Editorial Introduction to Special Issue on Trauma

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Social work has always served society's most vulnerable individuals and groups and it is difficult to think of an area of practice where one could avoid working with clients who have not been traumatized in some way. Although the field of traumatology initially evolved in response to soldiers and veterans who were shell-shocked in the World Wars, it has progressed beyond reductionist thinking that post-traumatic stress disorder is a pathology to an understanding of the significance and impact of trauma experiences in our lives. We now know that over one-third of adults are exposed to significant trauma as children and that the effects of these experiences are cumulative, complex, and often lifelong. Repeated exposure significantly increases the potential for negative outcomes including depression, alcohol and drug use, obesity, sexually transmitted diseases, smoking, cancer, chronic heart and lung disease, and early mortality (Centers for Disease Control, 2014). Even before we are born, in utero exposure to maternal stress can cause epigenetic changes that negatively affect development and contribute to poor health by compromising the immune system and reducing the capacity to stave off disease (Teicher, Andersen, Polcari, Anderson, & Navalta, 2002). Contextual factors such as age, gender, ethnicity, and socioeconomic status including historical and cultural trauma exacerbate the negative outcomes associated with trauma exposure and further increase the risk of retraumatization; creating a vicious cycle that can persist through generations.

Over the past 35 years, our courage, compassion and skill in listening to the stories of our clients, bearing witness to unspeakable cruelties, assuring safety, restoring hope and demanding justice has begun to coalesce into a cohesive body of knowledge and empirically-tested interventions that promote healing (Allen & Wozniak, 2014; Najavits, 2002). Further, recognizing that to work effectively with traumatized clients practitioners must "face human vulnerability in the natural world and ...the capacity for evil in human nature in order to bear witness to horrible events" (Herman, 1999, p. 7). We have pioneered new understandings in compassion fatigue, vicarious trauma and secondary stress (Figley, 2002). We have developed prevention and early intervention strategies such as stress inoculation and self-care techniques to help mediate negative outcomes and to promote the well-being of providers. Moreover, as new models of care, best practices, assessment tools and empirical studies emerge, we have adapted trauma-informed treatments for traumatized individuals to whole communities and most recently to agencies and institutions in order to develop trauma-informed systems of care (Strand, Popescu, Abramovitz, & Richards, 2015).

Many agencies now recognize and promote trauma-based principles as a key component of interventions for complex psychological and social problems. SAMHSA (2015) has funded the National Child Traumatic Stress Network (NCTSN, n.d.) for almost 20 years and recently endorsed principles and practices for trauma-informed systems.

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Beginning with early work in child welfare, the Children's Bureau initiated a focus on trauma-responsive child welfare systems (2017). Twelve schools of social work receiving traineeships through the National Child Welfare Workforce Institute (NCWWI, n.d.) now include a trauma lens in their child welfare courses. In 2012, CSWE released its standards for advanced social work practice in trauma and many schools of social work now offer concentrations, specializations, or certificates in trauma-based care. A joint initiative between CSWE and the National Center for Social Work Trauma Education is scheduled to publish a curriculum guide for Specialized Practice in Trauma by the end of 2017.

This special issue of Advances in Social Work recognizes the increasing role and importance of integrating trauma-informed care into our practices and into our educational programs. The issue presents 25 trauma related articles starting with conceptual and foundational articles, followed by empirical studies suggesting best practices, and culminating with articles describing emerging approaches in integrative and holistic care.

Beginning with two articles that explore integrating trauma-related content into curricula and pedagogy, the issue then provides an overview of the literature related to creating trauma-informed communities. We then present research that explores traumainformed interventions with specific populations including infants and toddlers, refugees, survivors of interpersonal violence, and male survivors of sexual abuse. The next section presents program and agency-based case studies that describe various strategies for implementing trauma-informed care such as staff training, learning collaboratives, interprofessional teams, and infrastructure development. Empirical studies testing the effects of trauma-based care or curriculums follow and include one study evaluating outcomes for the Core Concepts in Child Trauma for Child Welfare curriculum utilized in a Title IV-E university partnership, and another that assesses the effectiveness of a multiphase intervention with Latino youth. Additional studies describe the role that child attributes play in mediating the effects of trauma exposure and the relationship between Adverse Childhood Experiences (ACE) and youth arrested for sexual offenses. The issue concludes with articles describing innovative approaches in trauma therapy including work with children in a bereavement camp and an overview of equine-assisted psychotherapy for trauma survivors.

We received a generous response to the initial call for papers for this special issue, which extended the anticipated timeframe for publication. We thank all of the authors and reviewers for their patience in working with us throughout the publication process. We would also like to thank Margaret Adamek, Kadie Booth, Valerie Decker, and Michael Hernandez for their help in bringing this issue to press. Although we were unable to include all of the submissions in this issue, we were impressed with the scope of work being done in this field as well as the compassion, creativity and dedication of individuals working in this area. We look forward to the continuing evolution of our understanding of trauma and effective ways of addressing trauma and hope that this issue contributes to that process.

Respectfully, Karen Allen and Virginia Strand

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Integrating a Trauma-informed Care Perspective in Baccalaureate Social Work Education: Guiding Principles

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Abstract: Over the past decade, there has been substantial growth in empirical evidence supporting that proper assessment and treatment of trauma using evidence-based practices can effectively reduce a wide range of symptoms in both children and adults. Given the complex nature of trauma treatment, trauma-based educational programming in social work is most commonly found at the graduate level. Yet, to date, there has been little discussion calling for the inclusion of trauma content in BSW education. In this paper, we examine the current state of trauma-content inclusion in social work education, and offer a guiding framework for integrating core trauma content into the BSW curriculum that is based on the core principles of trauma-informed care.

Keywords: Trauma; trauma-informed care; baccalaureate social work

Over the past decade, there has been mounting evidence for assessment and treatment methods capable of effectively identifying and reducing a wide range of trauma symptoms in pediatric (de Arellano et al., 2014; Schneider, Grilli, & Schneider, 2013) and adult samples (Ehlers et al., 2010; Rubin & Springer, 2009). Subsequently, trauma-focused interventions have grown in popularity and are increasingly being recognized as a standard form of treatment for trauma-affected individuals.

Given the complex nature of trauma treatment and the numerous issues that can arise concerning client-safety, trauma-based educational programming is most commonly found at the graduate level (Courtois & Gold, 2009). Indeed, a growing number of MSW programs have begun integrating trauma content into their curriculum (Abrams & Shapiro, 2014; Bussey, 2008; Strand, Abramovitz, Layne, Robinson, & Way, 2014). Yet, to date, there has been little discussion calling for the inclusion of trauma content in BSW education (McKenzie-Mohr, 2004). With BSWs often having "first contact" with various client populations, including those who have been chronically maltreated and traumatized, it is necessary for BSW programs to include content into their curriculum that provides students with an understanding of trauma, its treatment, and the ways in which service organizations can best serve traumatized individuals. In this paper, we examine the current state of trauma-content inclusion in social work education, and offer guiding principles for integrating core trauma content into the BSW curriculum that is based on the principles of trauma-informed care.

Definition and Prevalence of Trauma

A variety of definitions of trauma have been presented in the literature. In an effort to develop a common conceptualization that is applicable to both practitioners and researchers, the Substance Abuse and Mental Health Services Administration (SAMHSA;

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2014) conducted an extensive review of existing definitions followed by a review from an expert panel to propose the following definition:

Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life-threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being. (p.7)

Prevalence of exposure to traumatic events is high among children and adults in the United States. Studies have shown that approximately 70-80% of children and adolescents (ages 2-17) were exposed to at least one type of victimization in their lifetime and 66% had been exposed to multiple types of victimization including child maltreatment, attempted kidnapping, peer/sibling victimization, domestic violence and crime in their communities (Copeland, Keeler, Angold, & Costello, 2007; Turner, Finkelhor, & Ormrod, 2010). In a nationally representative survey of adults, 89.7% reported having been exposed to at least one traumatic event with an average exposure to 3.30 different types of events (Kilpatrick et al., 2013). Similar rates of traumatization have been found in other studies using national and internationally representative samples (see Breslau et al., 1998; Frans, Rimmö, Åberg & Fredrickson, 2005; Stein, Walker, Hazen, & Forde, 1997; Vrana & Lauterbach, 1994).

Trauma Studies in Social Work Education

Numerous studies highlight the impact of trauma on long-term health and mental health functioning (Dong et al., 2004; Felitti et al., 1998), including the high rates of social service use among these populations (Elhai, North, & Frueh, 2005; Jennings, 2008; Solomon & Davidson, 1997). Consequently, there is a growing sentiment that the inclusion of traumafocused content should be presented in helping professional degree programs (Courtois & Gold, 2009; Marlowe & Adamson, 2011; Strand et al., 2014). Yet, Courtois (2002) notes that the specialized study of traumatic stress has yet to be fully included in social science educational programs. Courtois (2002) cautions:

This lack of inclusion has the effect of preventing traumatized individuals from getting needed services from professional and lay personnel who are knowledgeable about trauma, trauma response, and their particular role. In turn, it has also had the potential for creating more distress in traumatized individuals, in their loved ones, and in even those charged with providing help. Thus, the need for this information and its inclusion in professional curricula, is not casual and is, in fact urgent. (p. 53)

This sense of urgency has not gone unnoticed within the field of social work. In 2012, the Task Force on Advanced Social Work Practice in Trauma published guidelines on how to integrate trauma-focused content into social work programming (CSWE, 2012, Advanced Social Work Practice in Trauma). These guidelines are based on the 10 Education and Policy Accreditation Standards (EPAS) core competencies that were set forth by CSWE in 2008, and include individual, family, organizational, and community-based recommendations for advanced social work practice in trauma. The authors are clear that these guidelines are meant for integration in MSW-level programming. As such, there is ample discussion of activities that concern assessment, diagnosis and clinical intervention,

which are practice behaviors often associated with advanced social work practice. Thus, it could be argued that the current state of social work education views the inclusion of trauma-related content as best-suited for the graduate level.

Graduate Social Work Education in Trauma

Currently, there are several graduate-level trauma certificate programs offered at schools of social work throughout the nation. Many of these programs have a clinical emphasis, and include specific training in interventions like trauma-focused cognitive behavioral therapy (TF-CBT), crisis/disaster intervention models, and trauma-informed care (see Bussey, 2008). These programs may be included as part of the graduate curriculum, or housed within continuing education programs, with graduate students and practicing social workers being able to participate. Many of these programs are relatively new and, therefore, have yet to be evaluated.

One recent approach to integrating trauma-related content into graduate social work education has come from the National Child and Traumatic Stress Network's (NCTSN) Core Curriculum on Childhood Trauma (CCCT; Layne et al., 2011). The CCCT's aim is to advance the knowledge of graduate students and current working professionals on the core concepts of psychological trauma, which can then prepare them for more advanced training in evidence-based trauma treatment (EBTT). The CCCT consists of a five-tier conceptual framework, and uses problem-based learning (such as the use of real case vignettes) along with the use of facilitators who hold extensive clinical experience in trauma-related practice. In a large-scale evaluation of a modified version of the CCCT, the Core Concepts in Child and Adolescent Trauma, in graduate schools of social work researchers found that students experienced significant pre-posttest increases in selfreported confidence in applying the core concepts of trauma (Layne et al., 2014). The researchers also found that other students who participated in the "gold standard plus" educational model, which included the CCCT course, training in EBTT, and implementation of the EBTT in field placement, experienced significant pre-posttest increases in self-reported conceptual and field readiness. The CCCT constitutes one of the first comprehensive initiatives to promote trauma training for MSW students, and may reflect a growing trend for schools of social work to implement more structured approaches to offering trauma-based programming.

There is also a growing discussion of how to safely and effectively present trauma content to graduate social work students. Students with trauma histories who are exposed to trauma-related content, whether in the classroom or during field placement, have the potential to experience vicarious trauma, or to be re-traumatized by material that reflects past experiences (Carello & Butler 2014, 2015; Didham, Dromgole, Csiernik, Karley, & Hurley, 2011; Knight, 2010). This can be highly disruptive to student learning (Miller, 2001), as those who lack awareness of the severity of their past trauma can draw upon intense, maladaptive patterns of coping when exposed to course content that triggers prior traumas (Etherington, 2000). In response to this issue, recommendations have been offered on how to make the classroom environment a safe place for graduate students by presenting content that aids in the reduction of secondary traumatic stress (O'Halloran & O'Halloran,

2001; Shannon, Simmelink, Im, Becher, & Crook-Lyon, 2014) and vicarious trauma (Dane, 2002).

Baccalaureate Social Work Education in Trauma

Although the inclusion of trauma-related content in graduate level curricula has grown in popularity, the literature on the inclusion of trauma content in BSW education is limited. McKenzie-Mohr (2004) calls for the inclusion of trauma-focused content in the BSW curriculum due to the high likelihood that most graduates will obtain employment in organizations that provide services to traumatized and/or oppressed individuals. Breckenridge and James (2010) discuss the rationale for their development of a BSW course that emphasized multifaceted approaches to addressing trauma that encourages students to view treatment as including individual, group, community, and policy-based interventions. Finally, Farchi, Cohen, and Mosek (2014) describe their development of an Israeli stress and trauma studies (STS) program. The STS was a supplementary curriculum to an undergraduate social work program in which students were trained to act as psychological first responders to those who had just experienced traumatic events with the aim of preventing the development of trauma symptoms.

Currently, there is no recommended model for infusing trauma-related content across the BSW curriculum like the one provided by the Task Force on Advanced Social Work Practice in Trauma (CSWE, 2012) for MSW programming. The reasons behind this lack of emphasis are not entirely clear. One reason could be, as previously discussed, the potential for students to experience duress when exposed to trauma content. MSW students may be viewed as having more life and/or work experience than BSW students, and therefore, perceived as mature enough to manage the sensitive nature of the content (Bell, Kulkarni, & Dalton, 2003; Neumann & Gamble, 1995).

Another reason may be the perception that the study of trauma is inherently complex and clinical in nature (see CSWE, 2012), and therefore best suited for graduate-level social work programming. The CSWE Educational Policy and Accreditation Standards (EPAS; 2015) state that MSW programs help students to "identify the specialized knowledge, values, skills, cognitive and affective processes, and behaviors that extend and enhance the nine Social Work Competencies and prepare students for practice in the area of specialization" (p.12). Although there is no discussion of what constitutes specialized practice, the study of trauma and its treatment may be viewed as a primarily clinical endeavor, which is often synonymous with advanced or specialized practice. Thus, the structure of graduate social work education, with its strong emphasis on field education, may be deemed as best-suited to help students learn the theoretical concepts related to trauma and then to apply them during field placements. Due to BSW education being rooted in generalist practice, which does not typically include content on clinical or other specialized forms of practice, there may be a perceived difficulty in connecting trauma-related content with the BSW curriculum.

With the high likelihood of BSW students finding employment with organizations that serve traumatized individuals, we advocate for the inclusion of trauma-related content in the BSW curriculum. Such content should provide students with an understanding of the

ways in which trauma affects individuals, families, and communities, along with an understanding of how social service organizations' practices and policies can impact service delivery and their clients who have experienced trauma. One practice model that may offer an effective way to integrate a broad spectrum of trauma content into a generalist model of social work practice is trauma-informed care.

Trauma-Informed Care

In recent years, there has been a growing movement for trauma-informed practices to be implemented across a broad spectrum of service settings and client populations, such as in child welfare (Ko. et al., 2008), in-patient psychiatric settings (Azeem, Aujla, Rammerth, Binsfeld, & Jones, 2011; Huckshorn, 2004; Regan, 2010), with inmates (Levenson, Willis, & Prescott, 2014), and the homeless (Hopper, Bassuk, & Olivet, 2009; McKenzie-Mohr, Coates, & McLeod, 2012). Generally, in trauma-informed care settings, staff a) assess for and understand the impact of trauma on their clients, b) provide clients the knowledge and skills needed for recovery, and c) actively address treatment barriers and service delivery practices that may lead to potential re-traumatization (Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005; Gatz et al., 2007). Depending on the specific needs of the client population, staff may be trained in how to establish and maintain safety and therapeutic relationships, de-escalation techniques, and strengths and empowerment models of client-care and case management (Azeem et al., 2011; Borckardt et al., 2011; Elliott et al., 2005).

A trauma-informed care system also serves to support and maintain trauma-specific treatment approaches, which are "designed to treat the actual sequelae of sexual or physical abuse trauma" (Jennings, 2008, p. 10). These approaches can include psychoeducation, therapies designed to address trauma and its accompanying symptoms (e.g., cognitive therapies, desensitization therapies, prolonged exposure), emotional regulation and social skill-building, enhancing resiliency, and psychotropic medication management (Cohen, Mannarino, Berliner, & Deblinger, 2000; Jennings, 2008; NCTSN, 2007). This dual-approach to service delivery provides all those involved in client cases (e.g., case managers, clinicians, and administrators) with a common understanding and language surrounding the impact of trauma and its treatment. Such an environment allows clients to safely and confidently engage in trauma-based therapy without the fear of potential mismanagement of their care by those uninformed about their specific needs.

At the crux of trauma-informed care is the understanding that service organizations need to be consistent in the ways that they engage clients who have experienced trauma, while being flexible in responding to their individual needs (Prescott, Soares, Konnath, & Bassuk, 2008). Striking this balance requires staff to continuously reflect upon and evaluate both personal and organizational forms of practice, and to make changes accordingly. We propose that the skills and competencies needed to effectively engage in this type of practice closely align with those found in generalist social work practice. Therefore, the BSW curriculum, which is based on a generalist model, serves as an ideal platform to present principles of trauma-informed care. In the following sections, we present a comprehensive trauma-informed care framework that educators can use to guide the infusion of trauma-related content into their BSW curriculum.

Method

To identify core content areas that could be integrated into the BSW curriculum, we conducted a literature search to identify common principles found in trauma-informed care practice frameworks across a variety of professional disciplines. Focusing on frameworks that were published since 2000, we searched Google Scholar, Academic Search Complete and Elite, and PsychINFO. Additionally, we searched the internet using Google to identify frameworks published on organizational and government websites and other reputable non-academic literary sources (e.g., NCTSN, SAMHSA, National Center for Biotechnology Information). We used a combination of the search terms: trauma, trauma-informed care, approach, perspective, principles, and framework.

To begin, each author conducted a separate literature search to identify traumainformed frameworks. In total 13 frameworks were found using our search criteria. Each framework was then separately reviewed for common practice principles by both authors and compared for agreement. Initially, 19 common principles were identified. In a second review, we collapsed seven of the principles into broader categories in which they were closely aligned (e.g., empowerment, choice, autonomy). We further applied a selection criterion in which a principle had to have been present in at least four frameworks to be considered 'common'. This was based on our finding that a principle appeared at least four times and below that range, the identified principles or guidelines were sporadic, appearing only once or twice. At that point, we reached 100% agreement on the remaining principles. This level of agreement was facilitated by the high level of consistency in the stated principles and the language used across frameworks. The remaining nine principles are summarized in Table 1, and represent the most commonly identified principles of traumainformed care practice across the fields of mental health, social work, nursing, child welfare, and criminal justice. In the following section, we present these nine principles, along with recommendations for integration within a generalist BSW curriculum. Similar to the Task Force on Advanced Social Work Practice in Trauma (CSWE, 2012), our framework should serve as a guide for social work educators.

Table 1. Common Principles Identified Across Trauma-Informed Care Practice Frameworks

Source	1 Trauma Knowledge	2 Trauma Screening & Assessment	3 Safety & Minimize Re- victimizing	4 Empowerment & Self- Determination	5 Identifying Strengths	6 Cultural Competency	7 Healthy Relationships	8 Emotion Regulation	9 Self-Care
Bath (2008)			X				X	X	
Bloom & Sreedhar (2008)			X	X	X		X	X	
Covington et al. (2008)	X		X	X	X		X	X	
Elliot et al. (2005)	X	X	X	X	X	X	X		
Guarino et al. (2009)	X	X	X	X	X	X	X		X
Huckshorn (2004) Huckshorn et al. (2005)	X		X	X					
Harris & Fallot (2001) Fallot & Harris (2001)		X	X	X			X		
Kinniburgh et al. (2005)			X				X	X	
McManus & Thompson (2008)	X		X	X	X				
NCTSN (2007)	X	X	X			X	X	X	X
Prescott et al. (2008)	X	X	X	X	X	X	X		X
Saakvitne et al. (2000)	X			X	X		X		X
SAMSHA (2014)			X	X		X	X		

Note. NCTSN = National Child Traumatic Stress Network; SAMSHA = Substance Abuse and Mental Health Service Administration.

Recommendations for Integrating Trauma-Informed Care Principles in the BSW Curriculum

Principle 1: Trauma Knowledge

Trauma knowledge is defined as having an understanding of how traumatic events impact individual's development, health, well-being and coping abilities (Guarino, Soares, Konnath, Clervil, & Bassuk, 2009; NCTSN, 2007). Having this foundational awareness is an essential first step for social workers to effectively work with traumatized populations and understand the various ways in which trauma can affect clients' cognitive, emotional, behavioral and social functioning. One such example would be recognizing that many trauma symptoms stem from physiological responses within the body (e.g., hyperarousal and activation of the sympathetic nervous system), and that maladaptive coping behaviors (e.g., physical and verbal aggression, substance abuse, self-harm) are often used to manage these symptoms. Understanding this can help social workers to more accurately assess clients and the symptoms they may be presenting with (Covington, Burke, Keaton, & Norcott, 2008; McManus & Thompson, 2008; Prescott et al., 2008). Post-traumatic stress symptoms or maladaptive coping behaviors often interfere with healthy functioning in other domains of life and can make seeking assistance, whether voluntarily or mandated, from a service organization seem "fraught with danger" (Elliot et al., 2005, p. 463). Understanding the types of duress traumatized clients may be experiencing when seeking services can aid social workers in developing professional practices and service environments that promote physical and emotional safety and reduce the risk of retraumatization (McManus & Thompson, 2008).

Education on trauma has largely focused on understanding individual trauma (Audergon, 2004; Bell et al., 2003), yet trauma can also be experienced collectively and impact functioning within larger community (Nytagodien & Neal, 2004) and organizational systems (Bloom, 2010). Social services organizations often operate under conditions of chronic stress (Bloom, 2010) including working with traumatized and challenging clients, limited resources, workforce issues, and political and social scrutiny. The accumulation of chronic stress can lead to high rates of burn-out, employee turnover, mission drift and a loss of clarity in the values and goals that drive the organization (Bloom & Sreedhar, 2008). Similarly, communities can also be deeply impacted by trauma and become entrapped in a traumatized culture. Individuals experience and cope with trauma within the context of a community (Kahn, 2003) and communities as a whole can experience collective trauma due to natural disasters, violence, poverty or other events (SAMSHA, 2014). Trauma-affected organizations and communities can manifest traumatic stress symptoms characterized by hypervigilance, fear, mistrust, and withdrawal. Because the community and organizational contexts provide the backdrop in which micro and macro level interventions are delivered, they are an integral part of any intervention, whether it involves providing direct care services within an agency, community outreach work, or organizational practice.

Integrating trauma content in the BSW curriculum could enhance students' understanding of the impact of trauma on individuals, families, groups, communities and

organizations. Courtois and Gold (2009) recommend presenting trauma in undergraduate curricula as "a normal and frequent occurrence in human history and as an influential, but as yet not fully recognized, factor in human development" (p. 18). They further recommend highlighting how traumatic experiences can engender strength and resiliency (posttraumatic growth). As such, courses like Human Behavior in the Social Environment (or its equivalent) that focus on developmental theories and the specific needs of people across the lifespan could easily incorporate content that discusses how traumatic experiences can affect multiple domains of functioning and development. Research courses could expand on this content by providing BSW students opportunities to review current empirical studies on trauma, and macro-oriented courses could highlight how organizational structures, community initiatives, and policy decisions can impact clients who use certain services.

Principle 2: Trauma Screenings and Assessments

In addition to understanding the ways in which trauma can impact clients, it is equally important to screen and assess clients for past and current trauma experiences so that more individualized, holistic treatment planning can occur (Harris & Fallot, 2001). Fallot and Harris (2001) define *trauma screening* as "brief, focused inquiry to determine whether an individual has experienced specific traumatic events" (p. 24). Trauma screenings aid in identifying exposure to traumatic experiences or events, whether the client is currently in danger or exhibiting trauma symptoms, and are used to determine if a referral for a more in-depth trauma assessment is needed (Conradi, Wherry, & Kisiel, 2011; Fallot & Harris, 2001). Screening can also encourage service providers to see clients from a perspective of how they have been hurt, rather than seeing only their presenting problems resulting in greater compassion and understanding of the client's presenting issues and the surrounding circumstances.

The value that trauma-informed care places on screening and assessment practices that identify the ways in which trauma has affected a client's current functioning is reflective of generalist social work practice's use of the person-in-environment framework (CSWE, 2015). As such, many undergraduate programs of social work likely already provide content that emphasizes the importance of screening and assessment, the use of ecological and systems models, and the identification of strengths along with needs. Thus, the inclusion of how these frameworks and practice behaviors can better serve clients who have experienced trauma could be a relatively seamless integration. We do not necessarily advocate training BSW students on how to conduct specific types of standardized trauma screening tools and assessments, as this may be too specific of an activity for some generalist programs. However, universal trauma screening is often done during the period of initial contact with a client and often by bachelor's level service providers. Indeed, some of the most widely used trauma screening tools require bachelor's level education and training (e.g., Child Abuse and Neglect Scale - Trauma Version; Kisiel, Fehrenbach, Small, & Lyons, 2009; Trauma Symptom Checklist, Briere, 2005). Thus, the decision to incorporate training on specific screening and assessment tools can be left to the discretion of individual BSW programs.

Principle 3: Client Safety and Minimizing Re-traumatization

The principle of developing and sustaining organizational practices that promote client safety and limit the possibility of re-traumatization was found among all of the identified trauma-informed care frameworks. The importance of such a principle cannot be overstated; it represents the core of trauma-informed care, serving as a prerequisite to providing other elements of trauma-informed services. Safety, in the context of individual and organizational service delivery, is multi-faceted, with many elements that need to be considered by helping professionals (Bath, 2008). For example, professional qualities such as consistency, reliability, availability, honesty, and transparency in helping professionals can engender a safe and therapeutic environment for clients. Furthermore, a demonstrated tolerance for the range of intensity of reactions by trauma survivors can aid in developing rapport and feelings of trust (Guarino, Rubin, & Bassuk, 2007; Prescott et al., 2008). Client safety can be established through case management practices (NCTSN, 2007) that include assessing the potential for re-traumatization (e.g., does an abusive partner or parent have access to the client?), providing contact information for shelters, food pantries, crisis hotlines, and establishing legal protections such as restraining and protection orders. Implementing organizational practices that are sensitive to the individual needs of traumaaffected clients can also foster a sense of client safety. For example, a domestic violence shelter for women who have likely experienced abuse by male perpetrators, may have policies limiting the type and duration of contact male staff have with the clients as a way to protect clients from becoming triggered or experiencing symptoms of hyperarousal and fear (Prescott et al., 2008).

Integrating or enhancing content in existing BSW curricula that exemplifies how building trust, establishing rapport, adhering to ethical and professional standards of practice, and case management, can increase BSW students' preparedness to engage in practices that promote a sense of safety in trauma survivors. Social work educators may choose to approach this in many ways, including through having students role play the intake and assessment/screening processes with trauma-affected clients, practicing communication styles, both verbal and non-verbal, that allow students to develop a skill-base and sense of self-efficacy in their future work with trauma survivors, and through the use of case-vignettes that require students to assess the current functioning of a client and then to provide their recommendations for building safety. Finally, additional content outlining the importance of identifying how organizational practices and policies promote (or possibly restrict) the development of client safety may prepare future social workers to proactively assess and advocate for organizational practices that ensure clients' safety and needs are being met.

Principle 4: Client Empowerment and Self-Determination

Organizations that serve clients who have experienced traumatic victimization (e.g., intimate partner violence, and physical, emotional, and/or sexual abuse) understand that the inherent nature of these experiences are often rooted in a sense of coercion, powerlessness, and a loss of control (Dutton & Goodman, 2005; Gershuny & Thayer, 1999; Najavits, Sonn, Walsh, & Weiss, 2004). As such, recognizing and addressing power imbalances between the organization/staff and client can help to lessen the likelihood of

re-traumatization and foster a sense of safety and trust in the client. For example, shared-decision making surrounding client treatment options and goal setting is strongly encouraged in both policy and practice (SAHMSA, 2014). Allowing trauma survivors to have a voice in their own treatment and goal development will increase motivation to engage in services, which may result in better outcomes (Prescott et al., 2008). In instances where the social worker believed the client to be making a poor choice, every effort is made to understand the perspective of the client in addition to providing clarifying information in the hopes of reaching a mutual goal (Elliot et al., 2005).

The principles of client self-determination and empowerment constitute some of the foundations by which contemporary generalist social work practice is formed (see Kirst-Ashman, & Hull, 2014; Miley, O'Melia, & DuBois, 2013). Incorporating these principles within the context of working with traumatized populations into BSW programs of study should be relatively seamless, as many programs likely already include such content. BSW programs may consider adding content on how to engage in practices that promote client empowerment and self-determination during the initial contact with a client who has experienced trauma during screenings and assessments, and in more long-term service relationships to demonstrate how such an approach can be implemented across a variety of practice situations.

Principle 5: Client and Organizational Strengths Identification

An integral part of client empowerment and self-determination (principle 4) is the identification of client strengths (SAMSHA, 2014). In repeated or long-term cases of trauma, individuals may perceive their current reality as one where they have little control over what happens to them. Therefore, daily stressors and problems may seem insurmountable. Identifying client strengths can help lessen this sense of powerlessness, and promote a sense of empowerment, self-efficacy, and resiliency, all of which can aid in the attainment of therapeutic goals (McManus & Thompson, 2008; NCTSN, 2007).

The identification of strengths can also be applied to service organizations. In discussing the steps of the Sanctuary Model, Bloom and Sreedhar (2008) point out the need for staff members to engage in discussions that identify the strengths, vulnerabilities, and conflicts within an organization. These open discussions can provide a shared analysis of the organizations' structure, current functioning, and quality of service delivery. Such an approach may prove useful in building cohesiveness among staff within an organization, and can highlight positive attributes of the organization, all of which could bolster employee satisfaction and productivity in the long-term.

Like client self-determination and empowerment, the strengths perspective can be seen as one of several core concepts of generalist social work practice (see McMillen, Morris, & Sherraden, 2004; Poulin, 2009). The EPAS (CSWE, 2015) asserts that the generalist practitioner will "recognize, support, and build on the strengths and resiliency of all human beings" (p. 11). It is important to note that although the strengths perspective is recognized as an important aspect of client-centered practice, there is no universally accepted approach to application in practice settings (Staudt, Howard, & Drake, 2001). Therefore, for BSW programs that want to include content on how to integrate a strengths-based perspective

when working with clients who have experienced trauma, we propose the following: 1) help students to recognize that there is inherent resiliency that comes with having survived traumatic events, 2) emphasize that identifying strengths is most effective when there is a comprehensive and thorough assessment of the client's trauma history, biopsychosocial functioning, and social and cultural background, and 3) the identification of strengths can and should be applied to organizational processes and policies.

Principle 6: Cultural Competency

Critical to the development of client safety (principle 3), client empowerment and self-determination (principle 4), and the identification of strengths (principle 5), is recognizing the important role culture plays in the lives of clients who have experienced trauma. The ways in which a client expresses emotion, copes with traumatic stress, and seeks (or avoids) the support of others could all be influenced by cultural norms (NCTSN, 2007). Therefore, the start of services should always entail exploration of the client's cultural background and needs. Refugees, for example, who have experienced the effects of war and migration, may need additional time to build trust with service providers, especially if language barriers exist and there is need for an interpreter. Social workers can help clients identify the ways in which cultural norms aid or possibly restrict the expression of anger, sadness, and fear, along with how these emotions can serve to aid in the recovery from trauma. It is also important to recognize and respect a client's adherence to culturally-specific medical traditions and healing practices, and possibly find ways to incorporate such practices into more standard forms of trauma treatment (SAHMSA, 2014).

Equally important to recognizing and valuing a client's cultural background is understanding how one's own cultural background influences the helper-client relationship (Elliot et al., 2005). By exploring one's own history and culture, a deeper awareness and appreciation can develop for how life events, cultural influences, and privilege can shape one's worldview (Yan & Wong, 2005). Such insight can aid social workers in recognizing deeply held biases that could hinder the quality of services or, even worse, re-traumatize clients.

Cultural competency is widely regarded as a crucial element for effective social work practice (Boyle & Springer, 2001). The EPAS (CSWE, 2015) asserts that the generalist practitioner will "engage diversity in their practice and advocate for human rights and social and economic justice" (p. 11). Cultural competency can be seen as a more of a continuum of learning (Cross, 1988), and embodies a willingness to be a lifelong learner of other cultural and diverse peoples and traditions (Saunders, Haskins, & Vasquez, 2015). We suggest BSW programs incorporate content into their curriculum that a) explores the unique relationship between culture and trauma, b) emphasizes the importance of self-reflexivity and understanding the effect one's own cultural background has on perception and attitude toward others, and c) frames cultural competency as a lifelong journey of inquiry and personal exploration. Courses on diversity, human development, and/or social work practice could all serve as ideal settings for the presentation of such content.

Principle 7: Healthy Relationships

Creating an environment that is safe and accepting of clients who have experienced trauma (principle 3) can also enhance feelings of trust and building healthy relationships. Traumatic experiences, especially in the cases of physical, emotional, and/or sexual abuse, can have damaging effects on one's ability to trust others (Bath, 2008) and can be especially detrimental to the development of healthy attachment in children (Kinniburgh, Blaustein, Spinazzola, & van der Kolk, 2005). Developing an environment that promotes honest, transparent, and accepting interactions can act as a model by which clients can begin to practice learning to trust again, which may benefit them when it comes time to repair damaged relationships (Elliot et al., 2005; Saakvitne, Gamble, Pearlman, & Lev, 2000).

Social workers also need to be aware of how the effects of trauma and maladaptive forms of coping can affect families and external relationships (Conners-Burrow et al., 2013). For example, clients who have experienced substantial trauma in their past may have engaged in alcohol and/or illicit substance use and anti-social behaviors as a way of managing their trauma symptoms. As a result, clients may have alienated spouses, children, extended family, and friends, along with potentially damaging professional relationships. To provide effective treatment, social workers in direct service roles may need to assist clients in identifying ways of repairing damaged relationships and helping clients gain more external social supports, a key factor often associated with lower rates of PTSD and better treatment outcomes (Han et al., 2014; Tarrier & Humphreys, 2003; Tsai, Harpaz-Rotem, Pietrzak, & Southwick, 2012; Vranceanu, Hobfoll, & Johnson, 2007). BSW programs may want to include or emphasize content in their practice courses on the importance of relationships and social support for clients who have experienced trauma. Communication and social skills, including how to model appropriate boundaries should also be included in BSW course content.

Prescott and colleagues (2008) underscore the importance of providing opportunities for clients to obtain peer support, especially from other clients who have experienced similar traumatic experiences. These interactions can engender opportunities for clients to "gather, educate and organize for action can decrease isolation, generate accountability among the group, increase self-esteem and awareness of how personal experiences of violence and loss fit within a larger socio-political context" (p. 34). The idea of peer support as essential to the recovery from trauma is echoed in numerous trauma-informed frameworks (see Bloom & Sreedhar, 2008; Elliot et al., 2005; SAHMSA, 2014).

BSW programs may consider including content that emphasizes the importance of the worker-client relationship for both its therapeutic benefit to the client and its ability to serve as a model for future relationships. Furthermore, practice courses could provide students methods for modeling specific social skills, which may enhance students' feelings of self-efficacy when working with clients who have experienced trauma. Finally, we recommend providing instruction on the importance of peer support and the need for identifying ways in which organizations can develop or modify existing processes or policies to allow clients to safely interact and provide support to one another.

Principle 8: Emotional Regulation

As discussed in principle 1, trauma-affected clients experience a myriad of symptoms, many of which can hinder emotional regulatory capacities. Trauma can create a sense of disconnectedness from one's own emotional experiences (Kinniburgh et al., 2005), which can lead trauma survivors to not recognize when they are being triggered and/or experiencing high levels of stress. Consequently, the feeling of being emotionally overwhelmed can be perceived as occurring suddenly, which may (and often does) result in individuals engaging in maladaptive responses and/or coping behaviors. Furthermore, consistently feeling unsafe and being emotionally overwhelmed can be especially damaging to children's development (NCTSN, 2007). Thus, an essential component of trauma recovery includes the development of emotion regulation.

The ways in which clients learn to manage stress and cope with negative emotions varies widely across trauma-specific intervention approaches. Yet, at the core of these methods are three fundamental goals for emotional self-regulation that includes the development of 1) affect awareness, which is the ability to identify one's own emotional and physical feelings, 2) affect expression, which is the ability to express negative internal states in a safe and controlled manner, and 3) affect modulation, which is the ability to recognize negative emotional experiences and engage in coping activities that can aid in the return to a comfortable state of arousal (Kinniburgh et al., 2005).

Working to build emotion regulation skills in clients who have experienced trauma, in many service environments, may be seen as an activity that is best suited for graduate-level clinical personnel. In such instances, BSWs can act as supporting agents to clinicians by helping to remind and reinforce the use of these skills with their clients. This dual support may enhance the clients' feelings of safety and support, and may serve to encourage them to engage in more difficult aspects of therapy. However, not every service organization will have clinical staff available, nor may it be the role of the agency to provide direct mental health services. Further, BSWs often serve in a direct service capacity in agencies providing services to adults and children in group treatment settings, providing remedial or behavioral health services, social skills training, parent education classes, support groups and afterschool or day treatment programs. In these environments, BSWs play a direct role in helping clients build emotion regulation and problem-solving skills. Therefore, it is recommended that BSW programs provide knowledge and skills on how to build emotion regulation capacities in clients who have experienced trauma.

BSW programs may consider including content that reviews benefits of developing emotional regulations skills in clients who have experienced trauma, especially if those clients are actively working toward processing trauma with graduate-level clinicians. Practice courses that provide opportunities for in-class demonstrations and role-play practice on skills that can help with emotional regulation may promote a sense of competency for students who plan to work with client populations that have frequent exposure to trauma in their field placements.

Principle 9: Self-Care

Trauma education also has relevance to understanding and addressing work-related stress, burnout, and organizational trauma (Dane, 2000; Trippany, Kress, & Wilcoxon, 2004). Some research findings suggest that trauma education may be of even greater relevance to preparing bachelor's level social workers for practice. Dalton (2001) found that social workers with master's degrees exhibited lower levels of secondary traumatic stress than bachelor's level social workers. This difference that may be due to training in graduate programs that includes information on client empowerment, self-care, and recognizing maladaptive processes that may be less emphasized in BSW programs. Younger and less experienced social workers may be less skilled in effectively managing work-related stress and more vulnerable to direct and indirect exposure to trauma (Neumann & Gamble, 1995). It is not uncommon for social workers to work with clients who engage in aggressive and violent behavior or to work in crime-ridden, high risk communities placing them at heightened risk for victimization. Yet many organizations do not have formal policies or practices related to dealing with work-related victimization and violence (Bureau of Labor Statistics, 2006). Many incidents go unreported due to beliefs that reporting will not be of benefit or fears that an incident will be considered the result of negligence or poor job performance (Bloom, 2010). In some organizations, victimization by clients is viewed as part of the job and is a normalized into the culture. Students who are knowledgeable in the tenets of trauma-informed care can apply them to assess whether organizational practices and policies ensure physical and emotional safety and employee well-being.

Providing BSW students with introductory knowledge on the effects of secondary and vicarious trauma can strengthen their ability to recognize the sources, processes, and symptoms associated with trauma. Furthermore, educators can help them to work more effectively in organizations by engaging in practice behaviors that contribute to healthy organizational environments, including knowing when and how to practice self-care and provide peer support to co-workers who may be dealing with traumatic stress (Bell et al., 2003). In addition to classroom teaching, students can gain experience applying skills during their field placements, for instance, reviewing organizational procedures and policies and assessing them from a trauma-informed perspective. Teaching students basic skills they can apply to respond to work-related stress may help reduce burn out, vicarious trauma and symptoms of traumatic stress which, in turn, promotes improved organizational functioning and more effective practice with clients.

Conclusion

The prevalence of traumatization across the general population, the deleterious impact of traumatic exposure, and the high rate of service use among those who have been traumatized, has prompted many schools of social work to start incorporating trauma content into their programing. This can take the form of specialized programs (e.g., CCCT), electives, or continuing education courses. These offerings frequently have a clinical emphasis, and are often considered "advanced" or "specialized" trainings. Thus, trauma content is most often presented at the MSW level. Unfortunately, there has yet to be a push for trauma training to be included at the BSW level. The aim of this paper was to present

guiding principles that educators could use to infuse within the generalist perspective of the BSW curriculum. In doing so, we hope to have demonstrated that the scope of traumatic studies does not have be relegated to the presentation of only clinical material. Rather, trauma training can include work with individuals, agencies/organizations, and communities.

We echo the statement made by Courtois and Gold (2009): "the territory of trauma practice can only be adequately mastered if training in trauma is grounded in the fundamental and generalist curriculum of a profession" (p. 18). We call for the field of social work to start viewing the study of trauma as spanning both generalist and advanced domains of social work practice. Only then will our field be able to provide truly comprehensive and adequate services and treatment to those who have experienced trauma and are suffering from its effects.

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Teaching Trauma: A Model for Introducing Traumatic Materials in the Classroom

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Abstract: University courses in disciplines such as social work, family studies, humanities, and other areas often use classroom materials that contain traumatic material (Barlow & Becker-Blease, 2012). While many recommendations based on trauma theory exist for instructors at the university level, these are often made in the context of clinical training programs, rather than at the undergraduate level across disciplines. Furthermore, no organized model exists to aid instructors in developing a trauma-informed pedagogy for teaching courses on traumatic stress, violence, and other topics that may pose a risk for secondary traumatic stress in the classroom (Kostouros, 2008). This paper seeks to bridge the gap between trauma theory and implementation of sensitive content in classrooms of higher education, and presents a model of trauma-informed teaching that was developed in the context of an undergraduate trauma studies program. Implications and future directions for research in the area of trauma-informed university classrooms are discussed.

Keywords: Trauma-informed; teaching; higher education

Since the events of September 11, 2001, interest in courses on trauma and traumatic stress has spiked at universities across the country (Smith, 2002). While directly learning about trauma often occurs at the graduate level and in clinical programs of study, many disciplines outside of social work, human services, and clinical training programs also interact with materials and curriculum that involve trauma (Barlow & Becker-Blease, 2012). For example, courses related to humanities, literature, art, and journalism often make use of films, readings, video clips, and guest speaker lectures which contain elements of traumatic experiences that may or may not trigger the students' own personal experiences (Dufresne, 2004; Dworznik & Grubb, 2007). College and university professors have shared a variety of reasons for incorporating this type of trauma-related material into their classrooms, such as to prepare students for real-life situations they may encounter in the workforce, increase understanding of sociopolitical issues, or give life to boring topics or stories (Kostouros, 2008). Using this material in a classroom to promote student learning and engagement may be positive; however, it is not without some risk. Persons interacting with traumatic material may be at risk for secondary traumatic stress, also sometimes referred to as vicarious traumatization (Kostouros, 2008).

While *trauma-informed* (Bath, 2008) may have become somewhat of a buzzword in recent culture, it represents a crucial piece of implementing prevention and intervention services for individuals and families. According to Fallot and Harris (2009), a culture of trauma-informed care is rooted in the values of safety, trustworthiness, choice, collaboration, and empowerment. While gaining an understanding of the effects of trauma

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may be a first step to creating a culture of trauma-informed care, it is also crucial to shift patterns of thinking and behaviors that embrace this understanding (Harris & Fallot, 2001).

The term "trauma-informed" has been most commonly applied to settings such as medical and mental health as well as prevention and intervention programs; less has been done to develop trauma-informed practices in classroom settings, especially in higher education. Recent recommendations for creation of trauma-informed systems have included providing education regarding traumatic stress for all professionals who may work with children and families (Ko et al., 2008), seeking to expand trauma-informed practice from its previous focus on mental health and medical practitioners. The current proposed model for trauma-informed teaching aims to begin to address the current gap for implementing trauma-informed teaching practices in higher education.

Literature Review

Student Exposure to Trauma

Primary exposure to trauma and diagnoses of trauma and stressor related disorders (see American Psychiatric Association [APA], 2013) may increase the risk for students to experience adverse reactions to course materials in classrooms that introduce traumatic materials (Cunningham, 2004). Traumatic experiences have been shown to be prevalent in both the general population (Chapman et al., 2012; Finkelhor, Turner, Ormrod, & Hamby, 2009; Kilpatrick et al., 2013; Lukaschek et al., 2013) as well as populations of undergraduate students (Bernat, Ronfeldt, Calhoun, & Arias, 1998; Frazier et al., 2009). A recent study found approximately 85% of students reported having experienced at least one traumatic event in their lifetime and 21% of students reported having experienced a trauma while in college (Frazier et al., 2009). Furthermore, specific types of students may be especially at-risk for having been exposed to trauma, such as veteran populations (Ackerman, DiRamio, & Mitchell, 2009) and female students (Read, Ouimette, White, Colder, & Farrow, 2011).

Veteran students represent an important population of college students that may have a history of trauma exposure. One study found a diagnosis of PTSD in veteran college students of OIF and OEF was associated with more problem drinking and physical aggression with others (Widome et al., 2011). Active duty and veteran service member students are more likely to have symptoms of posttraumatic stress than civilian students (Barry, Whiteman, & MacDermid Wadsworth, 2012), furthering the need for traumainformed classroom practices. Recommendations have been made to universities regarding veteran student care and support, such as building awareness of veteran issues and creating external partnerships with military organizations (Rumann & Hamrick, 2009) and creating a veteran-friendly climate through creating student veteran organizations and campus offices meant to address the needs of veterans (O'Herrin, 2011). These recommendations are meant to address the veteran student population as a whole on college campuses, however specific university faculty should also recognize how course content may affect veterans in the classroom.

Risk and Protective Factors

While exposure to trauma should not be a barrier to students participating in education that includes trauma-related materials, in consideration of the high prevalence of trauma exposure, instructors should be mindful in introducing these materials in a classroom setting. It may also be helpful for instructors to be aware of risk and protective factors that may mitigate risk of reactivity after exposure to trauma has occurred. Trauma-exposure does not equate to traumatization (Bonanno, 2005) or a certain diagnosis of PTSD (Yehuda & Flory, 2007); however, those who qualify for a PTSD diagnosis can be seen as more "reactive" or affected by the trauma. According to a 2000 meta-analysis, risk factors for PTSD include female gender, minority race, younger age, lower levels of education, previous trauma history, and childhood adversity (Brewin, Andrews, & Valentine, 2000). Certain personality traits, such as neuroticism, have also been shown to increase risk for PTSD (Lauterbach & Vrana, 2001). Factors such as social support, optimism, cognitive flexibility, and active coping such as problem-solving and learning to face fears have been identified as protective against traumatic stress (Haglund, Cooper, Southwick, & Charney, 2007; Schumm, Briggs-Phillips, & Hobfoll, 2006). Severity of the trauma along with a combination of risk and protective factors contribute to individual reactivity and adjustment, which may lend a more contextual understanding of student risk after exposure to trauma.

Student Risk for Reactivity

Various levels of risk may exist in regards to student reactions to course content. Students who have been exposed to some trauma but are not experiencing any distress are presumably at the lowest level of risk. The next level of risk may be comprised of those students experiencing some trauma-related symptoms that lead to discomfort or disrupt functioning. Finally, students at the highest level of risk would be those with a current diagnosis of posttraumatic stress disorder. Framing student levels of risk in this way can be helpful to instructors as they consider the need for thoughtful intervention of trauma-related materials in the classroom.

While it is important to consider student risk for reactivity based upon the students' own past experiences, it should be noted that reactions to course content may occur regardless of trauma history. Secondary traumatic stress (STS), which can occur when a person is not primarily experiencing a trauma themselves, but is exposed to traumatic material by hearing an account of another's trauma and as a result experiences a set of symptoms that mimic PTSD (APA, 2013) or acute stress disorder (Bober & Regehr, 2005). In recognition of STS, instructors of courses on trauma and traumatic stress should introduce course content that contains traumatic material through responsible and strategic methods in order to minimize student risk for traumatization or secondary traumatic stress.

Existing Trauma-Informed Teaching Recommendations

In order to reduce occurrences of secondary traumatic stress in classroom settings, it has been recommended that university faculty be purposeful and cautious with the use of traumatic materials in the classroom (Kostouros, 2008). Specific biobehavioral, affective,

cognitive, relational, and spiritual strategies may be utilized by students to protect against secondary traumatic stress, ranging from encouraging students to take time for recreation to being aware of their own maladaptive coping strategies (O'Halloran & O'Halloran, 2001). For educators, Carello and Butler (2014) proposed steps for educators to make their educational practices more trauma-informed to include the importance of acknowledging the prevalence of students' trauma histories and making learning and safety central to the classroom experience. McCammon (1995) also provided suggestions to faculty for implementation of traumatic material to include establishing safety in the classroom, letting students know what materials are to be covered, carefully selecting examples, being knowledgeable of community and university referrals available to students, and handling student disclosures with care.

The International Society for Traumatic Stress Studies (ISTSS) provides best practice parameters for professionals in the areas of clinical work, research, and education. According to these parameters, educators should: communicate the potential impact of working in the field of trauma, such as vicarious traumatization; prepare students when materials may possibly be triggering; and avoid requiring assignments that encourage self-disclosure without providing a genuine alternative (ISTSS, 2016). These best practice parameters are not stated to pertain to any specific academic or training setting. While these recommendations do align with trauma theory, many of them are largely based in clinical training populations and do not specifically address undergraduate students or academic programs across multiple disciplines. Furthermore, these recommendations are mainly individual suggestions for strategies on how to cope with course content, rather than representative of an organized model for implementation of content. The current paper attempts to bridge this gap between trauma theory and implementation of content in the classroom, through a model that was developed in the context of a trauma studies undergraduate program.

Trauma-Informed Classroom Care Model

The pedagogical need for introducing traumatic materials thoughtfully in the classroom arose over years of instruction and coordination of an undergraduate trauma studies program. This program, in which students are required to take courses on trauma and conflict, and may also choose elective courses related to trauma in topic areas such as violence, grief and loss, and life crises, was the context for the development of the Trauma-Informed Classroom Care Model. This model is designed to aid instructors in recognizing and responding to student reactivity to traumatic materials in the classroom, with implications for instructional design. The following sections outline and describe each component of the model, with an emphasis on the research or evidence that was used to support the pieces of the model that have been combined to work together.

Trauma Exposure

Students may begin participating in courses that contain elements of trauma already having been exposed to trauma via their own life experiences, while other students without significant trauma histories may learn about the nature of trauma and traumatic stress for the first time in the classroom environment. In either case, exposure to elements of trauma

is inevitable as course objectives may be to explore the nature of trauma, posttraumatic stress disorder, as well as common symptoms and reactions to stressful and/or traumatic events (Nelson Goff, 2016). As cited previously, university students may be exposed to traumatic experiences prior to and/or during their time in college (Frazier et al., 2009), with veteran students who may experience PTS symptoms or are diagnosed with PTSD (Barry et al., 2012). While instructors may or may not be aware of students' previous exposure to trauma, it can be assumed that many students will have had these experiences based upon general knowledge of trauma exposure. Some instructors may wish to help students evaluate how their own experiences may affect their experience in the course. This can be accomplished using a variety of methods, including assigning a reflective writing assignment at the beginning of the course in which students are prompted to consider how their personal background may "show up" in the course, and identifying which personal strengths may aid their learning experience.

Reactions to Trauma

Trauma exposure does not imply traumatization will occur, as many persons are resilient in the face of trauma and may not experience significant adverse reactions (Bonanno, 2005; Yehuda & Flory, 2007). For this reason, trauma exposure and reactions are separate in the model. As possible previous trauma exposure may exist in students' own histories and re-exposure to trauma through the course materials will inevitably happen in the courses that are of current discussion, student reactivity to course materials may occur at any given point and time during the class. Student reactivity to traumatic materials is conceptualized using the Triphasic Model (Herman, 1997). This model describes three phases of trauma recovery: safety, remembrance and mourning, and reconnection. The three phases of trauma recovery in this model can serve as a way to understand a student's own level of reactivity to trauma, both personal and in the classroom.

Safety. During this stage of trauma recovery, survivors of trauma often feel unsafe in their own bodies, in their minds, in their relationships with others, or a combination of these. This phase may last weeks, months, or even years, depending on the severity of trauma (Herman, 1997). In the classroom setting, those in the safety stage may feel intense physiological reactions to lectures, videos, or other activities. Others may distance themselves from triggering materials by disengaging purposely or unintentionally. Of course these reactions, if they are present, may be easily masked in the modern classroom in which total student engagement is often interrupted by other students or means of technology (e.g. students using electronic devices during class for activities not related to the course, use of mobile phones or tablets). The instructor, then, should be aware of these reactions and open his/her mind to the possible various meanings of student overt reactivity or disengagement. Furthermore, the instructor should strive to make the classroom as safe and comfortable as possible.

Establishing safety has been noted as an important and often primary element of trauma-informed care (Bath, 2008; Fallot & Harris, 2009). Safety can be fostered in the classroom in a number of ways, both structurally and through the instructor's use of self. First, making clear the course structure and content can help to establish a safe environment, which may be accomplished by making students aware of what content will

be covered, communicating about when certain topics will be discussed, and clarifying the expectations of student participation in class. Furthermore, instructors should communicate to students clearly and often the acknowledgment of the intensity of the course materials, as well as being available to students. This need not be a long or overstated message, but it is important that the students are able to see the professor as a resource and as a safe person in the environment of a course that teaches trauma-related materials. In addition to verbal communication, instructors may also wish to include written notices on the course syllabus regarding possible student reactivity as well as resources available to students.

Remembrance and mourning. During this stage, survivors of trauma recall and work through their own memories of personal trauma, often *reconstructing* the trauma story (Herman, 1997). For survivors in this stage, the foundation of safety reached in the previous stage remains crucial to support healing during this time of recalling and examining personal trauma. While students in this stage may be less overtly or physically reactive to course materials, they may also be more emotionally or cognitively connected to the story of their own experience. Students may recount their own memories to instructors either verbally during class or through writing for course assignments, which warrants validation and monitoring on the part of the instructor as well as possible referrals and documentation of student interactions according to relevant university policies. For some students, learning about trauma in the classroom setting may lend new ideas and perspectives to their own processes of reconstruction or meaning making. For example, students learning for the first time about normal physiological reactions to threatening situations may begin to reframe actions taken in their own lives as protective rather than unresponsive or weak.

To support students who may be in this stage of recovery, instructors may wish to refrain from taking hard stances on what is "right" or "wrong" in relation to trauma reactions, treatment, or prevention, as it may disrupt a recovering student's own personal process. Mourning may increase reactivity and challenge students' beliefs and worldview, as they attempt to develop a cohesive understanding of their previous trauma experiences and work through the reactions that are a part of this stage of healing. The classroom should be supportive of this process, and instructors can take advantage of an open learning environment that is conducive to sharing new perspectives, and stories, which may help healing students to psychologically make room for new perspectives of their own trauma. Keeping with the values of choice and empowerment necessary in trauma-informed care (Fallot & Harris, 2009), instructors should strive to allow students to move at their own pace and determine their own meanings about personal experiences or examples which may be present course content. While instructors should be supportive of students in this stage, they should also be mindful to stay within the scope of their teaching role. This may be particularly important for those instructors who work as social workers or clinicians in other settings, as separating these two roles may be more difficult.

Reconnection. The third stage of the Triphasic Model is that in which the survivor of trauma must create and define a new future self, as the past self was mourned in the previous stage. Often survivors in this stage are rediscovering a sense of "normalcy" in areas of their life that was altered by the trauma itself. According to Herman (1997), "the traumatized person recognizes that [he/she] has been a victim and understands the effects of [his/her] victimization. Now [he/she] is ready to incorporate the lessons of her traumatic

experience into [his/her] life" (p. 197). Students in this stage may be comfortable disclosing their own experiences to the instructor or even to the whole class, and they may articulate integration of the trauma into their own lives. While students in this final stage of healing may present as less reactive to course content, use of this model may give instructors a clearer understanding as to how and why these students engage with the course materials, with peers, and with the instructor. The trauma-informed care value of empowerment (Fallot & Harris, 2009) may be present in this stage as students come face-to-face with reminders of their journey and are able to retain a sense of self, power, and meaning. Even with students who have made significant progress in their healing journey, it is important to recognize these students in relationship to the course and how trauma-related materials may affect them.

Student Disclosure of Trauma

Students recovering from trauma in all three stages may disclose personal experiences of trauma as noted above. Student disclosure may occur in a variety of settings: in an individual meeting with the instructor, during on-campus discussions, or in writing through online message boards or in projects, papers, or other course assignments. Instructors should handle student disclosures with care, especially if shared in the larger classroom setting. If assignments that may prompt disclosure of personal history are required, such as reflective essays on personal stories, instructors should communicate with students about confidentiality and its possible limits, in compliance with the policies of their institution. Instructors may choose to refer students to on-campus counseling services who disclose recent experiences of trauma, as well as those experiences that may still affect their functioning. If students disclose information that suggests they may harm themselves or others, instructors should be knowledgeable about his or her school's process for reporting a student of concern to units such as student life or counseling services to promote student and community well-being.

Flexibility

In using the Trauma-Informed Classroom Care model, flexibility should be parallel to student levels of reactivity. This is meant to demonstrate students' varying needs in the classroom according to their own levels of reactivity to course content. The model posits that students with higher levels of reactivity to traumatic materials should be met with higher levels of flexibility within the course. While many students may be exposed to these topics for the first time by means of the course content, other students will have previously been exposed to trauma and may or may not be triggered by materials in the class. Reactions to trauma are variant, and many individuals show signs of resilience even in the face of trauma (Bonanno, 2005), making it difficult to predict which students may be triggered during the course, even if information about a student's previous trauma exposure is known by the instructor.

Flexibility may vary in each course according to the needs of each class and instructor. Some recommendations for implementing flexibility in a course setting include allowing various options of assignments with a mix of objective and subjective choices, allowing students to attend a specific lecture remotely, or offering alternative ways for students to

comfortably demonstrate learning. This can be accomplished through offering alternative assignments, allowing students a certain number of absences, or having an incomplete policy in place for students who may need to stop the course and retake it in the future. It should be noted that flexibility in a course does not mean a lack of structure or allowing students to do whatever they would like to do or not meet academic requirements. Instructors should be able to allow certain flexibilities in the course, while maintaining clear structure and boundaries.

Course Progression

Especially in courses in which traumatic topics are the core focus of the class, it is expected that student reactions to the course may vary over time as topics are introduced. For example, a general course on identifying trauma and traumatic stress may heavily focus on sexual assault at one point in the course, but move to other topics as the course progresses. This is important to recognize as student personal histories with exposure to specific traumas are unknown to instructors, and reactions to more specific content within a course may occur at various points over the semester. For this reason, instructors should be cognizant of student reactions and be available to students throughout the course.

Communication with students directly regarding course progression can be a tool for instructors to utilize in order to promote student well-being in the course. In sending electronic notifications or emails to the class, instructors can acknowledge the intensity of the course material and offer to meet with students who may be experiencing distress. These statements can also be added the course syllabus, as a way to display this message throughout the duration of the course. Instructors can also make an effort to check in with students who seem to have withdrawn from the course by not attending or completing assignments. These moments of communication may seem insignificant, but they can be strategically implemented in order to create a safe and supportive environment for students exposed to traumatic materials in the course content.

Assessment

In courses with a heavy focus on trauma related topics, assessment should always be part of the course. Whereas courses that do not use traumatic materials may assess student progress toward learning outcomes, this process is of even greater importance in courses with traumatic materials not only to assess student learning but also to monitor student reactivity. Assessment of student learning outcomes often comes in the form of an assignment (e.g., test, quiz, essay) while assessing student reactivity may take place on various levels. While some students may feel comfortable approaching instructors to share any adverse reactions to course materials, other students may withdraw from the course in various ways. Student withdrawal may include poor or no attendance, low or no participation in course assignments and discussions, or failing to respond to assignments in-depth. Instructors should also be aware of more overt reactions to the course content (such as tearfulness or anger) and be ready to respond accordingly. As previously mentioned, students who disclose having personal histories that may increase risk for reactivity to course content should be offered referrals to university and/or community resources that he or she may choose to utilize as a source of support and method of coping.

If students reach a higher level of concern, exhibited by making statements that would be indicative of harm to self or others, instructors should be ready to make a report without the student's consent in order to ensure the student's well-being and safety. Although this can be difficult for instructors, as they may fear it could jeopardize the rapport they have built with their student(s), student well-being is of primary concern and reporting to academic or student services administrators allows a broader network of care and support to be developed for the student.

Discussion and Future Directions

This paper has proposed a trauma-informed teaching model for use in university courses that cover trauma and traumatic stress, violence, sexual assault, or other courses that may be completely or partially focused on topics that contain elements of trauma. Building on the work of other scholars who have addressed this topic, this model was constructed using a well-known trauma treatment model as a foundation for understanding reactivity to trauma, and expanding it to be relevant for the classroom. This work contributes to existing trauma-informed recommendations for teaching by providing a framework through which the need for these recommendations can be understood. Using a trauma-informed model for teaching should not be the only step to becoming "traumainformed." Instructors of university courses should take additional steps in order to respond to the varying needs of their students. Educating students about and communicating the need for self-care in courses that incorporate trauma-related content may encourage prevention of burnout and secondary trauma in students (O'Halloran & O'Halloran, 2001). Steps such as providing trainings to help instructors identify students at risk for mental health problems, which are prevalent among college students (Hunt & Eisenberg, 2010), implementing mentoring programs (Santos & Reigadas, 2005), and making clear to both instructors and students campus resources for mental health, advocacy, and advising are also recommended for holistic care of students in addition to mindful introduction of sensitive materials in the classroom.

This model may help those in the social work profession to more clearly implement the competencies outlined by the Council on Social Work Education (CSWE). Specifically, Competency #3, which calls for social workers to understand and promote the advancement of human rights and social, economic, and environmental justice, to include safety and education (CSWE, 2015). The creation of this model was founded on the recognition of the widespread experience of trauma, and aligns with the CSWE's call for professionals to "engage in practices that advance social, economic, and environmental justice" (CSWE, 2015, p. 8). Instructors at the university level should be a part of this process, and can both model and practice social justice with students in the classroom. Furthermore, the CSWE regards dignity and worth of the person as a central professional value in the field of social work that should be fostered in the educational environment (CSWE, 2015). Since this proposed model centers on understanding the student's own level of reactivity and strives to help instructors respond accordingly to foster student well-being, the values of dignity and worth are exemplified through its use.

It should be acknowledged that this model was developed in the context of a nonclinical trauma studies program with courses that focus on topics such as trauma and violence directly. In this way, the model has been formulated through the experience of teaching about trauma and implementing traumatic materials into the classroom due to the general focus of the course itself. However, other instructors may find that their own students are having reactions to materials that are not overtly "triggering" or seemingly traumatic in content. The authors denote this as a difference between teaching trauma, in which traumatic materials are the focus of the course content (Carello & Butler, 2014), and trauma-informed teaching, in which students with prior histories of trauma exposure may react adversely to any number of cues that are presented in a classroom not related stereotypically to trauma but personally meaningful to the student (Cunningham, 2004; Dufresne, 2004). This model may be flexible for both contexts; however, as the elements of trauma exposure and trauma re-exposure in the classroom setting may also be true for students taking courses unrelated to psychological trauma or distress. More development of the current model and empirical investigation of teaching trauma and trauma-informed teaching may help to clarify any existing differences in the needs of students with trauma histories in both types of classes.

It is important to remember that in conceptualizing student reactivity to traumatic course materials using Herman's (1997) Triphasic Model, instructors do not fill the role of helping professionals, such as social workers, psychologists, therapists, or doctors. All care toward students should be provided by licensed professionals. However, the Triphasic Model does provide a frame of reference that can inform instructors of signs and symptoms of student reactivity at various levels of the recovery process for students. Again, as it is expected that students will be present in the course with a history of trauma that may have occurred in the distant or recent past, or is currently ongoing, leaving students vulnerable to adverse reactions to course materials that should be thoughtfully implemented. Instructors may need to make referrals or work with student services offices offered at their university in order to ensure student care and safety.

While this pedagogical model recognizes the possibility for student reactivity to trauma-related course materials, it does not address how the histories and reactions of instructors may also influence the higher education classroom. Further study and conceptualization should be done to consider how this added element may affect the current model and trauma-informed teaching as a whole. Perhaps the greatest focus of attention in advancing knowledge related to trauma-informed teaching at the university-level is to provide empirical support for models such as these authors propose, as well as for trauma-informed interventions. While in the past many recommendations have been made for teaching trauma, no studies to date have tested these recommendations. An empirically supported model that can be used as a lens in how to teach traumatic materials in the classroom will give university faculty the opportunity to more carefully introduce students to trauma in an academic setting, while keeping in mind the students' own levels of reactivity and steps to healing from previous trauma.

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Creating a Trauma-Informed Community Through University-Community Partnerships: An Institute Agenda

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Abstract: The impact of trauma on wellness has been identified as a community health crisis. The alliance of universities and communities is a plausible response to address the scope of the problem given their wealth of resources. The Institute on Trauma and Trauma-informed Care (ITTIC) is an exemplar of a university-community partnership and unique approach that has fostered a common language within and between organizations to foster at the community level an awareness and understanding of trauma. The present article provides an overview of university-community partnerships and their importance to social work practice. It describes the formation of the Institute and discusses its model and contributions to the local community and abroad. The implications of ITTIC for the School, University and community are discussed. An iterative process that includes active engagement, evaluation, and reflection, is recommended for the integration and advancement of trauma-informed care through university-community partnerships.

Keywords: University-community partnerships; trauma; trauma-informed care

Universities are uniquely situated to address the social needs of their surrounding communities, due, in part, to their civic engagement as well as the intersection of teaching, research, and service (Buys & Bursnall, 2007; Maurrasse, 2002). University-community partnerships are one way in which academic institutions can fulfill this responsibility. The present article provides an overview of university-community partnerships as represented in the literature and highlights their relevance to social work. The Institute on Trauma and Trauma-informed Care at the University at Buffalo, New York, is then described as an exemplar for university-community partnerships, particularly as it addresses the community's need to become trauma-informed. The development of the Institute, as well as its efforts, contributions, and future directions are discussed.

University-Community Partnerships

University-community partnerships foster the development of relationships across systems and the mobilization of pooled resources through collaborative initiatives. While universities provide excellence in research and education, community partners provide practice knowledge and a natural setting with community members. Together, these partnerships can "advance practice to research and research to practice" (Dulmus & Cristalli, 2012, p.195) as they bridge the gaps between research and practice, and, the classroom and real-world practice (Institute of Medicine, 2001; McCaslin & Barnstable, 2008; Mullen, Bledsoe, & Bellamy, 2007). Further, the information exchanged between

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the academy and the social service sector can: (a) promote professional development; (b) establish and strengthen meaningful relationships; (c) foster social change efforts; and, (d) enable better client outcomes (Allen-Meares, 2008; Miller & Hafner, 2008; Van de Ven & Johnson, 2006).

University-community partnerships represent diverse collaborations with a range of activities and levels of engagement (Strier, 2014). The diversity is highlighted in the literature which includes partnerships aimed at: social work curriculum development (Lewis, Kusmaul, Elze, & Butler, 2016), low-income senior housing (Perry et al., 2015); homelessness (Patterson, Cronley, West, & Lantz, 2014), nonprofit capacity building (Kindred & Petrescu, 2015); child protection and family violence (Fantuzzo, Mohr, & Noone, 2000), and the advancement of research in human service organizations (Dulmus & Cristalli, 2012).

University-community partnerships can be vulnerable to various challenges given the potential for an imbalance of power and differences in expectations (Dempsey, 2010; Kindred & Petrescu, 2015). However, such challenges can be minimized through shared decision-making, clearly defined roles, and the articulation of specific goals (Miller & Hafner, 2008). In addition, transparency and the desire to learn from each other can foster trust, collaboration, and a shared sense of capacity and influence (Miller & Hafner, 2008). These characteristics, centered on personal relationships, can lead to successful partnerships (Bringle & Hatchner, 2002; McCaslin & Barnstable, 2008).

University-Community Partnerships, Social Work & Trauma

University-community partnerships can be integral to social work practice, education, and research (Dentato, Craig, & Smith, 2010; Lewis et al., 2016). According to the preamble of the National Association of Social Workers' (NASW) Code of Ethics:

The primary mission of the social work profession is to enhance human well-being...with particular attention to [those]...who are vulnerable, oppressed, and living in poverty. A historic and defining feature of social work is the profession's focus on individual well-being in a social context and the well-being of society. Fundamental to social work is attention to the environmental forces that create, contribute to, and address problems in living.... Social workers also seek to promote the responsiveness of organizations, communities, and other social institutions to individuals' needs and social problems. (NASW, 2008, para. 1-2)

Trauma, although not explicitly noted in the preamble, is often at the intersection of vulnerability, oppression and poverty – dimensions of the human experience that are critical to social work. Over the past two decades, the complexities of trauma and potentially traumatic events have been illuminated, particularly given their association with health-compromising behaviors, disease, and what has been identified as a "health crisis" (Larkin, Felitti, & Anda, 2014). Trauma-informed care has emerged as a systems-based response to trauma and trauma sequelae in order to create organizational environments that recognize the impact of trauma, promote healing, and avoid retraumatization (Butler, Critelli, & Rinfrette, 2011; Harris & Fallot, 2001). The Institute on Trauma and Trauma-informed Care is an exemplar for how university-community partnerships can embrace the

mission of social work with a particular focus on a community's need to become trauma-informed.

The Institute on Trauma and Trauma-Informed Care: Conceptualization and Inception

The Institute on Trauma and Trauma-Informed Care (ITTIC) was established in 2011 by a clinical professor and a research professor in the School of Social Work at the University at Buffalo as a center for university-community partnerships that focus on consultation, collaboration, training, evaluation and research. The Institute developed in response to an advancing global awareness of the prevalence and impact of trauma (Mills et al., 2011) and the needs of the surrounding community. The foundation of ITTIC is comprised of the five principles of trauma- informed care: choice, collaboration, empowerment, safety, and trustworthiness (Harris & Fallot, 2001). The mission of ITTIC is to foster a community-wide understanding of "what it means to be...trauma-informed..., [to] identify [and address] the need for trauma-informed change..., and [to] take necessary steps to integrate and sustain these changes over the long term" (Richardson, Coryn, Henry, Black-Pond, & Unrau, 2012, p.179). The Institute is housed within the Buffalo Center for Social Research (BCSR) and complements the School's trauma-informed and human rights curriculum.

A Community in Need. ITTIC is nestled in a university campus that is situated in a community of approximately 264,000 residents that is marked by poverty, increasing violence, and changing demographics. Approximately 39% of the population is African American and 11% is Hispanic/Latino (U.S. Census Bureau, 2010). About half of all residents are "doing poorly or struggling economically" with 43% of individuals having an income of \$25,000 or less and about 43% of children living in poverty (University at Buffalo Regional Institute, 2014a, 2014b, p.4). Poverty rates are influenced by regional job loss; for example, 20,000 jobs were lost between 2008 to 2009. In addition, 1 out of every 100 individuals in the community is a victim of a violent crime (not including theft or breaking and entering) and the rate of crime continues to increase. The needs of the community are compounded by gaps in psychiatric and medical services as well as changing demographics, including the annual resettlement of approximately 1,500 refugees (University at Buffalo Regional Institute, 2014a, 2014b). Low-income urban areas, like the respective community, have been associated with increased risk for trauma due to violence, drug activity, incarceration, and victimization. African Americans are disproportionately at increased risk for lifetime exposure to trauma (Kiser, Donohue, Hodgkinson, Medoff & Black, 2010). As a social work institute focused on community collaboration, the placement and mission of ITTIC are most appropriate.

Toward the Creation of a Trauma-informed Community

ITTIC was established in a time and environment that was "ready for it." Across the United States, initiatives and policies to support trauma-informed practices were well underway (Cooper, Masi, Dababnah, Aratani, & Knitzer, 2007). For example, as early as 2005, Illinois, Massachusetts, and Oklahoma had passed legislation and implemented collaborative efforts to foster the integration of trauma-informed practices in child welfare

systems, schools, and behavioral health. Similarly, efforts were underway within New York State through the Community Health Care Association of New York State and in collaboration with the National Traumatic Stress Network, to promote trauma-informed care within various medical centers, family and children's services, and through training institutes.

More proximally, the University of Buffalo School of Social Work, with which ITTIC is affiliated, was pursuing its re-accreditation. As the School engaged in this process, it considered the needs of the community and the status of TIC within the surrounding community-based organizations. The founding co-directors of the Institute assisted the School in developing an assessment tool that would facilitate a community evaluation. The School had a strong presence in the community through well-established field placements and numerous alumni working in the community. This presence fostered openness among community organizations to the administration of the measure. The School gathered and analyzed the data, and subsequently disseminated their findings to the community, which sparked an interest among organizations for more information on TIC.

Concurrently, as the School established a new trauma-informed curriculum, the community started a trauma coalition in which one of the Institute's co-directors played an integral role. In response to the community's desire for more knowledge and training, ITTIC was created. Among the first initiatives of the new Institute was the procurement of a Substance Abuse and Mental Health Services Administration (SAMHSA) train-the-trainer grant. As information about the training and ITTIC spread, the Institute began to receive requests from organizations for training. Such requests were, in part, influenced by current students in their field placements and a strong presence of School alumni, many of whom were among the first to request training. Notably, although the Institute initially had few resources, many of the early trainings and consultations were provided free-of-charge. *Pro bono* work further fostered relationships between the ITTIC and the community. It became evident that the Institute was committed to its work and invested in the community.

ITTIC used a formative process during its development, beginning with the support of the School's Dean, including the allocation of physical space in the School's research center. The first year for the Institute was critical to establishing a community presence and involved strategic tasks such as developing an online presence; establishing an advisory council of local, national and international expertise; crafting a strategic plan; creating a field placement for MSW interns; and generating initial revenue (e.g., SAMHSA training grant).

As the work of the Institute continued to expand, the co-directors sought consultation from top administrators in local agencies to help create a strategic plan. Similarly, ITTIC established an expert advisory panel of lead experts in the field of trauma and TIC to provide the Institute with advisement. Over the first year, the co-directors met biweekly, and had monthly meetings with the director of the BCSR. In addition, bimonthly meetings were held with various community members and recent graduates to help inform the Institute around priorities for engaging with the community. ITTIC shared information and literature (e.g. impact of trauma, understanding TIC, etc.) with community members and encouraged them to pass it along to others.

Collaboration: A Key Principle of TIC and ITTIC's Operation

ITTIC embraces a *total* approach when working with community partners. The Institute assists organizations with the adoption and integration of trauma-informed care by working *with* them to identify their readiness for change, while assessing their resources (e.g., clinical sophistication) and supporting the development of sustainable strategies to foster change at the organizational level (Brown, Baker, & Wilcox, 2012; Hummer, Dollard, Robst, & Armstrong, 2010). The principles of trauma-informed care are enacted within the Institute's daily operations and its collaborations such that engagements with community partners become exemplars of trauma-informed practices.

By "modeling the model," members from ITTIC initiate a relationship with organizations that is based on trustworthiness and fosters emotional safety. Members extend themselves to the organizations by their willingness to meet with them in person, visiting the agency, and making themselves available for ongoing consultation via phone and/or in person. During the initial phases of partnership, it is not uncommon for ITTIC to provide the organization with references from previous partners. In addition, materials, resources and information (e.g., infographics, impact of trauma, etc.) are provided to the organization to help them make informed decisions about what makes most sense for them and how they would like to proceed. Partnerships begin with open dialogue regarding what the organization is looking for and different options that the Institute can provide to them depending on what makes most sense for the organization. Together, the organization and ITTIC work together to develop a strategic plan that is tailored to the organization's goals and the resources that they have available to them. Through ongoing communication and routine contact with a point person(s) at the organization, members of the Institute provide updates, have team meetings to monitor progress on the work plan/timeline, and maintain flexibility to feedback throughout the process. While ITTIC acknowledges its expertise in trauma and TIC, it also recognizes and upholds the expertise of agency staff regardless of their position or experience. The Institute maintains a stance of not telling organizations what to do, but rather, working with the organizational team to operationalize what TIC looks like in their role and in their agency.

The process for organizations to become trauma-informed involves a cultural shift "structured around the presumption that everyone in the agency (from clients through agency management) may have been directly or indirectly exposed to trauma" (Wolf, Green, Nochajski, Mendel, & Kusmaul, 2014, p.111). Thus, the Institute seeks to ensure that an organization, from executive management to clients, as well as all policies, practices and procedures, are trauma-informed (Harris & Fallot, 2001). The inclusion of employees is critical – they translate policies into practices with clients – yet they are often overlooked regarding trauma-informed care (Bowen, Privitera, & Bowie, 2011; Keesler, 2016; Wolf et al., 2014). ITTIC also explores the ways in which organizations already exemplify trauma-informed practices with clients as trauma-informed practices are frequently used yet rarely identified as such (Wolf et al., 2014).

Training – A Critical Element

Training is central to ITTIC's mission as it is a critical component for agencies seeking

to implement trauma-informed care (Brown et al., 2012). Although many trauma-informed initiatives "lack theory-based comprehensive staff trauma training models that agencies can adopt system-wide as a way to implement TIC" (Brown et al., 2012, p.508), the Institute uses a user-friendly training curriculum comprised of fundamental trauma knowledge (e.g., definition of trauma and its biopsychosocial implications, triggers, retraumatization, vicarious traumatization) and the principles of trauma-informed care (e.g., conceptualization of principles, their importance, and their implementation). The training fosters a perceptual and attitudinal shift as participants are taught to approach trauma as a *universal precaution* (i.e., each person is interacted with as if they have experienced trauma) and to ask clients "What has happened to you?" rather than "What is wrong with you?" (Bloom, 1994).

The structure and content of the training is malleable to organization-specific wants and needs, and is often influenced by a reciprocal process of evaluation and training, largely consistent with translational research (Rubio et al., 2010). The Institute works with community partners based upon their needs and resources, and considers what makes most sense at that time. Thus, agencies get support (i.e., consultation/training/evaluation) that is personalized. In addition, baseline evaluations provide a critical understanding of an organization's current functioning from which the Institute can tailor the initiative and ascertain the initiative's impact through pre-/post-assessments and analyses (Hummer et al., 2010). This approach fosters the likelihood that the community partner will find the support useful and relevant, while increasing buy-in from those involved. In addition, ITTIC assists organizations in identifying and training "trauma champions" as a means of fostering the integration of trauma-informed care through a train-the-trainer model and as an ongoing internal support (Brown et al., 2012; Brown, Harris, & Fallot, 2013; Henry et al., 2011).

Growth and Advancement

Over the course of five years, ITTIC has expanded its assets and impact in various ways. In addition to augmenting its advisory panel with national experts and pool of affiliates, the Institute has established an operating budget of self-sufficiency, expanded its capacity as a designated field placement for MSW students, as well as independent studies and research internships for PhD students. ITTIC has created a well-established presence within the community and demonstrated the versatility of trauma-informed care through its work with more than 20 local agencies and organizations in children's mental health and residential services; adult behavioral health; crisis services; refugee, asylee and immigrant services; military veteran services; and, the criminal justice system (Bloom & Sreedhar, 2008). In addition, more than 10 students have completed field placements at ITTIC where they have been immersed in trauma-informed care. As students graduate and become employees within community organizations, they have the potential to further the work and connections of the Institute while promoting trauma-informed care.

ITTIC has expanded its community influence through local think-tanks around trauma and trauma-informed care. In addition, it provides leadership and administrative support to the Trauma-Informed Community Initiative of Western New York (TICI). Together, they developed a community action plan to "lead and assist organizations, individuals, and communities through the mobilization of resources in education, prevention, and response to the multi-dimensional aspects of trauma as a root cause of our growing public health crisis" (University at Buffalo School of Social Work, 2016, para. 1). Grand rounds are hosted throughout the year to provide regional trainings and presentations on topics related to trauma and trauma-informed care.

The Institute has extended its influence beyond the local community to the state, national, and international levels. Through funded collaborations with the State Department of Health AIDS Institute and the State Office of Alcohol and Substance Abuse Services, ITTIC has engaged in partnerships focused on training individuals who will serve as champions across the State. The Institute has developed *Trauma Talks*, an online podcast series of interviews with service providers and survivors about strength, resilience, and trauma-informed approaches in the healing process for trauma. In addition, ITTIC and its affiliates continually present at agencies and universities, as well as national and international conferences such as the Society for Social Work Research, the Council on Social Work Education, and the International Congress on Law and Mental Health (e.g. Heagle, Green, & Peek, 2016; Keesler & Green, 2014; Keesler & Nochajski, 2016; Nochajski & Hales, 2015).

The Institute's use of Harris and Fallot's principle-based model has afforded opportunities for the development and validation of an instrument to measure trauma-informed care within organizational culture which has largely been lacking (Brown et al., 2013; Clark et al., 2008; Hendricks, Conradi, & Wilson, 2011; Kusmaul, Wilson, & Nochajski, 2015). The development of such a measure presents the opportunity for comparative analyses within and among organizations, and the foundation for future work, for example, associations between trauma-informed care and agency/client outcomes (e.g., behavioral and psychiatric progress, injuries, staff retention). Such research is a critical next step in advancing trauma-informed practices (Brown et al., 2012).

Emergent and critical research surrounding TIC has come forth through the work of the Institute and its affiliates. Kusmaul et al. (2015) identified a high correlation among the five principles of TIC (Harris & Fallot, 2001) thus suggesting the integral interrelationship between the principles as well as the possibility of a unidimensional construct. In addition, they noted an association between employees' education and position within an organization with their perceptions of TIC. Higher education and higher ranked personnel (e.g., administration) were associated with more favorable ratings of TIC. Keesler and Isham (2017) identified the feasibility of integrating TIC within the context of services for individuals with intellectual and developmental disabilities. Findings suggested a positive association between TIC and staff satisfaction, restraint reduction, and behavioral improvement among individuals with disabilities. This research was the first study of its kind within the peer-reviewed body of literature on intellectual and developmental disabilities. Subsequent research has identified a positive association between TIC training and increased satisfaction among human service staff (Hales et al., 2016). Following an

agency-wide initiative to integrate TIC, post-test results identified approximately 10% to 16% increases in staff satisfaction with delivery of services, relationships with management, and connections and satisfaction with the workplace (Hales et al., 2016). In addition, Keesler (2016) noted the predictive nature of TIC and staff members' professional quality of life. Organizational environments that demonstrated greater presence of choice, collaboration, empowerment, safety, and trustworthiness, predicted greater satisfaction and lower burnout among workers. It is the authors' understanding that this is the first time TIC has been directly linked with staff outcomes.

Differentiating Levels of Trauma Services

Through its work, ITTIC has also identified and differentiated three levels of trauma services: (1) trauma-informed, (2) trauma-sensitive, and (3) trauma-specific. This perspective mirrors prevention and health promotion models that recognize universal, secondary, and tertiary levels of intervention (Skybo & Polivka, 2007). In addition, the trilevel perspective provides clarity for providers and appropriately frames the primary work of the Institute in relation to other possibilities for the care and treatment of individuals who have experienced trauma.

At the first level, trauma-informed practices are anchored in choice, collaboration, empowerment, safety, and trustworthiness for everyone (Harris & Fallot, 2001). Being trauma-informed considers: (a) where and when services are offered; (b) attentiveness to signs of discomfort among clients and staff; (c) perception of discomfort in a trauma-informed way; (d) providing clear information about what will be done, by whom, when, why, and under what circumstances; (e) provision of clear and appropriate messages regarding rights and responsibilities to clients and staff; (f) cultivating an atmosphere of working "with" rather than doing "to" or "for"; (g) providing an atmosphere that allows people to feel validated and affirmed with each and every contact at the agency; (h) paying attention to what works and what does not; and, (i) a deliberate use of non-problem focused language.

Trauma-sensitive is the second level of trauma services. Being trauma-sensitive involves the decision to address trauma and is exemplified through the use of trauma screening tools/evaluations and considers the procedures and process of providing services to clients. A deliberate effort is made in allocating time to: (a) witness the impact the work may have on staff; (b) promote self-care practices (e.g., having a venue for staff to decompress, debrief, and rebuild); and, (c) modifying intake, supervisory sessions, and procedures that may be intrusive.

The third level of trauma services is trauma-specific. Trauma-specific refers to trauma treatments that have been researched and are evidenced-based or, at least, promising practices. Such interventions are conducted by clinicians trained in the specific modality. Trauma-specific interventions include cognitive processing therapy, trauma-focused cognitive behavior therapy, crisis intervention stress debriefing (CISD), eye movement desentization reprocessing (EMDR), and prolonged exposure (PE). Most of the treatments for trauma that have been categorized as evidence-based or promising have specifically treated PTSD.

Impact of Institute on School of Social Work

ITTIC has had a notable impact on the University of Buffalo School of Social Work within a relatively brief period of time. First, the Institute has served as a champion of and consultant on the trauma-informed perspective for the School. The directors of ITTIC have helped to train the School's faculty and staff on trauma-informed care and have facilitated changes within the School toward more trauma-informed practices. Secondly, the Institute has strengthened the School's portfolio. Through service, teaching and evaluation, ITTIC has generated additional revenue for the School, has made contributions to the literature through its emerging publications, and has helped faculty to define their roles within the School as leaders. Thirdly, the School has become more prominent in the community. As trauma-informed care has become a "hot topic" locally, regionally, and nationally, ITTIC's work has helped strengthen community relations and position the School as a strong partner for collaboration. Fourthly, ITTIC has become a model for the perspective of an institute within the University. Because of the distinguished identity of the ITTIC in the community, the University has begun to look to the Institute and the School for leadership in institute development. Lastly, ITTIC has helped the School with recruitment of students and faculty. With trauma and trauma-informed care at the forefront of behavioral health, the Institute has attracted not only students who seek to learn more about trauma and trauma-informed care through applied experience, but also faculty members who seek to partner on grants and research opportunities given the well-established community relationships between ITTIC and the community.

Directions for Future Work

As ITTIC continues to envision a trauma-informed community, it strives to increase its influence and sustainability through an expansion of community partnerships, presentations, publications, and funding. The directors and affiliates continue to learn about the process of becoming trauma-informed from each community partner and about the nuances of trauma-informed care with specialized populations. The need to better understand *how* TIC is implemented within an organization and viewed by service providers is recognized by the Institute and is supported by research (Kusmaul et al., 2015).

Conclusion

University-community partnerships can be seen as "joint ventures [with] opportunities to achieve different goals" (Strier, 2014, p.155). However, for ITTIC and its community partners, the goal has been mutual: to infuse trauma-informed care within service delivery. This is a unique consideration that has strengthened the Institute as a visible and viable resource for the community, School, and University. Good relationship-building and its components are inherent in trauma-informed care. As such, the product has become much of the process for the Institute. Kindred and Petrescu (2015) noted:

Communication and relationship building [are] an important aspect to community collaborations, and to understanding and potentially improving the process is just as important as delivering outcomes. Paying attention to process and relationship building will ultimately impact future community collaboration efforts between

universities and nonprofits and may potentially lead to even better outcomes than participants initially expect. (p. 840)

The directors and affiliates of the Institute continue to learn about what it means to be trauma-informed and the process of becoming trauma-informed as it evolves through their work. While many people experience trauma and potentially traumatic events, far fewer are ever diagnosed with post-traumatic stress disorder (PTSD; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). However, the *need* to consider those who have not been diagnosed with PTSD yet have trauma symptoms remains, and a general awareness and understanding of trauma is warranted, thereby justifying the need to be trauma-informed. Thus, the establishment of a trauma-informed community through the adoption of a common language within and between organizations continues through the work of ITTIC, grounded in university-community partnerships.

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Trauma-exposed Infants and Toddlers: A Review of Impacts and Evidence-Based Interventions

Alysse Melville

Abstract: Infants and toddlers are exposed to abuse and neglect at disproportionate rates compared to other children, setting a trajectory for disrupted developmental processes and increased vulnerability to future traumatic exposure. Social workers encounter traumaexposed young children across a number of systems, including but not limited to early childcare, family physical and mental health, court, and child welfare. It benefits social workers to have a working understanding of current research related to the bio-psychosocial impact of trauma on infants and young children and an awareness of current, research-driven interventions that can support young, at—risk children and families. This article reviews trauma-impacted development throughout the first two years of life with a discussion of current research exploring attachment and brain development and then discusses caregiver—child based interventions that work to repair disrupted attachment patterns, repair impaired regulatory processes, and return the caregiver—child relationship to a healthy developmental path.

Keywords: Trauma; infant mental health; early childhood; attachment; development; intervention

Current national estimates suggest that children from birth to age two years old make up over a quarter of substantiated cases of child maltreatment and almost three-quarters of abuse and neglect-related fatalities (U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth, and Families, & Children's Bureau, 2015). The historical assumption of the natural resilience of very young children has been challenged by research showing trauma symptoms developing in children as early as three months of age (Cordón, Pipe, Sayfan, Melinder & Goodman, 2004) and neuroendocrine responses to maternal trauma transmitted in utero (Yehuda et al., 2005). Despite the high prevalence rates of trauma exposure in children ages zero to two years, there is a dearth of available resources and interventions to address and mitigate trauma for infants and toddlers, especially targeted at social workers. This deficiency is evidenced by only seven out of 43 Empirically Supported Treatments and Promising Practices listed by the National Child Traumatic Stress Network as appropriate for children ages zero and up, and of those, only two specifically and exclusively address early childhood trauma (Child Parent Psychotherapy and Attachment and Biobehavioral Catch-up, both reviewed below). Social workers will no doubt encounter trauma-exposed infants and toddlers in their area of work, whether directly or through caregivers, and must be equipped to advocate for these at-risk children. This article explores the impact of trauma-exposure on children ages zero to two years, due to the disproportionately high rates of maltreatment exposure in this age range, with particular emphasis on the impact of trauma on attachment patterns, and a review of two promising evidence-backed interventions that are developmentally appropriate for infants and toddlers.

Early Childhood Trauma

Numerous types of trauma can impact infants and toddlers; these range from single, isolated traumatic events, such as natural disasters or car accidents, to chronic maltreatment and victimization, including domestic violence, neglect, physical abuse and sexual abuse. A traumatic event may be defined as an event that is overwhelming to the child's senses or self-regulatory abilities, threatens the child's well-being or that of their caregiver, indicates the world is uncontrollable and unpredictable, and/or involves stressors that exceed the child (or caregiver's) normal resources (Cordón, et al., 2004; Van Horn & Lieberman, 2008). Chronicity of trauma (Streeck-Fischer & Van der Kolk, 2000), the child's pretrauma adjustment (Feldman & Vengrober, 2011), and the caregiver's reaction to the trauma (DeVoe, Klein, Bannon, & Miranda-Julian, 2011) have all been linked to the severity of children's post-trauma functioning.

Impact of adversity. A number of domains are impacted by early maltreatment, including cognitive, behavioral, socio-emotional, and health. Compared to older children who have been maltreated, trauma-exposed children ages zero to two years are at greater risk for developing internalizing symptoms (Kaplow & Widom, 2007) and have difficulties with inhibitory control and working memory (Cicchetti, Cowell, Rogosch, & Toth, 2015). In addition, children who experience early adversity, such as abuse and neglect, are at greater risk than their non-maltreated peers for impaired executive functioning (DePrince, Weinzierl, & Combs, 2009), a set of skills that predicts kindergarten school readiness (Fitzpatrick, McKinnon, Blair, & Willoughby, 2014) as well as adult academic and job outcomes (Miller, Nevado-Montenegro, & Hinshaw, 2012). Large-scale epidemiological studies such as the Adverse Childhood Experiences (ACE) study have analyzed the prevalence and effects of early childhood traumatic experiences in over 17,000 adults and have found relationships between early adverse childhood experiences and the prevalence of a number of adverse adult physical health outcomes (Dong, Anda, Dube, Giles, & Felitti, 2003). Further, although not specific to children zero to two years old, children under 6 experience more ACEs than any other age (Thompson et al., 2015). Multiple ACEs in early childhood are associated with impaired social-emotional development (McKelvey, Whiteside-Mansell, Connors-Burrow, Swindle, & Fitzgerald, 2016), increased risk of polyvictimization across childhood (Grasso, Ford, Dierkhising, Branson, & Lee, 2015), belowaverage academic literacy skills and behavior problems (Jimenez, Wade, Lin, Morrow, & Reichman, 2016), and increased rates of PTSD and internalizing symptoms in adulthood (Grasso et al., 2015). Taken together, these findings suggest that children zero to two years old are at risk of increased exposure to future experiences of trauma throughout childhood, as well as other potential negative developmental outcomes.

Diagnosis of early trauma. Critics of the DSM-IV's diagnosis of PTSD argued that it did not fit the complex symptoms that traumatized young children often present with (Feldman & Vengrober, 2011) as it was dependent largely on the individual's ability to verbalize feelings, details, and expectations. In two studies that measured the impact of trauma on toddlers, none of the children in the study fit the formal DSM-IV criteria for PTSD (Mongillo, Briggs-Gowan, Ford, & Carter, 2009). Similarly, among children in treatment for trauma with the National Child Traumatic Stress Network, fewer than a quarter met the criteria for PTSD. Other research found that assessment alternatives to the

DSM-IV diagnosis (including changes ultimately adopted for use in DSM-5 [American Psychiatric Association (APA), 2013]) resulted in significantly more PTSD diagnoses in preschool-aged children, indicating that the DSM-IV may have underdiagnosed PTSD for a considerable number of preschool-aged children (Scheeringa, Myers, Putnam, & Zeanah, 2012). Recent changes in the DSM-5 reflect the need for creating a developmentally appropriate diagnosis for traumatized children with the creation of a Preschool Subtype category for PTSD that helps to adapt the PTSD diagnosis to children under 6 years old (APA, 2013); however, these changes still do not reflect the specific impact of trauma on children ages zero to two years. In fact, although the DSM-5 notes that PTSD may occur at any age, it further clarified "beginning after the first year of life" (APA, 2013, p. 276). The limited assessment and diagnostic criteria addressing preverbal trauma, experienced by infants and toddlers, may limit insurance funding and federal Medicaid funding for early intervention services for this population.

Development

Attachment

The process of attachment is arguably most important in the earliest years, as it creates a *biological framework* for managing future stress and arousal (Streeck-Fischer & Van der Kolk, 2000), thus shaping how a child interprets and reacts to future experiences. As infants are not able to decipher between distinct, different arousal states or verbalize their needs, they are dependent on caregivers to modulate their arousal and to care for their basic needs (Van der Kolk, 2006). During times of intense arousal or distress, secure children will return to behaviors that center on their primary attachment figure, such as seeking attention from or proximity to their caregiver; these behaviors elicit predictable caretaking responses in secure caregivers (Feldman & Vengrober, 2011). As caregiver's moderate infant arousal by providing comfort and stimulation as well as by providing care for basic needs (such as changing a diaper or providing food), the infant learns the process of co-regulation (Ford, 2005). Secure and sensitive caregiving provides a type of safeguard against hyper-arousal and disorganization and infants begin to develop a sense of self and awareness of body cues, setting the stage for future development of self-regulation and affect tolerance (Feldman & Vengrober, 2011).

The relationship between early childhood trauma and attachment can be seen from a number of angles; namely, whether the attachment figure perpetrated the trauma, whether the emotional needs of the child were met after the traumatic experience, and to what extent the parent was affected by the child's traumatic experience (Pynoos, Steinberg, & Piacentini, 1999). The typical curiosity of the exploratory-orienting response that takes place as children begin to gain confidence in assessing and exploring the external world is also impacted by trauma, as children may instead choose to remain close to inconsistent or unpredictable caregivers. As children initially rely on their primary attachment figure's appraisal of contextual danger, a child with a neglectful or maltreating caregiver may be vulnerable to being without such early messages of danger and risk exploring too much. Conversely, the child may be exposed to a traumatized parent's over-estimation of danger, which may become internalized to the child (Pynoos et al., 1999).

In circumstances where the caregiver is unable or unwilling to provide early arousal modulation and basic care to young children, the child is at risk of exposure to overwhelming levels and durations of arousal. This lack of regulation risks imprinting in a child's developmental processes that emotions and arousal in general are dangerous/frightening, leading to potential avoidance of arousal in the form of numbing/dissociation or a response in the other direction such as arousal in the form of aggressive behaviors (Streeck-Fischer & Van der Kolk, 2000). In the Strange Situation, often used to observe and assess a toddler's response to separation from their primary caregiver, maltreated toddlers were found to be more likely to have disorganized attachments to caregivers (Cicchetti & Toth, 1995) as well as higher levels of cortisol after parental separation (Twardosz & Lutzker, 2010). Research with infants raised in countries engaged in war found that the mother's proximity to a traumatic event, not the child's proximity, was correlated with traumatic symptoms in children (Feldman & Vengrober, 2011). Infants' and toddlers' evaluation of danger relies mainly on referencing their primary attachment figure, which leads to the potential for traumatization through their attachment figure (Pynoos et al., 1999). This may shed some light into the detrimental effects of witnessing domestic violence in the home.

Neurobiological Development

Early childhood development of attachment occurs within the context of fast-paced neural development, thus making it nearly impossible to separate the infant's growing primary attachment from the neurobiological systems that are developing around stress and affect regulation (Twardosz & Lutzker, 2010; Van der Kolk, 2005). As experience shapes the brain through neural plasticity, synaptic connections that are use-dependent, either become strengthened or pruned based on early interactions with caregivers. The hypothalamic-pituitary-adrenal (HPA) axis is one such "use dependent" system which moderates arousal and regulation through a series of chemical reactions in the limbic system (Twardosz & Lutzker, 2010). When an individual is stressed, cortisol is released through the adrenal gland as a result of the HPA-axis interactions, and stress responses such as increased heart rate, blood pressure, arousal and concentration are triggered (DeBellis, 2001; Twardosz & Lutzker, 2010). In normal development, the stress response triggered by activation of the HPA axis and the release of cortisol through the adrenal gland is regulated by the hippocampus (Twardosz & Lutzker, 2010). As the hippocampus triggers the stopping of the HPA-axis chemical interactions, the body is restored to homeostasis through decreased heart rate, blood pressure and arousal, thus allowing infants to flow in and out of states of arousal and regulation safely and with predictability. Predictable coregulation by the primary caregivers aids typical functioning and development of the HPA axis (Twardosz & Lutzker, 2010).

Trauma-impacted development is also best understood through the intersection between neural development and social development, as it is difficult to address how trauma impacts attachment without a discussion of how attachment impacts the brain as well (Van der Kolk, 2005). Just as young children in responsive attachment relationships are able to organize their internal biological framework around expectations of safety and responsiveness from their caregivers (Streeck-Fischer & Van der Kolk, 2000), early trauma can impact a child's organization by creating expectancies of the world as unsafe and

unpredictable (Van der Kolk, 2005). The earlier discussed "use dependent" plasticity of the brain creates neural changes in children with chronic traumatic stress; creating a template of danger and survival through which later relationships and experiences are evaluated and processed (DeBellis, 2001; Pynoos et al., 2009). Primary trauma-related alterations in infant brain structure are in the HPA axis and the hippocampus (DeBellis, 2001; Ford, 2005). It is here that a major distinction between *types of trauma* becomes apparent; children with secure caregivers have a higher likelihood of developing a typical stress response system, as caregivers are able to continue to provide arousal modulation after a traumatic experience (Lieberman, 2004). However, if the trauma involves neglect or other maltreatment from the primary caregiver, chronic traumatic events, or traumatization of attachment figures (Feldman & Vengrober, 2011), the HPA axis can become severely impacted (Pynoos et al., 1999). This may also be the case if trauma responses from the infant are so severe that they challenge the resources of otherwise secure and attuned attachment figures, who may be unable to regulate the child in the face of such trauma responses (Markese, 2011).

The activation of the HPA axis results in behaviors consistent with duress, such as anxiety, hyper-arousal, and hyper-vigilance (DeBellis, 2001). Chronic traumatic stress represents an over-activation of the HPA axis and a disruption to the hippocampal process of restoring homeostasis after duress, thus exposing children to abnormally long periods of hyper-aroused states (Ford, 2005). The "use-dependent" plasticity of the brain begins to organize neural connections by prioritizing skills relevant to survival, interfering with the strengthening of connections relevant to safe attachment systems (Pynoos, et al., 1999). The development of the pre-frontal cortex is shaped by early information that children receive from caregivers and the outside world, and is organized around early experiences, such as to expect stability/regulation, neglect/deprivation, or violence/fear (Twardosz & Lutzker, 2010). As the prefrontal cortex aids children in interpreting information they receive from the outside world, a child who has been impacted by chronic traumatic stress may begin to build a cognitive framework where all information received from the outside world is interpreted as dangerous, thus perpetuating the cycle of persistent arousal (Twardosz & Lutzker, 2010). Although there is much yet to be learned about the impact of early maltreatment on brain development, the amygdala and hippocampus have been implicated in work related to early trauma exposure. For example, exposure to prenatal, antenatal, and postnatal maternal anxiety was associated with infant hippocampal growth (Qiu et al., 2013). In addition, early trauma has been related to smaller brain volume, less connective matter, and neuronal losses in the corpus callosum and frontal cortex (DeBellis, 2001).

Treatment Implications

The complex and attachment-dependent nature of early childhood trauma emphasizes the need for therapeutic interventions that can include the caregiver—child relationship (Lojkasek, Cohen & Muir, 1994). As discussed, trauma occurring within the developmental framework of early childhood has a direct impact on typical attachment processes, including trust formation and co-regulation which has an impact on the child's arousal modulation and agency/exploration (Pynoos et al., 2009; Van der Kolk, 2005). Important

considerations for treatment include the intervention's ability to address and repair disrupted attachment processes by taking into consideration the primary caregivers present and past trauma and their experience of the child's trauma as well as whether the intervention is able to increase levels of mutual sensitivity (Lojkasek et al., 1994). Ford, Albert and Hawke (2008) suggest that interventions for early childhood trauma should emphasize increasing the ability of the child and the caregiver to consciously control and co-regulate their internal alarm system. It is important to note that not all attachment work needs to take place within the context of a biological parent—child relationship; other caregiving systems can include relatives, foster or adoptive parents, and residential staff (Arvidson et al., 2011; Ford, et al., 2008) and have been shown to similarly reduce cortisol levels and behavior problems in trauma-impacted youth (Twardosz & Lutzker, 2010). Following are two evidence-backed interventions that effectively address risks associated with infant and toddler-exposure to trauma.

Child-Parent Psychotherapy (CPP)

Child-Parent Psychotherapy (CPP) is a relationship-based dyadic intervention for children from birth to age five who are experiencing difficulty as a result of traumatic events or relational disruptions (Lieberman & Van Horn, 2011). CPP aims to address the young child's experience of trauma through the lens of the relationship, by increasing mutual sensitivity and responsiveness between the infant and the caregiver (Tucker, 2006), addressing the observable behavior of the infant (Jones, 2006; Lojkasek et al., 1994), and naming the unconscious processing that may be occurring as a result of the caregiver's prior attachment systems and experiences (Jones, 2006). The structure of the CPP model includes caregiver-child sessions that are structured to enable the parent and child to engage in free-play and spontaneous reactions to each other. These reactions may be explored in the moment by the clinician or reviewed during collateral sessions with the parent (Lieberman & Van Horn, 2011). CPP supports the clinician's use of modeling, interpreting for the child as well as the provision of unstructured, reflective developmental guidance as a way to support the typical developmental trajectory of the child (Van Horn, Gray, Pettinelli, & Estassi, 2012). CPP is able to simultaneously address the child and caregiver's experiences and reactions to trauma, while also restoring typical attachment patterns and the child's developmental trajectory. Maltreating families report higher rates of abuse and neglect in their own childhoods, as well as insecure attachment patterns with their own caregivers (Toth, Rogosch, Manly, & Cicchetti, 2006). Because of the emphasis that CPP places on paying attention to the trauma of the caregiver's past and his or her ability to process the child's trauma, this dyadic form of therapy is also able to address the intergenerational transmission of trauma and attachment patterns from caregivers to their children (Van Horn & Lieberman, 2008).

CPP has been more widely studied with trauma–exposed pre-school populations (Lieberman, Ghosh Ippen, & Van Horn, 2006). Fewer studies have examined the impact of CPP with trauma–exposed children ages zero to two years. However, existing research with children ages zero to two years have found CPP to be linked to increased maternal empathy, and dyadic interaction, and decreases in infant's avoidance, resistance, and anger (Lieberman, Weston, & Pawl, 1991) as well as increased rates of secure attachment,

compared to maltreated infants who did not receive CPP (Toth et al., 2006). Children have been shown to be susceptible to trauma exposure in utero through caregiver exposure to interpersonal violence, stress, and trauma (Brand, Engel, Canfield, & Yehuda, 2006). Perinatal CPP begins intervention with dyads during the mother's third trimester and continues until the child is 6 months of age. Perinatal CPP with chronic trauma and interpersonal violence exposed pregnant mothers has been linked to decreases in maternal depression and post-traumatic stress symptoms, as well as increases in child-rearing attitudes, particularly with mothers with initially low maternal-fetal attachment (Lavi, Gard, Hagan, Van Horn, & Lieberman, 2015). CPP has been demonstrated to effectively address challenging early childhood behaviors related to trauma and attachment between caregivers and children, and has also been conceptualized as a developmentally appropriate intervention for pediatric medical trauma, such as invasive procedures or life-threatening illness (Bergeron, 2017).

Limitations of CPP center on the importance of the availability and engagement of a primary caregiver. If a caregiver is not willing or able to engage in CPP treatment then the fidelity to the model is compromised. CPP has been adapted to be used with young children who are placed out of the home, emphasizing the need for children to experience security even within complicated kinship or foster placements (Van Horn et al., 2012). CPP is a trauma-informed, developmentally-framed dyadic model that addresses the child's and caregiver's individual experiences while emphasizing that of the attachment relationship.

Attachment and Biobehavioral Catch-up (ABC)

Attachment and Biobehavioral Catch-up (ABC) is a 10 session, manualized, relational model that was developed to target the physiological and behavioral impacts of trauma in early childhood (Dozier, Bick & Bernard, 2011; Dozier, Peloso, Lewis, Laurenceau, & Levine, 2008). ABC uses the parent-child relationship to explore the impact of early trauma on the attachment relationship and to repair disruptions and distortions that occur as a result of altered stress-response systems and behavioral dysregulation in both children and their caregivers (Dozier et al., 2011). Throughout the 10 sessions, the clinician targets common trauma responses in attachment relationships, including the child pushing the parent away, the parent's own experiences that may interfere with attachment, such as past or current stressors, and the trauma-impacted child's adaptive physiological and behavioral responses (Dozier et al., 2008). ABC targets the behavioral and physiological dysregulation through play, during which time the clinician encourages and supports the parent in following the child's lead, responding to the child's cues, engaging with the child in regulating physical touch, and delighting in the child (Dozier et al., 2011). ABC addresses the parent experience through the use of videotaped parent-child interactions to show alternate attachment styles and emphasis on helping the parent become aware of automatic responses (Dozier et al., 2011).

In addition to caregiver sensitivity and maltreatment-related behaviors, studies of ABC have also explored outcomes related to the neurobiological underpinnings of attachment, trauma, and stress. A study comparing ABC to control interventions show significantly lower cortisol, a stress-hormone implicated in trauma and chronic stress exposure in children and adults, as well as fewer behavior problems post-intervention. In this study,

children in the ABC intervention groups had levels of cortisol similar to children in the non-maltreated control group following treatment (Dozier et al., 2008). Differences in cortisol production between maltreated children who received the ABC intervention in infancy/toddlerhood were observed through longitudinal follow-up in preschool (Bernard, Hostinar, & Dozier, 2015). Caregiver's event-related potentials (ERPs), a neurobiological marker of processing of their children's signals of emotion, and maternal sensitivity were enhanced in neglecting caregivers following the ABC intervention (Bernard, Simons, & Dozier, 2015).

ABC has been studied across a number of settings, including with children in foster care, caregivers in inpatient treatment programs, and in community settings. A follow-up study of the use of ABC with children in foster care found that children who received the ABC intervention prior to age two had stronger cognitive flexibility than a control group (Lewis-Morrarty, Dozier, Bernard, Terracciano, & Moore, 2012). In a study of the effects of the ABC intervention with mothers and infants in a residential substance-abuse treatment program, mean scores on observed sensitive parenting behavior measures were three times higher for the ABC intervention group than for the control group (Berlin, Shanahan, & Carmody, 2014). Additionally, ABC has proven successful at improving parenting behaviors even when translated into community practice models of care (Caron, Weston-Lee, Haggerty, & Dozier, 2016), demonstrating the ability to translate the ABC intervention successfully into social work agencies and community practice.

Conclusion

This article was written to provide an overview of the impact of trauma on the biopsychosocial development of children between birth and two years old, and as a guide for potential therapeutic interventions for this specific population. It does not cover all of the impacts of early childhood trauma, nor does it make a distinction between different types of trauma. It also does not provide a comprehensive or evidence-based review of the potential interventions, largely due to the minimal evidence-based research available for infant/toddler interventions.

Preverbal trauma must be assessed and addressed early, with developmentally appropriate interventions that target both the child and their primary attachment system and prevention models that focus on at-risk families and caregivers. Social workers encounter a number of at-risk, marginalized populations, including infants and toddlers. Social workers are poised as advocates for developmentally-sensitive, trauma-informed care and advocacy across a number of interdisciplinary settings. As more research uncovers the connection between early childhood experiences of trauma and adult mental and physical health problems (Dong et al., 2003), and more social workers engage in health care fields, more opportunities may arise to intervene with trauma—exposed young children in these and other interdisciplinary settings. Increased awareness and implementation of developmentally appropriate assessments, interventions, and policies to help trauma-impacted infants and toddlers may halt the cycle of trauma symptoms, restore healthy developmental trajectories, and promote well-being across the lifespan for future generations.

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Working With Refugees in the U.S.: Trauma-Informed and Structurally Competent Social Work Approaches

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Abstract: Social workers, government, and non-governmental organizations in the United States have been inadequately prepared to address the impact of trauma faced by refugees fleeing persecution. Compounding their initial trauma experiences, refugees often undergo further traumatic migration experiences and challenges after resettlement that can have long-lasting effects on their health and mental health. Micro and macro social work practitioners must understand the impact of these experiences in order to promote policies, social work training, and clinical practice that further the health and well-being of refugees and society. Social workers are in a unique position to provide multi-dimensional, structurally competent care and advocacy for diverse refugee populations. The experiences of Cambodian refugees will be used to examine these issues. We will explore the benefits of an ecological perspective in guiding interventions that support refugees, and will apply the framework of structural competence to highlight multidimensional implications for social work with refugee populations.

Keywords: Refugees; trauma; ecological perspective; structural competence

Of the 21.3 million refugees worldwide, more than 3.3 million (15.5%) have been resettled in the United States since 1975 (United Nations High Commissioner for Refugees, 2016). Refugees are individuals who were forcibly displaced from their home and across an international border due to conflict or persecution. A refugee is a person who,

owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country. (UN General Assembly, 1951, Article 1[A][2])

They flee seeking safety. Oppression, discrimination, war, and other traumatic experiences are common (UNHCR, 2016). As global crises continue, and the need for refugee resettlement grows, social workers must rise to address the unique needs of this population. The refugee experience does not simply begin upon entry in the host country, but instead is comprised of a "continuum of displacement, transition, and resettlement" (Catolico, 2013). Working with refugees requires an understanding of their pre-migration, migration, and post-migration trauma and other experiences (George, 2012).

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Pre-Migration & Transition

Many refugees have been forced into migration and resettlement due to exposure to violence and/or other traumas in their home country, including political violence, discrimination, child abuse, war, human trafficking or other human rights violations. Refugees report high rates of torture, including witnessing torture of family members or others, physical beating, rape/sexual assault, and deprivation of food and water (Hooberman, Rosenfeld, Lhewa, Rasmussen, & Keller, 2007). Estimated rates of torture exposure reported by refugees living in the United States range from 21% (Steel et al., 2009) to 44% (Higson-Smith, 2015). However, these numbers may underreport the true rate, in part due to stigma and fear associated with disclosure experienced by survivors. Malnutrition is also a common pre-migration experience of refugee adults and children. A recent study of 982 refugee children aged 0 to 10 newly arrived in the United States found that 45% experienced at least one form of malnutrition (Dawson-Hahn, Pak-Gorstein, Hoopes, & Matheson, 2016).

Unfortunately, with a few notable exceptions (Willard, Rabin, & Lawless, 2014), refugee screening upon arrival in the United States often does not include assessment of exposure to torture and other traumas pre-migration. Only half of U.S. states reported providing any mental health screening to recently arrived refugees, and of those, less than half directly asked refugees about war trauma or torture exposure (Shannon et al., 2012). This was despite the fact that refugees experience high rates of trauma during the pre-migration and transition experience. Many communities do not offer culturally-appropriate and linguistically accessible services to treat trauma and torture in any or all of the refugee groups resettling in their area, a violation of refugee rights to adequate health care (United Nations Committee on Economic, Social and Cultural Rights, 2000).

Trauma in one's home country is often not the sole adversity experienced during the process of refugee migration. Poorer outcomes have been noted for refugees who are displaced into temporary or institutional accommodations, such as refugee camps, compared to those who are placed in permanent, private residences in the host country (Porter & Haslam, 2005; Steel et al., 2009). Many refugee camps have documented patterns of abuse, excessive force, inhumane treatment, health risks (including communicable disease and lead exposure), and other human rights violations (Janmyr, 2014).

Resettlement

Issues that impact refugees upon resettlement include potential marginalization, socioeconomic disadvantage, acculturation difficulties, loss of cultural and social support, and cultural bereavement (Porter & Haslam, 2005). These issues must be considered as part of the migration experience. Refugee families may resettle into temporary or unstable housing and face employment and financial stressors. In addition, studies of post-migration challenges that refugees in developed countries face have documented exposure to community violence (Berthold, 2000), limited social networks (Dharod, Xin, Morrison, Young, & Nsonwu, 2013), difficulty finding formal childcare (Morantz, Rousseau, Banerji, Martin, & Heymann, 2013), and food-related challenges (Dharod et al., 2013).

Current federal support for refugees resettling in the United States covers health care, financial subsidies, case management services, English as a Second Language classes, and employment/job readiness services (Office of Refugee Resettlement, 2016). As noted above, refugees may be screened in the states in which they resettle; however, the screening content (namely whether it includes physical and/or mental health screening) is at the discretion of state policies, and often is merely an informal, conversational screening, if any (Shannon et al., 2012). Benefits offered to refugees are limited to an 8-month period, after which only provisionary support is offered to those who qualify.

As an acknowledgement of the high prevalence of torture experienced by refugees and asylum-seekers (and some other immigrants) in the United States, federal support is provided to agencies that deliver specialized services to torture survivors. The Torture Victims Relief Act (TVRA) of 1998 recognizes the need that many torture survivors have for rehabilitation, and outlines the authorization of U.S. funding to provide treatment and social and legal services for torture-exposed refugees, research, as well as training to support health care providers working with these refugees (TVRA, 2016). The Services for Survivors of Torture Program of the Office of Refugee Resettlement provides approximately \$10.5 million annually towards grants to agencies to provide trauma-informed, holistic, and strengths-based services to torture survivors and their families to promote rehabilitation (ORR, 2016).

However, support for refugees varies significantly at the state level, with little consideration by federal agencies for the health needs of incoming refugees when deciding resettlement locations (Agrawal & Venkatesh, 2016). Despite the efforts of the Torture Victims Relief Act, there are insufficient specialty clinics to serve all tortured refugees in need. U.S. social service systems often remain complex and difficult to navigate, and some torture survivors face eligibility restrictions for these programs, leading to difficulty accessing or paying for health care services (Ku & Matani, 2001; National Consortium of Torture Treatment Programs, 2015).

This paper seeks to explore the experience of Cambodian refugees in the United States more than three decades' post-resettlement. This case study of a single refugee group will be used to better understand the ecological impact of the refugee experience, and to provide recommendations for practice, policy, and education for those working with and advocating for refugee populations.

Cambodian Displacement & Transition in Refugee Camps

One of the largest genocides in the past century was perpetrated in Cambodia from 1975-1979 by the Khmer Rouge. Approximately 1.5 million Cambodians died as a result of starvation or murder (Kiernan, 2008). Those who survived recounted high rates of trauma and torture, including near-death starvation, death threats, forced labor, the murder of family members or friends, and witnessing beatings and killings (Marshall, Schell, Elliott, Berthold, & Chun, 2005; Mollica, Brooks, Tor, Lopes-Cardozo, & Silove, 2014; Mollica et al., 1993). Additionally, head trauma has been reported by those who survived the genocide, with prevalence rates documented as high as 18% (Mollica et al., 1993).

Following the end of the Pol Pot regime in 1975, over 500,000 fled Cambodia to be resettled in host countries (Tasker, 1993). During the time of transition, many Cambodians were settled temporarily in refugee or displaced persons camps. Some Cambodians spent many years in these Thai-Cambodian border camps, where reports of lack of food, water, shelter, and medical care were documented (Mollica et al., 1993). Those who survived the Khmer Rouge regime were more likely uneducated and unskilled laborers, and also more likely to be widowed women (Kula & Paik, 2016). While high rates of poor self-reported health, PTSD, and depression have been documented in Cambodians in a Thai-Cambodian border camp (Mollica et al., 1993), a number of protective factors, such as positive work status and economic activity, involvement in religious practices, and involvement in caretaking activities have also been identified (Mollica, Cui, McInnes, & Massagli, 2002). Such protective factors would be valuable to promote in current refugee and displaced persons camps and in countries of resettlement.

Cambodian Resettlement

Approximately 190,000 Cambodian refugees resettled in the United States following the end of the Pol Pot regime (National Cambodian American Health Initiative, 2007), with the highest numbers arriving between 1979 and 1986 (Kula & Paik, 2016). Most had limited proficiency in English and were faced with restricted education and employment opportunities upon resettlement. Coupled with the impact of their traumatic experiences, these factors compromised the early efforts of Cambodian refugees at becoming selfsufficient. During initial resettlement, much of the support to the newly arriving Cambodians came in the form of time-limited cash assistance from the Office of Refugee Resettlement. Cambodian Mutual Assistance Associations (CMAAs), community-based organizations founded in the 1980s to support acculturation and resettlement, provided grass-roots community support. The CMAAs were staffed with Cambodians and provided support in a number of areas, including medical translation, advocacy, family supports, and navigating social services (NCAHI, 2007). In the 1990s, there were around 150 CMAAs nationwide; however, decreases in federal policies that impacted refugee and immigrant communities resulted in increased difficulties for resettled Cambodians as well as for the CMAAs, which have since dwindled to approximately seven today (Lu, 2016).

Once resettled in the United States, many Cambodians experienced high rates of poverty and community violence (Berthold, 2000; Kula & Paik, 2016; Marshall et al., 2005). As noted above, Cambodians resettling from Thai-Cambodian border camps also had documented rates of poor self-reported health, depression, PTSD, various somatic complaints, physical pain, and functional limitations (Mollica et al., 1993). By 2014, the U.S. Census had documented over 326,000 Cambodian residents in the United States, of whom 51% were foreign-born (US Census Bureau, 2014). In recent years, documentation of health disparities in the Cambodian community have proliferated. More than two decades after resettling in the United States, Cambodians continue to experience high rates of past-year depression (51%) and PTSD (62%), much greater than the 7% and 3% rates for the same conditions found in the general U.S. population (Marshall et al., 2005). Comorbid PTSD and depression continued to be experienced by many Cambodians three decades after resettling in the United States (Berthold, Kong, Mollica, Kuoch, Scully, &

Franke, 2014). Additionally, Cambodian refugees have disproportionate rates of self-reported poor health, compared to both the general population and other Asian populations (Wong et al., 2011), with higher than average rates of diabetes and cardiovascular risk factors (Marshall, Schell, Wong, Berthold, Hambarsoomian, Elliott, & Gregg, 2016).

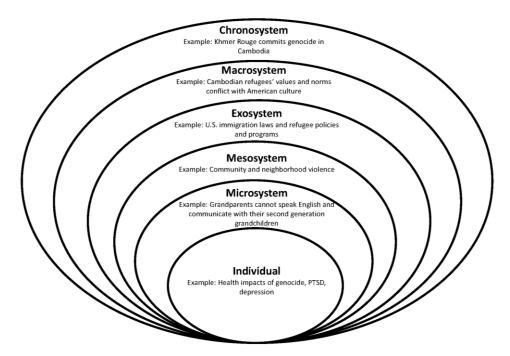
The current poverty rate for Cambodians is around 17.5%, a rate 2% higher than that of the general population and 5% higher than composite Asian populations (US Census Bureau, 2014). A 2013 study of Cambodian refugee women documented persistent high rates of household food insecurity, even two decades after resettlement (Peterman, Wilde, Silka, Bermudez, & Rogers, 2013). Those who resettled earlier (in the 1980s) reported greater persistent food insecurity than those who arrived later. Additionally, over one-third of Cambodians over 25 have less than a high school diploma (Kula & Paik, 2016), highlighting ongoing economic and educational disparities impacting the Cambodian community.

Differential generational impacts have been observed between Cambodians who resettled in the United States as adults, as young adults, and as young children, as well among their U.S. born offspring. Cambodians in the United States have often found themselves trying to "straddle" different cultural systems, those that promote traditional Cambodian values and those shaped by mainstream Western values. Many younger Cambodians do not speak Khmer well or at all, and are unable to communicate effectively with those from older generations, some of whom have limited English proficiency, thus limiting the cultural "passing down" of knowledge and sharing of experiences. Despite these cultural challenges, Cambodians have exhibited great resilience in creating new strategies and environments to respond to intergenerational conflict (Lewis, 2010), such as the creation of programs to support intergenerational bonding through senior-youth engagement activities (Yoshida, Henkin, & Lehrman, 2013).

Whole community models of intervention have been successfully used with Cambodian refugees to address health and mental health disparities within the community (Wagner, Berthold, Buckley, Kuoch, & Scully, 2015). These interventions are relationshipdriven, culturally-centered, and address physical-psychosocial-spiritual needs and engage community health workers as supports to clinical care. Community health workers have served as a bridge between Western services and Cambodian refugees (Lu, 2016). Interventions that engage the community with a culturally-appropriate, strengths-based approach have included faith-based outreach by temples, churches, and other faith-based groups. These efforts combine health education outreach by faith communities, involvement of revered community elders, and transportation support. Such wholecommunity interventions have proved beneficial in increasing communication between Cambodian refugees and health care providers, medication compliance, and cultural competence in health care providers, and at the same time decreasing chronic disease symptoms (Grigg-Saito, Och, Liang, Toof, & Silka, 2008; Grigg-Saito et al., 2010; Wagner et al., 2015). However, obtaining ongoing funding to sustain such community-driven interventions and securing buy-in from busy health care professionals may be a challenge to implementing whole community models for refugees.

Theoretical Lens

Refugees and asylum-seekers continue to seek to enter or resettle in the United States as persecution persists and wars rage in countries such as Syria, Iraq, and Afghanistan. Ecological theory provides support for the importance of a multi-dimensional treatment approach by social workers serving refugees, and is a prominent and oft-cited theory in the social work literature (Rotabi, 2007). This framework serves as a holistic theoretical approach to help understand and organize information about refugees and their sociopolitical environments in the United States. Refugees and their families do not exist in isolation and are engaged in larger social systems, which intertwine with individuals and communities. Bronfenbrenner's (1979) ecological framework posits an interconnectedness between a person and his or her environment. In order to apply this framework to understand the experiences of refugees, we must conceptualize these refugees as embedded in an interactive multi-leveled system, which are separated into five nested subsystems consisting of the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Societal problems, such as poor health outcomes, family dynamics, community violence, unemployment, and language difficulties, fit well within this model (Hepworth, Rooney, Rooney, Strom-Gottfried, & Larsen, 2010).



A structural competency approach is congruent with an ecological framework and can assist social workers to frame and organize the life experiences and multisystem forces, such as economic, political, and social determinants that impact refugees. Metzl and Hansen (2014) define structural competency "as the trained ability to discern how a host of issues defined clinically as symptoms, attitudes, or diseases...also represent decisions about such matters as health care and food delivery systems, zoning laws, urban and rural

infrastructures" (p. 128). This approach has five intersecting skill sets: 1) recognizing how economic, physical, and socio-political structures shape clinical interactions (i.e., insurance companies dictating how long and what type of services they will cover); 2) developing clinical language to explain the impact of social environments on one's health (i.e., the effect racism has on cortisol levels); 3) understanding the importance of culture for different class and ethnic groups and recognizing how structural inequalities and barriers can manifest themselves as interpersonal communication and institutional practices; 4) understanding that structures, such as laws and policies, that shape health and illness are not immutable and can be altered through structural interventions (i.e., creation of an intervention program to address rural mental health needs); and 5) developing structural humility in order to hear and understand the nuances in individual clients stories (Metzl & Hansen, 2014). Incorporating ecological theory and structural competency into practice will not only strengthen social workers' understanding of the unique and potentially traumatic experiences of resettling refugees, but also the contextual factors that impact them daily in their new communities (e.g., neighborhood violence, the lack of culturally appropriate services).

Implications for Social Work

It is incumbent upon social workers to understand the health statuses, psychosocial well-being, and challenges faced by refugee populations in the United States in order to promote appropriate policies, educate interdisciplinary health teams, and inform clinical social work practice. Trauma-informed social workers do not ask refugees, "What's wrong with you?" Instead, they ask "What happened to you?" (Substance Abuse and Mental Health Services Administration, 2014). Trauma-informed systems of care, framed by ecological theory, expand the focus of intervention from the therapeutic hour between a social work practitioner and refugee to encompass the broader agency and organizational systems as well as relevant structural factors in society.

Practice Implications

Implementing a structural competency approach within a trauma-informed system of care provides social work practitioners with the tools to look beyond microsystem interactions (e.g., social worker and client) and encourages them to look more holistically at structural inequalities and social determinants (i.e., racism and discrimination) that shape and constrain an individual's experiences (Metzl & Hansen, 2014). This is reinforced by a human rights-based approach to clinical practice (Berthold, 2015). Social workers play a critical role in providing quality services to refugees in a variety of direct care positions, including as members of interdisciplinary teams. The NASW (2016) has recently supported such practice-based interventions through a recommendation in the *Standards for Social Work Practice in Health Care Settings* manual, which recommends that assessment processes are customized for a number of vulnerable populations, including refugees. Ways in which assessments may be adapted for refugees, however, are not explicitly outlined. When conducting assessments, social workers must ensure all facets of the refugee's life are evaluated, which cannot be limited to the present. Rather, social work professionals must understand the interconnectedness and depth of the refugee's life journeys which

include past experiences of trauma in his or her home country, during migration, and when resettling in the new host country (George, 2012). Social workers must also be aware of the link between trauma exposure and health risks for refugee populations, and can provide psychoeducation to refugees as well as to providers in the different systems of care working with refugees. Social workers should work with cultural humility (Metzl & Hansen, 2014) and determine if potential formal and informal natural supports such as immediate and/or extended family, places of worship, and other social networks can support a refugee during his or her resettlement process.

Educational Implications

Given our global society, schools of social work should embed a broader understanding of the experiences of immigrants, asylum-seekers, and refugees into mandated course work. Social workers are practicing in diverse settings (e.g., hospitals, schools, child welfare) where they are called to serve refugee populations. At present, U.S. social work programs are struggling to include this vital material as well as content on human rights (Healy & Wairire, 2014). Schools of social work could play a significant role in training interdisciplinary healthcare teams and organizing and developing curricula framed by a structural competency approach. Critical components could include content on the migration experience, health outcomes, trauma, trauma-informed systems of care, evidence-based intervention strategies, and policy objectives. In fact, the International Federation of Social Workers (IFSW; 2012) has recommended that refugee studies, crosscultural practice, and access to specialized training in working with refugees and victims of torture and other traumas be implemented within current social work curricula. Such curriculum could be helpful to social work students and practitioners, including healthcare professionals, when conducting trauma assessments and treatment planning with refugees (Agbenyiga & Huang, 2012).

Policy Implications

Social workers have historically worked in the trenches with our nation's most vulnerable populations and engaged in advancing human rights, social action, and social and economic justice. These concepts are embedded in the profession's Code of Ethics (NASW, 2009) and educational requirements for social work program accreditation (CSWE, 2015). Refugees do not have the right to fully engage in the political system when they first arrive in the United States, which leaves them voiceless. To fill this void, private and non-profit partners can join with social workers as advocates and political partners to improve services and change laws and federal government policies affecting refugee populations. These coalitions could include churches, Buddhist temples, Mosques, and other faith-based organizations which traditionally have served as safe havens for many refugees and as a critical community support. As noted earlier, a fraction of states requires mandatory mental and physical health screenings of refugees and an even smaller proportion include screening questions relating to traumatic experiences. Social work organizations should work with state and federal elected officials to implement mandatory screenings for all refugees at the time of arrival to assist with their successful resettlement. For example, Willard, Rabin, and Lawless (2014) successfully used a short trauma and

torture screening tool with resettled Iraqi refugees in Utah. When thorough screenings are not conducted, refugees may not receive the services they require to promote their right to health and successfully integrate into their new home. Of note, in 2016 President Obama announced an increase in refugee admissions from 70,000 to 85,000 for Fiscal Year 2016 and to 100,000 for Fiscal Year 2017. However, at the time of this writing, President Trump lowered the cap, by more than half, to 50,000 refugees, through the signing of executive orders which went into effect on June 29, 2017. The U.S. Congress has not allocated the appropriate funding for services to meet the growing needs of refugees. These funds are necessary to help refugees rebuild their lives and to become productive citizens in their new homes.

Conclusion

The NASW Code of Ethics (2009) mandates social workers to obtain education and information about issues pertaining to ethnic and cultural diversity, to not support or facilitate means of discrimination, and to work to prevent and eliminate such discrimination through social and political action. A policy statement on immigrants and refugees from NASW (2015) promotes social work education, practice and advocacy around global migration and refugee resettlement and supports policy changes that would better support various refugee groups, including families and children. Likewise, IFSW (2012) supports practice models that involve robust participation of refugees during each stage of intervention and prevention, and advocates for social workers to be engaged in advocacy of refugee needs and rights in order to educate the general public, influence policies in government, as well as in different agencies. Structural competence can support existing social work theories, such as ecological theory, in identifying skill sets that go beyond traditional cultural humility in working with trauma-exposed refugees. This article explored the experiences of Cambodian refugees in order to highlight the various structural forces impacting one trauma-exposed refugee population. As the number of refugees resettling in the United States continues to rise, much can be learned from the long-term resettlement outcomes of Cambodian refugees in the United States so that other more newly arriving refugee populations may be spared from experiencing some of the same preventable health and social problems.

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A Multi-Systems Life Course Perspective of Economic Abuse

Kameri Christy Valandra

Abstract: Intimate partner violence (IPV) against women slowly moved out of the private sphere and into the public realm in the United States in the early 1970's. While progress has been made regarding psychological, physical, and sexual trauma related to IPV, it has been only in the last decade that attention about IPV has included an examination of the impact of economic abuse (EA). This is disturbing given that EA is one of the eight spokes on the Power and Control wheel (PCW) and many women state that they are not able to leave or get away from the abusive relationship due to financial reasons. Using a multisystems life course (MSLC) perspective, this paper considers the importance of elevating EA as a form of IPV-related trauma. We examine EA's differential impact among women, review current practices and policies, and conclude with implications for micro, mezzo, and macro levels of trauma-informed practice with survivors of EA.

Keywords: Economic abuse; multi-systems life course; and culturally responsive practices

Violence and abuse against women by their current or former intimate partners slowly moved out of the private sphere and into the public realm as an issue for consideration in the United States in the early 1970's (McCue, 2007). At first, attention focused on physical abuse, with the addition of emotional and sexual abuse following at the end of the 1970's. It was not until 1993 that all 50 states criminalized marital rape (Bergen & Barnhill, 2006). Much less attention has been given in the literature to an examination of economic abuse (EA; Adams, Sullivan, Bybee, & Greeson, 2008; Postmus, Plummer, McMahon, Murshid & Kim, 2012). Furthermore, a 2014 national poll commissioned by the Allstate Foundation revealed that 78% of the public respondents had never heard the term *economic abuse* in relationship to intimate partner violence (IPV). While respondents believed economic abuse to be the least common type of IPV, the survey indicates that 99% of people "who have been victim of domestic violence have also experienced financial abuse" (Allstate Foundation, 2017, p.3).

The authors acknowledge that EA is not gender-restrictive since it can be experienced by both men and women. Nor is EA an exclusive form of IPV. Survivors often experience economic, physical, sexual, or emotional abuse simultaneously (Johnson, 2015). For the purposes of this article, the focus is on women survivors. Applying a multi-systems life course perspective (MSLC; Murphy-Erby, Christy-McMullin, Stauss, & Schriver, 2010), we discuss the complexities of economic abuse and how it is experienced differentially by women. Lastly, we review current practices to address EA, and present micro, mezzo and macro practice implications to address EA from a MSLC perspective. To facilitate readability, a key of acronyms used in the article is included in the Table 1.

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EA	Economic Abuse			
EAPCW	Economic Abuse Power and Control Wheel			
FVO	Family Violence Option			
IDA	Individual Development Accounts			
IPV	Intimate Partner Violence			
IPV-EA	Intimate Partner Violence and Economic Abuse			
LGBT	Lesbian, Gay, Bi-sexual, Transgender			
MAFM	Moving Ahead through Financial Management			
MSLC	Multi-systems Life Course			
PCW	Power and Control Wheel			
REAP	Realizing Your Economic Action Plan			
PRWORA	Personal Responsibility and Work Opportunity Reconciliation Act			
TANF	Temporary Assistance for Needy Families			
VAWA	Violence Against Women Act			

Understanding Economic Abuse and Its Impact

While there is a paucity of scholarship on economic abuse, there has been an increase of publications on this topic since the early 2000's (see for example, Adams et al., 2008; Hahn & Postmus, 2014). For this paper, the definition of EA provided by Adams and colleagues (2008) is used: "economic abuse involves behaviors that control a woman's ability to acquire, use, and maintain economic resources, thus threatening her economic security and potential for self-sufficiency (p. 564)." EA behaviors include preventing work outside the house, preventing ownership of personal possessions, preventing financial documents from being titled in a woman's name, preventing a woman's right to a bank account or other measures intended to prevent women from attaining monetary success (Domestic Abuse Intervention Programs, n.d.). EA may include such sabotage strategies such as physical harm, destruction of possessions or transportation, theft of keys or money, harassment at a woman's place of work, physical restraints, or other measures intended to harm a woman's chance of obtaining and/or maintaining gainful employment (Adams et al., 2008).

Economic abuse and socio-economic status are closely linked but are not synonymous. For example, we know that IPV is reported more among low-income women (Weaver, Sanders, Campbell & Schnabel, 2009); however, women from seemingly moderate- and higher-income levels can experience economic abuse by a partner (Outlaw, 2009). EA is as prevalent as physical, psychological and sexual abuse, and is used by an intimate partner to gain control of a woman's life through economic means (Adams et al., 2008; Hahn & Postmus, 2014). In a study comprised primarily of African American (48%) and White (45%) women (N=103) receiving IPV services, 99% reported experiencing some type of economic abuse (Adams et al., 2008). Similarly, Postmus and colleagues (2012) found that 94% of the 120 (55% White, 20% African American and 15% Hispanic) female survivors of IPV reported economic abuse by their partner. In studies from the general public, 14% of new mothers indicated they had been economically abused (Schrag, 2015). Outlaw (2009) found that the "risk of physical violence among those whose access to money was

controlled by another was 4.68 times greater than for those not experiencing economic abuse" (p. 267).

Conceptual Framework for Understanding Economic Abuse

IPV is a complex and multifaceted phenomenon, with EA playing a central role. EA affects all aspects of life for individuals, families, communities, and society. For example, in the area of employment, over \$8 million paid workdays and \$5.8-12.6 billion are lost every year (National Coalition Against Domestic Violence [NCADV], 2015) due to such EA behaviors as harassment while on the job and absenteeism. We applied a MSLC perspective to address the complete context of EA.

MSLC is comprised of three theories and one perspective: (1) life course, (2) ecological/systems, and (3) symbolic interactionism theories, and a perspective of social change (Murphy-Erby et al., 2010). A MSLC perspective provides a way to unite the profession, expands and strengthens micro level practice through its consideration of macro level issues, and leads to the provision of more effective and efficient services. In this way, a MSLC perspective serves to address the historic tension between micro versus macro practice (Austin, Coombs & Barr, 2008; Haynes, 1998). This integrative practice perspective views well-being and social change as interdependent (enhancing both social functioning and social conditions) and should be applied in all stages of practice such as engagement, assessment, intervention, and evaluation (Murphy-Erby et al., 2010).

Anchored in an intersectional perspective of multiple and overlapping social relations, ecological/systems theory posits that organisms exist within the context of multiple interrelated, dynamic systems (e.g., biological, political, and social). In other words, what happens in one realm impacts other realms, and these interactions occur bi-directionally (Bronfrenbrenner, 1989). The integration of symbolic interactionism into MSLC requires us to pay attention to the social construction of meanings, symbolism, and roles when considering the behaviors at the micro, mezzo and macro levels (Blumer, 1969). Life course theory asserts that historical, social, and political contexts influence the important turning points, transitions, and trajectories of organisms. The context is understood as the exchanges between internal free will and external forces (Elder, 1995). While the interaction between the person and environment is important, a social change perspective draws attention to the reality that free will may be constrained by powerful social forces. A social change perspective "adds an emphasis on the relationships among social justice, social change, and social action by considering issues of power and oppression and strategies for actively challenging the status quo to promote social change" (Murphy-Erby et al., 2010, p. 1).

Although there are overlapping themes between these theories and this perspective, each is needed to address gaps or limitations that exist in each of the other three. For example, life course theory does not speak to issues of power, privilege, or social action. Similarly, ecological/systems theory, while understanding contextual factors, fails to place strong emphasis on an in-depth analysis of time and place, or key historical events. Likewise, symbolic interactionism has been applied mostly to micro-level interventions; it has been underutilized regarding mezzo and macro-structures. Additionally, social change

as a perspective allows a view of social movement and change that is often considered dichotomous, and minimizes the potential of individual empowerment. Therefore, MSLC is not used as four separate theories/perspectives but rather as an integrated whole whose intersecting concepts reinforce each other (Murphy-Erby et al., 2010). The overlapping aspects of the theories and perspective contained within MSLC demonstrate the concept of intersectionality as a perspective paradigm. In the same way that intersectionality attempts to understand multiple crucial, overlapping, and integrated systems of oppression experienced by an individual or larger system, MSLC asserts that individuals, groups, communities, and organizations with which social work intervenes are complex entities that cannot be wholly understood from one theoretic approach. MSLC integrates multiple theoretical frameworks, and thus is like an intersectionality perspective in its capacity to drive holistic examination and interpretation.

Understanding EA from a MSLC Perspective

Life course (Elder, 1995) and symbolic interactionism (Blumer, 1969) theories suggest an examination of EA relative to ascribed gender roles and life trajectories. The evolution of perceptions, policies, and practices pertaining to EA have been impacted by roles and meanings ascribed to men, women, marriage/intimate relationships, and money. Historically, the United States has supported a strong family ethic, "featuring a male breadwinner and an economically dependent female homemaker" (Abramovitz, 1996, p. 2). Along with this ethic is the presumption of men as strong, self-sufficient, head of the household and women as weak, dependent, less competent, and less intelligent than men. These beliefs unfortunately reinforce the concept of a husband-wife household where the man is all-knowing and makes all decisions, including the financial ones (Abramovitz, 1996). These meanings, compounded with a middle class, traditional life course perspective of women staying home to care for family members, sets the stage for certain behaviors to be overlooked and/or condoned. Consequently, it may be difficult for women and the rest of society to view behaviors such as taking (stealing) the woman's money, generating debt in her name, or forbidding her from going to school as economic abuse (Adams et al., 2008).

When a woman suffers in an environment of EA, the effects can extend far beyond her immediate situation. EA can affect both her life course and that of her children. The woman's employer may also feel impacts such as increased health expenses for the woman and her children, as well as decreased employee productivity. Furthermore, the economic health of the greater society can be affected by the woman's curtailed participation in the workforce (Trygged, Hedlund, & Käreholt, 2014). Given the ubiquitous nature of EA, addressing it will involve cultural change at the individual, community, and societal level.

Drawing upon symbolic interactionism, ecological/systems theories, and a social change perspective, prevention and intervention require collaboration among systems/groups and a shift in the meaning our culture ascribes to such concepts as money, family (Hawkins & Kim, 2012), gender roles/expectations, and IPV. Within a social change perspective, the act of ascribing meaning to those concepts is informed by a consideration of issues of power, privilege, and inclusion. Such consideration is required

to reveal the existence of EA and to unveil the secrets behind who benefits and who loses from the current economic system and EA.

An analysis of how the gender pay-gap provides a contextualized examination of women's vulnerability to EA by an intimate partner using the MSLC perspective will help illustrate the above assertions. The difference between what women make in the workforce compared to men can be attributed to macro, mezzo, and micro factors. The persistent existence of a gender wage-gap can be understood, in part, by overarching intersectional ideologies of patriarchy, heterosexual marriage and the nuclear family, and capitalism. These prevailing ideologies are influential in the development of a system of social control and paternalism regarding the subjugation of women's labor, reproduction, and right to self-determination (Day & Schiele, 2012). The National Women's Law Center (2016) indicates that some of the reasons include lack of laws requiring equal pay for equal work, negative stereotypes about mothers and women being discouraged from entering better paying fields. Research has also shown that IPV is correlated with lower pay (Adams et. al, 2008). Therefore, it can be convincingly argued that historical and systemic structures of gendered income inequality, inaccessibility to viable wage-earning resources (employment, education, affordable daycare, etc.), and socially accepted and perpetuated gender-based cultural norms and laws, in effect, exacerbate women's susceptibility to economic deprivation and EA by an intimate partner.

The 21% difference in the pay women receive compared to men (American Association of University Women, 2016) has multiple ramifications. While distressing, reporting the wage gap at 21% is misleading. Compared to White, heterosexual, cisgendered, fathers and older men, the disparity is often more egregious with pay differences of 40% for African American women, 45% for Latina, 21% for lesbians, 33% for transgendered women, 27% for mothers and 27% for women ages 45-64 (National Women's Law Center, 2016). Additionally, women living with disabilities earn on average 28% less than men living with disabilities (National Women's Law Center, 2016).

Lower wages mean less income for not only the woman but for the entire household (systems theory). Whether a single head of household or a dual-income household, fewer financial resources can limit the ability to pay bills and purchase adequate food and shelter (Mickelson & Hazlett, 2014; Page-Reeves, 2011). Economic hardship is also associated with financial reliance on men and the inability of women to leave an abusive relationship (Abramovitz, 1996; Sanders, 2015).

Critiquing consequences of the wage gap from a MSLC perspective, children, families, local communities (including schools), and the national budget are disadvantaged in a self-perpetuating cycle of EA of women, leading to economic hardship for the woman and her children, which in turn can lead to economic vulnerability and EA for children when they become adults. Some long-term effects include poorer public education for the children, which often results in low graduation rates and low rates of post-secondary education/training (Hawkins & Kim, 2012). Inadequate educational facilities and experiences can cause students to devalue education and themselves (Purtell & McLoyd, 2013). They may believe that the roles ascribed to their financially struggling parent(s) will be the same that they will bear as adults (Purtell & McLoyd, 2013). This belief is an

outgrowth of economic insecurity and is often realized as children grow up to find themselves doing low-wage work as adults and at risk for EA from an intimate partner. Incarceration is also linked to children's expectation that their roles in adulthood will mirror those of their financially struggling parents (Purtell & McLoyd, 2013).

Women's Differential Experiences of EA from a MSLC Perspective

MSLC demands of practitioners a critical and contextual analysis of the intersectional complexity of EA to better serve the diverse needs of survivors and to advocate for systems change. A MSLC wage-gap analysis serves as a means of understanding how the intersections of culture, class, race, and ethnicity differentially magnify women's experiences of IPV-EA (see Figure 1; Bent-Goodley, 2005; Rennison & Planty, 2003; Sokoloff & Dupont, 2005). Previously articulated pay disparities experienced by women of color and poor, lesbian, and older women (National Women's Law Center, 2016) suggest that some women are also vulnerable to intersectional structures of race, class, sexual orientation, and age inequality that can exacerbate their vulnerability of IPV-EA by partners (Bent-Goodley, 2005; Sokoloff & Dupont, 2005).

The historical context of enslavement and colonization, for example, is acknowledged in IPV-related scholarship as critical to understanding the needs of both survivors and men of color who commit violence and to providing culturally-sensitive services (Gondolf & Williams, 2001; McEachern, VanWinkle, & Steiner, 1998). In the United States, the legacy of slavery and colonization has resulted in longstanding structural income inequality, economic oppression, and negative stereotypes in which women of color are disproportionately represented as a high-risk group for EA (Rennison & Planty, 2003; Valandra, Murphy-Erby, Higgins, & Brown, 2016). Brush (2004) notes that in the United States women of color are disproportionately represented among recipients of public welfare, a context in which poverty, welfare, work, and vulnerability to IPV and EA intersect.

The disproportionate representation of women of color in the low-income sector of society increases their vulnerability to structural conditions of race-, class-, and gender-based discrimination limiting their accessibility to formal economic resources and increasing the likelihood of experiences of generational poverty (Corcoran, 1995). In a study examining EA survivors' use of informal economic resources, Pyles (2006) found that poor, incarcerated women, who were disproportionately African American/Black and Latina/Hispanic, more frequently relied on money and gifts from family, payday loan services, pawning items, selling blood or plasma, and illegal informal activities such as writing bad checks, while White women were more likely to use credit cards to access resources. The findings from these studies illustrate the importance of using an MSLC perspective to illuminate the links between the structural context of economic marginalization and exploitation and its intersections with interpersonal EA in the lives of women of color living in poverty (Sokoloff & Dupont, 2005).

An MSLC analysis of EA in the lives of poor women of color alerts scholars and practitioners to recognize the ways in which oppressive structures such as patriarchy and poverty shape cultural contexts and impact the incidence of IPV-EA and its economic

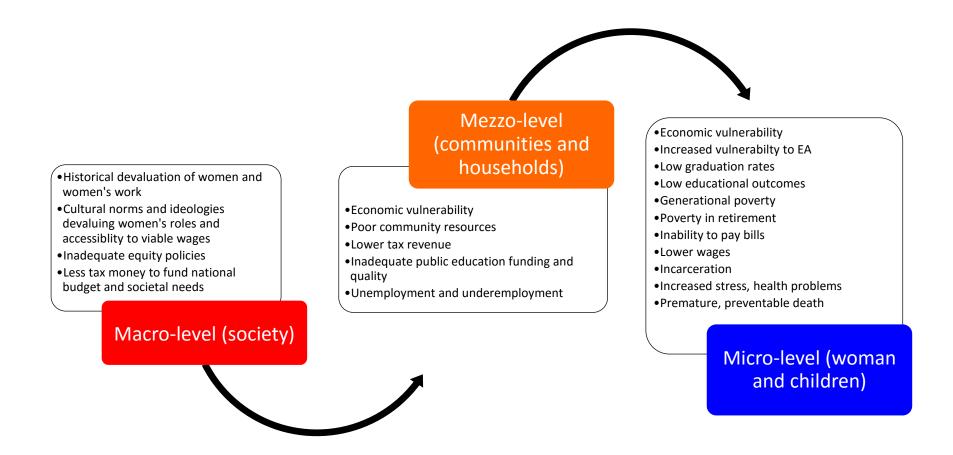
consequences in marginalized communities. Within this context, symbols of safety (police authorities, criminal justice) in one community can be experienced as symbols of oppression in another and result in barriers to service utilization (Campbell et al., 2008; Renzetti, 1998; Sokoloff & Dupont, 2005). For example, in an examination of cultural context in the experiences of African American women IPV survivors, researchers found that women's concerns about further economic strife in their families associated with the possible incarceration of male abusive partners influenced their decisions regarding whether to report violence to police authorities (Campbell et al., 2008). The symbolism and meaning women of color give to the systematic incarceration of men of color has significant implications for addressing EA through culturally responsive, oppression sensitive practice. The application of the MSLC perspective, thus, also entails a critical assessment of how service delivery systems intended to support survivors of EA and violence may be structured in ways that perpetuate cultural barriers, stereotypes, and discriminatory treatment of women of color (Valandra, 2007; West, 1999).

Ten different tactics of abuse, including EA, were found in a study investigating how particular structural-, cultural-, and community-level factors, influenced specific abuse tactics experienced by 29 Mexican immigrant women recruited from two geographically diverse sites (Kyriakaskis, Dawson, & Edmond, 2012). The abuse tactics employed by husbands were inextricably linked with cultural expectations of married Mexican women and reflected patriarchal expectations of women in Mexico (Kyriakakis et al., 2012). EA in this study consisted of economic deprivation, the prevention of women from working, taking women's paychecks, and allotting them allowances. Consistent with MSLC's emphasis on social change, domestic violence researchers who promote the examination of the intersections of structural and interpersonal factors on women's experiences of IPV and EA also argue for the importance of interventions that not only address women's specific needs, but also challenge cultural and structural conditions that can fuel EA (Sokoloff & Dupont, 2005).

Critiquing Current Practice Interventions from an MCLS Perspective

Literature on EA in the United States is sparse; however, a few articles do discuss direct and policy practice interventions. Most of the current interventions involve the (1) use of the Power and Control Wheel (PCW; Christy-McMullin, 2011), (2) provision of financial literacy and empowerment education, with emphasis on the applicability (Hahn & Postmus, 2014), and (3) use of Individual Development Accounts (IDAs) developed specifically for survivors of EA (see Table 2 for a summary of recommendations for each intervention; Hahn & Postmus, 2014).

Figure 1. MSLC Analysis of Wage-Gap Influence on EA Risk



Power and Control Wheel

Developed in the mid-1980's, the PCW intervention tool explicitly identifies eight abusive strategies employed within a context of a larger system of abuse (Domestic Abuse Intervention Programs, 2011). The abusive tactics identified on the PCW include using (1) intimidation, (2) emotional abuse (3) isolation, (4) minimizing, denying and blaming (5) threatening to take children, using them to relay messages, (6) male privilege, (7) economic abuse and (8) coercion and threats (Domestic Abuse Intervention Programs, 2011). The PCW is based on data collected from female survivors over several months and has been translated into more than 40 languages (Domestic Abuse Intervention Programs, 2011). The PCW allows practitioners to help clients determine, and sometimes come to terms with their situation, while also clearly defining abuse as a way that an abuser attempts to control or limit the victim. It can be useful in helping survivors break through a pattern of denial and minimization about abusive patterns of behaviors (Christy-McMullin, 2011). EA is clearly identified as one of the eight strategies listed in the PCW's larger system of abuse (Domestic Abuse Intervention Programs, 2011). Since the creation of the original PCW, numerous other wheels have been adapted in recognition that women's social location in relation to the environmental context influences their experiences and responses to EA such as the Equality Wheel (Domestic Abuse Intervention Programs, 2011), Lesbian Gay Bisexual Transgender (LGBT) Wheel (NW Network, n.d.), Teen Dating Violence Wheel (National Center on Domestic and Sexual Violence, 2017) and Economic Abuse Power and Control Wheel (EAPCW; Arizona Coalition to End Sexual and Domestic Violence, n.d.).

Like its predecessor, the EAPCW has eight categories of abuse operationalized; (1) legal issues, (2) employment and workplace, (3) finances and credit, (4) child support, (5) welfare, (6) housing, (7) child care, and (8) education and training (Arizona Coalition to End Sexual and Domestic Violence, n.d.). As with the original, the EAPCW can be used to help allies, survivors, and offenders to better understand the tactics of EA.

The prevalence of utilization and the development of other PCWs suggest it is an effective intervention. However, the authors could not find research to support this assumption. Nevertheless, it is worthwhile to analyze the EAPCW from a MSLC perspective to potentially expand the interventions that are used with it.

Table 2. Practice Recommendations Relevant to Economic Abuse

	MSLC Application	Practice Implications
Power & Control Wheel Financial Literacy Education	 Consider the historical/political/ social context of IPV-EA Recognize meanings, values and assumption around EA, finances and women's roles Assess impact of current life trajectory on self and others Acknowledge and work with the many systems involved and impacted by EA Consider the historical/political/ social context of finances, work and women Recognize meanings, values and assumptions around EA, finances and women's roles Assess impact of current life trajectory on self and others Acknowledge and work with the many systems involved with and impacted by EA and the lack of financial literacy 	 Use the EAPCW along with PCW Provide client-centered training on EA and the EAPCW Use cognitive-behavioral therapy to challenge woman's sense of selfagency; make explicit the role of culture, privilege and oppression Discuss trajectory of the woman, her children and family Work with various systems to bring about social change Develop appropriate system for timely referrals Adequately fund programs specifically for survivors of IPV-EA, e.g., REAP and MAFM
Financial Asset Building	 Consider the historical/political/ social context of assets and IPV Recognize meanings, values and assumptions around EA, financial assistance, economic security and assets Assess impact of asset accumulation on the trajectory on self and others Acknowledge and work with the many systems involved with and impacted by EA and assets 	 Adequately fund IDA programs for survivors of IPV-EA with VAWA funding Change perceptions and expectations around financial assistance and EA Provide EA training to IDA providers/administrators to create culturally relevant programming to their customers Advocate for social and economic justice reforms Conduct oversight and evaluation of IDA program implementation

A first step would be for direct practice practitioners to specifically use the EAPCW instead of relying solely on the original PCW. While using this wheel, practitioners can explore the historical context of financial knowledge, decision-making processes and resources, IPV and EA, along with the meaning made of these concepts by the women, their families of origin, their current family structure, members of the larger community, and their hopes for the future. Further application of MSLC is an assessment of the family's life course trajectory to understand the specific manifestations of EA within the family system. Making explicit the role of culture and ascribed meaning should also include a discussion of how the woman perceives herself and her self-agency. With this, practitioners should be aware of and introduce such concepts as privilege and oppression. Intermingled within this assessment should be conversations about how different systems have been and may be impacted in the future given the status quo, as well as the systems that can provide support and resources to the woman, her children, and her partner. It is not enough to merely understand this impact, but social workers using MSLC would also consider interventions that change the status quo.

To better explicate the application of a MSLC perspective, we will take one of the tactics from the EAPCW, 'Employment and Workplace,' (Arizona Coalition to End Sexual and Domestic Violence, n.d.). to provide more specific examples of assessment and interventions. We must consider not only the many systems (e.g., legal, state agencies, employers, religious, and/or family) impinging upon the woman, but the meanings and values held by the woman, her family, and various systems. Some of the negative assumptions might include: women should not be in the workforce; women are not as reliable in the workforce as men; poor women and women of color are lazy and do not want to work; staying home to take care of others is not really work particularly when talking about women of color and low-income women because middle- and upper-income and white women have been allowed, even encouraged to work in the home; women enjoy/deserve abusive relationships; women can leave the abusive relationship if they so choose and if a woman left her abusive partner the abuse would stop. Assessing the different meanings and values held can shape how much or little power/influence each of the various systems has on the woman across her work life. While these various systems may not always agree, some may have more power/influence. For example, lawmakers have the power to support or oppose laws that provide more employment resources and support for women who are experiencing EA, and laws mandating equal pay for women and increasing the minimum wage. Regardless of public policy on these issues, employers have the ability to incorporate these policies into their organizations. The status quo benefits those who hire women at a lower wage rate; however, not addressing economic abuse, women are less able to be productive due to EA, which costs the employer more money.

Interfering with the work trajectory of a woman has severe consequences in the present for herself (e.g., stress, health problems, inability to pay bills and homelessness), her children (e.g., lack of access to a good education and educational materials), and society (she will be paying less into the tax system). Her future (e.g., poverty in retirement) and those of her children (limited educational and employment as adults) and society (less money paid in taxes results in less public revenue) can be negatively impacted as well.

Hahn and Postmus (2014) noted that women often feel ostracized from using social services because workers are untrained in how to work with women experiencing IPV. From a MSLC perspective, client-centered training regarding survivors of abuse is a necessity in state agencies like the Division of Children and Family Services that see IPV on the frontline most often. One intervention could be to standardize the use of the PCW and EAPCW. These wheels provide enough examples of abusive behaviors and control tactics used by abusers that they can be used and adapted by advocates. Additionally, therapists using cognitive-behavioral therapy can use the wheels to facilitate a better identification of behaviors and understanding of the client's thoughts and feelings about those behaviors and an avenue to reframe labels and stigma (symbolic interactionism). Furthermore, the EAPCW can be used to assess the depth of economic abuse and can be highly useful for practice with EA survivors in (1) helping them understand key tactics used to keep women in abusive relationships (social change), (2) helping them develop strategies to address financial needs (systems) and (3) pointing to potential goals a woman might want to set for herself (life course). The EAPCW can also be used to train service providers and to increase public awareness of EA (Christy-McMullin, 2011), whereby a system of referral (thereby changing the status quo) could be designed and used to provide connections to culturally appropriate services in an improved period.

Financial Education and Literacy

The purpose of financial education is to increase one's financial literacy, which is "the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future, and respond competently to life events that affect everyday financial decisions" (Vitt et al., 2000, p. xii). The U.S. Department of Treasury, Social Security Administration, and Obama administration showed an understanding of the interconnection between financial literacy and IPV for girls/women (Gjertson, 2011). However, it is important to move beyond traditional perceptions that financial literacy education alone will change behaviors/outcomes (Hawkins & Kim, 2012). Knowledge alone may not change behavior/outcomes and focusing on financial literacy education as a solution has the potential to victim-blame by implying that "financial literacy alone can produce long-term change in consumer financial markets and absolve public and private entities of their responsibilities" (Hawkins & Kim, 2012, p. 194). Therefore, changing structural barriers, such as low-paying jobs, lack of high quality childcare (Fine & Weis, 2000) and lack of safe, affordable housing should go hand-in-hand with financial literacy education.

Turning first to financial literacy education, as demonstrated by a 2014 study conducted by the World Bank, Gallup, and George Washington University, almost half of the U.S. adult population (43%) is financially illiterate (McGrath, 2015). Further, only 52% of women in the U.S. are financially literate, compared to 62% of men (Standard & Poor, 2015). Without economic empowerment (financial knowledge and skills), women suffering from EA may experience less economic self-efficacy and face more challenges in becoming financially self-sufficient (Adams et al., 2008). Given that economic dependence on their partner is one of the main reasons women remain in abusive

relationships (Sanders, 2011), providing programs that increase women's financial literacy may increase economic self-efficacy (Hahn & Postmus, 2014).

REAP and MAFM literacy programs. Two research-supported financial literacy and economic empowerment education courses described by Hahn and Postmus (2014) are "Realizing Your Economic Action Plan," (REAP) and "Moving Ahead through Financial Management" (MAFM). Both are designed to empower women before, during and after the process of acknowledging EA in their relationship, and potentially leaving an abusive relationship. The programs seek to educate in such a way that women who are afraid to leave abusive relationships because of limited financial resources, employability, and economic prospects learn the steps to take to strengthen their financial competency, making an escape from an abusive relationship more possible (Hahn & Postmus, 2014).

To do this, REAP has developed a 12-hour curriculum across five economic facets. These facets are: (1) money and power, (2) developing a cost-of-living plan, (3) building and repairing credit, (4) banking and investing, and (5) oppression and economic abuse. Hahn and Postmus (2014) found that women in the REAP group had statistically significantly higher scores on financial self-efficacy than did the control group. Additionally, the program respondents reported they had learned new financial knowledge from the classes.

A collaborative effort, Allstate Foundation and the National Network to End Domestic Violence created the MAFM program (Hahn & Postmus, 2014). Its curriculum focuses on: (1) economic abuse and relationships, (2) financial fundamentals, (3) building a financial base, (4) creating long-term financial success, and (5) financial strategies for immigrant and refugee women (Hahn & Postmus, 2014). A pre-test/post-test non-experimental design was used and findings indicate significant increases in women's financial literacy, economic empowerment, economic self-sufficiency, and economic self-efficacy. Additionally, 88% of participants could clearly identify signs of economic abuse, 88% had developed financial goals after the course, 76% had developed a budget, 71% had taken steps to start paying off debt, 64% had accessed records of their credit history, and 22% started a retirement account. In-depth analysis showed that participants' heightened levels of financial literacy and economic self-efficacy predicted economic empowerment (Hahn & Postmus, 2014).

Applying a MSLC perspective to financial literacy of women who experience EA involves an assessment of symbols; traditions; life trajectories; historic, social, and political contexts; diversity and culture; systems and resources, as well as a call for social change. As discussed previously, women are less likely to be financially literate than men. This may be in part such symbolism as men being the "head" of the household and/or the "primary breadwinner," as well as an assumption that men should make the financial decisions in the family. As for low-income individuals and families, public misperceptions that low-income families do not need financial education may contribute to the 17% gap in financial literacy between the wealthiest 60% and poorest 40% of households in the U.S. (Standard & Poor, 2015). Changing these perceptions and expectations is critical because financial literacy "shapes the life course in other, extended ways by enhancing access to investment income, asset accumulation and asset protection" (Vitt et al., 2000, p. xiii) for

women and their children. Additionally, it must be recognized that the type of information needed regarding finances changes over the course of people's lives to assist with transitions and life trajectories.

Two federal policies created to specifically address IPV are Violence against Women Act of 1994 (VAWA) and an amendment to the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, The Family Violence Option (FVO) of 1996. One intention of VAWA was to create opportunities for economic empowerment for women surviving IPV by allocating funds for services and further research to determine appropriate practices for intervention. However, according to Hahn and Postmus (2014), VAWA has largely failed in that regard, with limited rental housing opportunities being the only services consistently funded by the legislation and focus instead being largely shifted to criminalization of abusers. Johnson (2015) argues it has led to a focus on safety (short-term goal) rather than security (long-term goal). Similarly, the explicit goals of the Family Violence Option (FVO), (1) screening for intimate partner violence, (2) providing appropriate referrals in cases of IPV and (3) waiving time limits and work requirements of women experiencing IPV, are not being met (Lindhorst & Padgett, 2005).

The FVO and VAWA are examples of policies that could be augmented to provide specialized, culturally responsive services to economically empower women who experience EA. Department of Children and Family Services (DCFS) workers are oftentimes the front-line for IPV intervention. However, they often the lack knowledge of or ability to uniformly implement this policy, which results in the services, waivers and extensions allowed by the policy not being provided to eligible recipients (An, Yoo, & Nackerud, 2015). Advocacy and promotion of the FVO as required national policy is needed to promote an effective and consistent system of implementation for the FVO. In addition to changing the FVO from an optional to a required policy, it will be important that (1) state workers receive ongoing training, (2) accountable oversight of the policy's implementation is established and maintained, and (3) regular evaluation of the implementation of the FVO occurs. The on-going culturally-responsive training of state workers would especially benefit poor and women of color who are largely represented among service recipients of state welfare programs and EA.

Additionally, culturally-responsive financial literacy training for frontline community and state workers will enable them to provide specific case management services for women who want to leave abusive relationships, but do not have sufficient economic prospects such as employability, access to financial education, stable credit, or other assistance options. Workers need to learn how to identify EA correctly and understand general mechanics of it, allowing for the development of a system of referral that can be used to provide connection to culturally-appropriate services in an improved timeframe. The training should also include content on how to advocate for social and economic justice reforms within the system that affect conditions of poverty, racism, sexism, and homophobia (Christy-McMullin, 2011; Coker, 2000; Richie & Kanuha, 1993). In order to provide resources that will enhance individual women's economic empowerment, workers need to receive financial literacy education training. This will increase both their own financial literacy and provide them with firsthand knowledge of issues clients may face (Christy-McMullin, 2011).

Other systems, such as workplaces, could help increase the financial literacy of the public by offering financial literacy training. The workplace is a good location for many individuals, with the rewards being "mutually beneficial for both employer and employee. We urge many more employers to offer personal finance courses... and we support public policy initiatives that offer incentives to those employers who do" (Vitt et al., 2000, p. xvii). Other systems, such as faith-based or community organizations (Vitt et al., 2000) can be important resources in providing financial education. Another useful strategy would be to target specific populations for financial literacy education. One example is domestic violence agencies since women who access them "are one of the many groups that could benefit substantially from financial education programs, especially those that meet their unique needs by providing content on economic abuse and economic safety plans" (Postmus, p. 1, 2011). As noted by Sanders, "low-income women [also] face significant challenges to building financial security, as they often lack resources, knowledge, and access to financial services" (2011, p. 1).

Developing Financial Assets

Historically, researchers have equated economic security with employment and/or income (Christy-McMullin, 2002). However, in the past 30 years, some scholars have begun to advocate for the importance of including financial assets in our definition of economic security (Johnson, 2015; Sherraden, 1988). In a review of the literature, Page-Adams and Sherraden (1997) found financial assets have a positive relationship with psychological well-being, physical health, life satisfaction, and child well-being. They also report a negative correlation between assets and economic strain, alcoholism, and depression. While there have been few studies to examine the relationship between asset ownership and IPV (Hahn & Postmus, 2014; Sanders, 2014), two studies indicate a negative relationship between owning a home and IPV (Christy-McMullin & Shobe, 2007; Peterson, 1980).

In his groundbreaking book, *Assets and the Poor*, Sherraden (1991) proposed a change in policy that would create Individual Development Accounts (IDAs) to assist low-income workers with building financial assets. His rationale, in part, is that the United States has a long history of upper- and middle-income earners benefiting from a redistribution of public funds to support their asset-building activities, such as homeownership and retirement accounts. However, public support for providing similar help to low-wage earners has been slow (Murphy-Erby, Jordan, Shobe & Christy-McMullin, 2009). Opponents of IDAs typically espouse the beliefs that low-income workers are poor due to their inability or unwillingness to manage their money properly (Murphy-Erby et al., 2009). Consequently, while most are not concerned with significantly more public funds going to middle- and upper- income earners, as well as large corporations, the same support for subsidizing low-wage earners is minimal (Christy-McMullin, 2000). One of the goals of IDA policy is to provide more social and economic justice to the working poor (Murphy-Erby et al., 2009).

Publically subsidized IDAs were first created through the Assets for Independence Act (AFIA) of 1998, and are designed to help low-income persons attain and maintain assets to develop a long-term sense of economic well-being (Hahn & Postmus, 2014). Most programs also offer a financial literacy component. Many states have implemented IDAs

using "savings" from their Temporary Assistance for Needy Families (TANF) funds. During the first 10 years of AFIA, over 600 IDA programs have been funded, with more than 60,000 IDAs opened nation-wide. IDAs use a match-ratio to match contributions made by account holders, up to \$20,000 yearly in some states (Hahn & Postmus, 2014).

IDA programs have the potential to counteract the tactic used by abusive partners to "isolate women from financial resources and engage in antics that prevent women from gaining economic independence" (Sanders, 2011, p. 1). Additionally, asset accumulation may (1) decrease a woman's vulnerability to IPV-EA and (2) provide a woman more options if she experiences IPV (Christy-McMullin, 2000; Johnson, 2015; Sanders, 2011).

Asset-building programs, such as IDAs, have been minimally used in the field of IPV to help empower impoverished survivors of EA (Hahn & Postmus, 2014). While little research has been conducted on the success of IDAs for IPV survivors (Hahn & Postmus, 2014), Sanders and Schabel (2008) found that in less than four years, 75 participants saved, on average, \$845. Each woman received a match of approximately \$1,573. They were able to use their funds to pay for such assets as (1) vehicles and registration, (2) post-secondary education, (3) home repair and (4) home purchase. In a later study of 125 IPV survivors, Sanders (2014) found that IDA participants saved on average \$1,310 (median \$1,500) over a 2.5-year period. Coupled with the matched deposits and earned interest, the women had an average savings of \$3,041 and a median savings of \$4,394. As with the PCW and financial literacy education, application of MSLC to asset development is complex and comprehensive. Attitudes about welfare and financial assets need to be challenged at multiple levels; individual, family, community, and government. While most of the public understand that welfare is the transfer of public funds from one group to another, a large segment do not understand that policies such as tax breaks and deferments are not only welfare, but also that the majority of these transfers go to middle- and upper-income workers and large corporations (Sherraden, 1991).

Proponents of multicultural interventions to address IPV and EA argue that policy reforms must be tailored to the diverse needs of marginalized women whose experiences of EA are often exacerbated by structural economic and social conditions and inequities (Dasgupta, 1998; Richie, 2000). Expanding the number of IDA programs of survivors of IPV-EA, and having them administered by staff with training in IPV-EA, would help remedy some of these conditions and inequities. To do this, modifying VAWA (1994) to include administrative and evaluation costs, as well as matched funds for IPV IDAs has the potential to increase the number of IDA programs designed specifically for survivors of IPV-EA. Along with increased funding, policymakers and practitioners need to be aware of cultural issues that may exist when women attempt to save money for themselves. For example, money and property may not be viewed as belonging to an individual or family, but rather to the community (Hawkins & Kim, 2012). Consequently, joining an IDA program in which individuals save money for themselves to purchase an asset for themselves may be viewed as disrespecting cultural norms. Such individuals may experience pressure to share their money rather than depositing it in an IDA (Hawkins & Kim, 2012). Allowing community-held assets as an approved use of money from an IDA may be one solution to this conundrum (Jorgensen & Morris, 2010). Additionally, women experiencing EA often have financial needs beyond the approved purchases of home or

business ownership, such as transportation, quality childcare, healthcare (Johnson, 2015), and/or hiring a lawyer. Restricting allowable purchases only reinforces patriarchal assumptions that women are not able to make good decisions on their own (Johnson, 2015).

Conclusion

The use of a MSLC perspective to illuminate the importance of EA as a significant form of IPV-related trauma offers social workers an integrated, multidimensional approach of assessing, intervening, and preventing EA across all systems of direct, policy, and social justice practice. Additionally, specific strategies for addressing EA-specific IPV can be more effectively tailored to meet the diverse and intersecting needs of women based on their differential experiences relative to their sociocultural identity within the larger community and society as well as the specifics of their family life course trajectory. Additionally, a MSLC lens facilitates the use of the EAPCW as a more effective assessment and intervention tool for practice with survivors, offenders, and secondary EA trauma survivors as well as a training tool for practitioners providing services across all systems of practice. Social workers should consider the complexity and interplay of power, privilege, and oppression within the context and roles of historical, cultural, and societal structures, norms, and scripts that place women at risk for EA. As such, social workers are better equipped to provide integrative, culturally inclusive, oppression-sensitive EA services that meet the needs of multiple levels of the practice landscape including direct practice, policy advocacy, community development, and structural systems change.

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"I Feel Like I Am Finding Peace": Exploring the Use of a Combined Art Therapy and Adapted Seeking Safety Program with Refugee Support Groups

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Abstract: This paper describes the creation and implementation of a trauma support group intervention which combined aspects of the Seeking Safety model with an art therapy technique in an effort to reduce trauma-related symptoms in a population of refugees. A preliminary assessment was carried out to evaluate the potential effectiveness of the combined approach with trauma-exposed refugees. Based on facilitator notes from 8 sessions of two women's refugee groups and one men's group, three themes were identified: mandala creation enhanced the Seeking Safety content, language barriers impacted the potential for implementation, and the trauma support group was a means of personal growth for participants. Reports from facilitators and participants also suggested a reduction in trauma-related symptoms and an increase in participant use of safe coping skills as a result of group participation. While additional research is needed, these exploratory results suggest that this combined approach holds promise for positively impacting trauma symptoms in trauma-exposed refugees.

Keywords: Seeking safety; mandala; art therapy; PTSD; trauma-exposed refugees; trauma symptoms

By the end of 2014, 59.5 million individuals had been forcibly displaced around the world because of persecution, violence and conflict. Approximately 19.5 million of these people were refugees (United Nations High Commissioner for Refugees [UNHRC], 2015). It is estimated that, in the United States alone, there are 267,222 refugees/people in refugee-like situations, and an additional 224,508 asylum seekers (UNHCR, 2015). And, refugees are continually arriving. Given the increasing number of refugees coming to the United States, there is an increasing need for services and interventions to address their unique concerns—particularly around mental health.

The recommended treatments available for refugees who have been exposed to trauma include cognitive behavioral therapy (CBT), testimonial psychotherapy, eye movement desensitization and reprocessing (EMDR), and narrative exposure therapy (Ehntholt & Yule, 2006). However, these interventions are not appropriate for every client, and more research examining treatment options for trauma-exposed refugees is needed (Ehntholt &

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Yule, 2006). It is also possible that some combination of existing techniques could be appropriate for interventions with refugees, but few possibilities have been explored to date.

One intervention that has shown promise with trauma-exposed populations is *Seeking Safety*, which is a type of CBT that is present-focused and appropriate for those with post-traumatic stress disorder (PTSD) and other comorbid disorders (Najavits et al., 2013). This technique has shown promise in impacting PTSD and substance use symptoms in adolescents, veterans, and incarcerated populations, which are populations commonly exposed to trauma (Boden et al., 2012; Najavits, Gallop & Weiss, 2006; Zlotnick, Najavits, Rohsenow, & Johnson, 2003). The possibility of adapting this technique for use with trauma-exposed refugees warrants exploration.

Also of interest are mandalas, circular art forms that Carl Jung asserted in 1973 could have calming and centering effects on those who used them (Slegelis, 1987). As such, mandalas have been adapted into colored "feeling wheels" and employed as art psychotherapy techniques (Slegelis, 1987; Sorkes, 1991). The literature suggests that the use of mandalas may be promising in the reduction of anxiety, and there is evidence of their effectiveness as a part of art therapy with pediatric oncology patients (Curry & Kasser, 2005; Sorkes, 1991). Mandala art therapy is considered a promising art therapy technique for addressing a variety of symptoms in various age groups. The associated calming effects make it particularly appropriate for use with trauma-exposed clients (Slayton, D'Archer, & Kaplan, 2010).

Given the promise of both *Seeking Safety* and mandala creation in terms of intervening with trauma, anxiety and comorbid symptoms, it seems plausible that combining these techniques might be a natural fit for working with trauma-exposed refugees. Despite the potential promise of these techniques with trauma-exposed populations, to our knowledge, there is no documented information in the literature that explores the use of this technique with trauma-exposed refugees. Thus, the purpose of this paper is to describe the exploratory use of *Seeking Safety* adapted with mandala creation for the purpose of reducing trauma-related symptoms in groups of trauma-exposed refugees.

Review of the Literature

It is well established in the literature that refugees and asylum seekers are likely to have a trauma history. Many are exposed to extreme stress and multiple traumatic events such as forced migration, torture, rape, injury, starvation and/or the witnessing of the death of friends and family members (Lambert & Alhassoon, 2015; Palic & Elklit, 2011). Further, refugees are also likely to experience an array of new stressors during travel and upon their arrival in new countries, including separation from family and friends, exposure to disease, refugee camps, problems assimilating in new cultures, difficulty obtaining asylum status, housing problems and social isolation (Lambert & Alhassoon, 2015; Shannon, Wieling, McCleary, & Becher, 2015).

Exposure to various traumas compounded by psychosocial stressors has implications for the overall mental health of refugees and asylum seekers. The prevalence rate of PTSD in the refugee and asylum seeker populations varies in the literature depending on the

population of interest. However, research suggests that refugees are 10 times more likely than the general population to have PTSD and PTSD, depression and substance use have been found to be the most common mental health conditions in populations exposed to mass conflict and displacement (Delker & Freyd, 2014; Fazel, Wheeler, & Danesh, 2005; Steel, 2009). More specifically, researchers have reported various symptoms of PTSD and depression in trauma-exposed refugees, including separation anxiety, worrying, poor concentration, disorientation, flashbacks, nightmares, hypervigilance, violent outbursts, crying, anhedonia, suicide attempts and using substances for coping (Dupont, Kaplan, Verbraeck, Braam, & van de Wijngaart, 2005; Shannon et al., 2015; Tay, Rees, Kareth, & Silove, 2016).

Treatment and Challenges

Studies of therapeutic interventions specific to trauma-exposed refugee populations are limited (Nickerson, Bryant, Silove, & Steel, 2011) and include variations of CBT, EMDR and Narrative Exposure Therapy (NET, Lambert & Alhassoon, 2015). According to a systematic review done by Palic and Elklit (2011), refugee-adapted NET and culturally-sensitive CBT for Southeast Asians have the strongest evidence of effectiveness.

Despite existing evidence of potentially beneficial treatments, there are still challenges in treating PTSD in the refugee population. This population may not speak English well, or at all, and may have additional unique barriers, including: educational deficits, problems accessing services, cultural differences that impact treatment, stigma and fear associated with mental health issues and treatments, lack of confidence in treatment, fear of being perceived as unstable, a desire to hide mental health symptoms, and lingering effects from political oppression (Hinton, Rivera, Hofmann, Barlow, & Otto, 2012; Shannon et al., 2015). Shannon and colleagues (2015) further assert that those who have experienced trauma from political strife and oppression may have difficulty talking about their experiences and symptoms, and they may require more time to trust and feel safe. Such findings have implications for traditional trauma-focused therapies that rely heavily on the client talking about and processing their experiences.

Additionally, concerns exist around exposure techniques, which are central to treatments like NET and CBT. Exposure may not be well tolerated by refugee populations and can be difficult to use because they are often aimed at only one traumatic experience when refugees often have complex, intersecting trauma histories (Hinton et al., 2012; Lester, Resick, Young-Xu, & Artz, 2010; Palic & Elklit, 2011). Further, Nickerson and colleagues (2011) argue using CBT to treat PTSD in the refugee population can also be challenging because it is based heavily on extinction learning, which assumes the treatment is occurring after the threat is over. Unfortunately, refugees often receive treatment while still facing real threats such as living in confinement, living in refugee camps, or living with the uncertainty of gaining legal status in their new country (Nickerson et al., 2011). As a result, there is a need for further research of novel, culturally-sensitive adaptations of empirically-supported treatment approaches to meet the needs of the refugee population (Hinton et al., 2012; Nickerson et al., 2011).

Seeking Safety

Given the need to expand treatment offerings for trauma-exposed refugee populations, treatment techniques that have not been previously used with this population need to be explored. One such option is *Seeking Safety*, which is a present-focused form of CBT treatment originally designed for individuals with comorbid PTSD and substance use disorder (Najavits et al., 2013). *Seeking Safety* helps individuals establish a greater sense of safety through psychoeducation and the use of effective coping skills (Najavits, 2002). Positive results in both individual and group formats have been demonstrated, with a wide variety of clients who have both diagnoses, one of the two diagnoses, as well as those that have symptoms not severe enough for either diagnosis (Brown et al, 2007; Lynch, Heath, Matthews, & Cepeda, 2012; Najavits, 2002, 2009).

Seeking Safety has 25 independent topics that can be flexibly applied in any order depending on the needs of the clients and the treatment timeframe allotted (for sample curriculum see Najavits, 2002). Although to our knowledge there is no existing literature documenting the use of Seeking Safety with refugees, various aspects of the model lend itself well to the unique treatment challenges of the trauma-exposed refugee population. Given that there is evidence that traditional exposure-based therapies might not be as effective for refugees with PTSD, as previously mentioned, a PTSD intervention that is present-focused and emphasizes the use of coping skills and psychoeducation was needed. Thus, Seeking Safety was adapted for this population, given that it has been shown to be flexible and adaptable for a variety of groups, which potentially lends itself to being adapted to the specific needs of the refugee population as well.

Art Therapy/Use of Mandalas

The use of art therapy as a treatment for different types of trauma allows space for individuals to explore various thoughts and feelings in a non-threatening way by removing focus on self (Naff, 2014; Skeffington & Browne, 2014). However, evidence suggests that art therapy seems to be most effective in combination with trauma-focused interventions (Naff, 2014; Schouten, de Niet, Knipscheer, Kleber, & Hutschemaekers, 2015). Not only is the combination more effective in comparison to art therapy as a standalone intervention, a review done by Schouten and colleagues (2014) found that trauma-focused psychotherapy in combination with art therapy was more effective in reducing trauma symptoms than a trauma-focused psychotherapy control group. Given the need for innovative and culturally sensitive ways to adapt treatment for refugees, combining evidence-based treatments for PTSD with art therapy may be useful in addressing trauma symptoms in the refugee population. Thus, adapting a trauma-focused therapy like *Seeking Safety* to include aspects of art therapy may help refugees begin to process feelings and thoughts around their trauma in a safe space until they are more comfortable or able to verbalize them.

The creation of mandalas is commonly used in art therapy (Stinley, Norris, & Hinds, 2015). Henderson, Rosen and Mascaro (2007) argue that the mandala is a task particularly suited to individuals with a trauma history, as it functions as a symbolic representation of difficult emotions while also providing personal meaning, order and integration. Mandalas

have also been found to decrease anxiety, distress and negative mood state (Babouchkina & Robbins, 2015; Stinley et al., 2015; Van der Vennet & Serice, 2012).

After considering the unique challenges of working with refugees who have PTSD, the need for innovative treatment approaches, and the strengths of both *Seeking Safety* and mandala creation, a trauma support group for refugees was created by adapting *Seeking Safety* and integrating it with mandala work. The purpose of this paper is to describe the trauma support group modality and the facilitators' experiences implementing the adapted *Seeking Safety*/mandala technique with three different groups of trauma-exposed refugees.

Description of the Intervention

Participants and Group Formation

Participants in the trauma support groups were adults currently residing at a nonprofit humanitarian organization in Western New York that provides food, shelter, clothing and legal assistance to refugees seeking protection in the United States or Canada. All participants volunteered to participate in the trauma support group. Participants were screened into the program by an LCSW, who used the Dissociative Experience Scale (DES; Carlson & Putnam, 1993), and the Post Traumatic Checklist (PCL; Blanchard, Jones-Alexander, Buckley & Forneris, 1996) as a guide for determining participant goodness of fit for the group. The LCSW considered factors such as motivation, country of origin, gender, and levels of PTSD symptoms. Individuals who experienced DSM-IV-TR, (the version of the DSM in use during the time that this intervention was conducted) symptoms of PTSD that they themselves believed were related to current and/or previous trauma were ruled in for inclusion. Individuals with dissociative symptoms were screened out.

Gender specific support groups were created and clients were referred to the groups based on several factors, including: similarity in countries of origin and availability of agency support services outside of the group. Groups were closed after the second session, in order to promote a sense of trust. One group of four women and another with three men was offered in 2014, with an additional group with 11 men was offered in 2014. Some participants missed a session due to illness or appointments. At least one group facilitator or group participant was skilled in translation in the participants' native language.

Intervention Techniques

Adapting Seeking Safety. With Najavits' (2002) (the original developer of the Seeking Safety curriculum) permission, treatment topics from Seeking Safety were modified into an eight-week trauma support group. The sessions mirrored Seeking Safety with regard to structure of content and time allotted for each session, activity and discussion, and session length. Also consistent with Seeking Safety, each session opened with a "check-in" to ask how participants were doing and what pressing needs participants wished to prioritize, and to allow participants to share brief examples of good coping they used since the previous session (Najavits, 2002). The facilitators then presented the Seeking Safety quotation for that week's treatment topic to stimulate the discussion, provided psychoeducation around that week's topic, discussed how the topic related to the participants' lives, and checked-

out at the end by having participants describe benefits of the session and then describe the new commitment for the following week (Najavits, 2002).

The facilitators chose eight of the original 25 Seeking Safety treatment topics based on the intended purpose of the group, which was to address trauma, encourage coping skills, help participants build their own tools for coping, help participants understand trauma and its impact, encourage self-reliance and provide a safe space for participating. The following topics were covered: Taking Back Your Power; Detaching from Emotional Pain; Grounding; Compassion; Creating Meaning; Coping with Triggers; Healthy Relationships; and Self-Nurturing (Najavits, 2002). For the full list of treatment topics, see Najavits (2002).

While several topics overlapped in the three separate groups, the topics chosen, the order they were presented in, and the number of sessions spent on each topic was based on the needs of the group. The *Safety* and *PTSD*: *Taking Back Your Power* topics were considered key to moving forward with subsequent topics, so these were covered first in all three groups. More than one session was allotted to these topics if the facilitators could not cover all the material in one session. The other treatment topics were chosen based on the number of remaining sessions and were tailored to the needs of the group. Group needs ranged from needing more information about PTSD to enhancing skills for functioning in day-to-day life. Treatment topic handouts from the *Seeking Safety* manual were modified to make the language easier to understand for those who had difficulty with English. Textheavy handouts were condensed, pictures were added, and the language in more complex topics was purposely simplified.

Use of mandalas. The *Seeking Safety* treatment groups were further adapted by adding an art therapy component in the form of mandala creation to each session. The mandala was purposely chosen as the form of art-making so participants could create their own meaning for their experiences using creativity and self-expression through the use of words, pictures, symbols, and colors. Mandalas also lend themselves towards facilitating transfer of emotions into the art form, and result in a tangible product at the end of each session so participants can gauge their progress, even for those not participating in other forms of group sharing during the session. Ultimately, the mandala is intended to be uniquely meaningful for each participant. Unique meanings for each individual evolve through the creative process.

The Intervention Team

The team was supervised by one LCSW and two student facilitators. The team received six hours of mandala specific art therapy training from a certified art therapist. The training informed the facilitators how the mandalas were to be integrated into the adapted *Seeking Safety* material.

The Intervention Process

During the first session of the trauma support group, participants were given an overview of the mandala, and were encouraged not to comment on each other's work. Facilitators also emphasized to participants that the process of getting their feelings out

was more important than the product itself. In-between the discussion of content and the check-out of each session, group participants were given between 15 and 20 minutes to create a mandala based on the topic for that session. Participants were provided with precut circles in different colors, magazines, markers, pencils, crayons, stencils, staples, tape, glue, fabric, and scissors in order to make their mandala in any way they chose. Soft background music accompanied the mandala creation time. Participants were then invited to share their mandala and its meaning with the group if they felt comfortable doing so.

In the first session of all three groups, participants were instructed to create a mandala that represented them or told a story about them. Depending on the topic used for subsequent sessions, participants created mandalas around themes of safety, reclaiming personal power, self-compassion, and self-nurturing. An additional mandala activity on the topic of grounding was offered and facilitators provided participants with a pre-made, blank mandala. Participants were instructed to choose a mandala, to select colors, shapes, images, sizes, and materials, and to notice the process of creating something beautiful while focusing their senses on the mandala. Participants could also add pictures or words if they chose to. The mandala activity for the final session had participants reflect on coming "full circle" by asking them to take out their mandala from the first session. They were asked to create a mandala that represented who they were that day and where they were on their healing journey overall. Each participant was provided with one wedge of a full circle in this session, so the facilitators could collect the wedges to make a group mandala. Figures 1 and 2 show examples of mandalas created in the women's group.







Figure 1 - Example mandala

Preliminary Observations

In order to assess whether the adaptation of *Seeking Safety* with the use of mandalas seemed to be helpful for participants, the three facilitators were asked to write up detailed progress notes after each session. Facilitators noted the goals for the session using the adapted model, the content covered, their affective experience and thoughts around what happened during the session, what went well and what could have gone better, and what the participants took away from each session. The progress notes also included quotes and descriptions of what group participants thought of each session and of the group overall.

After all sessions were completed, a member of the research team examined the progress notes from each facilitator and extracted common themes around the group members' and facilitators' thoughts, feelings and experiences about the group. Common themes were identified as those that were mentioned by at least two different facilitators. The progress notes were then re-examined in order to track how many times each of the common themes were mentioned throughout all of the progress notes. Common themes that were mentioned at least three times were grouped together into major themes. Table 1 below depicts the themes and subthemes.

Table 1. Identified Themes and Subthemes of the Trauma Support Group

1. Mandala creation enhanced the Seeking Safety material

- Mandalas were a symbol of personal reflection and meaning. (11)
- Participants were actively engaged in mandala creation. (10)
- Participants wished to create/created mandalas outside the group as a coping skill. (6)
- Mandalas were a way to express difficult feelings and thoughts. (5)

2. Language barriers posed important considerations

- Extra time was required for translation. (9)
- Needed to use more deliberate, simple and concise language. (6)
- Concern that those who struggled with English benefitted less from the group. (6)
- Tension between covering the material and ensuring concepts were clear. (5)
- Facilitators found some topics difficult to explain. (3)
- Group felt fragmented due to translation occurring while content was delivered. (3)

3. Trauma support group was a means of personal growth

- Participants reported personal growth as a result of the group. (9)
- Participants talked about using what they learned to help others/wanting to help others. (4)

Note: Numbers in parentheses indicate the frequency of each sub-theme as noted by group facilitators.

Facilitators were also instructed to note any anecdotal reports from participants about the impact of the trauma support group. Participant quotes from the progress notes were grouped into two overarching categories: reduction of symptoms and use of safe coping skills. Examples of these quotes are presented in Table 2.

Limitations

This paper details the results of a case observation and is not a formal study. The adaptation of the model was created to offer additional techniques to help the trauma-impacted group to further process their trauma experiences. Participants were volunteers and the observed outcomes were practice observations and not conclusions from a study designed with formal research principles. Therefore, more research in this area is needed.

While the technique seems to have been promising for this one group, we cannot assume that the positive process that was observed will transfer to other groups, or that it will be maintained over time. We also did not conduct a formal follow-up to determine the

long-term impact of this intervention. Because this was an actual treatment group being observed, there was only one facilitator available to observe and record the reactions of the group. Future studies of this adapted technique should employ multiple raters to allow for inter-rater reliability when recording and categorizing the observations. Moreover, we recommend recording the therapy sessions to allow a supervisor to review sessions with facilitators and give them feedback, thus enhancing their training. Formal recording of sessions would also permit study personnel to measure fidelity to the intervention.

It is unknown if the positive effects observed were attributable to the intervention or attributable to some other form of therapy the client was receiving, and therefore future research studies should take this into account in their design. A pre-test/post-test research design where participants are randomly assigned to groups would allow the exploration of the impact of the specific intervention. If this is done, the research design should use clinicians who are blind to the subjects' trauma status.

Table 2. Anecdotal Participant Reports as Reported by Observers

Reduction of Symptoms	Use of Safe Coping Skills
 "I feel so happyI feel like I am finding peace" (description of what was overheard) Sleeping better, feeling better, focusing better and feeling happy Slowly trying to let men back into her life again Blood pressure has gone down Feels free and "so good" Helped her love and engage in life fully again Comfortable with telling her story to others without crying 	 Truly thinking about safe coping skills Did some grounding techniques right before she attended her doctor's appointment Learned that one can have power over one's emotions and safe coping skills Using positive, safe coping (including going to the gym, surrounding self with positive people rather than being isolated, reaching out to supports) Expressed she was able to deal with memories of her trauma by going out with friends, talking with people she trusted and doing positive self-talk

Discussion

Initial results of this exploratory evaluation suggest that there is potential for this adapted version of *Seeking Safety* with the inclusion of mandalas to reduce trauma symptoms in refugee populations. Given that *Seeking Safety* has improved symptoms in other trauma-exposed populations and that mandalas are considered a flexible means by which participants can safely express and explore their own experiences (Boden et al., 2012; Lynch et al., 2012; Parris, 2008), these outcomes are not surprising.

Our observations are consistent with Gerteisen (2008) who found that mandala art therapy was useful for impacting trauma symptoms in children, as it facilitated non-verbal expression at the child's own comfort level. Non-verbal expression was also a goal of the current intervention, which was one prominent reason for originally integrating mandalas with this *Seeking Safety* adaptation.

These preliminary results are also consistent with literature regarding the effectiveness of art therapy for treating trauma, which concluded that the use of trauma-focused mandala drawing in art therapy was associated with a reduction in trauma symptoms in adults (Schouten et al., 2015). Additionally, Allen (2011) found that mandalas were useful in impacting severity of PTSD symptoms, anxiety, and physical health issues in college students.

Directions for Future Research

Future research efforts should be directed towards examining the effectiveness of this adapted technique with various refugee populations over time. The development of fidelity measures such as a client self-report survey, semi-structured interviews and/or evaluation of the model through observations or video recording would further clarify and validate the dynamics, implementation, and effectiveness of the model. Further, a training manual and means of coaching practitioners using the validated fidelity measures is also needed. Future studies can be designed to assign some participants to the adapted *Seeking Safety* group and others to a standard treatment group to allow comparison of which groups facilitate the greatest reduction of trauma symptoms.

Conclusion

Trauma-exposed refugees are diverse in background and experience and may suffer from a wide variety of trauma symptoms. Currently established treatment protocols may be useful for some refugees, and not as beneficial for working with others. As such, innovative treatment modalities must be explored in greater detail, which was the purpose of the treatment adaptation presented in this paper. We recommend that social workers who practice with trauma-exposed refugee populations consider incorporating art therapy and the *Seeking Safety* content into group treatment sessions, given the potential for reducing trauma symptoms and the relative low cost of integrating this approach into existing programming.

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Male Survivors of Sexual Abuse: Becoming Gender-Responsive and Trauma-Informed

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Abstract: While there is a wide body of literature examining the behavioral, emotional, and social consequences associated with being sexually abused, comparatively few studies have focused on males. Sexual abuse victimization among males remains largely underreported, under-treated, and under-recognized by researchers, practitioners, and the public. Researchers trying to clarify why sexual abuse in males has been overlooked point to prevailing cultural norms, myths, assumptions, stigma, and biases about masculinity. Consequently, there is often an assumption that males are not negatively affected by sexual abuse. Drawing extensively from the literature, this article provides a critical review of: (1) the nature, experience and impact of sexual abuse victimization for males; and (2) the multidimensional processes that promote and inhibit resilient outcomes. It concludes with a discussion of trauma-informed and gender-responsive recommendations and future directions for social work practice, policy, and research.

Keywords: Sexual abuse; males; gender; trauma-informed care

Over the past 20 years a growing body of literature has documented the enduring behavioral, emotional, and social consequences associated with being sexually abused. Despite this increased attention to sexual abuse, males are significantly less likely to disclose sexual abuse victimization, less likely to seek help, less likely to be suspected of being a victim, less likely to be believed upon disclosure, more likely to be blamed, and more likely to be perceived negatively when they do disclose sexual abuse than their female counterparts (Banyard, Williams, & Siegal, 2004; Holmes & Slap, 1999; O'Leary & Barber, 2008; Paul & Paul, 2016; Speigel, 2003). Researchers trying to clarify why sexual abuse in males has been overlooked have pointed to prevailing cultural norms, myths, assumptions, stigma and biases about victimization of males in general and sexual abuse of males in particular. As a result of these traditional notions of masculinity, there is often an assumption that males are not negatively affected by sexual abuse (Heru, 2001; Kia-Keating, Grossman, Sorsoli & Epstein, 2005; McGuffey, 2005; Teram, Stalker, Hovey, Schachter, & Lasiuk, 2006).

Sexually abused males report significantly higher rates of posttraumatic stress disorder (Spataro, Mullen, Burgess, Wells, & Moss, 2004; Wolfe, Francis, & Straatman, 2006), depression (Gover, 2004), substance abuse (Bergen, Martin, Richardson, Allison & Roeger, 2004; DiLorio, Hartwell, & Hansen, 2002) and suicidality (Bergen, Martin, Richardson, Allison, & Roeger, 2003; Easton, Renner, & O'Leary, 2013; Miller, Esposito-Smythers, Wismoore, & Renshaw, 2013). Other internalizing and externalizing problem behaviors are also common. For example, using a population-based sample of 136,549

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students in Minnesota, Duke, Pettingell, McMorris, and Borowsky (2010) found that for males, sexual abuse victimization was associated with a 45-fold increase in dating violence, a 4.5-fold increase in fighting, and a 6 to 15-fold increase in self-harm and suicidality. High risk sexual behavior is also more common (Homma, Wang, Saewyc, & Kishor, 2012; Jones et al., 2013). In a meta-analysis, Homma et al. (2012) found that sexually abused boys were significantly more likely than non-abused boys to father a child, to have multiple sexual partners, and were more likely to have unprotected sexual intercourse.

Great strides have been made in advancing research approaches that reflect the reality of sexually abused males' experiences and also tackle the challenges and complexities endemic to high quality research in this field. Nevertheless, there remains a great deal of work to be done. Drawing extensively from existing research, this critical review: (1) examines the nature, experience and impact of sexual abuse victimization for males; and (2) identifies key multilevel risk and protective factors influencing the nature, experience and impact of sexual abuse for males. The review concludes by offering trauma-informed and gender-responsive recommendations for social work practice, policy, and research.

Multidimensional Risk and Protective Factors

Abuse-Related Factors

Timing (e.g., onset, frequency, duration) is an important source of variability in outcomes (Manly, 2005). Though the research is preliminary, some studies suggest that males are more likely to report an earlier onset (Ompad et al., 2005; Stevens, Ruggiero, Kilpatrick, Resnick, & Saunders, 2005; Walrath et al., 2003) and shorter duration of sexual abuse (Ullman & Filipas, 2005). There is some evidence to suggest that sexually abused males have worse outcomes if they report co-occurring physical abuse (Dong, Anda, Dube, Giles, & Felitti, 2003) or an earlier onset of sexual abuse (Ohene, Halcon, Ireland, Carr, & McNeely, 2005; Ompad et al., 2005; Stevens et al., 2005; Walrath et al., 2003). Frequency, duration and severity of sexual abuse have also been associated with worse outcomes for male youth (Banyard et al., 2004). Characteristics of the perpetrator have emerged as an important factor influencing the impact of sexual abuse. Several studies have found that male survivors are more likely to have extrafamilial perpetrators (Banyard et al., 2004; Feiring, Taska, & Lewis, 1999), and female perpetrators (Briere & Elliott, 2003; Dube et al., 2005; Newcomb, Munoz, & Carmona, 2009). Our knowledge in this area is complicated by the underrepresentation of female perpetrators in the literature (McLeod, 2015) and the underreporting of female-perpetrated sexual abuse. Regardless of the gender of the perpetrator, males experience a unique double stigma that impacts self-definition and self-disclosure of the abuse: with male perpetrators they often face misconceptions, stereotypes and assumptions regarding their sexual orientation; whereas femaleperpetrated sexual abuse is often regarded as benign, normative, or a rite of passage that is something to be bragged about.

Intrapsychic Factors

Because physical evidence of sexual abuse is rare (Heger, Tison, Velasquez, & Bernier, 2002; Kelly, Koh, & Thompson, 2006), self-disclosure takes on increased importance in

the identification of sexual abuse. However disclosure is a complex and lifelong process happening mostly in adulthood (Gagnier & Collin-Vézina, 2016; Hunter, 2011). A victim's cognitive appraisal and self-definition of the sexual abuse experience contributes to the probability of self-disclosure. This is particularly true for males. Stander, Olsen, and Merrill (2002) found that females were nearly 6 times more likely than males to self-define being sexually abused. Of the 2,010 participants who met the behavioral definition for childhood sexual abuse, only 15% of the men identified as sexual abuse survivors in comparison to 49% of the women. Males were more likely to acknowledge and define their experience as sexual abuse if deviated from accepted societal norms. For example, men were 17 times more likely to define themselves as sexually abused if their perpetrator was a family member. This illustrates the difficulty in obtaining an accurate picture of the scope and impact of sexual abuse among males.

Other intrapsychic factors such as cognitive appraisal, self-esteem and self-worth, spirituality and/or religion, coping strategies, and attribution style (i.e., locus of control; self-blame) also play a central role in interrupting the pathway between sexual abuse and later adaptive or maladaptive outcomes (Bal, Van Oost, De Bourdeaudhuij, & Crombez., 2003; Crete & Singh, 2015; Feiring, Taska, & Chen, 2002; Hebert, Parent, Daignault, & Tourigny, 2006; Quas, Goodman, & Jones, 2003; Holmes, 2008). The coping strategies (Simon, Feiring, & McElroy, 2010) and cognitive appraisals (Lab & Moore, 2005; Stander et al., 2002) sexual abuse survivors use are critical ingredients in how men and boys understand, define, and experience victimization. Avoidant coping strategies, which are associated with worse outcomes, are more common among sexually abused boys (Simon et al., 2010). However, problem behaviors can also be a successful, adaptive, coping strategy. For example, a complex trauma framework classifies these self-protective responses as tension-reduction behaviors (Briere & Lanktree, 2013; Masten et al., 2005; Richardson, Henry, Black-Pond, & Sloane, 2008).

Family, School and Sociocultural Factors

Sexually abused males frequently face very real and entrenched problems both inside and outside of the home—including poverty, domestic violence, community violence and racial discrimination—that place them at higher risk for maladaptive developmental outcomes. Focusing on school can serve as a protective mechanism for sexually abused children living in chaotic, stressful, and unstable home environments. However, the array of characteristics, problems, and consequences associated with sexual abuse victimization can also translate into problems in academic achievement (Avery, Massat, & Lundy, 2000; Buckle, Lancaster, Powell, & Higgins, 2005) and social skills (Bal et al., 2003; Feiring, Rosenthal, & Taska, 2000; Hebert et al., 2006). Family-level risk and protective factors that potentially play a role influencing resilient adaptation include parental substance abuse, maternal education, parent-child relationship, family functioning, and parental support and belief (Kim & Cicchetti, 2004; Pintello & Zuravin, 2001; Rosenthal, Feiring, & Taska, 2003; Stevens et al., 2005). However, the parent-child relationship is a particularly critical protective factor considering it is typically tied into the parent's belief in and support of their child subsequent to the disclosure of the abuse.

Given the individual and society level stigma, prejudice, stereotypes, and taboos surrounding homosexuality in the United States, many male survivors experience unique issues related to fears of becoming or being seen as a potential perpetrator, fear of being perceived or labeled as gay, and confusion about sexual identity that can lead to hypermasculinity and attempts to reassert masculinity (Alaggia & Millington, 2008; Dhaliwal, Gauzas, Antonowicz, & Ross, 1996; Teram et al., 2006). In addition to sexual identity and gender role stereotypes and norms surrounding masculinity, many sexually abused males also contend with the interlocking influences of racial socialization, racial stress, and racial appraisals (Hughes et al., 2006; McGuffey, 2008; Yasui & Dishion, 2007). Racial appraisal refers to the process of "how and why trauma victims construct their interpretations of trauma when there is already an excess of stigma due to their racially marginalized positions in the social order" (McGuffey, 2008, p. 219). Comparatively little research has focused on sexual abuse victimization for males who are members of racial, ethnic, cultural, religious and sexual minority populations (Kenny & McEachern, 2000). Still fewer studies have examined intragroup differences and how multiple identities intersect, particularly for males. For example, what does it mean to be a gay, African American male victim of sexual abuse? While the racial, ethnic, cultural and religious meanings ascribed to sexual abuse can be a potent risk or protective factor, little research to date has focused on sexually abused males.

Trauma-Informed and Gender-Responsive Care

A trauma-informed care approach is an essential component in service provision. In traditional systems of care, trauma is not well understood or taken into consideration, which leads client problems or behaviors to be viewed as separate, discrete, and unrelated to past trauma experiences (Clervil & DeCandia, 2013; Harris & Fallot, 2001) With a trauma-informed approach individuals are viewed through a 'trauma lens' that views behaviors, emotions, responses, and attitudes as an accumulation of survival skills created in response to trauma experiences (Clervil & DeCandia, 2013). Hopper, Bassuk, and Olivet (2010) describe a consensus-based definition of trauma-informed care as:

a strengths-based framework that is grounded in an understanding of and responsiveness to the impact of trauma, that emphasizes physical, psychological, and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment. (p.82)

Although males and females may experience the same kinds of trauma, how they process and respond to these experiences may present differently based on the social expectations of each gender role (Crable, Underwood, Parks-Savage, & Maclin, 2013; Fallot & Bebout, 2012). Thus, there is also a need for trauma-informed and gender-responsive care (Crable et al., 2013; Fallot & Bebout, 2012). Given the low rates of self-disclosure, this overarching framework is imperative in creating a safe and supportive environment for male survivors being served in the various public systems (Corbin et al., 2011; Fallot & Bebout, 2012; Harris & Fallot, 2001). Difficulty can also arise when working with male survivors because the social expectations of men to be strong and independent can influence and restrict the range of emotions men are allowed to express in public and even recognize privately (Fallot & Bebout, 2012). This is especially pronounced

for African American and Hispanic/Latino males. However, ultimately there is a need for vulnerability and the ability to process a range of emotions when recovering from trauma experiences. A safe and supportive environment is a necessary component in this process.

Future Directions and Recommendations

Despite the increased attention to sexual abuse, victimization of males continues to be overlooked. Consequently, it is crucial that practitioners and researchers incorporate a developmentally and contextually-sensitive focus on: (1) the nature, experience, and impact of sexual abuse for males, (2) the multidimensional processes that promote and inhibit resilient outcomes, and (3) trauma-informed and gender-responsive approaches to care. One of the most straightforward ways to do this is for researchers to be intentional in including males in studies focusing on sexual abuse and testing for gender as an effect moderator. Researchers and practitioners working with specialized populations of males with appreciably higher rates of sexual abuse victimization should also be aware of the higher likelihood for sexual abuse and include this as part of the initial and ongoing screening and assessment process. Recognizing some of the unique issues males experience, and taking this into account in study designs, may increase the chances for larger samples and/or subsamples of sexually abused males. This includes: (1) increased attention to sexual abuse victimization for males who are members of racial, ethnic cultural, religious, and sexual minority populations, and (2) awareness of and sensitivity to how questions about sexual abuse are constructed. Questions should be gender-neutral and avoid labels and instead use behavioral definitions of the sexual abuse. Finally, more research is needed to better understand the impact of sexual abuse on males across multiple domains of functioning. Accounting for the influence of confounding factors in the family, peer, school, and neighborhood environment is also critical given that sexual abuse rarely occurs apart from other risk factors.

Micro-level Implications for Trauma-Informed Care

Practitioners and service providers should use a trauma-informed and gender-responsive framework as a guide in practice and service provision (Crable et al., 2013; Fallot & Bebout, 2012). Gender role expectations impact the initial trauma experience as well as the narrative explanation and reactions of the survivor (Crable et al., 2013; Fallot & Bebout, 2012). For male survivors it is essential that providers take into consideration the influence of male gender role socialization on their experience (Fallot & Bebout, 2012; Foster, Boyd, & O'Leary, 2012; Sorsoli, Kia-Keating, & Grossman, 2008). Issues and expectations based on gender role socialization regarding sexuality should be addressed directly, and normative male expectations should be actively examined and challenged (Fallot & Bebout, 2012; Foster et al., 2012; Sorsoli et al., 2008). Social workers should explore prevalent messages that boys and men learn about how "real" men think, act, and feel (Fallot & Bebout, 2012; Foster et al., 2012; Sorsoli et al., 2008). These messages and expectations need to be discussed openly, so males are able to learn how to integrate all parts of self (Fallot & Bebout, 2012). By acknowledging these gendered messages, social workers communicate that they are not blaming the victim and create a sense of safety and

trustworthiness for the male client (Fallot & Bebout, 2012; Foster et al., 2012; Sorsoli et al., 2008).

It is important males be asked about a history of exposure to violence as soon as possible in the intake process, with sensitivity to using labels that denote victimization (Fallot & Bebout, 2012). There is, however, also a need to directly ask questions related to sexual abuse (Sorsoli et al., 2008). If specific questions regarding sexual abuse are not asked, it is unlikely these experiences will be disclosed (Sorsoli et al., 2008). These questions may need to be raised several times over the course of service provision (Fallot & Bebout, 2012; Sorsoli et al., 2008). Social workers should also be careful not to push for details prior to establishing a safe and supportive therapeutic relationship (Fallot & Bebout, 2012; Foster et al., 2012; Sorsoli et al., 2008). For example, if a man is receptive to responding to broad questions regarding discussion of a trauma history, it would make sense for a service provider to move forward with a more comprehensive trauma assessment, which should include a recovery plan and referral to specific trauma services (Fallot & Bebout, 2012). However, if the social worker is met with a negative response to initial questions regarding a trauma history, more emphasis should be placed on forming rapport and a collaborative relationship with the individual so questions regarding trauma can be revisited (Fallot & Bebout, 2012). Prefacing with the prevalence and widespread occurrence of exposure to violence can validate and normalize male survivors' experiences and feelings (Fallot & Bebout, 2012; Knight, 2015).

Once past sexual abuse has been disclosed, it is essential it be taken seriously. This includes responding calmly and empathetically, with affirmation and attentiveness (Foster et al., 2012; Knight, 2015; Sorsoli et al., 2008). This initial response to the disclosure can serve as an initial boundary-setting activity and can provide an emotionally restorative experience that aids in counteracting a client's previous vulnerability in relationships (Sorsoli et al., 2008). If the response to initial disclosures are inappropriate or not protective, there can be increased difficulties (Foster et al., 2012; Knight, 2015). This includes: avoiding addressing the trauma entirely, probing for too much detail too soon, pushing for expression of feelings when it is not appropriate, and minimizing the impact of the trauma (Knight, 2015).

It is also necessary for males to gain support and security in growing their emotional vocabulary and to be assisted in cultivating the necessary skills to identify, label, and describe emotions that may sometimes be perceived as more stereotypically feminine (Fallot & Bebout, 2012). Male survivors should be assisted in developing a wider range of options when expressing emotions (Corbin et al., 2011; Fallot & Bebout, 2012). For example, men may be reluctant to discuss emotions or relationships and this should not be viewed as a lack of engagement in services. Instead, service providers should enhance the client's sense of safety by slowing the rate of expectation in regards to open communication and level of disclosure (Fallot & Bebout, 2012).

Furthermore, male trauma survivors often encounter a dilemma related to the conflict between the identity of being a man and the experience of being powerless and a victim. These two identities can be in direct contradiction with one another and can lead to the display of all-or-nothing responses (Corbin et al., 2011; Fallot & Bebout, 2012). It is

important for service providers to recognize that these all-or-nothing responses can come in the form of overt aggression or withdrawal (Fallot & Bebout, 2012; Foster et al., 2012). If a male client is engaging in aggressive behavior, it needs to be understood in the context of survival skills and adaptive behaviors that have protected the individual when they felt threatened in the past (Fallot & Bebout, 2012). This understanding can help reduce a counterproductive response by service providers (Fallot & Bebout, 2012).

The extent to which male survivors participate meaningfully in clinical treatment is often dependent on the extent to which the social worker addresses the manifestations of the legacy of sexual abuse, explores the degree of internalization of the abuse experience, and the impact of the abuse on relationships with others. In furthering the change process with male survivors, the social worker can explore the meanings male survivors attach to their abuse experiences and change the narrative they have internalized about themselves, others, and the world. The following capacity-building practice recommendations are ways social workers can help clients identify how sexual abuse experiences manifest in relational themes and patterns across relationships:

- Learning to operationalize the practice of self-acceptance, emotional awareness and regulation by establishing and defining personal boundaries.
- Engaging in self-acceptance through daily self-affirmations and cognitive restructuring of negative self-talk.
- Aiding clients in thinking through places and times in their schedule to inventory, nourish and care for emotional, physical, social, and psychological well-being. (Fallot & Bebout, 2012).

The strengths and skills of trauma survivors should also be emphasized and used as a way of promoting hope and empowerment and highlighting resilience (Fallot & Bebout, 2012). Offering choices throughout service provision should be made a top priority in decreasing issues of power within the therapeutic relationship (Fallot & Bebout 2012; Foster et al., 2012; Sorsoli et al., 2008). For example, offering the male client a choice of practitioner, such as having a male or female, can increase the client's comfort and help decrease power dynamics (Foster et al., 2012). Clients must be included in decision-making and should work collaboratively with the service provider in the development of any treatment plans or service referrals. For example, a social worker might ask the client "How can we work together to meet your goals?" (Fallot & Bebout, 2012).

Although there are several trauma-informed strategies and techniques that social workers can use with male sexual abuse survivors, an underlying sense of safety in the environment and therapeutic relationship is an essential first step (Fallot & Bebout, 2012; Foster et al., 2012; Knight, 2015). A focus on the male survivor's strength and resilience and the awareness of how gender socialization impacts recovery are central components of all service provision. It is also important for social workers to understand the differences in how men access and utilize services, as well as the best techniques and strategies to begin and maintain this engagement (Foster et al., 2012). Because men can be hesitant about accessing services, sometimes life crises present an opening or opportunity for sexual abuse to be identified in a context that can lead to referrals and linkage to appropriate support. Another important factor that should be considered is to create a male-friendly

environment in the entrance or waiting room, which may include relevant posters or information (Foster et al., 2012).

Macro-level Implications for Trauma-Informed Care

Effective male-specific sexual abuse advocacy, outreach, and training can influence more proximal factors related to the prevention and amelioration of maladaptive outcomes for male survivors. This includes challenging and confronting the homophobia and traditional gender role norms that frequently silence male survivors. Social media, the internet and web-based technology are increasingly critical tools. Mandated reporting policies, requirements, and training are another area that needs greater attention. In the wake of the Penn State sexual abuse scandal (Chappell, 2012), many states began to reexamine and revise existing mandatory reporting requirements (Persky, 2012; Kelly, 2012), which vary from state to state (Child Welfare Information Gateway, 2012; Pietrantonio et al., 2013). While this stricter legislation is well-intentioned, it often neglects two components integral to achieving its goal: (1) adequate mandated reporter training; and (2) funding to ensure proper investigation of these reports in already understaffed, underfunded, and overburdened child welfare agencies. Emerging evidence suggests that the majority of mandated reporters do not receive adequate training regarding how to identify the signs of abuse and neglect (Pietrantonio et al., 2013; Wekerle, 2013). One way to address this is through minimum training requirements for all mandated reporters using a standardized, evidence-informed curriculum that all states are required to adopt (Kenny & Abreu, 2015). This is one way to ensure that mandated reporters are more knowledgeable and comfortable about recognizing sexual abuse in general, and sexual abuse in males in particular.

Because school-aged male youth are surrounded all day by peers and non-relative adults, it is an ideal location for individual and group treatment aimed at enhancing social support and building positive relationships. For these reasons, the school context in particular represents a unique and potentially crucial entry point for trauma-informed support, prevention, and intervention throughout the disclosure and recovery process. Faith-based and youth-serving organizations also have the opportunity to play a similarly important role, particularly for outreach and engagement within historically marginalized communities. Religion/spirituality can provide a sense of community, meaning and purpose that can be helpful in coping with trauma (Bryant-Davis et al., 2012). At the same time, traumatic events often shatter core assumptions and beliefs about the world in ways that can lead to religious/spiritual discontent, disillusionment, and rejection. This can be exacerbated when sexual abuse occurs within religious institutions (John Jay College Research Team, 2004).

In sum, recommendations for trauma-informed and gender-responsive approaches with male survivors of sexual abuse should bridge the micro-macro spectrum. This includes an emphasis on: (1) increased awareness of sexual abuse and its impact; (2) adequate attention to male gender roles; and (3) provision of safe, supportive, and empowering environments that facilitate healing.

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Trauma-Informed Social Work Practice with Women with Disabilities: Working with Survivors of Intimate Partner Violence

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Abstract: Women with disabilities experience intimate partner violence (IPV) at higher rates than both nondisabled women and men, and men with disabilities. Their significant exposure to IPV suggests notable levels of trauma-related symptomology. However, there is a dearth of research on trauma and IPV among women with disabilities, and services tailored to their diverse strengths and needs are scarce. Guided by critical disability theory and feminist disability theory, this article describes culturally sensitive, trauma-informed approaches to practice with female survivors of IPV with disabilities.

Keywords: Intimate partner violence; women with disabilities; trauma-informed practice

Women with disabilities are among the most vulnerable groups impacted by intimate partner violence (IPV), which includes physical, sexual, psychological, and economic abuse. They experience IPV at higher rates than nondisabled women and men, and men with disabilities (Breiding & Armour, 2015) and are more often subject to severe forms of physical abuse, including being kicked, punched, or bitten (Brownridge, 2006). Women with disabilities also experience subtle forms of abuse exploiting aspects of disability, such as withholding medication or denying needed supports (Lund, 2011). The most common perpetrators of violence against women with disabilities are former or current intimate partners (Hahn, McCormick, Silverman, Robinson, & Koenen, 2014), but family members, caregivers, personal assistants, and medical providers may also be perpetrators (Curry et al., 2009). The experience of abuse is compounded as women with disabilities remain in abusive relationships for longer periods of time than nondisabled women (Nosek, Howland, Rintala, Young, & Chanpong, 2001).

The impact of trauma on women with disabilities is under-researched, and its origins misunderstood. One study comparing trauma symptomatology among men and women both with and without disabilities found that women with disabilities reported significantly higher levels of trauma symptoms compared to men with disabilities and nondisabled men and women (Strauser, Lustig, & Uruk, 2007). Traumatic experiences can compound health problems among women with disabilities, as trauma has been linked with physical health problems, as well as poor health behaviors such as substance abuse (Weissbecker & Clark, 2007).

Despite the problem's gravity, there is a dearth of research on trauma and IPV among women with disabilities, and services tailored to their diverse needs are scarce. Research on trauma-informed practice with this population is particularly limited (Anderson & Najavits, 2014). Trauma-informed practice is emerging as an effective approach to addressing the needs of female survivors experiencing IPV and related traumatic life experiences (Taft, Murphy, & Creech, 2016). However, a systematic review of the

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empirical research found not a single effective IPV intervention for women with disabilities (Mikton, Maguire, & Shakespeare, 2014), and the utility of trauma-informed practice has yet to be explored with this population. In this article, we consider culturally sensitive, trauma-informed approaches to practice for female survivors of IPV with disabilities.

Background: IPV, Disability, and Trauma-Informed Practice

Empirical research confirms that women with disabilities are disproportionately affected by IPV. According to the 2013 National Crime Victimization Survey, individuals with disabilities experienced serious violent victimization at three times the rate of those without disabilities, and were more likely to experience serious violent victimization by an intimate partner (Harrell, 2015). The 2010 National Intimate Partner Violence and Sexual Violence Survey revealed that women with a disability were significantly more likely to experience sexual and physical violence, stalking, psychological aggression, and control of reproductive or sexual health than women without a disability (Breiding & Armour, 2015).

Compounding the risks faced by victims with disabilities, IPV is associated with long-term physical and mental health problems. The health-related risks of IPV are of particular concern. The World Health Organization (2011) cites violence against women with disabilities as a major factor in their diminished health status, linking violence to "immediate and long-term" health outcomes including "injuries, physical and mental health problems, substance abuse, and death" (p. 59). IPV is associated with a wide range of mental health issues, including depression, post-traumatic stress disorder (PTSD), anxiety, self-harm, and sleep disorders (Dillon, Hussain, Loxton, & Rahman, 2013). Furthermore, IPV is more common among women with serious or chronic mental illness, and studies have shown that women with chronic mental illness are more likely to attempt suicide as a result of IPV, and less likely to seek help from informal networks of support (Khalifeh, Oram, Trevillion, Johnson, & Howard, 2015).

Women with disabilities also face unique risk factors for abuse, including physical and social isolation; difficulty identifying abuse; dependence on abusive partners for assistance with daily needs; and general vulnerability related to disability, such as physical difficulty escaping abusive environments (Plummer & Findley, 2012). Social messages regarding the asexuality and undesirability of women with disabilities as intimate partners denigrates self-esteem, which is associated with IPV (Hassouneh-Philips & McNeff, 2005). Poverty and unemployment further reduce alternatives to abusive relationships for women with disabilities (Nosek et al., 2001), who are also impacted by structural inequalities related to race, gender, socioeconomic status, sexual orientation, and age (Ortoleva & Lewis, 2012).

The need for evidence-based interventions is frequently noted in the literature, with a particular need to develop approaches tailored to women with physical, sensory, and/or psychiatric disabilities (Lund, 2011; Mikton et al., 2014). Typical IPV violence intervention efforts for women with disabilities have been to modify approaches used with nondisabled women informed by traditional domestic violence theory (Barranti & Yuen, 2008). Applying the same intervention tactics assumes that the causes and consequences

of IPV are similar for nondisabled women and women with disabilities, when research has shown they often are not (Plummer & Findlay, 2012).

Women with disabilities may face great difficulty accessing support services, such as IPV agencies or the police, due to isolation, physical and attitudinal barriers among service agencies and providers, and fear of retribution by the abuser (Chang et al., 2003). If women with disabilities do seek assistance from IPV agencies, they may find that these agencies, and those working within them, are inadequately prepared to meet the needs of survivors with disabilities. The physical and attitudinal inaccessibility of these agencies has been cited as a barrier to escaping an abusive relationship (Chang et al., 2003; Frantz, Carey, & Nelson-Bryen, 2006). Furthermore, the barriers preventing women with disabilities from accessing support, such as isolation, inaccessibility, and a lack of empowerment, may be exacerbated by trauma-related conditions such as PTSD (Anderson & Najavits, 2014).

Abuse among women with disabilities has largely been addressed within either domestic violence organizations lacking experience with this population, or disability-focused organizations unfamiliar with IPV. In a National Census of Domestic Violence Services, the National Network to End Domestic Violence (2016) found that seventy-two percent of agencies surveyed reported providing advocacy related to disability issues throughout the year. It is critical that these agencies have the necessary tools to provide culturally relevant services to assist women with disabilities in their efforts to cope, heal, and achieve safety from abuse. Accessibility moves beyond physical infrastructure and considers the needs of women with disabilities in their policies and practices, establishing relationships with disability organizations and interpreter services, and accommodating women with varying levels of medication use, service animals, and personal care attendants. These accessibility considerations extend to trauma-informed practice with survivors of IPV with disabilities.

Trauma-Informed Practice

Trauma-informed IPV practice is driven by an understanding of the impact of violence and trauma, past and present, on all aspects of an individual's life and development (Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005). In a trauma-informed system, trauma is viewed not as a single discrete event but rather as a defining and organizing experience that forms the core of an individual's identity (Harris & Fallot, 2001). Systems of care operating from a trauma-informed approach design, organize, and implement all aspects of the clinical encounter to reflect an understanding of how trauma affects the life of the individual seeking services (Ghandour, Campbell, & Lloyd, 2015). The core values of safety, trustworthiness, choice, collaboration, and empowerment are defining features of service settings utilizing a trauma-informed approach (Fallot & Harris, 2009). This includes ensuring that all staff working within the setting are trained on trauma-relevant information and skills, and have the competencies to work with a range of individuals and experiences (Ghandour et al., 2015).

Trauma-informed IPV practice with women with disabilities requires an understanding of the complex interplay of medical, social, political, and personal factors influencing the experience of trauma within this population. Quiros and Berger (2015) note that an agency

that is truly trauma-informed must align itself with the social work mission of social justice, considering structural and environmental conditions when assessing trauma; that is, trauma is experienced on both interpersonal and sociopolitical levels. A comprehensive, trauma-informed response to IPV for women with disabilities must begin by addressing the full constellation of disability-related risk factors and consequences of abuse, at both personal and structural levels.

Lessons from Past Research

In addition to the tenets of trauma-informed practice discussed above, our past research suggests areas of focus for survivors of IPV with disabilities. Our preliminary research (Ballan et al., 2014; Ballan, Burke Freyer, & Powledge, 2015; Ballan, Burke Freyer, Powledge, & Marti, 2016) examined familial, social, and contextual correlates of IPV among individuals with disabilities and barriers to self-protection. This research yielded insight into the factors motivating women with disabilities to seek assistance and the need to increase women's independence and self-efficacy to enable them to find alternatives to violent relationships.

Health-related factors such as dependence on abusers for assistance with activities of daily living, social factors such as reduced community inclusion and lack of employment options, and personal factors such as the desire to retain custody of one's children all present significant barriers to addressing IPV. Findings indicated that female IPV victims with disabilities were often married and/or had children, challenging previous research and stereotypical portrayals of women with disabilities as single and childless. The possibility of losing custody of one's children is a great deterrent to reporting abuse among women with disabilities, as perpetrators may erroneously claim that disability negatively impacts parenting ability (Ortoleva & Lewis, 2012). Elliott et al. (2005) suggest including trauma-informed parenting services for survivors of trauma with children, helping parents explore how to take care of their own feelings, as well as those of their children.

The exclusion of women with disabilities from education and employment is a structural issue which has serious individual consequences. High rates of unemployment within our study sample indicated the need for vocational and financial assistance as standard components of IPV interventions. Moreover, it guides practitioners to consider additional needs such as permanent housing and accessible affordable healthcare accompanying unemployment and low socioeconomic status. Women with disabilities are disproportionately poor when compared to the general population (Hassouneh-Philips, McNeff, Powers, & Curry, 2005), which is by large a result of their secondary social status, and creates further difficulty in attempting to gain independence from an abuser. Economic independence has a great impact on a woman's ability to escape an abusive relationship, and stable employment is one crucial means of attaining financial stability. Social workers need to be apprised of services such as vocational training and benefits such as Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI), and understand the distinction between the various entitlements available to women with disabilities. An important role will be to serve as a link between the survivor and these federal and state resources.

Our previous research likewise indicated that practitioners must consider how needs may vary based on disability type. Literature on violence and women with disabilities has included a range of disabilities in the study sample, yet generally fails to examine abuse among specific disability groups (Hughes et al., 2011). It is essential for intervention methods to account for the interplay of disability, abuse, and related psychosocial dimensions, and acknowledge how these factors impact the health, well-being, and options of women with disabilities (Copel, 2006). A critical consideration entails assessing disability status and how this interacts with the effectiveness of interventions for IPV survivors.

Below, we discuss theoretical approaches related to IPV and disability, and provide recommendations for integrating these into trauma-informed practice with survivors with disabilities.

Recommendations for Trauma-Informed Practice with Survivors of IPV with Disabilities

The unique range of factors influencing the experience of IPV among women with disabilities requires a consideration of disability-informed theoretical approaches to the problem. Concepts drawn from critical disability theory and feminist disability theory provide a thorough foundation for culturally sensitive, trauma-informed practice with survivors with disabilities. Traditional trauma theory neglects to consider the diversity of experiences shaped by race, ethnicity, and disability status, among other identities (Quiros & Berger, 2015). The tenets of critical disability theory and feminist disability theory remind practitioners of the salience of intersecting identity statuses to each individual's experience of trauma.

Critical disability theory (Shakespeare, 2014) views disability as an interaction between individual, or intrinsic factors, and structural/contextual factors. The intrinsic factors include issues such as the type and severity of one's impairment, one's own feelings about the impairment, and additional personality and psychological characteristics. Contextual factors include the attitudes and reactions of others to one's impairment, the extent to which one's immediate environment is accommodating of disability, and wider cultural, social, and economic issues relevant to disability. Critical disability theory reminds practitioners that women with disabilities cannot be treated as a homogeneous group, as personal experience will vary based on disability type. The severity of one's impairment influences her ability to respond to IPV on a personal level. The system of social networks, agencies, and institutions surrounding survivors of abuse with disabilities, and their ability and willingness to support them, profoundly impacts a woman's options. Finally, the broader influence of general social and cultural attitudes toward disability shapes the experience of perceived vulnerability to abuse, discrimination and lack of responsiveness to women with disabilities experiencing IPV.

Feminist disability theory (Asch & Fine, 1988; Garland-Thompson, 2002) draws attention to the intersecting statuses of gender and disability, viewing violence against women with disabilities through the lens of disability- and gender-based oppression. These attitudes manifest at the social and political level, but filter down to the personal level.

Intersectional concepts further shed light on this phenomenon, but stress a consideration of intersecting statuses beyond gender and disability, such as race, ethnicity, immigration status, sexual orientation, age, and socioeconomic status.

Focusing solely on individual factors when constructing interventions for survivors of IPV with disabilities ignores broader structural factors contributing to the problem, and contributes to victim-blaming and marginalization (Mays, 2006). Barranti and Yuen (2008) likewise argue that traditional models of IPV prevention and intervention do not consider the reality of social oppression. They suggest that feminist disability theory can correct for the current inadequacies inherent in IPV services for women with disabilities by "emphasizing issues of gender, disablism, poverty, and the inherent social oppression that intersect in the experience of IPV and abuse of women with disabilities" (p. 128). Traumainformed practice with survivors with disabilities should begin with a consideration of these issues and how they impact the healing process.

The tenets of the theoretical frameworks described above, along with the core trauma-informed values (Fallot & Harris, 2009) can inform practice with survivors with disabilities. More specifically, the Substance Abuse and Mental Health Services Administration (SAMHSA; 2015) direct trauma-informed intervention programs recognize the following:

The survivor's need to be respected, informed, connected, and hopeful regarding their own recovery; The interrelation between trauma and symptoms of trauma such as substance abuse, eating disorders, depression, and anxiety; The need to work in a collaborative way with survivors, family and friends of the survivor, and other human services agencies in a manner that will empower survivors and consumers (para. 3).

Using these specific guidelines, we consider how to integrate trauma-informed practice's core values, along with the issues raised by critical disability theory and feminist disability theory, to guide social workers in providing culturally sensitive, trauma-informed practice with IPV survivors with disabilities. See Table 1 for a summary of our recommendations.

The Survivor's Need to be Respected, Informed, Connected, and Hopeful

Respect begins with seeking to understand what the survivor wants when accessing assistance. When a woman with a disability seeks IPV related assistance, the goal may not always be to leave the abusive relationship, understanding that some women will be reluctant if the perpetrator is someone on whom she depends for assistance with daily needs (Martin et al., 2006). Women with disabilities also face the loss of accessible housing, barriers in the criminal justice system, and threats to their independence if they report abuse, among a host of concerns (Ortoleva & Lewis, 2012).

Social workers serving survivors of IPV with disabilities must guard against making assumptions based on disability, and not allow the disability to overshadow other relevant aspects of the woman's experience. Disability may present personal challenges on an individual level, but the social oppression stemming from disability-based discrimination, both visible and invisible, is equally damaging. Focusing narrowly on the individual

experience of disability neglects the diverse psychosocial context of one's life; it also neglects the social context of disability. Yet social workers may fail to see beyond a woman's disability, and assume that the disability itself is the presenting problem. For instance, women with disabilities who seek help from IPV agencies are often diverted to disability service agencies because providers perceive their disability, rather than the abuse, as the primary treatment need (Cramer, Gilson, & DePoy, 2003). This invalidates the woman's experience of IPV and dilutes the effectiveness of the response. As a social worker, one can raise all relevant issues and safety concerns, but ultimately the goals of intervention must be defined on the survivor's own terms, in her own words.

Survivors with disabilities will feel respected, informed, connected, and hopeful if social workers express an understanding of disability-related needs and considerations when responding to IPV. For instance, safety planning, a common aspect of IPV interventions, can be modified to address disability-related needs in collaboration with the survivor. Creating a safety plan in collaboration with women with disabilities puts the survivor in control and teaches skills which can be individually executed, as opposed to a social worker assuming full responsibility and control. Hoog (2004) provides the following guidelines in constructing an empowering safety plan:

The advocate should ask the survivor about the physical and attitudinal barriers that are affecting her safety. The survivor with a disability is the expert on what safety techniques will work best for them...When developing safety planning strategies, the advocate should ask about and incorporate the practical ways a person with a disability navigates barriers. Advocates should consider using support services that the survivor wants to use in the safety planning process. (p. 8-9)

Recognizing the survivor's strengths employed in coping with the abuse up until the point of intervention is paramount.

The Interrelation Between Trauma and Symptoms of Trauma

Substance abuse, eating disorders, depression, and anxiety are noted mental health concerns related to trauma (SAMHSA, 2015). Psychiatric disabilities have been found to precede IPV, serving as a potential risk factor, as well as occurring as a result of IPV (Devries et al., 2013). Social workers working with survivors of trauma must be vigilant to the possibility that unresolved mental health issues could increase one's vulnerability to IPV, while also screening for mental health issues resulting from trauma.

A previous study of female IPV survivors with disabilities determined that almost 72% of the study sample was diagnosed with a psychiatric disability of some type, and the majority of women with physical disabilities also had a psychiatric disability (Ballan et al., 2014). However, less than half of all safe homes, shelters, and transitional housing services in the U.S. provide mental health services to survivors of IPV (Douglas & Hines, 2011). Agencies addressing IPV, particularly those serving women with disabilities, must offer comprehensive mental health services. This unmet need warrants immediate attention. Untreated mental illness further compromises a woman's ability to respond effectively to abuse and other unsafe situations (Hoog, 2004).

The Need to Work Collaboratively

Collaboration in treatment, which includes providing choices and empowering survivors to make their own choices regarding their personal safety, is essential to trauma-informed practice with survivors with disabilities. This point is especially salient, as issues of power and control are paramount in practice with survivors of IPV. Social workers should strive to restore a sense of power to the survivor, and this may begin simply by asking her how she would like to proceed. Ensure that the survivor is defining her own goals, related to both disability and IPV.

Reaching consensus regarding the goals of intervention requires an equal collaboration between social workers and survivors. Women with disabilities should be in control of the forms of assistance they choose to utilize, and be assured appropriate resources in order to access what is needed. Women with disabilities have reported feeling invalidated, discounted, and objectified in healthcare settings, noting a sense that providers take over their care (Hassouneh-Phillips et al., 2005). The services provided to survivors should be chosen by the woman with the disability herself, to the extent possible. For example, knowledge about one's options in hiring, securing, and firing personal care assistants is an abuse prevention tool which acknowledges the medical need for care while allowing the woman with a disability to take control of this assistance.

In addition to collaborating with the survivor, it is essential to work collaboratively with other agencies within the community to address the survivor's needs. Arranging meetings between IPV- and disability-focused agencies, as well as healthcare providers and representatives from the criminal justice system, aids in the sharing of information and building of rapport. The social worker can serve as an advocate in this process, assisting the IPV survivor to access the trauma-related assistance she desires.

Table 1. Recommendations for Trauma-Informed Practice with Survivors of IPV with Disabilities

Trauma-Informed	
Principle	Recommendations
Considerations from	-Avoid treating women with disabilities as a homogeneous group
critical disability	-Consider personal factors such as type and severity of impairment,
theory and feminist	and one's adaptations to it; contextual factors such as the extent to
disability theory	which one's immediate environment is accommodating of disability;
	as well as wider cultural, social, and economic issues related to
	disability
	-Attend to the personal, social, and political contexts of gender and
	disability, as well as race, ethnicity, immigration status, sexual
	orientation, age, and socioeconomic status
The survivor's need to	-Define goals of intervention in the survivor's own terms, in her own
be respected,	words
informed, connected,	-Express an understanding of disability-related needs and
and hopeful	considerations when responding to IPV
_	-Recognize the survivor's strengths

Interrelation between	-Screen for mental health issues associated with trauma
trauma and symptoms	-Recognize that unresolved mental health issues can increase
of trauma	vulnerability to IPV
	-Provide mental health services/address mental health in IPV agencies
The need to work	-Provide choices and empower survivors to make their own choices
collaboratively	regarding personal safety
	-Ensure that the survivor is defining her own goals related to both
	disability and IPV
	-Give control to the survivor in the forms of disability assistance one
	chooses to utilize
	-Work collaboratively with agencies in the community to address the
	survivor's needs

Conclusion

Women with disabilities are disproportionately affected by IPV, yet disabilitysensitive, trauma-informed practice is in its infancy. In order to make trauma-informed practice truly accessible to survivors of IPV with disabilities, the effectiveness of evidencebased trauma-specific interventions must be researched with this population. Promising research on trauma-informed interventions such as Seeking Safety has revealed its effectiveness with women with physical disabilities; however, the study's authors acknowledge the need for more research with a larger, more diverse sample of women with disabilities (Anderson & Najavits, 2014). Diversity is notably lacking in previous studies of IPV among women with disabilities (Hughes et al., 2011), which tend to represent mainly white, college-educated women. Prior research by this team (Ballan et al., 2014) indicates that women with disabilities who seek IPV services are substantially more diverse than those sampled in abuse and disability research, and underscores the need to examine distinct groups of women with disabilities. Women with disabilities form a diverse population with varying experiences, needs, strengths, and expertise. Trauma-informed practice with survivors must respect this diversity, while understanding the unique ways in which disability impacts the experience of abuse. Social workers will need to be vigilant to ensure equality of access, not simply in disability terms, but also in respect to aspects of identity such as race, ethnicity, sexual orientation, and immigration status. Approaching trauma-informed practice from the theoretical foundation of critical disability theory and feminist disability theory ensures that these considerations are kept central to culturally sensitive IPV interventions with women with disabilities.

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Developing Trauma-Informed Care Champions: A Six-Month Learning Collaborative Training Model

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Abstract: This paper describes a six-month learning collaborative for service providers seeking to implement trauma-informed care (TIC) into their agencies. Although the professional literature on trauma-informed care has grown substantially over the past 10 years, little research has focused on how to effectively train agencies in creating a trauma-informed culture shift. Participants were trained as "TIC champions" to help facilitate the creation of trauma-informed approaches in their agencies. Through a parallel process, they learned the skills for planning and implementing a trauma-informed approach in their agency. At the completion of the training, trainers observed champions becoming more confident in their ability to assist their agencies in creating a trauma-informed culture shift. Though quantitative studies evaluating the learning collaborative are needed, initial findings suggest the collaborative approach is an effective means of guiding champions through the process of becoming trauma-informed.

Keywords: Trauma-informed care; agency change; training

Research indicates that trauma/adversity is a pervasive public health concern (Hornor, 2015; Roberts, Huang, Crusto & Kaufman, 2014; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014b). The Adverse Childhood Experiences (ACE) study found that more than one-half of the study participants experienced at least one adverse event such as physical or sexual abuse during their childhood (Felitti et al., 1998). Adversity does not necessarily equate to trauma; however, people who experience adverse events may perceive the events as traumatic. Kilpatrick et al. (2013) found 89.7% of the 2,953 adults in their study reported having been exposed to at least one traumatic event as defined by the DSM-5's Criterion A (American Psychiatric Association [APA], 2013). Due to the pervasiveness of trauma, multiple service sectors—beyond behavioral health—interact daily with individuals who have a trauma history (SAMHSA, 2014b). Although it is not the role of all sectors to treat trauma directly by offering trauma-specific services, sectors that work with trauma survivors have the potential to re-traumatize, or replicate the dynamics of an individual's trauma, through trauma-insensitive practices and procedures—thus worsening service outcomes.

Trauma-Informed Care

Trauma-informed care (TIC) is an organizational approach that strives to prevent retraumatization while promoting healing. The TIC service provider approaches each client with the assumption the individual may have experienced trauma (Wolf, Green, Nochajski, Mendel & Kusmaul, 2014). Service organizations themselves are starting to shift toward becoming trauma-informed systems of care in order to better address the needs of

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individuals with trauma histories (Bassuk, Unick, Paquette, & Richard, 2017; Wolf et al., 2014).

Professionals' interactions with service recipients, as well as agency policies and procedures that are trauma-informed, reflect the paradigm shift from, "What is wrong with you?" to "What has happened to you," and are anchored in the guiding values of safety, trustworthiness, choice, collaboration and empowerment (Harris & Fallot, 2001). Becoming trauma-informed involves culture change within organizations, and incorporates all levels of staff, which often results in flattening the agency hierarchy (Bloom, 2013).

Organizational culture refers to the shared, imbedded assumptions of staff members (Schein, 2010). Bloom (2006) argues that the majority of agency cultures are based on a medical model of treatment, and that this culture needs to shift away from a hierarchical power dynamic towards a more flattened, collaborative environment in order to be more trauma-informed. It is ultimately the function of leadership within an organization to identify the agency's culture and transform it when it is no longer responsive to the environment (Schein, 2010). Leaders that champion the change process by being supportive and providing direction for change are critical (Shultz, 2014). The development of "champions" is thus necessary for sustainability, as they continuously identify both the key factors contributing to sustaining organizational change and factors acting as barriers in order to address them (Buchanan et al., 2005). Buono and Subbiah (2014) state that organizational change capacity is partially reliant on organizational members that have knowledge of change approaches and are willing to manage change—further contextualizing the importance and role of champions in the change process. These organizational members have the potential to mentor other staff, assess and monitor implementation goals, and assist in oversight of the overall change process, which helps build the infrastructure for sustainability (Buono & Subbjah, 2014). The development of internal champions is thus critical for trauma-informed organizational change.

The existing literature on champions within trauma-informed organizations indicates they are the individuals who have knowledge about trauma and its impacts; prioritize sensitivity in all aspects of organizational functioning; and provide expertise to promote and support changes to policies, practices, and staff development (Harris & Fallot, 2001; Jennings, 2009). While all staff members should have foundation knowledge around trauma and TIC in a trauma-informed organization, TIC champions think "trauma first" and highlight potential concerns to other professionals in the service delivery system (Harris & Fallot, 2001). Frameworks for TIC also delineate that champions of the approach are often necessary to initiate and sustain organizational change (SAMHSA, 2014a; Harris & Fallot, 2001). Champions are able to facilitate change and function as part of the infrastructure for overall sustainability by taking on the roles of educator, mentor, coach, consultant, and/or advocate.

Training

While there is a gap in the literature describing models of TIC training, there is a growing body of literature around what content should be covered and the structure to use for staff trainings to effectively create trauma-informed culture change (Harris & Fallot,

2001; Jennings, 2009; SAMHSA, 2014a, 2014b). Fallot and Harris (2009) propose an initial kickoff training that covers the key components of trauma-informed cultures, the importance of applying TIC to staff as well as clients, and the degree of importance trauma holds with the agency looking to be trained. Short-term and long-term follow-ups to the initial training are recommended to deepen staff understanding of trauma, how to implement TIC with clients, and how TIC applies to them as staff (Harris & Fallot, 2001). Similarly, SAMHSA (2014b) advises agencies to focus on the impacts of trauma and how agency practices can unintentionally replicate the dynamics of an individual's trauma history and thus be re-traumatizing. Training should also deliberately focus on ways the agency can prevent re-traumatization and how to identify, prevent, and address secondary traumatization and vicarious trauma.

Trauma and TIC training content needs to be framed in overarching historical and cultural considerations (Jennings, 2009; SAMHSA, 2014b). In light of TIC's emphasis on healing and growth, and the growing literature around the human capacity to bounce back and even flourish after experiencing adversity or a traumatic event, it is important for staff to learn how to promote resilience and posttraumatic growth (American Psychological Assocation, 2016; Calvo, Ukeje, Abraham & Libman, 2016; Tedeschi & Calhoun, 2004).

There is some evidence that longitudinal, multifaceted, and interactive education strategies may be more effective for long-lasting changes in skills, attitudes and practice approaches than single-session workshops or trainings (Hoge et al., 2007; Pearce et al., 2012). TIC implementation involves a culture shift that needs to be reflected in all aspects of agency functioning (Harris & Fallot, 2001). Such a change arguably can take a few years to achieve. Not surprisingly, SAMHSA (2014b) advises agency administrators to invest in TIC trainings that are longitudinal, emphasize interactive and experiential learning activities, and are geared toward training a core group of staff who can then train other staff. Further, in a review of TIC in in-patient settings, Muskett (2014) concurs that ongoing trauma-informed education and skill development, mentoring, and regular debriefing are key components of successful TIC implementation. Hall and colleagues (2016) explored the effectiveness of single day TIC training for emergency department nurses and found that while the nurses' understanding of TIC increased, the participants were not confident in their ability to implement trauma-informed approaches due to various complexities of their work environment. Without an organizational culture shift impacting policies, procedures, and day-to-day interactions, TIC is not sustainable. Based on the findings of Hall et al. (2016), the evidence that longitudinal trainings may be more effective for creating longer lasting changes, and the training recommendations provided by Harris and Fallot (2001) and SAMHSA (2014b), an effective training model for TIC implementation needs to be staged and offered over time.

Because of the difficulties in creating and sustaining agency cultural change to a TIC approach, and the limited body of literature on TIC training, the purpose of this paper is to fill the gap in the literature by describing the use of a six-month learning collaborative model for training TIC champions.

The Learning Collaborative

An interactive learning collaborative model was created in order to train "TIC champions" over a six-month period. The collaborative was developed based on the need to create sustainable trauma-informed organizational change and the literature supporting the use of longitudinal TIC training. Participants in the collaborative were trained on how to create trauma-informed agencies based on the components of effective TIC training described earlier. By expanding a train-the-trainer approach, the learning collaborative not only provided champions with content and resources, but also promoted a parallel process through the trainers' modeling of skills, activities, and discussions—putting the champions in the position to bring the information and resources back to their own agencies for planning and implementation.

Selection of Champions

The champion team was created as part of a state-wide initiative to build agency capacity for TIC within the adolescent substance use system of care. Applications were sent to multiple addiction programs across New York State and included information about the learning collaborative, expectations for being a TIC champion, and the requirements for participation. Champions were expected to attend and participate in all components of the learning collaborative, have the ability to implement changes in their agencies, and have the ability to train and coach other staff.

Harris and Fallot (2001) stress the importance of administrative support for trauma-informed organizational change. Thus, we requested applications to be filled out by both the tentative champion and their supervisor/administrator, as well as required a signed attestation of commitment to TIC capacity building by the agency's executive director. Table 1 below depicts the questions asked in the application.

Table 1. Questions on TIC Champion Application

Questions for future TIC champions	Questions for supervisor/administrator
What is your "best hope" of being a TIC champion?	Describe the future TIC champion's ability to implement changes in agency policy and practice to promote TIC.
What are you already doing that tells you, "I will be an effective TIC champion"?	Describe the steps your agency has already taken to train staff or implement a TIC approach to service delivery.
How do you see yourself assisting in the implementation of TIC at your workplace?	
Describe your experience/ability in being a leader, trainer and/or mentoring others.	
Describe your ability to implement changes in agency policy and practice to promote TIC.	

Applications were reviewed separately by two individuals who ranked each application based on the applicant's ability to implement change, train other staff, and the changes their agency has already taken toward becoming more trauma-informed. Thirty champions from across New York State were chosen based on mutual agreement of the reviewers. The majority of the team was comprised of individuals in middle-management roles such as clinical supervisors and program directors/coordinators, with a smaller portion represented by direct care staff.

Once chosen, the champions were e-mailed a congratulatory letter, details about the first in-person training and directions for creating an account to access the required online continuing education course. They were also sent a link to an online, 10 question TIC knowledge and attitudes pre-test created by the authors and their colleagues via Survey Monkey to get a baseline assessment before any training began. Individuals who were not chosen were also sent letters thanking them for their interest.

Foundational Trauma Knowledge

As stated earlier, all agency staff working in a trauma-informed organization have foundational knowledge about trauma and TIC (Harris & Fallot, 2001; SAMHSA, 2014b). Before attending the initial training, champions were asked to complete a one and one-half hour online course titled "Trauma 101: An Overview of Psychological Trauma," provided through the University at Buffalo's School of Social Work Continuing Education Program to ensure they had a basic understanding of trauma, re-traumatization, the ACE Study, and an overview of Harris and Fallot's (2001) five values of TIC. To strengthen their knowledge around trauma and TIC within the addictions field, champions were also asked to read the first chapter of Greenwald's (2014) *Child Trauma Handbook: A Guide for Helping Trauma-Exposed Children and Adolescents* and an article titled "Trauma-Informed Care and Addiction Recovery: An Interview with Nancy J. Smyth" (Steiker, 2015).

Initial Training

All champions were required to attend a seven-hour, in-person training during the first month of the collaborative. Champions received folders with various handouts to reference during the day, a copy of the PowerPoint slides, and a document detailing the schedule for assignments, consultation options, and evaluations. After the champions introduced themselves, the trainers asked what needed to happen during the training to make it worthwhile. These "best hopes" were recorded on an easel in order to reference at the end of the day.

Using the work of Steiker (2015), one of the trainers anchored the group around what it means to be a champion by talking about his own experience in organizational change. This discussion highlighted five pieces of advice to consider as a champion over the course of the collaborative: personally commit to the role of a champion, involve key stakeholders in their agency in the process, remember the importance of senior leadership support, ensure that an organizational assessment is conducted early in the process, and to be relentless in advocating for trauma-informed practices.

The training then moved onto a brief review of trauma by taking a deliberate look at what the champions were already noticing in their work around trauma and addiction, and having an in-depth discussion around re-traumatization. The morning ended with the differentiation between the three levels of trauma practice: *trauma-informed*, the overarching umbrella consisting of the guiding principles of TIC; *trauma-sensitive*, considering the physical environment and day-to-day interactions for the potential of re-traumatization, as well as screening and assessing for trauma; and *trauma-specific*, providing evidence-based trauma treatments such as Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) and Eye Movement Desensitization and Reprocessing (EMDR). Table 2 below depicts the content covered and its objective.

Table 2. Morning Training Content and Objectives

Topic/Discussion	Objective	
Understanding trauma (lecture)		
Impacts on the body	Explain how trauma may affect individuals	
Historical trauma		
Impacts on world view		
Addiction and its impact (discussion)		
What are you noticing about the individuals you treat?	• Identify ways in which trauma impacts addiction	
• What do you notice about your staff and how they "interface" with client's addiction?	Identify current staff and system interactions and procedures	
What do you notice about how you "interface" with the organization/system in regards to the treatment of addiction?		
Re-traumatization (lecture)		
 What is it? The story of Anna Jennings (Jennings, 1994) How common mental health practices mirror the dynamics of a trauma experience Impact of re-traumatization on clients Impact of re-traumatization on staff 	 Increase awareness of potential retraumatization through interactions, procedures and policies Recognize the impact of re-traumatization on clients and staff 	
Three levels of trauma practice (lecture)		
Trauma-informed	Be able to articulate the difference between	
Trauma-sensitive	the three levels of trauma practice	
Trauma-specific	Identify the levels of practice that make sense for their organization	

The afternoon portion of the training focused on organizational change. The champions were first divided into five groups of six and given a large piece of paper with one of the five values listed on it. The group members were asked to come up with at least five things their programs are already doing that demonstrate organizational change for both clients and staff. The three trainers listened and asked prompting questions as necessary. Each group reported what it discussed while other groups were invited to share additional thoughts.

After reconvening as a big group, the champions learned about the steps for creating trauma-informed culture change in human service programs, completed the "Trauma-Informed Care in Youth Serving Settings: Organizational Self Assessment" (Traumatic Stress Institute of Klingberg Family Centers, n.d.) as an activity to demonstrate the various components of trauma-informed organizational change, and were given an overview of the ten implementation domains proposed by SAMHSA (2014a). Table 3 provides an overview of the afternoon topics, activities, and objectives.

Table 3. Afternoon Training Content and Objectives

Topic/Discussion Objective		
Five guiding values of TIC (activity) • Small group discussion of what is already happening in their programs around the five values	Identify ways in which their programs are already using TIC—strengths to build on Hear from other champions around what they have in place	
Steps for TIC culture change (lecture) Commitment by administration Universal screening, training/education, hiring practices Review of policies and procedures Assessment/evaluation (Harris & Fallot, 2001)	Identify and understand what it takes to create a trauma-informed organization	
Organizational self-assessment (activity) Completed the "Trauma-Informed Care in Youth Serving Settings: Organizational Self Assessment" (Traumatic Stress Institute of Klingberg Family Centers, n.d.) Discussion around what it was like to complete the assessment	Identify and understand what it takes to create a trauma-informed organization Identify areas of strength and improvement in own program	
Implementing TIC (lecture) • Overview of SAMHSA (2014a) ten implementation domains	 Identify and understand what it takes to create a trauma-informed organization Have a basic understanding of the ten domains that will frame the rest of the collaborative 	

Lastly, the trainers reviewed the schedule for the remainder of the collaborative and introduced the team's Samepage—a private web page that served as the main center of communication between consultations. The champions were informed that later that day, they would receive an e-mail invitation to the Samepage, their first homework assignment and a Survey Monkey link for the TIC attitudes and knowledge post-test to assess for

changes from before the training. The trainers later reviewed the changes on the survey from pre- to post-test in order to inform future trainings.

Samepage

Due to both the length of the collaborative, and the majority of it taking place in an online format, the trainers wanted to have an online space for the team to interact between consultations. Thus, the trainers created a collaborative website on Samepage for the champion team to use throughout the training as depicted in Figure 1. Access to the website was provided by e-mail invitation after the initial training, so that only participants in the collaborative could view it. The Samepage was broken down into five sections: team files and resources, homework area, calendar, the "champion's resource corner," and a chat bar.

The trainers uploaded resources including documents and handouts, posted the PowerPoint slides after each consultation, and provided links to relevant TIC websites and videos in the team files and resources section. The homework area provided a space for champions to upload each assignment for others on the team to read, and provided information on assignment due dates and how to upload assignments. The calendar denoted each of the consultation options as well as the date and location of the final training.

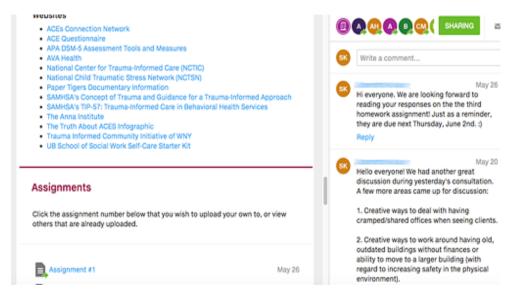


Figure 1. Samepage Example

The champions uploaded their own resources and asked for feedback on their ideas and plans around implementing TIC in the "Champion's Resource Corner." The "corner" provided a space where the trainers and team members could use Samepage's comment function to provide feedback on the uploaded material. Lastly, the "chat bar" provided a quick way for the team and trainers to communicate. Everyone with access to the page received an e-mailed each time a comment was left. The trainers often used the chat bar to

ask the team questions and provide reminders for upcoming consultations and assignment due dates. The team was informed that the Samepage would be available to them even after the learning collaborative finished, so they would have a place with a collection of TIC resources and a means to reach out to other champions after the trainers were no longer involved.

Monthly Consultations

The third component of the learning collaborative involved consultations from months two through five. The champions were required to attend one of the two, 90-minute consultations each month. In order to keep the group size manageable, each offering had no more than 15 champions. The consultations were held through Blackboard Collaborate—an online collaborative learning platform that allows for audio, video, and text chat. The champions were provided with detailed instructions on how to download and run the software in advance. One of the trainers was also available by telephone to troubleshoot any technology problems.

General Format. In order to further operationalize what is involved in trauma-informed organizational change, the content of each consultation was anchored around two of SAMHSA's (2014a) ten implementation domains. *Governance and leadership* and *policy* were covered in month two, *physical environment* and *engagement and involvement* in month three, *cross-sector collaboration* and *screening, assessment, treatment services* in month four, and *training and workforce development* and *financing* in month five. The final two, *progress monitoring and quality assurance* and *evaluation*, were included in the final training.

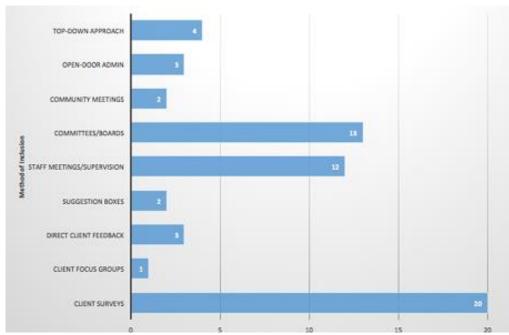


Figure 2 Example Homework Responses

Although the content differed for each consultation, there were some structural components that remained the same. Each consultation started with a review of the day's agenda and a report of the team's homework responses. The trainers read the homework responses ahead of time so as to identify themes and create visual summaries for the homework report (see Figure 2). The report focused on the themes while highlighting some examples that were already in place. The champions were asked to listen and notice if anything resonated with them.

Each consultation also included an activity making use of scaling questions from the solution-focused model (DeJong & Berg, 2013). The trainers compiled a list of "things to consider" for each domain—questions to operationalize the domains adapted from various sources (Harris & Fallot, 2001; SAMHSA, 2014a, 2014b; Trauma Informed Oregon, 2015). The champions received the "things to consider" with space to write under each question ahead of time via e-mail and were asked to bring a printed copy to the session. During each consultation, champions were asked to choose one or two questions under each domain to look at more closely. The champions independently recorded their answers to the following three scaling questions:

On a scale from 1 to 10, with 10 representing your program's ideal implementation for that question and 1 being the complete opposite, where would you scale your agency right now? What is already happening that lets you know you are at that number (as opposed to a lower number)? And, what will be different if your agency were to move just one number higher on the scale?

Once the group reconvened, the champions shared one of the questions they thought about. The trainer then asked follow-up questions to help each champion come up with a next small step they could take in their role in order to help the program get one number higher on the scale.

Homework. Before each consultation, champions were required to complete short homework assignments around the two domains to be reviewed that month. Each domain had a total of two or three questions. The team was given approximately two weeks to complete each assignment before uploading their responses to the Samepage for others to view. The purpose of having the champions complete the assignments ahead of time was twofold: to have the champions begin to think about how each of the domains apply to their program already (strengths and areas for improvement), and to help the trainers focus discussion questions around where the team was regarding its current level of implementation and understanding for each domain. Table 4 below lists example homework questions.

Table 4. Example Homework Questions

HW	Implementation	1 Question Example	
	Domain		
#1	Governance and leadership	Discuss thoughts you have regarding what you might say/do in informing your leadership about TIC and your best hope for your role within your agency.	
	Policy	How do your agency's written policies and procedures already include a focus on trauma-informed care, trauma-sensitive care, and trauma-specific care?	
#2	Physical environment	Discuss how your organization considers the physical safety of clients and staff. How does the physical environment promote a calm and aesthetically comfortable setting?	
	Engagement and involvement	Discuss thoughts you have around including client, peer, family and staff voice and involvement in the planning, implementation and evaluation of TIC in your agency.	
#3	Cross sector collaboration	Is there a system of communication in place with your partner agencies working with the individual receiving services for making trauma-informed decisions? (SAMHSA, 2014a)	
	Screening, assessment, treatment services	What screening/assessment tools are you using to screen for adversity (ACE) and/or trauma (PTSD)?	
#4	Training and workforce development	What mechanisms and supports are in place to address the emotional stress that can arise for staff/volunteers/peers whe working with individuals who have had traumatic experience (i.e., vicarious trauma)?	
	Financing	Explore what is already in place or what will be in place to support/finance a trauma-informed initiative in your agency.	
#5	Progress monitoring and quality assurance How is your agency tracking the use of trauma-spe screening, assessment, and treatment?		
	Evaluation	How is your agency tracking the trauma-informed initiative/approach?	

Content. As stated previously, each of the consultations were framed in two of the ten implementation domains proposed by SAMHSA (2014a). The content and structure of the consultations were formulated collaboratively by two of the trainers based on the literature (British Columbia Center of Excellence for Women's Health, 2013; Harris & Fallot, 2001; Lipsky & Burk, 2009; Meichenbaum, n.d.; Pearlman & McKay, 2008; SAMHSA, 2014a; SAMHSA, 2014b). The content was further adapted to fit the needs of the champions based on their homework responses. The consultations were largely discussion-based to give the champions opportunities to hear and learn from each other. Resources in the form of readings, handouts, websites, and tools were also provided where applicable. Table 5 showcases the content of each of the four consults and their objectives.

Table 5. Consultation Content

Consult	Topic/Discussion	Objective(s)
#1 Governance & Leadership Policy	Creating culture change Review of the 5 guiding values and steps for creating organizational change (Harris & Fallot, 2001) Resource - "Creating Cultures of Trauma-Informed Care" (Fallot & Harris, 2009)	Anchor around the nuances of each of the five values Recognize the "big picture" of TIC organizational change
112	Leadership and policy Introduction to the scaling questions (activity)	Identify program strengths and areas of improvement Formulate a next small step
#2 Physical Environment Engagement & Involvement	Agency walkthroughs Walkthrough goals National Center on Substance Abuse and Child Welfare[NCSACW] TIC Assessment Project – physical space trauma triggers (video) What are you noticing, or what has your agency put in place around triggers in the	 Recognize aspects of the physical environment that may be re- traumatizing/triggering Identify changes to address triggers in the physical environment
	physical environment? (discussion) Engagement: Agency readiness TIC organizational change interview (video) What are you experiencing in your own agency with regard to agency readiness for creating a trauma-informed environment? (discussion)	 Identify agency's readiness for becoming trauma-informed Begin to identify who in their program might be a part of their TIC workgroup/initiative
	Role as a TIC champion • 10-minute solution-focused conversation (activity; Fiske, 2010)	 Articulate their best hopes around their role as a champion Formulate a next small step to take in order to reach those best hopes
#3 Cross Sector Collaboration Screening, Assessment, Treatment Services	Collaborative partners How might knowing where collaborative partners are in their understanding of trauma-informed, trauma-sensitive and trauma-specific services impact your own/your staff's work with partners? (discussion)	 Understand the implications of working with partners who are not trauma-informed, trauma-sensitive and/or trauma-specific Increase awareness of the importance of collaborating with partners around TIC
	Screening/assessment/treatment Resources – TIP-57 pg 91-110 (SAMHSA, 2014b); "Child and Adolescent Trauma Measures: A Review" (Strand, Pasquale & Sarmiento, 2003); DSM-5 assessment tools and measures (APA, 2017) If someone is referred to your agency, how do you know if they've already been	 Identify resources for choosing appropriate screening/assessment tools Understand the importance of knowing what trauma screening/assessment tools have been used by referral sources

Consult	Topic/Discussion	Objective(s)
	screened/assessed for trauma? What tools have been used? (discussion) • Is there anyone in your agency you would see as a "trauma expert"?	Identify who, if anyone, in their agency is knowledgeable about trauma through education/training that could be a point person for decisions around screening, assessment, treatment and/or referrals
	Guest speaker TIC champion from a local agency came to talk about their process in becoming traumainformed, largely framed in the two domains for this consult Time for questions included	Hear from a TIC champion from an agency further in the process of becoming trauma-informed
#4 Training & Workforce Development Financing	Staff Training (provided during HW report) Resource – Treatment Improvement Protocol [TIP]-57 pg179-183; appendix B (SAMHSA, 2014b) Supervision (provided during HW report) Resource – TIP-57 pg 93, 191, 195, 197, 205 (SAMHSA, 2014b)	 Identify resources to address champion-stated areas of improvement around providing TIC staff training and supervision Identify how they and others in their programs are managing (strengths) in face of the reality of
	Agency supports • How are you/co-workers/staff managing around the loss of clients? What is in place for residents/clients? For staff? (discussion)	Recognize the importance of agency supports for staff
	 Impact of trauma on staff Secondary traumatic stress, vicarious trauma, compassion fatigue, burnout (overview) What do you notice about individual/organizational risk factors? (discussion) What do you notice about individual/organizational protective factors? (discussion) Awareness-Balance-Connection (ABCs) Self-care assessment (activity) Coping Resources – Professional Quality of Life Scale [ProQoL] (Stamm, 2010); University at Buffalo School of Social Work self-care starter kit (Butler & McClain-Meeder, 2015). 	 Understand the ways trauma can impact staff Identify what might put staff at a higher risk for being negatively impacted by trauma Identify what may decrease the risk of staff being negatively impacted by trauma Increase awareness of their own self-care Understand key components of effective coping Identify further resources for assessing and promoting self-care

Evaluations. Each consultation had its own evaluation for the purpose of informing future consultations. The champions who attended any given consultation received a link to an online Survey Monkey to provide feedback. Although they were encouraged to provide their feedback in order to help the trainers make adjustments to future consultations,

their participation was completely anonymous and voluntary. Using a Likert scale, the champions completed the evaluation, which asked how helpful the components of the consultation were, how much the consultation helped their understanding of the content covered, and how much of the content they thought they would use in the planning and implementation of a trauma-informed approach. The evaluations also had two open-ended questions that asked the champions to indicate the most helpful part of the consultation and how the consultation could have been more helpful. Evaluations were reviewed while planning for subsequent consultations and small adjustments were made to technology, facilitation style, and activities.

Final Training

The learning collaborative ended with a four-hour, in-person training during month six. The PowerPoint slides were posted to the Samepage so that the champions could print the slides if they wished. The trainers spent time checking in with the team by asking the champions to consider what they noticed different about themselves compared to the initial training. Each champion was encouraged to share their thoughts about the training.

The first half of the training focused on resilience and posttraumatic growth. The champions were divided into groups of three and were given a small slip of paper with questions about resilience. Additional questions were provided after short periods of time for the groups to continue their discussions. After the group reconvened and talked about what came up for each of them, one of the trainers provided a brief overview of resilience and posttraumatic growth. The team then took a short break and reconvened to talk about their experiences being in a six-month learning collaborative and to have a deliberate conversation about the parallel process that occurred over the six months. In order to anchor a short discussion around the *progress monitoring and quality assurance* and *evaluation* domains, the team re-visited the same agency self-assessment they completed in the initial training. Table 6 below depicts the content covered in the first half of the training and its objective.

Table 6. *Morning Content and Objectives*

Topic/Discussion	Objective (s)
 Tuning into the Work (small group activity) What challenges have you witnessed your clients/other staff/organization overcoming in your work with them? How have you been positively impacted by witnessing this resilience? How has your perception of yourself been changed by witnessing this resilience? Your perception of your work? How has your world view been changed by witnessing this resilience? 	Recognize the positive impacts the work has on them

Topic/Discussion	Objective(s)
Resilience/Posttraumatic Growth (lecture) • Brief review of vicarious trauma & coping • Transformation of vicarious trauma • Defining resilience • Interpersonal factors of resilience • Vicarious resilience • Posttraumatic growth	Have a basic understanding of resilience, vicarious resilience and posttraumatic growth Identify ways to build resilience into the workplace
Parallel process (overview, brief discussion) What was it like being in a 6-month learning collaborative? Deliberate look at everything involved in the collaborative and how each component promoted a parallel process—content and the means to bring the content to others	 Identify skills, discussion points, activities and other means of teaching and coaching that the trainers used during the learning collaborative Consider which means of teaching and coaching make sense in light of their role as a champion and where their agency is at
Agency assessment (activity, brief discussion) Filled out the same agency assessment they completed during the initial training and then compared	 Further understand the progress monitoring and quality assurance, and evaluation implementation domains Recognize any changes that have occurred over the course of the collaborative

The remainder of the training was spent focusing on TIC action planning through activities and discussion. First, the champions were given three circles divided into ten sections—each section labeled with one of the SAMHSA (2014a) ten implementation domains. In an activity adapted from Integrative Nutrition, Inc. (2006), the champions were asked to place a dot on the line of each domain to visually display where they saw themselves—the center of the circle represented not being competent, while the periphery represented their ideal competence. They were then asked to consider their own level of competence on the first handout, their agency's level of competence on the second handout, and their agency's level of implementation on the third handout for each domain. Once finished with the plotting, the champions were instructed to connect the dots on each circle to have an overall display of their competence, their agency's competence, and their agency's level of implementation.

The back of each circle handout had a chart with each of the implementation domains listed in one column and space to explain the capacities and strengths associated with each. The champions were asked to pick just two domains to fill in on each chart based on their plotting on the front of the handout. Once they finished working on the circles and their associated charts, the team was divided into pairs and given a handout with a ten-minute solution-focused conversation adapted from Fiske (2010). Using the framework provided, the champions had a conversation around implementing one of the domains they focused on in the previous activity into their work. Each champion had the opportunity to be in the role of the person asking questions and the one answering questions. The solution-focused conversation framework helped each of the champions identify a next small step they could take in order to reach their ideal implementation for that domain.

The trainers then handed out one additional chart titled, "Trauma-Informed Care Implementation Action Plan." The chart listed all ten domains in one column, had a column to rate the agency on a scale from one to ten, a column for the champion's next step, and a final column for the agency's next step. The trainers explained that the chart would be filled out based on all of the action-planning activities and discussions they had up until that point, and could thus be used to create an action plan with others in their agency.

The training concluded by having a short discussion around how the team would stay in contact after that day. The trainers then called each champion up one by one to receive their certificate of completion for the learning collaborative. The champions were informed that there would be additional resources posted to their Samepage based on their conversations that day and that they would also be receiving one last online evaluation. The trainers thanked the champions for their participation in the learning collaborative and encouraged them to stay connected to each other.

Evaluation. The evaluation for the closing training was e-mailed later that day to those who attended. Similar to previous evaluations, the final evaluation asked the respondents what was helpful, how well the training met their needs, how confident they felt in their role as a TIC champion and if they felt they had the tools to create a TIC implementation plan. Additionally, there were three free-text questions that asked about what was most helpful about the training, what could have made the training more helpful, and a space for any other comments or feedback about the collaborative in general.

Trainer Experiences

In addition to online evaluations for each of the consultations, the trainers took note of their experiences facilitating the learning collaborative and debriefed together after each training or consultation. This activity allowed the trainers to recognize a number of strengths and challenges associated with the six-month learning collaborative.

Strengths

The champions often verbally reported how they appreciated the learning collaborative occurring over a six-month period. TIC was on the forefront of their minds because they had to be accountable to the trainers and to the rest of the team each month through submitting homework assignments and attending the consultations. Otherwise, many stated TIC would have likely been "lost in the shuffle" or consistently moved to the bottom of their "to-do" lists. The majority of the 30 team members were engaged and participated in all of the learning collaborative components. Further, the homework assignments and consultations facilitated the champions' thinking about TIC, conversations with coworkers around TIC, and how to apply the guiding values and implementation domains within their own programs more consistently than if they had only attended a regular training. Much like Buono and Subbiah (2014)'s operationalization of the role of an internal change agent as regularly monitoring and overseeing the organizational change process, and Harris and Fallot's (2001) recommendation for the identification of champions in order to keep the TIC initiative active and in the forefront of all agency

functioning, the learning collaborative helped model this expectation of being a TIC champion.

Creating a sense of being a "champion team" was another apparent strength of the learning collaborative model. By the second or third consultation, the champions often consulted with fellow team members instead of asking the trainers facilitating the consultations. The champions also expressed that hearing from others on the team was helpful, not only because they were reassured by others being "in the same boat," but also because they were able to think of new ideas and next steps by hearing what others were doing. Such observations are in line with previous research findings that show some effectiveness of mutual aid group processes such as shared experience and building on others' expertise/views increasing group member confidence and learning (Finch & Feigelman, 2008; Shulman, 2008; Steinberg, 2010). One of the champions suggested creating a contact directory of those who would be willing to stay in touch, and the others readily agreed. The champions also discussed the possibility of continuing to have their own "consultation calls" without the trainers in order to keep the process going. The team continued the process of mutual aid by deciding on their own that they wanted to stay connected even after the collaborative ended in order to keep helping and supporting each other (Steinberg, 2010).

Lastly, the trainers noticed the champion team had grown in their ability to understand and think critically about TIC. By the final training in month six, the champions were using the five values in their language more frequently and were able to articulate barriers and possible solutions to implementing TIC within the ten domains. Many of the champions reported a difference in themselves in month six compared to the first month of the collaborative—including feeling more confident in their understanding and ability to bring aspects of TIC back to their programs. These observations resonate with findings and suggestions in the literature that longitudinal, multifaceted training programs may be more effective than single-day workshops in facilitating long-lasting changes and confidence in implementing TIC (Hall et al., 2016; Hoge et al., 2007; Pearce et al., 2012).

Challenges

Technology was the biggest challenge throughout the collaborative. Despite one of the trainers making herself available to troubleshoot with the champions who were having difficulty, a portion of the team went through all of the consultations without having audio capabilities. Even though an external headset was recommended for participation, not all of the champions were able to get one, and their computers were not equipped with microphones. These champions had to participate by typing their answers, comments, and questions into the "chat box." One of the two trainers facilitating the consultations read these champions' comments out loud and addressed what was said to include them as much as possible, but the flow of the consultations and ability to have an interactive group discussions were impacted by a portion of the team not having audio capacity. Additionally, background noise from the room where the trainers were facilitating the discussions resulted in some champions having difficulty hearing the trainers. The trainers also purchased headsets after the first consultation, which significantly improved the audio. Unfortunately, the Blackboard Collaborate technology occasionally lagged, skipped

portions of the training, and even disconnected for some of the champions, which caused difficulties in the champions' ability to participate. Isolation and decreased interactions caused by technology challenges may be a factor that leads to dissatisfaction with the learning collaborative and/or inhibited learning (Jang & Kim, 2014; Koutsoupidou, 2014). Investigating other online learning platforms such as WebEx, where participants can participate via the telephone, might be worthwhile.

Another challenge was the lack of opportunity to make up any pieces of the collaborative that were missed. The dates of the consultations and closing training were selected by the trainers and given to the champions prior to the initial training. However, some champions missed one or two consultations due to technology, a work-related crisis, or being sick. One of the trainers made herself available to touch base over the telephone for 15-20 minutes for champions who were unable to attend a consultation and wanted to get caught up; however, these champions still missed the experience of being a part of the consultation with their peers. Giving absent champions access to recordings of the sessions could provide some of the experience of being in the consultation that they missed. As Blackboard Collaborate does have the ability to record, it may be worth recording the sessions in a future learning collaborative for those who are absent to watch in addition to following up with one of the trainers.

One last challenge was the small number of champions who completed the evaluations after each consultation and the closing training. Though the evaluations were voluntary, the champions were encouraged each time to provide their feedback so that the trainers could modify future consultations to better meet their needs. Additionally, those who did provide feedback did not always write an answer to the free text question of what might have made the consultation more helpful for them. The trainers made some adjustments based on the feedback that was given, especially around any technology challenges. However, it was difficult to know how the learning collaborative was being received by the team as a whole due to the low response rate.

Implications

Based on verbal reports from participants and the experiences of the trainers facilitating the learning collaborative, the model appears to have initial evidence of being an effective means of training TIC champions. However, as the described collaborative was not a research study, further quantitative research is required in order to truly evaluate the effectiveness of the learning collaborative. Evaluation tools other than those collected for the trainers' use could be implemented to assess understanding and implementation steps taken throughout and the collaborative. Follow-up evaluations after the completion of the learning collaborative would also be important in assessing long-term understanding and implementation, as the primary purpose of training champions is to build sustainability for TIC organizational change. Additionally, the participants in the learning collaborative were from agencies working with adolescents who have substance use diagnoses. Facilitating the learning collaborative with different types of service providers while collecting data would increase the generalizability of the findings. Future studies comparing the learning collaborative model to other means of TIC training, such as single workshops, would also

add to the literature by determining whether the collaborative is more effective than the comparison training modality.

As more organizations and systems of care make the shift to becoming trauma-informed, there will be an increasing need for effective training modalities. Although further research is necessary to provide a better understanding of the learning collaborative model's effectiveness, the collaborative is an example of how individuals from 30 different agencies can be trained and developed into TIC champions, who are then in a position to train their co-workers and other staff, understand what is required to become a trauma-informed agency, and help ultimately support their agency in the implementation of TIC.

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Implementing Trauma-Informed Care: Recommendations on the Process

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Abstract: The importance of trauma-informed care (TIC) is now recognized across most health and human service systems. Providers are calling for concrete examples of what TIC means in practice and how to create more trauma-informed organizations. However, much of the current understanding about implementation rests on principles and values rather than specific recommendations for action. This paper addresses this gap based on observations during the provision of technical assistance over the past decade in fields like mental health and addictions, juvenile justice, child welfare, healthcare, housing, and education. Focusing on the infrastructure for making change (the TIC workgroup), assessment and planning, and the early stages of implementation, the authors discuss barriers and challenges that are commonly encountered, strategies that have proven effective in addressing barriers, and specific action steps that can help sustain momentum for the longer term.

Keywords: Trauma-informed care; implementation; health and human services

Rates of past and current trauma are known to be high among service recipients involved in many health and human service systems (Hopper, Bassuk, & Olivet, 2010; Ko et al., 2008; Salazar, Keller, Gowen, & Courtney, 2013), in the social service workforce (Berger et al., 2012; Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005), and in the general population (Dube et al., 2005; Green et al., 2010; Huang, Schwandt, Ramchandani, George, & Heilig, 2012; McLaughlin et al., 2010). Moreover, service providers recognize that not only are our public systems populated with trauma survivors but that many service settings, programs, and processes can be re-traumatizing (Bloom & Farragher, 2011; Substance Abuse Mental Health Services Administration [SAMHSA], 2014a). Trauma-informed care (TIC) takes this understanding into account, based on the premise that when services feel safe, empowering, and welcoming for those affected by trauma, service recipients are more likely to engage in and benefit from care.

TIC is not an evidence-based intervention with fidelity measures and clearly outlined strategies, nor is there a single definition (Hopper et al., 2010). Experts agree, however, that essential components of TIC include awareness of the prevalence of trauma, understanding about the impact on service utilization and engagement, and commitment to incorporating those understandings in policy, procedure, and practice (Guarino, Soares, Konnath, Clervil, & Bassuk, 2009; Hopper et al., 2010; SAMHSA, 2014a).

In recent years, efforts to define TIC, outline its principles, and generate buy-in have turned to a focus on implementation (Miller & Najavits, 2012; Morrissey et al., 2014). Service providers are calling for concrete examples of what it means in practice and the most effective strategies at the organizational level to make the needed changes. However,

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despite a proliferation of national centers, conferences, proprietary models, web-based resources, training opportunities, and experts offering technical assistance or consultation, much of the dialogue about implementation remains academic, resting on principles and general guidelines (Baker, Brown, Wilcox, Overstreet, & Arora, 2015).

In some cases, creating a more trauma-informed service system may be easy and intuitive. However, for many organizations, adoption of TIC is slow to take off and hard to sustain, despite deeply held interest and commitment (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013; Hopper et al., 2010). What is missing from the literature is detailed and concrete information about what commonly happens in the implementation process, the barriers that are encountered, factors that can facilitate the process, and how organizations are effectively moving forward despite significant challenges.

This paper addresses this gap, presenting observations from the provision of technical assistance over the past decade in fields like mental health and addictions, criminal justice, juvenile justice, child welfare, healthcare, housing, criminal justice, and education. The authors have consulted and/or facilitated a TIC change process for individual agencies, larger organizations, and inter-agency or cross-system initiatives. While these settings are all different and each organization within them is a unique entity, our experience suggests that too much has been made of these differences, while the reality is that there are significant common dimensions to the work, common obstacles that are encountered, and a common set of strategies that can facilitate progress.

The overarching process for the implementation of TIC (see, for example, Trauma Informed Oregon, 2016a) will be familiar to anyone who has used organizational planning tools in the past, such as the well-known Plan-Do-Study-Act (PDSA) model of iterative change (Institute for Healthcare Improvement, 2003). The PDSA cycle includes introducing the idea of change, forming a team, setting aims, establishing measures, selecting changes, testing and implementing changes, and then spreading changes. Similarly, for the trauma-informed care initiative in an organization, early steps include acquiring foundational knowledge, generating buy-in (Guarino et al., 2009; Hendricks, Conradi, & Wilson, 2011; Institute for Health and Recovery, 2012; SAMHSA, 2014b), and ensuring other elements of readiness (Armenakis & Harris, 2009) as a precursor to the assessment and planning phase. In this paper, we focus primarily on infrastructure (forming a team), assessment, and early steps in implementation, where difficulties most frequently arise and successes can mean the most.

Brief examples of action steps that organizations have taken to reflect the principles of trauma-informed care are mentioned in various sections below, but the overarching purpose of the paper is to provide support for the *process* of assessment, planning, and implementation rather than to detail specific trauma-informed practices that have been adopted.

Infrastructure for Change: The TIC Workgroup

Although we have seen some success with individual champions or small grassroots efforts that create a ripple effect in organizations, most successful TIC implementation initiatives begin with foundational training and subsequently the establishment of a

workgroup that is charged with leading the implementation effort. Ideally, staff at all levels and from all roles in an organization receive training in the core knowledge areas: the nature of trauma; the impact of trauma on brain development and functioning; how trauma shows up in service systems; how systems may inadvertently re-traumatize or activate a trauma response; secondary and vicarious trauma in the workforce; and the definition and principles of trauma-informed care, including care of the workforce as well as the population seeking or using services.

A TIC workgroup is usually established soon after initial training. It has not worked particularly well, in our experience, when organizations have put this responsibility into existing structures such as quality improvement or safety committees. A team that is created specifically for this purpose has been more effective. The job of the workgroup (Guarino et al., 2009; SAMHSA, 2014b) includes:

- gathering information to identify strengths and challenges;
- recommending priorities for change;
- developing solutions or action steps in priority areas;
- monitoring results; and
- proposing additions or changes to agency policy to institutionalize traumainformed practices.

These primary purposes are generally well understood. What is sometimes overlooked is the role of the workgroup to sustain momentum across the organization and to model trauma-informed practice. For instance, if a workgroup forms and begins to meet but is not heard from again for six months, the opportunity to build on and enhance the initial impact of training is missed and staff buy-in may be lost. Moreover, even if the workgroup comes up with recommendations for changes and is successful in getting them instituted by management, the opportunity to demonstrate transparency and inclusiveness is missed if other staff feel unheard.

The most successful workgroups send out regular updates about membership, process, activities, priorities, and proposed recommendations, along with information about trauma or TIC (articles, video clips, fact sheets, etc.). These missives are also an opportunity to recognize exemplary practices observed in the workplace and to disseminate new ideas or concrete examples that staff can use. Some of our favorite workgroup communication tools have been electronic newsletters, but a simple email will suffice so long as it is regular, informative, and invites feedback. To encourage staff input, it can be helpful to create an email address for the workgroup. This serves the dual purpose of institutionalizing the group and ensuring that no one person is solely identified with the effort.

Forming the Workgroup

Workgroups can be challenging to manage and sustain. Some of the difficulties are preventable by considering the following as the initial team comes together.

Membership. It is axiomatic that workgroups represent different roles and different levels of authority in the organization (Guarino et al., 2009), but issues of *relationship* and *power* inevitably come into play. In large complex organizations, individuals will not

necessarily know one another. One technician in a residential setting gently pointed this out when his expert outside consultant was confused by the awkward silences in the room. It helps to know ahead of time that the work of the first few months may progress slowly until relationships form.

More challenging are inevitable power differences if management or senior management is represented along with line staff, facilities staff, front office staff, etc. The advantages to including senior managers are manifold. Their direct involvement sends a message that TIC is valued at the highest levels. Moreover, the authority to make changes happen is also present; without that, workgroups can spin their wheels coming up with ideas and priorities that are subsequently ignored or rejected by the leadership or governance body. In some instances, we have seen strong resistance to including senior management because of significant trust issues. However, the workgroup is the place where some of these divisions can begin to be breached; sustaining factions only contributes to the problem and undercuts the effort.

It is helpful if workgroups include individuals with lived experience of trauma and of the organization or service system. In our experience, this rarely happens. More successfully, we have seen peer support personnel added to workgroups and consumer advisory groups involved in helping with the assessment and planning process (e.g., walking through the lobby or waiting areas; reviewing signage; providing perspective on what feels safe, welcoming, or otherwise in the agency's practices).

Considering the discussion and tasks involved, the optimal group is comprised of eight to ten members. However, workgroups may need to be larger to represent constituencies in the organization and to ensure reasonable attendance at meetings. If the group is larger, and attendance remains high, sub-committees can form for different tasks.

Recruitment and length of service. We have seen three approaches to recruitment: (a) the open invitation (anyone is welcome to join) which honors interest but may not achieve representation across the organization and may also result in an overly homogenous group with respect to views; (b) appointment by a senior manager or supervisors in different programs, which gains representation but could be perceived as favoritism and may not be representative of different perspectives; and (c) a slot-based application process with openings for representatives from different roles and levels, asking interested staff why they want to participate and what they bring to the process. In whatever way recruitment occurs, it is important to think through, ahead of time, the consequences and to have a process that is as transparent as possible. It has also been helpful to form the workgroup with a limited duration (six-eight months works well), at which point the group can revisit the structure, membership, and process. The TIC initiative will be ongoing (we have worked with organizations over four-five years in some cases) but membership in the workgroup need not be a long-term commitment. In fact, some organizations rotate membership regularly to give more staff a chance to participate, bring new ideas, and reduce the burden for individuals. It is important to have some continuity in the group, however, and a set of priorities to work from, so that it does not feel like starting over as the membership changes.

Facilitation and technical assistance. Many workgroups find it helpful to have support, at least initially, from outside the organization. This can increase credibility in the early planning stages as well as help with structure and manage power differences or conflict. In small organizations or in those with knowledgeable staff, outside technical assistance may not be necessary. In the end, sustainability rests on internalizing the process. Ideally, an outside facilitator phases out as soon as possible, providing any additional consultation only periodically.

Even with outside assistance, someone in the organization will need to set up meetings, send out reminders, write agendas, facilitate the meetings, take minutes, etc. Management's commitment of staff time for a designated point person is important. This role can rotate, but we have found it works best when the point person is a committed champion for traumainformed care, is relatively well-versed in the concepts, has the ear of leadership, and is respected by colleagues.

The Workgroup Process

Forming the workgroup carefully may help avoid some of the common challenges to the process, but will not prevent others, especially those related to long-standing undercurrents in organizations with a history of trauma and oppressive practices. The condition of organizational trauma and its long-term impact has been described in detail (Bloom, 2010; Bloom & Farragher, 2011). Briefly, this occurs when a system becomes fundamentally and unconsciously organized around the impact of chronic and toxic stress, such that the essential mission of the system is undermined. We find this phenomenon sometimes reflected in workgroup dynamics (Vivian & Hormann, 2013). It is likely that *any* change process or introduction of innovation would run into the challenges related to organizational trauma, but the explicit focus on TIC (especially the open acknowledgment, often for the first time, of toxic stress and/or vicarious trauma in the workforce) almost certainly heightens its likelihood. This can show up in a variety of ways.

In systems like housing, child welfare, juvenile justice, community mental health, and others, there may be members of the workgroup who bring long-standing frustration with management or deeply held anger about perceived past wrongs; others may need to share their sense of being overwhelmed with the work itself or of not feeling seen, heard, and supported by managers or colleagues. For example, in a large complex public system, early successes with implementation were dismissed by one powerful workgroup member as not really addressing the important issues. This may have reflected a lack of shared vision and goals, but it also reflected deeper underlying issues. In one community mental health program, the TIC workgroup hung on through a very difficult phase (the facilitator said it felt like six months of group therapy) before they were ready to start work in earnest. If the workgroup cannot move past those feelings, however, the process breaks down. In some cases, it has been necessary to revisit group membership, goals, and expectations in order to restart processes that stalled out.

If there is a history of mistrust or finger pointing between different parts of the organization either across departments/programs or between line staff and management, this may show up as well. Silence in workgroup meetings can signal merely a lack of

confidence or uncertainty about how to proceed but it may also reflect a lack of safety or strong resistance to working together. In some organizations, there can also be a sense of hopelessness or a lack of belief that anything will be different (a felt sense that initiatives come and go, are billed as promising but do not change anything).

All of this takes time to overcome and may sometimes be impossible (Bloom, 2012; Burnes, 2011), at least in the short run. In fact, there is probably a case to be made for holding off on a TIC initiative in some instances. However, we have seen TIC efforts in agencies struggle through ups and downs over a period of years, experience frustration and confusion in meetings, see changes in membership of the workgroup, have periods of inactivity, and still move forward. Organizations persist through these challenges when there is a commitment of key staff and leadership, understanding that it is a long haul process, solid relationships that exist or are built during the process, and—on a practical note—have strong facilitation skills available to the group. A set of guidelines for the workgroup (see, for example, Trauma Informed Oregon, 2016b) may help steer the process if the guidelines are reviewed, adapted as necessary, endorsed by the membership, and used regularly during meetings.

The Planning Process

The map of trauma-informed care is huge and without distinct boundaries. It can be confusing to know what is most important or even where to start. We have watched groups approach planning in a variety of ways over the years and based on some of their experiences, we recommend a hybrid approach that involves both responding to urgent/immediate felt concerns and simultaneously (or nearly simultaneously) using a more structured self-assessment process to provide an overall framework for the work. We discuss each of these approaches in turn.

Dealing with the Immediate

Based on our observations working with organizations over time, individuals join the TIC workgroup because there is something about trauma-informed care that resonates with them, either in their own experience personally (on or off the job) and/or in their experiences with the individuals they encounter in their work. It is important to honor, capture, and use this immediate sense of what is important. We often start the first workgroup by asking participants why they want to be in the workgroup and what they believe the organization can do to be more trauma-informed for both the workforce and individuals seeking or receiving services. Typically, we get enough material from this initial conversation to drive priorities for the first six months. However, it is also important to be sure that other staff have an opportunity to feed into the list of immediate issues, either during brainstorming sessions as part of training or in their teams, staff meetings, or focus/discussion groups convened for this purpose. In order for this to be useful, all staff need to have the basic language and ideas about trauma and trauma-informed care; foundational training is a prerequisite (Fallot & Harris, 2009; Guarino et al., 2009).

In our experience, the issues that surface first are surprisingly similar across a wide range of organizations:

- activated clients (in the waiting room, on the phone, in a confined office, or exam room) and the need for training in an effective and trauma-informed response;
- lack of protocols for dealing with crisis situations (an incident of violence, a death, or police intervention) that in themselves can be extremely destabilizing to staff, individuals involved, bystanders; and
- the need for care of all concerned following such a crisis.

Other physical safety issues that affect staff (and sometimes clients) are also easy to elicit: simple things like poor lighting, or malfunctioning locks, or challenges accessing crisis services when the need arises. In complex organizations, issues also typically emerge related to communication and power dynamics within the system: lack of transparency in decision-making, personnel practices that generate anxiety, lack of communication and a sense of respect or mutuality between different programs or divisions within the organization, and lack of teamwork.

By acknowledging and working with the experience of the workforce immediately, the TIC initiative can gain buy-in. This is particularly true if there are simple steps that can be taken to resolve concerns that surface. Often these opportunities relate to physical safety. One primary healthcare clinic in an urban setting, for example, made immediate converts among the workforce by adding a combination lock and motion sensor light to the bike shed (located in a dark corner of the parking lot) and by creating a buddy system for individuals leaving the building at night to walk several blocks to their cars. In another case, a list of emergency numbers, printed and laminated, made staff feel safer. We call these high impact/low cost results. They are usually simple, inexpensive, and easy to accomplish, but they can make a big difference by sending a message that staff concerns are being heard.

The TIC worksheet. A worksheet of initial priorities can be helpful, especially if it includes a column for workforce hot spots and a column for circumstances that may activate those seeking or receiving services. If this document also notes how each issue relates to trauma (e.g., why it would be particularly activating for a trauma survivor, or what principle of trauma-informed care is involved), it can help keep the workgroup on topic. Often these two columns line up with the same activating circumstances affecting both populations. For example, an incident that happens in the lobby with a patient yelling or threatening the front office staff will have an impact on the staff but also on other patients who witness the event or hear about it later. Likewise, unexpected staff turnover or sudden changes in policy without warning may equally destabilize anxious workers and anxious patients/clients. This alignment can make it easier to advocate for a specific recommendation to senior management because it affects both populations and maintains a balance in priorities between the workforce and the people walking in the door for help. The worksheet is also a handy tool to come back to when discussion strays.

Structured Assessment and Planning

A systematic framework for assessment and planning provides a map of TIC that is recognizable and describable. By linking immediate concerns with longer-range goals, it is possible to connect an individual organization's efforts with those that are occurring across the system of care in the wider community. A structured framework makes it easy to communicate with stakeholders, including governance boards, staff, advisory groups, funders, etc., about what you are doing and where you are in the implementation effort. It can also help reassure even workgroup members that small steps are part of a bigger picture as well as providing an organized parking lot for the many ideas that are likely to surface.

Pioneer efforts by Harris and Fallot (2001), Jennings (2004), and others were followed by the development of formal guidelines and planning toolkits for organizations, frequently but not always focusing on particular service systems. They cover much the same territory and vary primarily with respect to their level of detail and the amount of emphasis on clinical practice versus a systems perspective. Fallot, Harris, and colleagues at Community Connections created one of the first and most comprehensive self-assessment and planning processes (Fallot & Harris, 2006). The Center for Family Homelessness, likewise, created *The Trauma-Informed Organizational Toolkit for Homeless Service* (Guarino et al., 2009) that includes an assessment instrument. *TIP 57* published by SAMHSA (2014b) is another comprehensive resource. Organizations all over the country presumably have been working with these or other tools for some time, with or without guidance from the authors or technical assistance from outside consultants. However, there is little in the literature about the experience or results from using these assessment tools.

Trade-offs with formal planning tools. In our early work with organizations, we often recommended either the planning tools developed by Community Connections or the Toolkit available from the National Center for Family Homelessness. Both are excellent; they can scarcely be improved on, with the exception of newer emphases that have emerged related to historical/cultural considerations, collective oppression/trauma, and the centrality of peer support.

We and our organizational partners have had mixed results. We found that the agencies that had turned to us for help or advice did not always have the capacity to take this route very effectively. First, the TIC effort is frequently led by a supervisor, a clinician who is passionately committed, or a behavioral health manager. Generally speaking, these individuals are working under tremendous pressure and, more important, come to the table with a sense of urgency and a helping perspective that can make the longer and more conceptual manuals or toolkits feel both daunting and not well-aligned with their immediate concerns. Given lack of confidence, lack of time, and limited support, the systems perspective was often not a good fit. Consequently, we had trouble getting workgroups to complete the longer manuals or toolkits.

The specific assessment instruments were more easily adopted since our partners recognized the need to gather information from staff and in some cases from volunteers and/or individuals receiving services. A number of organizations constructed surveys out of these tools, in some cases administering them to a large number of individuals. The process was lengthy and required substantial staff time in the development of the surveys to suit the context.

The bigger difficulty was in the output. These instruments yield huge amounts of information particularly if you tap into multiple sources, and it can be a long, arduous, and

confusing process to sort through, report out, and use the data to guide priorities. Moreover, survey data usually resulted in numerical ratings. Average or summary scores can be hard to work with and give little help in determining what to do next. Finally, as agencies began to act on identified priorities and to make changes, they could report out on what they had accomplished, but they had no framework against which to gauge or report on their overall progress in a way that lined up with what other organizations might be doing.

Another challenge needs mentioning here as well. When an agency's service population are included in a large survey process, the intention is admirable but the data can be misleading. Consumer satisfaction surveys are known to have a strong positive response bias in most cases (Fowler, 2013; Patwardhan & Spencer, 2012). More important, it is difficult to get reliable or valid data in a written survey from vulnerable individuals and especially if the population is diverse, potentially using English as a second language (or not at all), and without support and guidance around what is being asked and whether it is safe to answer honestly. It is a weak methodology at best.

As a result, we have taken to discouraging our partners from starting their assessment process with a survey unless it is highly targeted and based on at least a preliminary understanding about the current status. We also recommend that any survey should include open-ended questions inviting a qualitative response either in addition to or in instead of a set of ratings. If open-ended questions are not included or do not yield sufficiently useful information (it can sometimes be difficult to get participants to articulate their thoughts in text), following up with small group discussions to help interpret the results can be helpful.

At the other end of the spectrum are a number of checklists for TIC that can also be found online, and are often focused on general concepts ("our agency is committed to trauma-informed care") rather than concrete steps that have been taken. See, for example, National Council for Behavioral Health (2013) or U.S. Department of Health & Human Services, Office of Adolescent Health (2015). These resources may be useful to stimulate thinking but they are necessarily crude and will rarely yield enough information to be useful in planning (or credible with stakeholders, since they are generally not well-anchored in specific or concrete detail and thus highly subjective).

The principles of TIC as framework. Another approach is to build the planning/assessment process around the principles of trauma-informed care. Again, despite differences in the language and the number of principles that are listed, there is strong congruence across the literature about the core principles. SAMHSA (2014a) now uses six principles; some of the original proponents outlined six or seven (see Hopper et al., 2010 for a review). New principles related to peer supports and to the critical importance of cultural responsiveness and sensitivity to gender issues have fleshed out areas that were underplayed in earlier work. Fallot and Harris (2009) modified their original highly detailed "Trauma-Informed Self-Assessment and Planning Protocol" (2006) to produce "Creating Cultures of Trauma-Informed Care (CCTIC): A Self-Assessment and Planning Protocol," organized around TIC principles, which we have seen used very effectively by small agencies with cohesive and like-minded staff.

In our work, it has been useful to collapse the principles of TIC into three major domains: *safety, power, and self-worth*. We base this framework on the understanding that

traumatic experiences that have a lasting impact are those events that induce overwhelming fear, powerlessness, and, depending on the nature of the trauma, a sense of worthlessness. In light of this, the fundamental commitment of trauma-informed care is to avoid reinducing those experiences and instead to establish policies, practices, and procedures that, insofar as possible, create a safe context, restore power, and support self-worth. As reflected in Table 1, we find that larger sets of TIC principles fit readily into these areas, sometimes arguably into more than one.

Table 1. Principles of Trauma-Informed Care: Agencies demonstrate Trauma-Informed Care
Through Practices. Policies, and Procedures

Restore Power Through:	Create Safe Context Through:	Build Self-Worth Through:
• Choice	Physical safety	• Relationship
• Empowerment	• Trustworthiness	• Respect
• Strengths perspective	Choice	 Compassion
Skill building	• Transparency	• Mutuality
	Predictability	 Collaboration
	• Clear and consistent boundaries	 Acceptance and nonjudgment

It is possible to use these domains for assessment as well. Physical safety has proven to be a good place to start. This domain is easily understood by workgroup members, and it is usually fairly concrete. Agencies are often doing a reasonably good job already regarding safety, so it is possible to highlight strengths as a starting point. Quite often, moreover, small fixes can make a big difference as noted earlier in the light on the bike shed example.

Moving beyond physical safety, however has been more difficult. Defining emotional safety can prove to be a stumbling block and is subject to highly individual interpretation. Issues of power and especially relationship, respect, mutuality, and so forth that constitute the self-worth domain can take a group into challenging areas, particularly in traumatized organizations with a particularly vulnerable workforce. Nonetheless, some agencies have worked successfully with the principles. Sample action steps based on this approach appear in Table 2.

For some organizations, a narrative approach (Clandinin & Huber, 2010) can be appealing. In essence, workgroup members walk through the experience of a client from the moment the service need arises: the referral or self-referral, initial contact, appointment scheduling, entry and intake, the waiting room, location of bathrooms, signage, and so forth—all the way to exiting services. The idea is to look at each step along that path for conditions that might activate a trauma response, fail to activate a trauma response, or in fact may be welcoming/healing. This approach appeals especially to direct service staff because it is concrete rather than abstract and contains within it the experiences that clients may have shared with them. In contrast to more abstract assessment, the narrative approach lends itself easily and effectively to direct involvement from individuals with lived experience of trauma and of the service system in question. It can be useful, for example, for gathering information from consumer advisory groups or in listening sessions with service recipients.

Table 2. Action Steps for Implementation Based on Key Principles of Trauma-Informed Care

Create Safe Physical Context

- Crisis protocols in place & practiced for critical incidents.
- Buddy system instituted for after-hours parking concerns.
- Lighting reviewed & improved inside & outside building.
- De-escalation training provided for all staff.
- Emergency numbers posted at every workstation.

Create Safe Emotional Context

- Intake forms reviewed & revised to be less activating/intrusive.
- Front office staff, security, custodial staff, & direct service staff are taught how to recognize & respond to signs of trauma response in waiting room, office, lab, & exam room. Scripts created & practiced that are respectful & de-stigmatizing.
- Client Handbook includes section about relationship between clinician & client, explaining boundaries in a supportive & informative way.
- Clients provided clear & concrete information about what to expect at every juncture. A what you need to know document created & available.
- Signage reviewed & improved to be more welcoming & clear.
- Restroom closed when mandatory tests (urinalysis) are underway.
- Gender inclusion signs posted.
- Staff debrief process created for critical incidents.

Offer/Restore Power

- Individuals provided whatever choices are available with respect to service options, scheduling, etc.
- Individuals asked at first appointment about their prior experience with the system & their current needs.
- Staff & clients regularly asked for feedback & they *also* receive a report on what they said & how it was addressed.
- Staff offered flexibility in work schedules.
- Peer support available & offered.

Support Self-Worth

- Service recipients offered coffee or water (especially if staff are enjoying them).
- Observation & appreciation of colleagues' trauma-informed work is routine.
- Self-care plans institutionalized as regular part of supervision.
- Staff can acknowledge strengths & recognize the why behind behaviors, even if they are unacceptable; staff are able to connect the dots for clients about how trauma has impacted them.
- Diverse staff are hired to represent population served.

The middle way: Benchmarks. In recent years, new resources have been developed that fall somewhere between a crude checklist and the detailed set of highly individual issues that came out of the earlier assessment tools. "SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach" (SAMHSA, 2014a) falls into this category, reducing the content of "TIP 57" (SAMHSA, 2014b) to a 19-page document that includes questions or prompts for action that are organized into a set of ten implementation domains. Trauma Informed Oregon's "Standards of Practice for Trauma-Informed Care" (Trauma Informed Oregon, 2015) is another example of a benchmark approach, or the organizational self-assessment for youth residential programs developed at the University of South Florida (Hummer & Dollard, 2010). Others combine elements in slightly different ways or in larger or smaller clusters, but the content is virtually identical. In each case, domains of concern typically include multiple organizational functions: governance, operations, human resources, physical environment, workforce development, service

delivery, and program improvement/evaluation. When used appropriately, benchmarks can support a mezzo-level approach for management, guiding planning at a structural level while the workgroup continues to focus on specific micro-level concerns. Moreover, a set of specific standards or benchmarks can be used to highlight and communicate progress over time against a framework that is common across organizations. Sample benchmarks (Trauma Informed Oregon, 2015) are illustrated further in Table 3.

Table 3. Benchmarks for Trauma-Informed Care: Organized by Five Domains Common Across Systems

Governance & Leadership

- Board & executive team attend training or information sessions to learn about trauma & Trauma-Informed Care (TIC).
- Agencywide trauma policy is in place.
- Regular feedback from workforce & service population is solicited & *used* to improve practice.
- Resources are set aside to support mental & physical health of staff & to attend to vicarious or secondary trauma.
- Policy decisions are communicated with as much transparency as possible & with a demonstrated understanding of the impact on staff.

Physical Environment & Safety

- Physical environment has been reviewed & modified to be as welcoming & safe as possible (art work, signage, common areas, hallways, bathrooms); individuals with lived experience were part of that process.
- Crisis protocols in place; provision is made to ensure that no staff member is alone in the building.
- There is a designated space for staff to go when self-care or a time-out would be helpful.

Workforce Development

- Initial & ongoing training about trauma & trauma-informed care are institutionalized.
- Hiring practices (job descriptions, resume review, interview questions, etc.) reflect a commitment to traumainformed care.
- On boarding includes orientation to trauma-informed care & the organization's commitment to it.
- Supervision & performance reviews include expectation of ongoing learning & application of TIC principles.

Service Delivery

- Required intake forms & processes have been reviewed & modified to reduce unnecessary detail or questions that could be activating for survivors.
- Easy-to-read materials are available that explain core services, key rules & policies, & procedure for questions, concerns, or complaints.
- [In direct service organizations], screening for trauma is routine & trauma specific services are available.
- All staff understand heightened risk of suicide & are able to respond effectively or get appropriate help.

Ongoing Systems Change

- Infrastructure is in place to sustain ongoing assessment, planning, implementation, & feedback.
- Staff time has been set aside to participate, including designated FTE for coordination.
- Clinic policies (new & existing) are reviewed regularly for trauma-informed language & content.
- Regular mechanism has been established to report out to entire organization about TIC practices & the change process.

Benchmarks also may serve as a step towards accountability measures. More and more states are creating policies that require behavioral health or other entities to demonstrate that they are meeting minimum sufficient standards for TIC or are working towards them (see, for example, Oregon Health Authority, 2014). Standards or benchmarks are proving useful in demonstrating adherence to policy stipulations. In the long run, this work may also move us towards fidelity measures that would allow researchers to examine the impact of trauma-informed care (or "trauma-informed approach" as it is being rebranded) on the

experiences and outcomes for the workforce and for individuals and families receiving services.

Implementation and the Feedback Loop

Setting priorities and agreeing on action steps may be the most time consuming and complex aspect of the work, but as organizations begin to implement specific changes, a number of new challenges frequently appear.

Trauma-Informed Rollout

Even the most well-conceived efforts to create a more trauma-informed organization can have unintended negative consequences if they are not carried out with skill and sensitivity. A new intake procedure, for example—one that slows the process down, eliminates unnecessarily triggering questions, provides more transparency and opportunity for clients to connect and engage—may be exemplary. However, it will feel anything but trauma-informed to staff if it is rolled out as a new policy that requires changes in the day-to-day work of already-stressed employees without warning, without providing enough time to adjust, or enough support for the potential impact on the workload.

Considering context. Along the same lines, if a trauma-informed policy fails to consider the context and realities of the workforce (or clients), it may result in a backlash. Schools are currently in the cross-hairs of the movement towards trauma awareness and improved practices. Many districts are seeking to change disciplinary policies and procedures to support students more humanely and effectively, recognizing that adverse experiences, past and present, are likely driving much student conduct. However, schools of education are not yet equipping teachers with the tools to de-escalate activated students or to manage their classrooms in new ways. If we ask teachers to respond differently, we need to have a strategy in place for when the child responds to "What happened to you?" rather than "What's wrong with you?" by throwing a chair across the room.

The needed skill set. Likewise, our human services field is famous for initiating promising new practices, putting them into policy, and failing to account for the skills and support needed to make these practices work as they are intended. Screening for adverse childhood experiences or a history of trauma is only one of many examples where some workers will be able to do it well initially, others may never have the skills, and some will need coaching and support over time. In our rush to implement TIC, we sometimes forget that there is a steep learning curve for many, even those that are enthusiastic about the ideas in the abstract.

Shared understanding of the concepts. Trauma-informed care relies on the operationalization of a set of principles rather than a manual with specific and well-defined action steps. This can lead to confusion. Concepts like transparency, for example, are easily misinterpreted. Does it mean telling a client everything you know or everything that has been said? This is a serious problem, and most organizations are not yet equipped to carry out the detailed discussions to ensure that everyone is on the same page about what is being asked of them. Some office staff in a juvenile detention facility in Wisconsin, for example, blamed trauma-informed care for an incident of violence and harm (Hall, 2016). Since

physical safety is the first principle of TIC, on the face of it there was likely a misinterpretation (or over-interpretation) of one of the other principles.

Follow up. In small or very cohesive organizations, planning may lead directly and visibly to action, but in larger, more complex organizations, best laid plans do not always result in change. The workgroup may present a recommendation to management; there may even have been the opportunity for all staff to review or provide input about the draft protocol. The proposed solution may be put into policy and shared at an all-staff meeting. There is no guarantee, however, that it will be widely adopted across the organization.

One mental health organization initiated a large number of changes over a period of about three years based on recommendations from the TIC workgroup. The steps ranged widely and included creating an agency wide trauma policy, installing new and more welcoming signs in the lobby, involving clients in designing a planned remodel, requiring that staff self-care plans be included in supervision and reviewed annually, adding a section in the client handbook about boundaries so that clinicians could go over it with new clients together, initiating lunch and listen sessions where clients could bring ideas, concerns or grievances, and so on.

In a follow-up survey of staff, we learned that the required self-care reviews were only being used by about a third of the supervisors. Some of the newer staff had never heard of the policy. This is not because the organization failed in its efforts; it reflects only that culture change takes a long time, requiring vigilance and follow through. In other cases, laudable efforts may simply not be as visible to a busy and overworked staff. If there is a new crisis protocol that is brilliantly conceived, but staff do not know how to get to it easily when they need it, the impact will be minimal.

Impact. Assuming that a change actually occurred, there is no way to know without asking whether it makes a difference. At one of our partner agencies, for example, the leadership instituted a policy that every unit, department, team, or staff meeting across the entire multi-site system would start with appreciations, to set a positive tone and build community. In a follow up survey, we learned that although some teams seemed to do this well and some of the workforce told us it made a difference in their experience, a significant number of staff said it felt artificial, did not make a difference, or made things worse. This was important information for the workgroup to address.

Moving with resistance. No matter how solid the work, how well-intentioned, and how thoughtful the planning and implementation, there will be resistance to change (Choi, 2011; Oreg, Vakola, & Armenakis, 2011). Not everyone gets it, not everyone will. Even when they do, it is challenging and stressful to be asked to do things differently. If organizations were to wait for 100% buy-in before they committed to an implementation process, nothing would happen. The most experienced advocates and consultants in the field (ACE Interface, 2014) recognize the importance of persistence—the capacity to move around resistance and continue to work with folks that are ready and available (Family Resources, 2013). We would add that it is necessary for leadership to support the process from the top—setting direction and even mandates. It is also necessary to include and involve every layer in the organization. But it still will not eliminate resistance—at least not entirely. You just keep going.

Down the Road

As organizations begin to move further along this journey, we would like to see better documentation of the process and the results. Disseminating this information is useful in that it normalizes the challenges inherent in the work (and the time involved) and sparks ideas for other changes that can be made. We are also committed to developing evaluation resources and supports for organizations. The core questions are, first, What did we do and what happened? (the documentation piece); and then, If changes were implemented, what if any difference did it make to the experience of the workforce or those receiving services? For example, attention to trauma-informed care of the workforce might be reflected in reduced absenteeism, reduced turnover, greater sense of competence and confidence, and increased job satisfaction. Likewise, for those receiving services, trauma-informed policies, procedures, and practices could help improve, among other things, client/patient engagement and retention in services, rates of follow-through on appointments, buy-in with service plans, adherence to plan provisions, and reduced non-indicated use of emergency services.

These are merely examples of the kinds of outcomes that might appear on a logic model for evaluation of trauma-informed care. Research is stymied for the moment by the lack of a fidelity measure for trauma-informed care, a way to measure dosage (what changes, how many changes, what type of changes would influence these or other outcomes) and experience with the time element (how long it should take for outcomes to be realized). These are not simple questions and the answers are not going to come quickly. What is possible at this stage is documentation of our work—tracking the process, the outputs, and any difference we can detect both in terms of reported experiences of staff and clients and agency-level indicators of staff and client engagement. Careful documentation will pave the way for more rigorous research efforts aimed at demonstrating how the significant changes that are occurring across many service systems may be improving outcomes for children, adults, and families in our communities.

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Contemporary Trauma Theory and Trauma-Informed Care in Substance Use Disorders: A Conceptual Model for Integrating Coping and Resilience

Revital Goodman

Abstract: National data of children's exposure to traumatic experiences are alarming. Research asserts the interconnectedness between experiencing childhood trauma (CT) or adverse childhood experiences (ACE) and developing substance use disorders (SUDs) in later adulthood. Trauma definition and contemporary trauma theory (CTT) provide the foundation for trauma informed care (TIC) in social work practice with co-occurring trauma and SUDs. TIC re-conceptualizes SUDs as a mechanism to cope with the effects of trauma. Coping and resilience are relevant factors to the ramifications of CT on SUDs, and are the manifestation of key TIC principles. Integrating TIC practices aimed at enhancing coping and resilience into treatment for co-occurring trauma and SUDs is needed in order to negate the devastating impact of trauma and propel recovery. Conclusions and implications to social work practice are discussed.

Keywords: Childhood-trauma; ACE; TIC; substance use disorders; coping; resilience

National data of children's exposure to traumatic experiences are alarming. According to the National Center for Mental Health Promotion and Youth Violence Prevention (2012), 26% of children in the United States will witness or experience a traumatic event before they turn four, with four of every 10 children reporting experiencing a physical assault during the past year (Finkelhor, Turner, Shattuck, & Hamby, 2013). Other reports indicate that more than 60% of youth age 17 and younger have been exposed to crime, violence, and abuse either directly or indirectly (Finkelhor, Turner, Shattuck, Hamby, & Kracke, 2015). The high prevalence of substance use disorders (SUDs) constitutes a growing problem in the United States, with an overwhelming number of persons challenged with this cluster of disorders (U.S. Department of Health and Human Services, Office of the Surgeon General, 2016). Research asserts the interconnectedness between experiencing childhood trauma (CT) or adverse childhood experiences (ACE) and the subsequent underlying mechanisms that contribute to the development of SUDs and to recovery from drug and alcohol addiction (Driessen, et al., 2008; Dube, et al., 2003; Elwyn & Smith, 2013; Felitti, et al., 1998; Harris, Lieberman, & Marans, 2007; Levenson, 2016; Levenson & Grady, 2016). Compelling associations between CT and SUDs define a growing need for social workers practicing in the field of SUDs to frame clinical practices through the lens of trauma-informed care (TIC; Levenson, 2015). Social workers practicing in the field of addiction need to thoroughly assess past trauma experiences in order to have a better understanding of clients' presentation and symptoms. Through the lens of TIC, clients' poor clinical presentations and maladaptive functioning are perceived as the manifestation of unresolved trauma and impaired self-regulatory skills; higher dysfunction and disruptive clinical presentations suggest higher probability for a complex history of unresolved trauma. Discounting the role of trauma within this clinical population may lead to inaccurate diagnoses and to subsequent inaccurate treatment, which may result in a

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higher percentage of treatment attrition or relapse. In order to better understand and practice TIC for this clinical population, it is essential to integrate recent findings from the fields of trauma and SUDs with a comprehensive theoretical foundation. Finally, the current knowledge about the curative influence of coping and resilience on co-occurring CT and SUDs provides social workers with tangible tools to improve treatment and enhance recovery.

Theoretical Foundation for Trauma Informed Care: Trauma, and Contemporary Trauma Theory

Trauma has been perceived and defined in different ways over the years, contingent on the development of knowledge and the understanding of the impact of traumatic experiences on the individual, family, community, and society (van der Kolk, 2014). In recent decades, the definition of trauma has been consistently inclusive of the following elements: (1) an identified event or series of events, that is (2) experienced by the individual as physically or emotionally harmful, threatening, or overwhelming, and (3) has lasting and holistic effects on the individual's functioning (Herman, 1992; Laplanche & Pontalis, 1973; Ringel & Brandell, 2012; Substance Abuse and Mental Health Services Administration (SAMHSA), 2012; van der Kolk, 2014). CT "overwhelms the ordinary human adaptation to life" (Herman, 1992, p. 33) and the person's sense of control, which may lead to maladaptive internalization of the event. Such maladaptive internalization may result in disturbance to bio-psychosocial functioning, healthy development, and brain performance in regions that are related to emotions, behavior, and executive functioning (Lizeretti, Extremera, & Rodriguez, 2012; SAMHSA, 2012; Suleiman, 2008; van der Kolk, 2014). The development of contemporary trauma theory (CTT) represents a paradigm shift in how social workers perceive and treat survivors of trauma. The new trauma-based paradigm, refrains from viewing survivors' poor functioning as resulting from sickness, weakness, or deficiencies in moral character, and reframes viewing survivors as psychologically and physically injured, and instead, in need of healing and help (Bloom & Farragher, 2011; Salovey & Sluyter, 1997; van der Kolk, 2014; Williams, 2006). CTT provides a theoretical framework for understanding the impact trauma has on a person's functioning, and is based on the following central properties:

- a) *Dissociation*. Dissociation in trauma "entails a division of an individual's personality, that is, of the dynamic, bio-psychosocial system as a whole that determines his or her characteristic mental and behavioral actions" (Nijenhuis & van der Hart, 2011, p. 418). Dissociation is the main defense mechanism used by a victim to negotiate and tolerate the horrific traumatic experience (Herman, 1992; Siegal, 1999; Suleiman, 2008; van der Kolk, 2014; Williams, 2006).
- b) *Attachment.* CT impacts a person's ability to develop healthful interpersonal relationships and to establish trust, leading to impairment in the abilities to form secured attachment with others and to interruptions in interpersonal relationships (O'Connor & Elklit, 2008; Siegal, 2010; Tarren-Sweeney, 2013).
- c) *Reenactment.* A phenomenon in which victims seek relationships and display behaviors that reenact the original traumatic event (Courtois & Ford, 2016).

Reenactment elicits an intense emotional state that releases tension or anxiety and provides the person with a sense of control and connectedness (van der Kolk, 2014).

- d) *Long-term effect on later adulthood.* Unresolved CT may have devastating effects on functioning in adulthood (Becker-Blease & Freyd, 2005). Trauma that is experienced by a child inhibits appropriate development and predisposes the child to negative recurrence later in life, including comorbidity in physical and mental health problems (Ross, 2000; Williams, 2006). In addition, CT diminishes the basic sense of self and leads to destruction of intrapersonal and interpersonal capacities (Courtois, 2008; Herman, 1992; Lewis, 2012; Ringel & Brandell, 2012; Salovey & Sluyter, 1997; Shapiro, 2012; van der Kolk, 2014; Williams, 2006).
- e) *Impairment in emotional capacities*. Emotional numbing and the break down of the self-regulatory system are direct impacts of trauma on the brain and on the adaptive functioning of the limbic system, the part of the brain that supports a variety of functions, including the emotional life (Badenoch, 2008; Salovey & Sluyter, 1997; Siegal, 1999; van der Kolk, 2014). Traumatic events, and especially prolonged exposure to trauma, which is typical in childhood abuse or neglect, diminish the sense of baseline state of both emotional and physical calm or comfort, resulting in hyper-arousal symptoms that include hypervigilant, anxiety, agitation, night terror, and somatization (Herman, 1992; Siegal, 1999; Shapiro, 2010; Van der Kolk, 2014; Van der Kolk, McFarlane, & Weisaeth, 2006; Williams, 2006). Victims of CT display compromised ability to regulate their moods and their emotional responses as adults, including the ability to identify emotions in self and others, to understand emotions, and to self-regulate, which may lead to dissociation and dissociative identity disorder in extreme cases of abuse (Levendosky & Buttenheim, 2010; Mészáros, 2010; Salovey & Sluyter, 1997; Schutte, Malouff, & Hine, 2011; Shapiro, 2010).

CTT provides a conceptual foundation for understanding the bio-psychosocial impact of trauma on children and adults. Given the devastating impact CT has on brain functioning and on adequate development of social and emotional skills, the correlation between CT and SUDs is prescient.

The Link Between Substance Use Disorders and Childhood Trauma

Studies validate the deleterious effects of accumulative CT or ACE on future life outcomes, including mental and physical health, social problems, sexually offensive behaviors, and death (Felitti, et al., 1998; Heffernan et al., 2000; Jung, Herrenkohl, Klika, Olivia-Lee, & Brown, 2014; Levenson, 2016). Research in the area of mental health indicates high correlations between ACE or CT and SUDs (Banducci, Hoffman, Lejuez, & Koenen, 2014a). These correlations signify an essential need to integrate TIC into treatment for SUDs.

Research provides robust correlation between trauma and substance abuse, ACE and serious problems with drug use, and trauma as an independent risk factor for drug or alcohol relapse in substance-abusing populations (Dube et al., 2003; Elwyn & Smith, 2013; Felitti, et al., 1998; Harris, Lieberman, & Marans, 2007; Levenson, 2016; Levenson & Grady, 2016; Torchalla, Nosen, Rostam, & Allen, 2012). Child maltreatment refers to dominant and/or persistent environmental stressors that hinder the development of personality and may lead to increased psychopathology (Handley, Rogosch, Guild, & Cicchetti, 2015; Oshri & Rogosch, 2013). Exposure to chronic victimization results in more global dysfunction, added distress, and vulnerability (Turner, Finkelhor, & Ormrod, 2010) and is linked to increased risk for substance abuse problems in adulthood (Driessen, et al., 2008; Elwyn & Smith, 2013). Felitti et al. (1998) found that ACE account for one-half to two-thirds of increased problems with drug use among over 17,000 adult patients of the Kaiser Permanente Health System. The writers identified strong positive correlations between the ACE score and initiation of illicit drug use problems and drug addiction. Similarly, later studies linked exposure to violence in childhood with a greater risk for alcohol and drug abuse in adulthood (Harris, et al., 2007; Jung et al., 2014; van der Kolk, 2014). CT was identified as an independent risk factor for drug or alcohol relapse in a sample recruited from a substance-abusing population (Driessen et al., 2008). Finally, while CT adversely affects both men and women, studies indicate higher rates of childhood sexual abuse among women diagnosed with SUDs compared to childhood physical abuse among men diagnosed with SUDs. Data suggest CT rates between 60%-75% of women enrolled in SUDs treatment (Keyser-Marcus, et al., 2015).

Consequences of Co-Occurring Trauma and SUDs

Research highlights severely adverse consequences of co-occurring trauma and SUDs. Significant correlations exist between CT and SUDs and deleterious patterns of substance abuse comorbidity, and higher rates of all psychiatric disorders, including mood disorders, anxiety disorders, psychotic symptoms, and personality disorders (Bombardier et al., 2004; Brucker, 2007; Dickey, Azeni, Weiss, & Sederer, 2000; Ross, 2000). Persons with a CT history and SUDs diagnosis report high frequency of suicidal thoughts and suicide attempts (Keyser-Marcus, et al., 2015). There is recent evidence that type of childhood abuse correlates with maladaptive emotional and behavioral patterns among adults diagnosed with SUDs. Childhood sexual abuse is linked with risky sexual behaviors in adulthood, childhood physical abuse with aggressive behaviors, and childhood emotional abuse with emotion dysregulation (Banducci, Hoffman, Lejuez, & Koenen, 2014b). Finally, co-occurring CT and SUDs are correlated to myriad physical health problems, sexually transmitted diseases, homelessness, decreased psychosocial functioning, poor well-being, and an overall reduction in quality of life (Levenson, 2015; Wu, Schairer, Dellor, & Grella, 2010).

The Curative Roles of Coping and Resilience

Research findings indicate that coping and resilience are curative factors that play an important role in mitigating the impact of CT on later SUDs (Kuper, Gallop, & Greenfield, 2010; Schneider, Lyons, & Khazon, 2013; Weiland, et al., 2012). Coping is defined as a range of skills and strategies employed by the individual in counteracting the negative impact of stressful or challenging life experiences (Valtonen, Sogren, & Cameron-Padmore, 2006). Coping includes a wide range of behavioral and cognitive activities that play an important role in functioning, adaptation, and general quality of life (Toker, Tiryaki, Ozçürümez, & Iskender, 2011). Resilience is defined as the capacity to spring back and successfully adapt in the face of adversity (Henderson & Milstein, 1996). The resilient person is able to develop adaptive functioning and competences despite exposure to severe stress (Henderson & Milstein, 1996). In the context of drug addiction, resilience is defined as the person's ability to tolerate, adapt, or overcome crises (Beauvais & Oetting, 1999).

Coping style is a vital protective factor associated with substance use abstinence and maintaining sobriety (Kuper et al., 2010). Advanced coping is associated with decreased internalized stigma and with increased adaptation among persons diagnosed with SUDs (Chou, Robb, Clay, & Chronister, 2013; Valtonen, et al., 2006). Poor coping styles are associated with more severe and detrimental substance use pathways and relapse (Franken, Hendriks, Haffmans, & van der Meer, 2003; Lyvers & Edward, 2008). Furthermore, nonadaptive coping is prevalent among clinical samples of adults with a history of CT and cooccurring SUDs. Findings indicate CT significantly compromises overall coping capacities; those already compromised coping capacities are further weakened by harmful patterns of alcohol and drug abuse (Lyvers & Edward, 2008; Smyth & Wiechelt, 2005; Toker, et al., 2011). Recent conceptualizations of coping highlight the interconnectedness between coping and emotional regulation skills and impulse control, and suggest that better coping skills are contingent on sophisticated emotional capacities (Erozkan, 2013; Mikolajczak, Nelis, Hansenne, & Quoidbach, 2008; Saklofske, Austin, Galloway, & Davidson, 2007). Emotional capacities and advanced coping are significantly and positively correlated, with the ability to regulate emotions being a reliable predictor of the ability to employ a wide range of coping strategies to negotiate stressors (Downey, Johnston, Hansen, Birney, & Stough, 2010; Mikolajczak, et al., 2008; Perera & DiGiacomo, 2015; Zeidner, Kloda, & Matthews, 2013).

Research affirms the central role of resilience in CT and SUDs. Higher resilience is related to lower levels of substance use, fewer alcohol problems, and a delayed onset of substance abuse (Weiland et al., 2012). Similarly, enhanced resilience plays a significant protective role in successful recovery from SUDs (Roberts, Galassi, McDonald, & Sachs, 2002). Researchers provide compelling evidence in support of the association between emotional capacities and resilience, and of resilience as a mediating factor among advanced emotional capacities, affect balance, and well-being (Armstrong, Galligan, & Critchley, 2011; Liu, Wang, & Lu, 2013; Zeidner, Matthews & Roberts, 2012). Advanced emotional capacities relate to stress resilience (Schneider et al., 2013) and demonstrate strong relationships with resilience factors among clinical samples of young adults with co-occurring CT and SUDs (Montgomery et al., 2008). As such, enhanced resilience is tied to enhanced abilities to tolerate stress and to regulate emotions despite adversities, reducing

the person's need to self-medicate with substances.

Contemporary Trauma Theory and Trauma-Informed Care: An Emerging Conceptual and Integrative Model for Enhancing Coping and Resilience (CORE)

Building on the existing literature pertaining the high rates of co-occurring CT and SUDs among adults, research asserts both the need and the effectiveness of adding TIC and trauma-focused strategies into standard SUDs treatment (Back et al., 2014; Covington, 2008; van Dam, Ehring, Vedel, & Emmelkamp, 2013; Farrugia et al., 2011; Torchalla, et al., 2012). The National Center for Trauma Informed Care (SAMHSA, 2015) published six key guiding principles that inform the spirit and the application of working with trauma survivors. These principles are: (1) safety; (2) trustworthiness and transparency; (3) peer support; (4) collaboration and mutuality; (5) empowerment, voice and choice; and (6) cultural, historical, and gender issues. These six principles reflect and define a resiliencebased approach to enhanced coping. These principles correspond with empirical research that asserts the curative roles of resilience and coping to the ramifications of CT on SUDs. As such, it is postulated that coping and resilience are relevant and essential components that need to be integrated into a TIC model for the treatment of co-occurring trauma and SUDs. Furthermore, it is suggested that an integrative and comprehensive model of TIC to SUDs needs to encompass scientific research, theory, and practice. The research component consists of recognition of the prevalence of childhood trauma, familiarity with the existing scientific correlations between CT and the development of SUDs, and the integration of findings related to the curative roles of coping and resilience. The theoretical component incorporates a clear definition of trauma and a comprehensive understanding of the five tenets of CTT. The theoretical component further illustrates a realistic expectation of clinical presentations that are based on CTT, and provides clinicians with an enhanced understanding of clients' symptomology. Finally, the practical component guides clinicians to proactively apply the key principles of TIC as defined by SAMHSA (2015), in order to originate a superior therapeutic environment and to deliberately create opportunities for clients to enhance coping and resilience within treatment for SUDs.

Contemporary Trauma
Theory & Trauma
Informed Care

Resilence

Coping

Substance use outcomes

Current trauma symptoms

Figure 1. Contemporary Trauma Theory and Trauma-Informed Care: An Emerging Conceptual and Integrative Model for Enhancing Coping and Resilience (CORE).

Figure 1. CORE Model summary: This emerging integrative CORE model for treating SUDs incorporates scientific findings of the positive correlations between CT and SUDs, the negative correlations between CT coping and resilience, and of the curative role of coping and resilience in recovery from SUDs. CTT and TIC are the overarching frameworks of the model. CTT provides the framework for understanding clinical presentations and symptomology. TIC defines guiding principles for delivery of services in a manner that recognizes the impact of trauma history and actively seeks to avoid retraumatization. The CORE model suggests viewing SUDs through the lens of childhood trauma history and CTT as well as through the application of TIC principles; these clinical components will directly impact resilience, coping and current trauma symptoms in order to enhance substance use recovery. Childhood trauma is placed outside the direct impact of the intervention in that it provides the lens of treatment needed, and has an impact on current symptoms, yet is not directly impacted by the treatment since the childhood trauma has already happened and cannot be changed.

A trauma-informed approach views presenting problems and symptomology as a maladaptive coping with unresolved traumatic experiences (Levenson, 2014). From a neurobiological perspective, CT and childhood maltreatment -- including the types of trauma or maltreatment, the developmental timing in which the events occurred, and the degree of chronicity -- have an adverse impact on brain structure and development, and on the brain's functioning specifically in regions responsible for impulse control, executive functioning skills, and emotion-focused tasks (Cowell, Cicchetti, Rogosch, & Toth, 2015; Toth, Gravener-Davis, Guild, & Cicchetti, 2013). While TIC does not necessarily mean directly addressing trauma (Brown, Baker, & Wilcox, 2012), it does signify the need to conceptualize the person's presentation through the lens of trauma and CTT. TIC in the context of SUDs views drug and alcohol abuse as a tool to self-medicate and negotiate capacities impeded by unresolved trauma (Khantzian & Albanse, 2008). The application of TIC to SUDs treatment refrains from viewing the person as deficient in moral character or as lacking motivation, and re-frames the person's presentation as resulting from

unresolved psychological trauma. The application of TIC into treatment for SUDs promotes viewing the person as lacking a basic sense of safety and as challenged with his or her abilities to display adaptive functioning and employ accurate judgment, especially in emotionally charged situations. Drug and alcohol abuse is perceived as the person's attempt to cope with these deficiencies not in order to make the person "feel good" but in order to make the person feel "normal" -- or not to feel at all.

Persons diagnosed with co-occurring trauma and SUDs are at particular risk for being re-traumatized (van der Kolk, 2014). First, addiction in itself is highly traumatizing, exposing the person to life-threatening experiences and to severe disturbances. Second, both trauma and addiction adversely impact the person's ability to form safe and secure attachments (Siegal, 2010). Hence, the combined effect of CT with SUDs creates a snowball effect that leads to decreased functioning, reenactment, and an overall loss of a basic sense of safety and trust. This destructive cycle makes psychoactive substances catnip, and relapse a cure. Often times, this is the presentation of clients who are classified by professionals as problematic, defiant, resistant to treatment, or lacking motivation to change -- perceptions and views that further marginalize and re-traumatize survivors. TIC for social work practice with co-occurring trauma and SUDs deliberately avoids the use of marginalization and detrimental views of clients. Applying TIC requires assessing, diagnosing, perceiving, and approaching the most difficult client presentations through a thorough understanding of the impact of trauma and of CTT.

Conclusions and Implications for Social Work

Research findings concerning the relationship between CT and the subsequent underlying mechanisms contributing to the development of SUDs and to recovery from drug and alcohol addiction instigate a need for a comprehensive TIC model to guide clinical practices. An integrative TIC model is based on a sound theoretical foundation, cutting edge research findings, and clear targets for clinical intervention. Specifically, the relevancy of coping and resilience as curative factors to negate the impacts of CT hinder the development of SUDs, and are crucial in providing a sound base to TIC practices.

Treatment centers and programs for SUDs need to invest in training all personnel that are in direct contact with clients on the impact of trauma in order to apply a systematic trauma-informed therapeutic environment that is congruent with SAMHSA's (2015) guiding principles. Practicing in the field of addiction through the lens of TIC requires a shift in understanding the epidemiology of SUDs to include a consistent comprehension of the global impact of trauma, an ability to detect and determine the existence of trauma among diagnosed individuals, an integration of trauma-based knowledge and theory into policies and practices, and an active seeking to avoid re-traumatization of individuals (SAMHSA, 2015). Social workers need to be knowledgeable of the prevalence of CT among this clinical population and of the potential existence of CT history, especially among clients with challenging clinical presentations. Moreover, social workers need to deliver treatment interventions that are aimed at strengthening resilience and coping skills among clients. For example, integrating obtainable tasks and behavioral rewards that will mobilize clients to action such as: problem solving challenges; assuming responsibilities and roles within the residential treatment; and expanding communal connections by

volunteering or attending self-help meetings. Social workers whose practice involves atrisk and traumatized populations need to integrate trauma-informed practices that are focused on creating opportunities to develop and enhance coping skills and resilience into prevention and early intervention programs for youth. Finally, it is recommended for social work educational institutions to adequately train BSW and MSW students — especially those entering the workforce in the field of addiction, whether in direct practice, administration, or policy — in incorporating trauma-informed practices into prevention, assessment, and intervention in work with at-risk and clinical populations.

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Implementation of Trauma-Informed Care in a Housing First Program for Survivors of Intimate Partner Violence: A Case Study

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Abstract: The intersection of trauma with the need for safe, stable, sustainable, and long-term housing is important when working with survivors of intimate partner violence (IPV). IPV advocacy agencies are advised to use a trauma-informed approach to help practitioners understand the impact of IPV on individuals. Housing First, a model addressing homelessness that provides permanent housing without preconditions, has been found to increase housing stability for survivors of IPV. Thus, we used a case study approach to examine how practitioners and administrators implement trauma-informed care in a Housing First program for IPV survivors. Trauma-informed care principles and the Housing First model were found to be complementary. The majority of clients in this program retained housing up to 3-months after services ended and increased their safety and knowledge of domestic violence. Combining Housing First with trauma-informed care may increase success for survivors of IPV.

Keywords: Housing First; intimate partner violence; trauma-informed care

It is estimated that 35% of women have been abused by an intimate partner and approximately 24% have experienced severe physical intimate partner violence (IPV) in their lifetime (Black et al., 2011). Survivors of IPV commonly report experiencing psychological symptoms associated with trauma, such as depression, anxiety, fear, and PTSD symptoms (i.e., nightmares, avoidance, and dissociation; Black et al., 2011). Survivors of IPV have a multitude of needs (Allen, Bybee, & Sullivan, 2004), though housing has been reported by survivors as one of the most needed services upon exiting a violent relationship (Dichter & Rhodes, 2011). This is because IPV is associated with housing instability (Baker, Billhardt, Warren, Rollins, & Glass, 2010; Pavao, Alvarez, Baumrind, Induni, & Kimerling, 2007), which leads to homelessness (Baker et al., 2010). Women who exit violent relationships are at risk for housing instability due to economic dependence in their relationship (Postmus, Plummer, McMahon, Murshid, & Kim, 2012), lack of employment, economic disparities, and barriers to renting, such as poor credit or a criminal record (Baker et al., 2010). Thus, homelessness and housing instability for female survivors of IPV and their children are a primary concern among service providers (Macy, Giattina, Montijo, & Ermentrout, 2010).

The intersection of trauma and housing stability among women exiting (or seeking respite from) violent relationships is the focus of this research. Organizations providing services to survivors of IPV are encouraged to use a trauma-informed approach as a best-practice (Wilson, Fauci, & Goodman, 2015). There is evidence to suggest that a Housing

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First model may be a successful approach to address the housing needs of survivors of IPV who are seeking services from domestic violence agencies (Mbilinyi, 2015). Thus, the goal of this case study is to describe and examine the intersection of a trauma-informed care approach and a Housing First model within a single domestic violence program in the Southwest U.S.

IPV & Housing Instability

A woman's decision to leave her abusive partner is associated with more severe and frequent violence and is also a risk factor for homicide, making this a dangerous time in a survivor's life (Campbell, Glass, Sharps, Laughon, & Bloom, 2007). Traditionally, one of the primary interventions for survivors of IPV is the provision of emergency shelter. Shelters may reduce subsequent moderate and severe violence (Messing, O'Sullivan, Cavanaugh, & Campbell, 2016), providing women who leave an abusive partner a safe, temporary, and short-term place to stay where they can access IPV-related services, such as legal advocacy, education, and counseling (Baker et al., 2010). But all too often, women exiting emergency shelters are not transitioning to permanent housing (Sullivan, Basta, Tan, & Davidson, 1992). Requirements of longer-term transitional or permanent housing programs make it difficult for women with co-occurring issues, such as substance abuse or mental health diagnoses, to access these services (Baker et al., 2010).

An innovative approach to addressing the housing needs of survivors of IPV is a Housing First model that advocates for individuals who are experiencing homelessness to receive permanent housing in the community without preconditions, such as substance use or mental health treatment (Padgett, Henwood, & Tsemberis, 2015). The basic tenet of the Housing First paradigm is that clients' basic needs must be met (i.e., stable housing) before they can then focus on secondary needs (i.e., recovery; Schiff & Schiff, 2014). Once permanent housing is attained, supportive services are offered that clients can choose to access, but are not required to stay in the program (Padgett et al., 2015). Although Housing First has been successful as a model to address homelessness (Montgomery, Hill, Kane, & Culhane, 2013; Patterson et al., 2013), it is a relatively new approach to addressing the housing needs of survivors of IPV. The Washington State Coalition Against Domestic Violence implemented a Housing First approach in several agencies statewide (Mbilinyi, 2015). Upon evaluation, they found that the vast majority of survivors were able to achieve and retain permanent housing, even with the significant barriers to housing clients faced (i.e., unemployment, criminal records; Mbilinyi, 2015). Thus, a Housing First model may be a successful intervention for IPV survivors and, given the trauma caused by abuse, there is a need to elucidate the relationship between trauma-informed care and Housing First in an IPV setting.

Trauma-Informed Care & Housing First

The specific components of a trauma-informed approach in IPV intervention (Elliott, Bjelajac, Fallot, Markoff, & Reed, 2005; Wilson et al., 2015) have been conceptualized as six principles: emotional safety, client choice, domestic violence education, relationship development, using an intersectional approach, and a strengths-based perspective (Wilson et al., 2015). First, attending to a client's emotional safety is an important component of a

trauma-informed approach. Programs that are community-based and have flexible funding, such as Housing First, give survivors greater control over their environment by choosing where they live within the community; this may make them feel safe and minimize retraumatization.

IPV shelter services have been criticized for having strict rules (Arnold & Ake, 2013; McDermott & Garofalo, 2004), such as curfew and chores that can emulate the control of an abusive partner and limit client choice (Messing, Ward-Lasher, Thaller, & Bagwell-Gray, 2015; Stark, 2007). Client choice is a component of trauma-informed care in IPV settings, and Housing First models (with less restrictive rules and preconditions) have been found to increase clients' choice when compared to traditional interventions (Tsemberis, Gulcur, & Nakae, 2004). Another component of a trauma-informed care model is relationship development (Strand, Hansen, & Courtney, 2013; Wilson et al., 2015). Relationships between survivors and staff members should be collaborative (Elliott et al., 2005) and supportive (Wilson et al., 2015), which has been identified as a key component in a Housing First approach to survivors of IPV (Mbilinyi, 2015).

Domestic violence education is integral to strengthening coping skills within a traumainformed care model (Elliott et al., 2005; Wilson et al., 2015). Housing First complements this principle by meeting the housing needs of clients first, leaving them better able to focus on understanding IPV and developing coping skills (Mbilinyi, 2015). An intersectional approach to working with clients through culturally competent staff is another main component of trauma-informed services (Elliott et al., 2005; Wilson et al., 2015). Ethnic minority, immigrant, or lesbian women may not be comfortable seeking services from domestic violence shelters because of language barriers, the stigma associated with seeking services, or fear of discrimination (Baker et al., 2010). Therefore, community-based services may be a more comfortable option for women with marginalized identities. Within IPV intervention, Housing First models have been identified as culturally responsive due to the survivor-defined nature of the intervention (Mbilinyi, 2015). The final component of trauma-informed care is a strengths-based perspective that identifies client strengths and builds on them (Elliott et al., 2005; Wilson et al., 2015). The flexibility of a Housing First model allows practitioners to safety plan, resource creatively, and empower survivors using their existing strengths (Mbilinyi, 2015). Trauma-informed domestic violence programs and the Housing First model have the potential to support IPV survivors through the interconnection of the six principles within an evidence based practice framework (Strand et al., 2013).

Study Aims

Among survivors of intimate partner violence, the need for trauma-informed care and housing overlap. Yet, to our knowledge, there is no research to date specifically examining the intersection of trauma-informed care and Housing First models in a domestic violence agency. Thus, we aim to answer the question: How is trauma-informed care implemented within a Housing First model in a single domestic violence agency?

Method

Since the intersection of Housing First and trauma-informed care in IPV interventions is understudied, we used a case study research design and methodology (Yin, 2014). A case study is an ideal method of research when the purpose is to examine "a contemporary phenomenon in depth" (Yin, 2014, pp. 16). The unit of analysis in this research is one agency in the Southwestern U.S. that provides trauma-informed housing stabilization services for survivors of IPV using a Housing First model. In case study research, it is best to use multiple forms of data (Yin, 2014). Therefore, in 2015, we conducted qualitative interviews with agency staff, observed a staff meeting, and analyzed secondary client outcome data provided by the agency.

Study Site & Client Description

In 2014 and 2015, the agency served a total of 226 individuals (91 adults, 135 children) in their Housing First program. Approximately half of the clients in the program were Hispanic/Latino/a (n=114), 20% were Caucasian (n=45), 11% were African American/Black (n=25), 10% were unknown (n=22), and 9% were categorized as other (n=20). In 2014 and 2015, 135 clients "exited" the program. Of those, 111 were renting their own place, 20 were staying or living with a friend/family member, 3 owned a residence, and 1 was unknown. Based on the agency's survey data, 86-100% of clients were satisfied with the services that they received at the agency (average agreement rate of 97.1%). In 2014 and 2015, the average length of stay in the program was 11.3 months and 9.1 months, respectively. In general, the length of stay in the Housing First program is 9 months. However, the agency recognizes that some clients may need more time to reach self-sufficiency due to significant barriers (i.e., documentation status) and will adjust clients' length of stay in the program on a case-by-case basis.

Participants

The participants in this study were seven employees of the agency (administrators n=3, practitioners n=4) who work directly with the Housing First program. All participants were female. On average, participants had slightly more than 4 years of experience working with domestic violence survivors and just under 4 years of that experience was with this agency. The education level of participants varied from high school completion to graduate degree. Two of the administrators held Master's degrees while one had a Bachelor's degree. Two practitioners had Master's degrees, one had a Bachelor's degree, and the other had completed high school.

Data Sources

Data from study participants were collected through interviews and direct observation of a staff meeting. Qualitative interviews were conducted using a semi-structured interview guide, were audio recorded, and on average 1-2 hours long. For administrators, questions focused on the program's mission, goals, and client outcomes. The interview guide for practitioners focused on examining their direct practice with clients of the agency (see Table 1 for sample questions from the interview guide). The qualitative interview audio

files were first transcribed by the research team then transferred to Dedoose (2016) for analysis. Codes were developed based on the study aims and propositions (Yin, 2014). Each transcript was coded independently by two members of the research team for interrater reliability. One member of the research team attended an agency staff meeting and took detailed notes.

Table 1. Sample Interview Questions

<u>Administrators</u>	<u>Practitioners</u>
• What is the mission of the program?	Can you describe your work here at the
• What is the philosophy or theoretical	agency?
framework?	• Can you tell me a success story?
• What is a typical client for the agency?	Can you tell me about a time where these
What considerations are made when	services were not helpful?
locating housing for a client?	What considerations are made when
	locating housing for a client?

Data from the agency's clients was pre-existing, de-identified data collected by the agency between 2014 and 2015. These data consisted of basic information including age, gender, ethnicity, and exit destination. The agency's client data also consisted of responses to a quarterly survey administered by the agency that included statements related to client knowledge of domestic violence, client self-esteem, client safety, knowledge of community resources, and client perception of the program (see Table 2 for sample agency survey items). Client responses were reported as "agree" or "disagree" by the agency. The agency provided us with the total number of surveys completed and the survey responses tallied by quarter. In order to assess client outcomes using these pre-existing agency data, we averaged the percent of client agreement to each statement across quarters. The agency reported 67 responses to the survey, but could not provide information about whether clients responded multiple times or the response rate.

Table 2. Survey Distributed by the Agency: Sample Items

Domestic Violence Education/Knowledge

- My child(ren) better understand domestic violence since receiving services
- My knowledge about DV and its effects on my life has increased since receiving services
- I better understand how domestic violence has affected my child(ren) since receiving services

Self-esteem/Self-efficacy

- My child(ren) has an increased sense of self-esteem since receiving services
- I feel that I am (re)gaining control of my life after receiving services
- I feel more self-sufficient after receiving services

Safety

- My child(ren) better understand how to stay safe since receiving services
- My safety has improved since receiving services
- My knowledge of how to plan for my safety has increased since receiving services

Community Resources

- My knowledge of how to access short and long term resources available to meet my needs has increased
- My knowledge of community resources and services has increased since receiving services

Program

- I am satisfied with the services my child(ren) received
- I feel that I met at least one goal on my case plan
- I am satisfied with the services I have received at [the agency]

Results

The results are organized to primarily highlight the data collected during qualitative interviews with participants (agency practitioners and administrators), while observational data and data from the survey distributed by the agency to their clients are supplemental.

Connecting Trauma and Housing

Participants recognized that, in order for their Housing First program to be trauma-informed, they need to connect trauma with housing stabilization services and interventions. One administrator stated, "All of our services are provided with the knowledge that trauma impacts people's lives and thus their behavior." The connection between trauma and housing was further described: "...another component that plays into the process of looking for permanent housing is also working through their trauma of what housing has looked like in the past and what housing will look like once they're on their own..." Specifically, participants connected housing and trauma by assessing physical and emotional safety and understanding how housing can "trigger" survivors of IPV, or lead to a memory or flashback of their trauma. Practitioners discussed the location of client housing in relation to where their abuser and/or his family live; they also consider characteristics of the neighborhood that may provide emotional and physical safety. For example, one practitioner reported:

So, things that we look at are: What area of town is safe?...If you go to the grocery store, are you going to run into him, or family or friends...We look at do they have access to a bus?...Is it going to be a mile walk without street lights that they have to come home to at night?

Because of the need for emotional and physical safety, the agency needs a wide network of landlords in all areas of town in order to accommodate a survivor's location preference. The vast majority (91-100%) of clients agreed that their safety had improved since receiving services (average agreement rate of 98.9%).

Housing can also create feelings of isolation or be a reminder of financial abuse based on a survivor's experience of IPV. Thus, practitioners need to assess for things such as:

Was [abuser] withholding the food stamps or money to get food? Or was it that he was like 'Let's just go shopping and buy everything' at the beginning of the month and then at the end of the month you guys have nothing.

With the knowledge that housing and associated housing issues can be triggering, practitioners must prepare and assist clients in learning new coping strategies.

Trauma-Informed Interventions

All participants said that, to be trauma informed, it was necessary to provide emotional support to survivors: "...provid[ing] the emotional support and [domestic violence] education to help them continue on their healing process." Practitioners dedicated specific counseling sessions to "processing abuse...[and] their emotions around it and offering support around that." One practitioner discussed the importance of survivors processing the loss that is associated with their experience: "Being able to grieve the loss of the relationship and... live with those feelings and not feeling guilt and not wanting to return..." Some practitioners described their use of role-play as a way to provide support and prepare clients for a time when they may need to engage with their abusers. One practitioner stated that she uses "emotional safety planning where they have to [role play] a conversation with their abusers or exchange an email and what that could look like." The agency also provides specific social work interventions with a trauma-informed approach, such as motivational interviewing, and refers clients to other community agencies that provide trauma-specific interventions.

The majority of participants talked about the need to educate survivors about how trauma impacts their emotions and behavior. Both administrators and practitioners said that domestic violence education was crucial to understanding the triggers associated with trauma and housing, and is an important part of helping survivors develop coping skills. One administrator discussed an "emergency self-care plan" the agency uses to assist with this process:

[It] identif[ies] all of the things that might become triggering for them and identif[ies] how that looks, how that might play out, how that has played out in the past, to be able to identify 'right now I'm in a crisis', 'right now I'm experiencing a panic attack' and then being able to identify the way that they can self-soothe.

It is also important to incorporate interventions that include education for the entire family about the impact of IPV. Practitioners discussed helping survivors process their children's behavior and assisting them in differentiating when the behavior is associated with trauma and when the behavior is "just age-appropriate." According to the client surveys administered by the agency, 91-100% of survivors agreed that their knowledge of domestic violence increased since receiving services (average rate of agreement 98.9%). However, there was a wider range of agreement when assessing their children's knowledge of domestic violence (50-100%; average rate of agreement 92.9%).

Engagement

Engagement with the staff and the program is an integral aspect of relationship development within the trauma-informed care principles. An administrator defined engagement as: "[a] therapeutic concept that it's the relationship that gets you to the outcomes. So [practitioners] focus [on] the relationship that they build with the [client]." Every participant (administrators and practitioners) discussed the concept of client

engagement in the program as necessary to success. One administrator illustrated how trauma can impact a client's willingness to engage with a practitioner: "So, sometimes keeping people at a distance keeps [the client] safe, because [they] don't hurt. And so, [they] might not want to necessarily engage when [they're] not feeling quite safe." On the other hand, this initial skepticism may indicate healthy boundaries, a component that is taught in this trauma-informed care model. Open and honest communication between the client and the practitioner was identified by all participants as a key aspect of engagement and relationship development. Practitioners identified engagement as a partnership between them and the client and pointed out that facilitating this level of engagement "start[s] with me...being honest to them." In a trauma-informed care model, it is important for practitioners to remember how trauma impacts a client's willingness to engage:

In a lot of situations, they couldn't talk to anybody, because they were isolated. Or if they said something to their abuser, like expressed how they felt or their thoughts, it could lead to them getting further abused or talked down to or whatever.

According to practitioners and administrators, engagement with clients (or the relationship between clients and practitioners) directly impacts client outcomes. One administrator said that engagement is "...being authentic, genuine, honest, loving, caring, compassionate, unconditional...those are the, like, core pieces of the model that I think is where [clients] find the success." Building relationships with staff is seen as a core component of trauma-informed intervention:

To be able to build that relationship with the [client] to feel trust, to explore reasons why they're doing certain things or feeling certain things. Because if you don't have that good relationship with somebody and that ability to have open and honest conversations and to look at those deep-rooted issues of domestic violence and how that's playing out in their life, those barriers will continue to overcome, no matter how many resources, housing, subsidies you throw at them.

Engagement with the program is needed from clients, staff, and administrators for success. Practitioners discussed the importance of their own engagement in open and honest communication with the program, their peers, and their supervisors. This was described as facilitating a culture where it is acceptable for practitioners to ask for help: "that open and honest communication, like being able to be honest and say like 'I am burnt out right now. I need help. I need a different perspective on this situation.""

Engagement also extends to family and friends. Survivors commonly begin to evaluate their relationships with others based on their abuse experience and what they learn in the program: "We often hear [clients] start thinking about it very differently in the sense of like 'I recognize this person did this and I recognize that it looked like something that I've experienced in the past." From a trauma-informed approach, the staff conceptualizes this as an opportunity:

... to discuss the logistics of that relationship and whether it's healthy or not and talk about what... [abuse] looked like in the past and what they're doing right now

and how hard they're working right now in thinking about what they want to do for their future.

Being a Trauma-Informed Agency

This agency stressed that being trauma-informed includes providing training and selfcare for practitioners. Administrators discussed training their staff on how trauma can impact a survivor's participation in the program and their decision making:

A [client] may not be able to follow through with something, an interview or something they said they were going to work on, and how can we ... look at and pay attention to the reality that there might be something underlying that, rather than 'I just don't want to do it' or 'I just didn't have time'.

One of the primary features of a Housing First model is the exclusion of preconditions for enrollment into the housing program (i.e., substance use, mental health treatment). Thus, it is important that staff is educated about the connection between trauma, substance misuse, and IPV:

In terms of substance abuse, our philosophy here at [the agency] is that we understand that many people cope with their abuse through substance abuse to help numb out the feelings, to help escape those feelings. And it could be part of their abuse that their abuser made them use in order to stay weak, you know, not clear-minded.

Employee self-care is a major part of being a trauma-informed agency. One administrator said, "...to be a trauma-informed organization, like you have to take care of your staff the way you take care of your clients, because what's good for them is good for us." Each practitioner spoke about the agency encouraging time-off and taking care of themselves individually and as a group. This was exemplified by one practitioner:

Our supervisors' are super supportive about whatever it is we need, whether it's a day or days...or an afternoon. And what we usually try to do at least once a month...is what we call a Restorative Meeting, when we'll ...meditation or we'll do ... self-care activities ... So those are always really helpful.

This was evident within the agency culture. For example, during the staff meeting that was observed, "Self-care was encouraged for both [clients] and staff."

Discussion

The intersection of trauma-informed care and Housing First has the potential to improve the lives of IPV survivors who are at risk for homelessness. Considerations of safety and trauma are an integral component of a program that locates permanent housing for IPV survivors. One of the main findings of this study was the need for emotional safety when locating housing for a survivor of IPV. Any practitioner assisting survivors of IPV with obtaining permanent housing from a trauma-informed perspective needs to ensure that the environment is both physically and emotionally safe. A Housing First program can create this safe space by asking clients where in the community they would feel the safest.

Survivors of IPV have reported both costs and benefits to seeking safety (Thomas, Goodman, & Putnins, 2015). A housing risk assessment may be a useful intervention to assess a client's level of risk for further violence, allowing a survivor to make an informed decision about available housing options. Current housing assessment tools, such as the Service Prioritization Decision Assistance Tool (SPDAT)/Vulnerability Index - Service Prioritization Decision Assistance Tool (VI-SPDAT) help agencies determine individual's or family's eligibility and urgency for housing assistance (OrgCode Consulting, 2017), but have not been identified as helpful tools for assessing risk for further violence in relation to housing needs. Other tools commonly used by housing agencies are self-sufficiency matrices (SSMs), which have a dual purpose of assisting practitioners with goal-setting based on their clients' needs and evaluating progress in goal-attainment (Richmond et al., 2015). SSMs often include a domain to assess family relations and/or functioning (i.e., Culhane, Gross, Parker, Poppe, & Sykes, 2008), however, there are few that are evidencebased (Richmond et al., 2015). The use of risk assessment, such as the Danger Assessment, within an evidence based practice framework to assess a client's level of risk for revictimization or lethality (Campbell, 2003; Messing & Thaller, 2015) could be used when safety planning and considering various available housing options, while taking into account her risk.

Domestic violence practitioners working in Housing First programs should consider that trauma related to a prior history of financial abuse may be triggered by financial assistance during stabilization in independent housing. Survivors of IPV commonly experience financial abuse such as their partner withholding money or giving them a weekly allowance (Postmus et al., 2012). Practitioners in a Housing First program can assess survivors' experience with financial abuse and can provide interventions aimed at improving survivors' financial literacy and increasing economic self-sufficiency, which are both associated with economic empowerment (Postmus, Plummer, McMahon, & Zurlo, 2013). The experience of financial abuse may be different for immigrant women who have additional barriers to work due to language, documentation status, and oppression (Ayon, Messing, Gurrola, & Valencia-Garcia, in press). Thus, cultural competency, which is necessary to understand IPV from the perspective of a survivor with a marginalized identity, is central to the trauma-informed care approach and should be explored in future research.

A trauma-informed care approach is more than providing trauma-informed care services for clients; it means having a trauma-informed care approach for practitioners as well. Social work practice with survivors of IPV is emotional work and practitioners risk burnout and secondary traumatic stress (Powell-Williams, White, & Powell-Williams, 2013; Strand et al., 2013). Similar to previous research (Slattery & Goodman, 2009; Strand et al., 2013), practitioners highlighted the positive impact of the agency's supportive culture and prioritization of self-care for practitioners individually and as a team. Using a trauma-informed care model in services not only benefits clients but can also increase worker satisfaction (Kulkarni, Bell, & Rhodes, 2012).

A Housing First model combined with a trauma-informed care approach has the potential to increase worker satisfaction by providing workers with flexibility and mobility to meet with survivors in their community (Mbilinyi, 2015). IPV practitioners have

reported frustration and a lack of feeling successful in their jobs when survivors return to their abuser (Powell-Williams et al., 2013). Permanent, safe housing that allows women to remain free from their abuser may have the added benefit of increasing job satisfaction for practitioners (Mbilinyi, 2015). Returning to an abusive partner was not reported among clients in this program. Longitudinal research to examine the sustainability of housing and survivors' relationship status after completion of Housing First programs in domestic violence agencies is needed.

Strengths and Limitations

This research examines the intersection of trauma-informed care in a Housing First model for IPV survivors. Our analysis is limited due to the focus on a single program within a single agency; although the agency has other programs (i.e., shelter, community based services), those were not the focus of this inquiry. This limitation is offset by the strength of the case study design which allows an in-depth examination of a unique intervention for IPV survivors. Additionally, the use of multiple forms of data in the analysis adds to the rigor of the study, including the dual perspective that was offered by data collected from both practitioners and administrators. Because this is based primarily on workers' perspectives, we do not know if the clients would report the same. Workers may also feel compelled to speak positively of their organization in an effort to highlight the good in their program, a form of respondent bias (Padgett, 2008).

A major limitation of this study is the methods that the agency uses to evaluate client outcomes. The data were not available in their raw form. Thus, we did not know response rates, whether clients took the surveys multiple times over multiple quarters, how long clients completing the surveys had been receiving services, or which phase of the program the clients were in when they completed the survey. The race/ethnicity of survivors who completed the surveys is unknown as well as whether the survey was completed in languages other than English. When examining agencies that are providing innovative services, ideally researchers would have collected both qualitative and quantitative data directly from the clients receiving services from that agency.

Suggestions for Future Research

Additional research with this agency and with agencies providing services to survivors of IPV through a Housing First model is needed. In particular, researchers need to continue to explore how trauma-informed care and Housing First models impact worker satisfaction, burnout, and secondary traumatic stress. Additionally, future research should include longitudinal, quantitative studies examining both survivor and child outcomes related to housing, trauma symptomatology, and survivor-defined services. Future research should also connect forms of abuse, risk, coping, and trauma with specific outcomes to understand for whom Housing First services are most appropriate. Research examining trauma informed care approaches in other IPV service settings is also of import to understand the intersection of trauma informed care approaches with more traditional IPV services (residential settings, for example).

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Interdisciplinary Issues at the Intersection of Assessing and Treating Substance Use Disorders and Post Traumatic Stress Disorder: Clinical Social Work and Clinical Behavioral Analysis with Veterans

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Abstract: Veterans and military personnel may be at higher risk for developing addictions due to increased prevalence rates of co-occurring mental health disorders including posttraumatic stress and substance abuse disorders. However, clinicians may feel unprepared to assess and to treat these co-occurring disorders, especially when it includes a behavioral addiction such as gambling. Clinical social work and clinical behavior analysis are two fields with complementary interdisciplinary approaches that can lead to improved client-centered outcomes. Yet, limited evidence exists to guide interdisciplinary treatment teams in effective treatment of gambling addictions and Post Traumatic Stress Disorder (PTSD). The current article provides an interdisciplinary treatment model to assist clinicians in selecting appropriate evidence-based assessments and treatments. A case example focuses on the use of assessment tools and treatment approaches drawn from recommendations from best practice guidelines for veterans. Finally, resources related trauma and addictions are presented.

Keywords: Post traumatic stress disorder; substance-related disorders; gambling; veteran; United States Department of Veterans Affairs; social work; behavioral disciplines and activities

In 1989, the National Associations of Social Work (NASW) Standards for the Practice of Clinical Social Work defined clinical social work by an emphasis on the process of assessment, diagnosis, intervention, treatment, collaboration, case management, and evaluation of the psychosocial functioning of individuals, families, and small groups (NASW, 1989). As this standard is currently undergoing revision, it can be expected that the collaboration aspect will expand to encompass more modern views on interdisciplinary collaboration with other allied health professions, namely those with similar traditions, theoretical perspectives, and methods. Once such discipline is clinical behavioral analysis. Clinical behavioral analysis is defined as a professional practice that utilizes a similar individually-focused process model to examine, assess, measure, and treat a problematic human behavior. While the main tool is a functional analysis of the behavior, clinical behavioral analysts examine the biological and social forces that impinge on an individual and apply behavioral, cognitive behavioral, and other behavioral medicine methods to instigate change (Association for Behavior Analysis International, 2017).

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With such common ground as the person-in-environment theoretical perspective, clinical social work and behavior analysis have a special interdisciplinary connectedness that can be helpful in addressing and treating complex behavioral issues. Both disciplines subscribe to a process model for clinical practice that includes five steps (Wilson & Matthieu, 2015). The steps are: 1) identification of clinically relevant target behaviors; 2) use of reliable and valid measurements; 3) relationship between target behaviors, measures, and treatment; 4) data-based treatment decisions; and 5) social validity of treatment process and outcomes.

At present, there are a number of clinically relevant areas of overlap between the two disciplines that are not well known. Some however, are gaining more notice and relevance for extremely high-need clients with behavioral issues, such as children with Autism and individuals with complex clinical presentations requiring behavior based interventions, such as veterans with Post Traumatic Stress Disorder (PTSD) and co-occurring substance use or gambling disorders.

As the Department of Veterans Affairs (VA) expands services to the newest generation of veterans and continues to serve all veterans from military discharge to death, there is a growing need for community providers to understand, address, and treat the biopsychosocialspiritual aspects trauma. While the health and psychosocial needs of veterans are paramount, clinicians need to ensure they have the competencies to support shared decision-making, patient-centered care, and collaborative case management of veteran clients who seek services both in the community and in the VA health care system. In this way, interdisciplinary collaboration, such as that between clinical social work and clinical behavior analysis, can lead to significant client-centered outcomes and changes in health behaviors (Wilson & Matthieu, 2015). While there are also many barriers to treatment in the community and the VA such as client follow-through, mutual agreement on target behaviors (e.g., who decides on the target behavior during treatment?), and clinician 'choice' of intervention selection when co-occurring conditions are present (e.g., treatment of what condition is primary?), the use of evidence based behavioral practices joins these professionals in the pursuit of psychosocial recovery for complex conditions such as PTSD, substance use, and addictions.

Specific Aims

The aim of this paper is to provide a framework for clinicians to effectively, and collaboratively, assess and treat PTSD and substance use disorders, in particular gambling. This manuscript will outline a model for interdisciplinary practice to assist social work, behavioral analysis, and other allied health clinicians working with addictions and traumarelated symptoms in selecting appropriate evidence based assessments and treatments. Further, a case example focused on the use of these assessment tools and treatment approaches drawn from recommendations from best practice guidelines from the Department of Veterans Affairs/Department of Defense (DVA/DoD) Clinical Practice Guidelines will be presented for veterans with PTSD and addictive behaviors. Finally, resources related to the training of interdisciplinary treatment teams on trauma and addictions, particularly for behavioral additions such gambling, will be presented.

Overview of Gambling and Substance Use Disorders

Gambling is one of the most frequent activities that people engage in around the world. Raylu and Oei (2002) defined gambling as placing value upon a game/event or a bet of any type that has an unpredictable outcome, and in which the result to some magnitude is determined by chance. Gambling occurs in many different forms to include cards, sports betting, casinos, etc. and is participated in widely across socioeconomic levels. Research has demonstrated that gambling was a frequent occurrence in the earliest of societies, and modern games of chance have evolved from the games once played by our ancestors (Bolen & Boyd, 1968). In the United States, as in many countries, individuals gamble on games and events, and most do so without experiencing problems. Numerous people play games of chance for recreation, however, for some individuals, gambling becomes problematic.

Previous editions of the Diagnostic and Statistical Manual (DSM IV) (APA, 1994, p. 615) defined pathological gambling as a progressive and chronic disorder that encompasses an unrelenting failure to resist impulses to gamble and where this "maladaptive behavior disrupts, or damages personal, family, or vocational pursuits." The negative impact that individuals experience is far reaching. Pathological gamblers have high rates of co-occurring disorders, including mood, personality, and substance use disorders (Kessler et al., 2008; Petry, Stinson, & Grant, 2005).

The most recent update, DSM V, changed the way pathological gambling is classified. Pathological gambling is no longer viewed as an inability to resist impulses, but rather a substance use disorder (SUD), specifically named, gambling disorder. DSM V (APA, 2013, p. 586) states that "although some behavioral conditions that do not involve ingestion of substances have similarities to substance-related disorders, only one disorder—gambling disorder—has sufficient data to be included in this section." With regard to gambling being classified as a disorder that is included in this section with substance use, the DSM V (APA, 2013) provides criteria and organization for the associated symptoms. Additionally, DSM V (APA, 2013) now provides specific diagnoses associated with this substance class with regard to SUD. Ten substance classes, relevant to SUD, are highlighted in the DSM V chapter. A side by side comparison of a substance related disorder, alcohol use disorder, and a non-substance related disorder, gambling disorder (GD), highlights the parallel in behavioral symptoms and thus, clarifies the rationale for including GD in the SUD discussion. (See Table 1).

When comparing to the criterion, the rational for including GD in the SUD section of the DSM V becomes evident. For example, SUD criterion states that "the individual may express a persistent desire to cut down or regulate substance use and may report multiple unsuccessful efforts to decrease or discontinue use" (APA, 2013, p. 483). Furthermore, "the individual may spend a great deal of time obtaining the substance, using the substance, or recovering from its effects" (APA, 2013, p. 483). Similarly, individuals who experience GD "need(s) to gamble with increasing amounts of money in order to achieve the desired excitement, has made repeated unsuccessful efforts to control, cut back, or stop gambling, is often preoccupied with gambling" (APA, 2013, p. 585). While diagnostically similar, clinicians with familiarity with the diagnostic criteria now have the foundational knowledge to begin to identify GD, however additional training in a clinical process that

blends identification, assessment, and treatment may be necessary to ensure competency when gambling may co-occur with other conditions.

Table 1. Comparison of Diagnostic Criteria for Gambling and Alcohol Use Disorder.

Gambling Disorder Criteria

- A. Persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress, as indicated by the individual exhibiting four (or more) of the following in a 12-month period:
- Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
- 2. Is restless or irritable when attempting to cut down or stop gambling.
- 3. Has made repeated unsuccessful efforts to control, cut back, or stop gambling.
- 4. Is often **preoccupied** with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble).
- 5. Often gambles when feeling distressed (e.g., helpless, guilty, anxious, depressed).
- 6. After losing money gambling, often returns another day to get even ("chasing" one's losses).
- 7. Lies to conceal the extent of involvement with gambling.
- 8. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.
- Relies on others to provide money to relieve desperate financial situations caused by gambling.

Alcohol Use Disorder

- A. A problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:
 - 1. Alcohol is often taken in larger amounts or over a longer period than was intended.
 - 2. There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.
 - A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects.
 - 4. Craving, or a strong desire or urge to use alcohol.
 - 5. Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home.
 - Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol.
 - Important social, occupational, or recreational activities are given up or reduced because of alcohol use.
 - 8. Recurrent alcohol use in situations in which it is physically hazardous.
 - 9. Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol.
 - 10. Tolerance, as defined by either of the following:
 - a. A need for markedly increased amounts of alcohol to achieve intoxication or desired effect.
 - b. A markedly diminished effect with continued use of the same amount of alcohol.
 - 11. Withdrawal, as manifested by either of the following:
 - a. The characteristic withdrawal syndrome for alcohol (refer to Criteria A and B of the criteria set for alcohol withdrawal, pp. 499–500).
 - b. Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms.

Gambling Disorder Criteria	Alcohol Use Disorder
B, The gambling behavior is not better explained by a manic episode.	
Specify if:	Specify if:
 Episodic: Meeting diagnostic criteria at more than one-time point, with symptoms subsiding between periods of gambling disorder for at least several months. Persistent: Experiencing continuous symptoms, to 	In a controlled environment: This additional specifier is used if the individual is in an environment where access to alcohol is restricted.
meet diagnostic criteria for multiple years.	G 10 10
	 Specify if: In early remission: After full criteria for alcohol use disorder were previously met, none of the criteria for alcohol use disorder have been met for at least 3 months but for less than 12 months (with the exception that Criterion A4, "Craving, or a strong desire or urge to use alcohol," may be met). In sustained remission: After full criteria for alcohol use disorder were previously met, none of the criteria for alcohol use disorder have been met at any time during a period of 12 months or longer (with the exception that Criterion A4, "Craving, or a strong desire or urge to use alcohol," may be met).
Specify current severity:	Specify current severity:
• Mild: 4–5 criteria met.	• 305.00 (F10.10) Mild: Presence of 2–3 symptoms.
• Moderate: 6–7 criteria met.	• 303.90 (F10.20) Moderate: Presence of 4–5
• Severe: 8–9 criteria met. Note. DSM-V Criteria summarized from the American Psych	symptoms. • 303.90 (F10.20) Severe: Presence of 6 or more symptoms.

Screening Brief Intervention and Referral to Treatment

manual of mental disorders (6th ed.). Washington, DC: Author. Bold indicates similarity of criteria.

As noted earlier, there are five phases to interdisciplinary treatment from a clinical social work and clinical behavioral analysis perspective (Wilson & Matthieu, 2015). The focus here is now on the first two phases of that model, the identification of clinically relevant target behaviors and the use of reliable and valid measurements. As one example of an evidence based process, the Substance Abuse and Mental Health Services Administration (2016) describes Screening, Brief Intervention, and Referral to Treatment (SBIRT) as a sequential assessment and referral approach to the delivery of early intervention and treatment to individuals with substance use disorders and those at risk of developing these disorders. Screening quickly assesses the severity of substance use using a standardized assessment instrument and identifies the appropriate level of treatment. Brief intervention focuses on increasing insight and awareness regarding substance use and eliciting motivation toward behavioral change. Referral to treatment provides those identified as needing more extensive treatment with access to specialty care. Gambling as

an additional substance use disorder can be easily integrated into this protocol, with the addition of appropriate gambling screening measures (which will be discussed later) and community referrals located for gambling treatment.

Protocols for Assessing PTSD and Substance Use Disorders in Veterans

Clinical practice guidelines (CPG) are guiding principles that include evidence based treatment recommendations intended to enhance the quality of care that individuals receive. The guidelines are built upon the knowledge gained through systematic reviews and meta-analysis of evidence, and assessments regarding potential benefits and risks of alternative interventions. Clinicians utilize CPG's in order to apply the best available evidence supported interventions and to make informed clinical decisions (DVA/DoD, 2015; DVA/DoD, 2017). Additionally, CPG's often include decision aids or clinical tools that provide a flow chart, or an algorithm, aimed at selecting the most appropriate clinical intervention for a situation. As defined, a clinical algorithm is a diagram that utilizes a step-by-step decision tree approach in order to assist a clinician in the decision making process (DVA/DoD, 2015; DVA/DoD, 2017. Symbols are used to display each step in the process, and arrows connect numbered decision points that indicate the order and direction the steps in the decision process should be made. For example, "if symptoms x and y are present, then use intervention z". What follows are summaries of the CPG's utilized by the DVA/DoD for the management of PTSD and SUD.

The DVA/DoD Clinical Practice Guideline for Management of Substance Use Disorder (December, 2015) is designed to assist providers in managing or co-managing patients with SUD. The patient population of interest for this CPG is adults who are eligible for care in the VA and DoD healthcare delivery systems that includes veterans, as well as, deployed and non-deployed military service members. As such, it does not provide recommendations for the management of SUD in children or adolescents. This CPG includes an algorithm, a step-by-step decision tree, which is designed to facilitate understanding of the clinical pathway and decision making process used in management of SUD. Standardized symbols are used to display each step in the algorithm, and arrows connect the numbered boxes indicating the order in which the steps should be followed. The CPG includes Algorithm A: Screening and Treatment, and Algorithm B: Stabilization. Although GD is included in the SUD section of DSM V, GD is not included in this CPG. With regard to other co-occurring conditions, this CPG notes that "of those with an SUD diagnosis, 55-75% also received diagnoses for PTSD or depression" (p. 9).

The DVA/DoD Clinical Practice Guideline for Management of PTSD (ver 2.0, 2010) is relevant to all healthcare professionals who are providing or directing treatment services to patients with a history of trauma exposure. Post-traumatic stress is one disorder along a spectrum of anxiety disorders that focus on the individual's stress reaction to the trauma. These disorders are arranged along a temporal axis, from Acute Stress Reaction, to Acute Stress Disorder, Acute PTSD, and Chronic PTSD. Each of these may be associated with serious mental and physical co-occurring conditions. Some trauma survivors may experience only a part of this spectrum, while others may progress through the entire range, requiring different types of treatment along this temporal sequence. Algorithms included in this CPG are Core Algorithm: Initial Evaluation and Triage, Algorithm A: Acute Stress

Reaction/Disorder Prevention of PTSD, Algorithm B: Assessment and Diagnosis of PTSD. This CPG (p. 90) identifies a documented and strong relationship between co-occurring PTSD and SUD, and recommends that all individuals with a diagnosis of PTSD should receive comprehensive assessment for SUD. However, in this CPG as the one previous, gambling is not included.

Screeners

The complexity of symptoms associated with co-occurring disorders often make the task of diagnosis difficult resulting in people receiving treatment for one disorder and not another. However, if a problem is not identified, one can expect that it will not receive the appropriate clinical attention. The importance of screening for co-occurring disorders is difficult to overstate. The following section identifies assessment measures that are utilized in the domains of PTSD, hazardous drinking or active alcohol use disorders, and severity of gambling symptoms. The list in Table 2 is not exhaustive and yet includes some strong, well-established screening measures.

Table 2. Short Screening Instruments for PTSD, Alcohol, Drug, and Gambling Disorders

Measure	# of items	<u>Domain</u>	<u>Website</u>
Primary Care PTSD Screen (PC-PTSD- 5)	5-item	PTSD	Prins, A., Bovin, M.J., Smolenski, D.J. et al., 2016; http://www.ptsd.va.gov/professional/assessment/screens/pc-ptsd.asp
AUDIT-C	3-item	Hazardous drinkers or active alcohol use disorders	http://www.integration.samhsa.gov/i mages/res/tool auditc.pdf
DAST-10	10-items	Drug use (not including alcohol)	http://www.integration.samhsa.gov/cl inical-practice/screening-tools
Brief Biosocial Gambling Screen (BBGS)	3-item	Gambling	Contact author.
South Oaks Gambling Screen (SOGS)	20-item	Gambling severity	http://www.ncrg.org/sites/default/file s/uploads/docs/monographs/sogs.pdf

Note. Many assessment measures can be obtained at the National Center for PTSD by completing the request form located at http://www.ptsd.va.gov/professional/assessment/ncptsd-instrument-request-form.asp

The Primary Care PTSD Screen (PC-PTSD; Prins et al., 2003), is a 4-item screener that was designed for use in primary care and other medical settings, and is currently used to screen for PTSD in veterans using VA health care. The screen includes an introductory sentence to cue respondents to traumatic events and asks about four main clusters of symptoms. A DSM V revised version of the PC-PTSD has been developed with 5 items (Prins et al., 2016) and will be available from the NC-PTSD website once it is validated and ready for wide scale dissemination (NC-PTSD, 2016).

The AUDIT-C (Bush, Kivlahan, McDonell, et al., 1998) is a three item alcohol screener that can help identify persons who are hazardous drinkers or have active alcohol

use disorders. The AUDIT-C is a modified version of the 10 question AUDIT instrument and is available for use in the public domain.

DAST-10 (Skinner, 1982) is a 10 item screener related to an individuals' possible involvement with drugs, not including alcoholic beverages, during the past 12 months which is adapted from the full 28 item DAST screen. "Drug abuse" refers to (1) the use of prescribed or over-the-counter drugs in excess of the directions, and (2) any nonmedical use of drugs. The various classes of drugs may include cannabis (marijuana, hashish), solvents (e.g., paint thinner), tranquilizers (e.g., Valium), barbiturates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD) or narcotics (e.g., heroin).

The Brief Biosocial Gambling Screen (BBGS; Gebauer, LaBrie, & Shaffer, 2010) is a 15-item screening tool targeting past year experiences of withdrawal, deception, and bailout related to gambling behaviors. To date, no research has been conducted on the clinical validity or reliability (see also Volberg & Williams, 2011). Gambling proclivity is assessed using the South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987), where scores of 5 or higher indicate disordered or pathological gambling. Gambling severity is assessed using the Gambling Severity Assessment Scale (GSAS). Function of gambling play is also assessed using the Gambling Functional Assessment II (GFA-II; Dixon, Wilson, Belisle, & Schrieber, under review).

Table 3. Evidence Based Treatments Recommended in Publically Available Clinical Practice Guidelines for Trauma, Substance Use and Gambling Disorders

Domain	Treatment Treatment	Publically Available Clinical Practice Guidelines
PTSD	Prolonged Exposure	http://www.healthquality.va.gov/guidelines/MH/pts d/
	Cognitive Processing Therapy	http://www.healthquality.va.gov/guidelines/MH/pts d/
	Eye Movement Desensitization and Reprocessing	http://www.healthquality.va.gov/guidelines/MH/ptsd/
	Stress Inoculation Therapy	http://www.healthquality.va.gov/guidelines/MH/pts d/
SUD	Cognitive-Behavioral Coping Skills Therapy	http://www.healthquality.va.gov/guidelines/mh/sud/index.asp
	Community Reinforcement Approach	http://www.healthquality.va.gov/guidelines/mh/sud/index.asp
	Motivational Enhancement Therapy	http://www.healthquality.va.gov/guidelines/mh/sud/index.asp
Gambling	Cognitive Behavioral Therapy	https://store.samhsa.gov/shin/content/PGKIT- 07/PGKIT-07-03.pdf
	Acceptance and Commitment Therapy	https://www.guideline.gov/summaries/summary/39 327

Note. A listing of all current and updated DVA/DoD Clinical Practice Guidelines can be found at http://www.healthquality.va.gov

Overview of Evidence Based Treatments for Veterans

As noted in Table 3, there are a variety of evidence based treatments for PTSD, substance use, and gambling disorders, noted in the DVA/DoD Clinical Practice Guidelines for PTSD and substance use. Given that veterans have high rates of co-occurring PTSD and substance use disorders, the guidelines recommend treatments for each condition separately. However, in both of these guidelines, when conditions of PTSD and substance use co-occur, the recommendations include standardized assessments of both conditions and using a shared decision making process to prioritize care when recovery is emerging. Yet in both, gambling is not included as a behavioral addiction or as a SUD. The following section will review specific treatments that are evidence based for PTSD and substance use and recommended by the guidelines for veterans.

PTSD Treatments

Clinical practice guidelines for PTSD recommend four psychotherapies as having good evidence for effectiveness: Prolonged Exposure (PE), Cognitive Processing Therapy (CPT), Eye Movement Desensitization and Reprocessing (EMDR), and Stress Inoculation Training (SIT) (DVA/DoD, 2017). VHA policies and implementation efforts for PTSD have focused particularly on CPT and PE because they had the strongest evidence base at the time, including at least one study with veterans (Karlin et al., 2010). As a quick overview, both CPT and PE are manualized, trauma-focused cognitive-behavioral therapies that address and treat the cognitive and behavioral symptoms of PTSD, with improvements also seen in other outcomes such as depression and anxiety (Haagen et al., 2015). CPT typically includes 10-15 sessions lasting 60 minutes if delivered individually or 90 minutes if delivered in a group. It is broadly divided into three main parts: 1) PTSD symptom overview and psychoeducation, 2) the cognitive triad, and 3) examining and challenging beliefs related to the trauma and its impact. PE is only provided in 90-minute individual sessions and the number of sessions range from 8-15 sessions. The treatment consists of four main components: 1) treatment rationale and psychoeducation, 2) breathing retraining, 3) in vivo exposure, and 4) imaginal exposure.

Substance Use Treatments

Clinical practice guidelines recommend the following interventions for substance use as having good evidence for effectiveness: Cognitive-behavioral coping skills training, community reinforcement approach, and motivational enhancement therapy. Cognitive-behavioral coping skills therapy consists of "related treatment approaches for substance use that focus on teaching patients to modify both thinking and behavior related not only to substance use, but to other areas of life functionally related to substance use" (DVA/DoD, 2015, p. 92). Individuals learn to identify thoughts and actions that have behavioral consequences that relate to and reinforce substance use. As a way to interrupt a problematic relationship between their thoughts and behaviors, individuals acquire skills aimed at "changing thinking and behaviors that contribute to substance use, and to strengthen coping skills, improve mood, interpersonal functioning and enhance social support" (VA/DOD, December, 2015, p. 92)

Environmental factors can impact and influence an individual's behavior. Community reinforcement approach (CRA) "is a comprehensive cognitive-behavioral intervention for the treatment of substance use by focusing on environmental contingencies that impact and influence the patient's behavior" (VA/DOD, December, 2015, p. 92). Based upon the assertion that the environmental factors play a key role in additive behavior, CRA utilizes changes in natural environmental supports, such as family, social, and occupational, to enhance the opportunity to change drinking/using behaviors.

An individual's motivation to change is an important indicator of success with regard to behavior change. Motivational enhancement therapy (MET) is based on "principles of motivational interviewing (MI) including an empathic, client-centered, but directive, approach intended to heighten awareness of ambivalence about change, promote commitment to change, and enhance self-efficacy." (VA/DOD, December, 2015, p. 92). Effectively enhancing an individual's willingness to effect change in their behavior can greatly increase the effectiveness of and commitment to an individualized recovery plan. Overall, these SUD treatments draw heavily from behavior theories and utilize strategies for specifically targeted behavioral change.

Gambling Treatments

Selecting an evidence-based intervention includes the integration of best available research with clinical expertise in the context of client characteristics, culture, and preferences (APA, 2015). Meta-analyses of gambling treatment have found the effects of psychotherapeutic interventions to have positive outcomes (Pallesen et al., 2005; Cowlishaw et al., 2012). For example, CBT (Gooding & Tarrier, 2009) has proven effective in reducing problem gambling with significant effect sizes across 3, 6, 12, and 24 month follow up. Overall success rates for gambling treatments are estimated at 70% for six months follow up and 50% for one year follow up (Lopez-Viets, & Miller, 1997). Utilizing CBT as a therapeutic intervention, and internet based CBT (Casey et al., 2017), to treat gambling disorder typically involves three targets that include 1) identifying and changing cognitive distortions about gambling, 2) reinforcing non-gambling behaviors, 3) and recognizing positive and negative consequences (Petry, 2009). Additionally, emerging evidence suggests mindfulness-based interventions, such as acceptance and commitment therapy, for disordered gambling demonstrate positive and significant effects on gambling behavior and symptoms, urges, and financial outcomes (Maynard, Wilson, Labuzienski, & Whiting, 2015).

The goal of ACT is to enhance an individual's psychological flexibility. ACT targets psychological flexibility through the use of six interconnected processes that include acceptance, present moment focus, diffusion, self as context, committed action, and values (Dixon, Wilson, & Habib, 2016). The empirical evidence in support of ACT as an effective therapeutic technique continues to expand (Maynard et al., 2015; Dixon et al., 2016), and has been evidence of an effective treatment option for substance use disorders (Dixon et al., 2016). Both, CBT and ACT, are effective interventions with regard to treating the behavioral symptoms presented in GD.

GD is very likely under-idenified by mental health clinicians, as well as those in the community, bearing in mind the high rates of co-occurring disorders associated with GD. Edens and Rosenheck (2012) concluded that in a sample of Veterans Affairs (VA) specialty mental health services users (N = 1,102,846) was indicative of GD under-diagnosis with a rate of six times below national estimates. Given serious associated co-occurring conditions, increased awareness of this condition among mental health clinicians could facilitate referral and utilization of effective services and timely access to treatment (Edens & Rosenheck, 2012).

Although a significant association between GD and other disorders have been identified, the GD literature has largely overlooked the importance of trauma and post-traumatic stress disorder (PTSD) as a prevalent co-occurring condition (Ledgerwood & Milosevic, 2015). In fact, those with lifetime PTSD also were more likely to use gambling as a way to cope with negative emotions and experienced greater negative emotionality (Ledgerwood & Milosevic, 2015). PTSD is a prevalent condition in many subpopulations such as, women who have experienced sexual assault, and veterans, and is associated with greater psychiatric co-morbidity. Considering that PTSD is not an uncommon diagnosis in the veteran community, effective assessment and treatment of concurrent GD and PTSD is crucial to providing appropriate health care services to veteran population.

Given a similarity in functional response, research has identified a compelling association between posttraumatic stress disorder (PTSD) and Gambling Disorder (GD). The National Comorbidity Study Replication identified that 14.8% of those with lifetime GD met criteria for lifetime PTSD (Kessler et al., 2008). Overall, co-occurring disorders often have a larger impact on individuals when compared to those with only one of the problem areas. As examples, individuals who experience increased depressive symptoms (Taber, McCormick, & Ramirez, 1987), engage in gambling at a younger age, experience more severe gambling problems (Petry & Steinberg, 2005), and experience greater psychiatric symptom severity, impulsivity, and dissociation (Ledgerwood & Petry, 2006). Amid this strong and growing evidence base on GD, to our knowledge, there is a compelling lack of guidance, inclusion, or discussion of GD in clinical practice guidelines nor co-occurring treatments for the veteran population. While glaring, this omission is an opportunity to reinforce the interdisciplinary treatment model suggested by clinical social work and behavioral analysis.

Interdisciplinary Treatment Model

As noted previously, there are five areas of interdisciplinary social work and behavior analytic practice (Wilson & Matthieu, 2015) to assist clinicians with case conceptualization: 1) identification of clinically relevant target behaviors; 2) use of reliable and valid measurements; 3) relationship between target behaviors, measures, and treatment; 4) data-based treatment decisions; and 5) social validity of treatment process and outcomes. In the following case example, we highlight the use of this process model using the first two steps.

Case Example

Cindy was a 42-year-old African American female with chronic pain, rheumatoid arthritis, and a neck injury from her service in the Army. She was a wife and mother to her only son, who was 21-years-old. She worked in an administrative position for the Department of Defense, and took pride in her job still being connected to serving her country. She reported recent mood swings, nightmares, and intrusive thoughts related to a sexual assault that occurred during her military service. Currently, she reported that her and her husband spent more and more time at the local casino, as a way to spend time with each other and to get out of the house. Eventually, she was trading in her car title for quick cash, and went through the family savings within 6 months. When Cindy self-referred for gambling services, her family did not know of her condition, and she had gambled away two cars, countless household items, and was unable to pay her mortgage. A retrospective baseline of her gambling the 60 days prior to her intake, identified Cindy had gambled for 35 days in the casino (slot machines), over 6 hours per visit, and had wagered over \$10,000.

During screening, she was identified as having severe gambling disorder (South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987) score of 18), and gambled to access escape and tangible items according to the Gambling Functional Assessment (GFA; Dixon & Johnson, 2007). During treatment, she was concerned with her gambling behaviors. According to the PC-PTSD screener (Prins et al., 2003), Cindy scored a 4 (yes to all 4 items) and then completed the self-report Post Traumatic Stress Disorder (PTSD) Checklist -Military Version (PCL-M; Blanchard, Jones-Alexander, Buckley, & Forneris, 1996). Cindy met criteria for PTSD and scored in the clinical range on the PCL with a score of 45, and endorsed a number of PTSD symptoms in the extreme range in the month prior (e.g., daily and nightly repeated, disturbing memories, thoughts, or images of a stressful experience from the military; avoiding thinking, talking, or similar activities or situations that remind her of her military experience; and feeling jumpy or easily startled, or being "super alert" or watchful and on guard). Clinical interviews were then completed to identify functional relations between Cindy's co-occurring symptoms and environmental events. SBIRT assessment using the AUDIT-C revealed that Cindy was in the risky range of substance use with a score of 10 and was proved patient education materials and referred to treatment. Therefore, Cindy's target behaviors included gambling, trauma related symptoms and alcohol use. Trauma treatment, specifically PE was initiated to address the trauma symptoms while initiating treatment for gambling disorders to include Acceptance and Commitment Therapy. Referrals to self-help programs for substance use were also provided.

Resources for Practice

There are a host of available materials related to the training of interdisciplinary treatment teams on trauma and addictions. However, more limited are publically available resources and those specifically on behavioral additions such gambling and targeted to veterans. Therefore, here we highlight a number of these resources and offer additional resources to support interdisciplinary clinical practice in Table 2 and Table 3.

The Substance Abuse and Mental Health Administration (SAMHSA) has invested heavily in disseminating the evidence based treatment protocol entitled Screening, Brief Intervention and Referral to Treatment. At present, there is an SBIRT core curriculum that is publically available by request for the CD-ROM from SAMHSA. There are also a number of free publically available online SBIRT training courses listed on the SAMHSA-HRSA Center for Integrated Health Solutions. Some additional particularly easy to navigate and free online SBIRT courses are also available online (See Table 4).

Table 4. Publically Available Resources to Support Clinical Practice.

<u>Topic</u>	Description	Publically Available Resource	
SBIRT	CD-ROM	http://www.samhsa.gov/sbirt	
	Online Training Course	http://www.integration.samhsa.gov/clinical- practice/sbirt/training-other-resources	
	Online Courses	http://healtheknowledge.org/course/index.php?categ oryid=50.	
PTSD	Assessment Measures Online Request Form	http://www.ptsd.va.gov/professional/assessment/nc ptsd-instrument-request-form.asp.	
	DVA/DoD Clinical Practice Guidelines	http://www.healthquality.va.gov	
	Community Provider Toolkit	http://www.mentalhealth.va.gov/communityprovide rs/clinic_sud.asp.	
SUD	DVA/DoD Clinical Practice Provider, Family and Patient Resources	http://www.healthquality.va.gov/guidelines/MH/sud/	
	Self-Help Toolkit: The 3- step Referral Method	http://www.mentalhealth.va.gov/providers/sud/selfhelp/	

With regard to assessing and treating PTSD, the VA's National Center for PTSD hosts a list of assessment measures that can be obtained by completing the online request form. For practice guidelines, there are a variety of DVA/DoD Clinical Practice Guideless that are publically available for download, and can be found on the VA Health Quality website. For each guideline, there are free downloadable additional tools for the provider, family, and patient resources, such as the one for substance use noted in Table 4. One substance use related link in the online resources is to a particularly good Self-Help Toolkit: The 3-step Referral Method. Finally, the VA disseminates many of the mental health products, trainings and resources available on a community provider's website, called the Community Provider Toolkit. This website offers a military culture training, mini clinic topics on couples and family, disability benefits, posttraumatic stress disorder, serious mental illness, smoking and tobacco use, substance use, suicide prevention, technology in care, and women veterans, and other clinician friendly tools and handouts.

Discussion

The use of an interdisciplinary model can assist clinicians in the identification of appropriate evidence-based assessments and treatments for co-occurring PTSD and

substance use disorders. A case example focused on the use of specific assessment tools and treatment approaches drawn from DVA/DoD clinical practice guidelines demonstrate how clinicians can use the model in practice, to identify target behaviors, valid screening measures, and effective behavior-based treatments. Finally, resources related to the training of interdisciplinary treatment teams on trauma and addictions, particularly for behavioral additions such gambling, was presented. By noting the exclusion of GD, we strongly hope that the future will bring an integration of gambling as a behavioral addiction into the evidence-based practices of clinicians who assess and treat co-occurring conditions.

Implications for Practice with Veterans and VA

Recent changes to the DSM has re-categorized gambling as a substance use disorder. For the VA, this change may instigate major national service delivery changes with substance use disorder treatment for veterans to now include gambling treatment and services within the existing "minimum requirements" services mandate (DVA, 2008). As outlined in VHA Handbook 1160.01, Uniform Mental Health Services in VA Medical Centers and Clinics, this document requires VA facilities to offer or to contract out to the community substance use treatment for all Veterans with a clinical need. At present, to our knowledge, gambling addiction is not addressed in any of the VA's mandatory national screening and treatment requirements. To determine if pathological gambling is currently an unmet need in the VA, the National Council on Problem Gambling recently recommended a two-part study of all VA patients to determine the severity of gambling problems and to determine if the VA health care system has the capacity to serve this population (Newhouse, 2013). Until this national study is completed, it is critical to assess local services for the capacity for referrals and the barriers and facilitators to veterans receiving evidence based assessments and treatments for gambling.

With the advent of new changes to the DSM V and the requirements for SUD treatments provided by the VA health care system, there are various individual, provider and system level factors that may limit the extent to which gambling treatment options are offered. First, military service members may face disciplinary action (e.g., demotion) for seeking help while still serving in the armed forces (Emshoff, Gilmore, & Zorland, 2010). Secondly, the extent to which VA and military providers are systematically identifying atrisk or disordered gamblers is unknown (Whiting et al., 2016).

Lastly, system level accessibility issues are also unknown. These issues include the frequency of gambling treatment referrals from national gambling helplines (1-800-522-4700) or local crisis lines for veterans (1-800-273-8255 and Press 1 for military or veteran) to the few existing out of state VA facilities with gambling treatment services (e.g., VA New England Health Care System, Louis Stokes Cleveland Health Care System), to local gambling treatment programs or specialty behavioral health providers such as social workers and applied behavior analysts in the community, or to self-help groups (e.g. Gamblers Anonymous). Given that co-occurring addictions treatment for veterans may occur in the VA for PTSD and SUD, and more commonly in the community with specialized gambling treatment programs or private practitioners, this fragmented system of care will require an interdisciplinary, collaborative, case management approach. Collecting information within local communities and in the VA to assess the availability

of gambling treatment services is the first step in determining the local accessibility and then the quality of services for military and Veterans. While there is an emerging picture of the etiology and prevalence of gambling in general (Petry et al., 2005) and among Veterans and military personnel specifically (Newhouse, 2013) it is still unclear the extent to which clinicians in the community or VA are identifying and treating disordered or atrisk gamblers.

Conclusion

Co-occurring mental health and substance use issues can present challenges to clinicians in recognizing both disorders and obtaining utilizing the best intervention for individuals. Limited evidence exists to guide interdisciplinary treatment teams in effective behavioral treatment of co-occurring PTSD and GD. The aim of the article was to begin to address that gap in literature. We provided a model for interdisciplinary practice to assist social work, behavioral analysis, and other clinicians working with addictions and traumarelated symptoms in selecting appropriate evidence based assessments and treatments. As respective professions continuously move to enhance client outcomes in behavioral health, the importance of interdisciplinary treatment becomes increasingly vital.

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Title IV-E Child Welfare Training and University Partnerships: Transforming State Child Protection Services into a Trauma-Informed System

Robin Hernandez-Mekonnen Dawn Konrady

Abstract: Children who are involved in the child welfare system have experienced trauma, and research indicates that parents of those children also frequently grapple with their own unresolved trauma. In addition, child welfare workers face high rates of secondary traumatic stress. Federal legislation from 2011 requires states to conduct universal trauma screening on children in foster care. The Administration on Children and Families (ACF) urges state Child Protection agencies (CPS) to become trauma-informed, however, many states still struggle to integrate a trauma focused practice model. This article describes the outcomes of a national, empirically driven, Core Concepts in Child Trauma for Child Welfare curriculum utilized in a Title IV-E university partnership program to teach graduate level child welfare agency supervisors. Findings suggest that the graduate trauma course demonstrates statistically significant gains in confidence, and also has a profound impact on the agency's transformation into a trauma-informed system.

Keywords: Title IV-E; child welfare; trauma; secondary traumatic stress; social work education

There is a significant body of research indicating the importance of using a Trauma-informed approach in working with maltreated children, yet not all states and jurisdictions have fully engaged in the process of identifying or adapting a model or framework by which they will approach trauma–informed practice (Ai, Foster, Pecora, Delaney, & Rodriguez, 2013; Hanson & Lang, 2016; Klain & White, 2013). As states transition to a trauma-informed approach, there is a need for high caliber evidence based curricula. This study investigates the impact of a statewide Title IV-E MSW consortium utilizing an empirically based trauma curriculum in aiding the early transition into a trauma-informed child protection system.

Child maltreatment research has grown exponentially in the number of studies investigating the nature and prevalence of trauma experienced by the children involved in the child welfare system (Kisiel, Fehrenbach, Small, & Lyons, 2009; Miller, Green, Fettes, & Aarons, 2011). In addition to learning about the trauma experienced by children, we have gained insight into the unresolved trauma histories of caregivers, and the secondary traumatic stress experienced by the child welfare workforce (Bride, Jones, & MacMaster, 2007; Nelson-Gardell & Harris, 2003). In 2011, President Obama enacted the Child and Family Services Improvement and Innovation Act (2011) which amended language to require States to include a description of how they will screen for, and treat, emotional trauma associated with maltreatment and removal, in the health oversight plan. While the requirement specifies children in foster care, the Administration on Children Families

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(ACF) issued an Information Memorandum (IM) to States, Tribes, and Territories suggesting that they integrate trauma screening into the regular developmental screening activities (under Early Periodic Diagnosis and Treatment: EPSDT) in order to meet the new requirement (ACF, 2012). As such, child protection agencies are compelled to seek strategies to become trauma-informed, including specific trauma-informed screening and assessment protocols, and creating access to trauma-informed treatment.

Since 1980, Title IV-E of the Social Security Act has supported the development and implementation of formalized child welfare education programs to increase the number of prepared candidates for careers in child welfare (Zlotnik, 2003). There are currently approximately 40 states receiving Title IV-E funding for education, and nearly all of those states are engaged in university partnerships with academic degree programs (Zlotnik, Strand, & Anderson, 2009). The range of supports students receive in these programs is notable, some receiving book stipends and others receiving full tuition benefits and salary. However, research indicates IV-E programs are effective in improving Child Protective Services (CPS) worker retention (O'Donnell & Kirkner, 2009; Zlotnik, 2003; Zlotnik & Pryce, 2013).

Social work programs are charged with educating IV-E students. Both undergraduate (Bachelor of Social Work - BSW) and graduate (Master of Social Work - MSW) programs serving IV-E students vary in their offerings of courses, or electives that are related to child welfare. This paper discusses the implementation and impact of an evidence-based MSW elective in trauma-informed child welfare practice in a Title IV-E university partnership to aid in the transformation of a state based child welfare system to a trauma-informed system.

Child Traumatic Stress

Scientific advances in the study of the brain have enhanced the ability to detect the neurological and cognitive impact of childhood trauma on the development of children (Perry, 2009; Watts-English, Fortson, Giblet, Hooper, & DeBellis, 2006). Traumatic experiences have both short-term and long-term effects upon children, often lasting into their transition into adulthood. Research indicates a clear pathway between childhood trauma and both acute and chronic manifestations of cognitive, emotional, psychiatric, relationship, social, and health outcomes (Richardson, Henry, Black-Pond & Sloane, 2008). The Centers for Disease Control and Prevention has conducted decades of research investigating the public health repercussions of Adverse Childhood Experiences (Feletti & Anda, 2014). A multitude of studies reveals the effects of trauma upon long term outcomes, including an array of emotional, behavioral, cognitive, and social, cognitive, emotional and behavioral impairments (Ai et al., 2013; Feletti & Anda, 2014; Felitti et al., 1998).

According to the New Jersey Department of Children and Families (DCF) Commissioner's Monthly Report, in September 2016, approximately 45,823 children were under the Division of Child Protection and Permanency's supervision, 6,698 were in out-of-care settings, with approximately 11,500 new cases of child maltreatment substantiated and opened in the past year (Blake, 2016). By the very nature of coming to the attention of the child protection system, particularly after an investigation has concluded that there is merit for involvement, children have experienced some form of trauma (Ko et al., 2008).

While the manifestations of trauma are varied, depending on age, trauma type, and the supports the child may receive (Ko et al., 2008), CPS agencies have lacked sufficient resources to adequately address the needs of traumatized children, despite the 2011 law. The resources to address the needs of children experiencing trauma include universal and routine screening of children for symptoms of traumatic stress, access to trauma focused and evidence based interventions, and access to trauma-informed systems of care (ACF, 2012). Trauma-informed child welfare practice, along with quality and trauma focused clinical interventions are crucial components addressing traumatic stress (ACF, 2012).

Caregiver Traumatic Stress

CPS agencies have undergone decades of reform efforts, often lead by litigation, and class action suits resulting in consent decrees (Noonan, Sabel, & Simon, 2009). Despite the mandate of the 2011 legislation, the movement toward integrating a social work perspective, accompanied by a trauma-informed focus, is only a recent undertaking by a handful of state child welfare systems. As CPS workers and clinicians begin to align their approaches with a trauma-informed lens, it becomes increasingly evident that the caregivers or parents of the children being screened for trauma, are experiencing parenting deficits, at least in part, due to their own unresolved trauma (Walker, 2007). In fact, many systems still do not conduct universal trauma screening for child victims, so performing trauma screening with birth parents or other caregivers is even more unlikely. Yet, there is a growing body of research linking the experience of child maltreatment (as indicated by CPS involvement) in later childhood or adolescence to the increased likelihood of involvement as a parent in CPS (Thornberry & Henry, 2013). Most recent data from California indicates at least a 44% increased likelihood that a mother who conceives between the ages of 15-19 will be reported for child maltreatment before her child reaches five years of age (Putnam-Hornstein, Cederbaum, King, Eastman, & Trickett, 2015).

While the debate of whether "maltreatment begets maltreatment" continues (Thornberry, Knight, & Lovegrove, 2012, p.135), research is being done to explore the intergenerational effects of maltreatment upon parenting styles and attachment of adults with their children (Berthelot et al., 2015; Kim, Fonagy, Allen, & Strathearn, 2014; Schwerdtfeger, Larzelere, Werner, Peters, & Oliver, 2013). The empirical evidence thus far suggests there are indeed correlations, and CPS professionals in the field struggle with addressing prior trauma histories on cases where perhaps there was a missed opportunity by the system when the caregiver was a child. In states like New Jersey, where the child protection system has a history of failings, cases where parents were former clients as children, are relatively common. As workers learn about case level caregiver trauma and continue to trace history of cases, there is a disheartening realization that that the system failed to adequately address their childhood trauma, and as parents, these former clients still struggle to overcome the effects of unresolved trauma (Kim et al., 2014; National Child Traumatic Stress Network [NCTSN], 2011; Walker, 2007). CPS supervisors find themselves frustrated that the CPS system had an opportunity to intervene, and had a trauma focus been part of the service delivery a decade ago, these children may have had better chances to become healthy adults and parents. Additionally, the level of trust these parents, former clients, have for the CPS system is limited (NCTSN, 2011; Walker, 2007).

A lack of trust due to failure of the system on their own behalf creates a difficult dynamic for effective engagement by CPS workers.

Secondary Traumatic Stress in CPS workers

The child welfare workforce is another important consideration in becoming a traumainformed organization. There is a significant body of literature that captures the prevalence and impact of secondary traumatic stress in the human service professions. There are fewer studies that parse out the effects of secondary traumatic stress upon the CPS workforce. Figley (1995) pioneered the term secondary traumatic stress (STS), which he defined as "the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other" (1995, as cited in Pryce, Shackelford, & Pryce, 2007, p. 13). He contends that while the causes of STS are different from post-traumatic stress disorder (PTSD), the reactions are equivalent. Figley also identified four criteria that increase one's vulnerability for STS: the actual child's trauma, unresolved personal trauma, any personal trauma history, and one's level of empathy (Pryce et al., 2007). CPS workers experiencing STS are more likely to leave their positions, creating significant cost to the organization and to clients (O'Donnell & Kirkner, 2009). Recruiting, training and retaining child welfare workers is a significant fiscal burden, and is also costly to their clients in terms of stability and trust (Strolin-Goltzman, Kollar, & Trinkle, 2010). CPS organizations and clients benefit from taking stock of their current staff and cultivating resources to monitor and support workers who are at an elevated risk for STS (Pryce et al., 2007).

Title IV-E - Master of Social Work and the Masters Child Welfare Education Program (MCWEP) University Partnership

The New Jersey IV-E partnership is an innovative model to CPS workforce training. After a sordid history of failure in child protection, combined with high profile media exposure and a class action law suit, the New Jersey Department of Children and Families entered a consent decree, a modified settlement agreement, and is currently developing an exit strategy. Under the consent decree, aggressive measures were initiated to recruit hundreds of CPS workers (Lipka & Graham, 2004). Funds were harnessed for this recruitment effort, as well as training and retention. A state of the art training academy, in collaboration with the MCWEP program, is a key component in the agency's strides in professionalization and retention (Guzkowski, 2015).

MCWEP is a statewide university partnership consortium, including four of the state's accredited MSW programs, initiated in 2012. The MCWEP project developed as a partnership based upon the current consortium model used in the baccalaureate IV-E educational consortium for the state, the Baccalaureate Child Welfare Education Program (BCWEP), in which seven of the state's public and private universities with BSW programs are members.

A unique facet of both the BCWEP and MCWEP is the use of learning communities. The learning community consists of quarterly daylong meetings of all MSW IV-E students from all four partnering universities. Students meet as cohorts based upon year of study

(the program typically takes 3-4 years as part-time study only), and also as a large group. Learning communities provide the opportunity to synthesize the students' MSW curriculum, field placement experiences, CPS agency integration, and to infuse critical thinking exercises, with self-care and leadership development. The learning communities provide an enhanced learning environment for students, who are mid-level supervisors, to establish a support network among colleagues and faculty, and cultivate innovation in their ideas and strategies to support ongoing reform efforts within the agency.

In addition to the learning communities, MCWEP students are required to take two courses based upon national models of evidence-based curriculum. One course focuses on Leadership and Supervision in Child Welfare; the other is Trauma-Informed Child Welfare Practice (TICWP), which is the focus of this analysis. The TICWP course was adopted from the NCTSN's Core Curriculum for Childhood Trauma (CCCT; Layne et al., 2011). Students receiving the trauma course through the MCWEP program, take the course with an NCTSN certified instructor, and are subjects in the national data collection. Both Fordham University and Stockton University's Institutional Review Boards have approved the research, and students were provided with informed consents for each respective data collection effort.

National Child Traumatic Stress Network Core Curriculum

The NCTSN was established in 2000 under the Children's Health Act (2000), and has developed a comprehensive empirically-based national model for addressing trauma. Over the past decade, NCTSN has cultivated workgroups through networks of professionals and academics from across the country to formulate an evidence driven curriculum. The National Center for Social Work Trauma Education and Workforce Development, a member of the SAMHSA-funded NCTSN, developed the CCCT for child welfare with the goal of creating a high caliber and evidence informed trauma curricula for dissemination in social work education.

There have been 55 CCCT social work professors certified through the yearlong learning collaborative (over 6 years), open for ongoing participation to maintain fidelity to the teaching framework and structure of the course. Once certified, faculty have some flexibility to tailor content or style within reason. For example, in the MCWEP program some adaptation was necessary since our students are acting supervisors within the organization, occupying slightly different roles than those for which the course content was designed. Since most MCWEP students/supervisors have over a decade of experience in the New Jersey state child welfare system, some organization of the materials was altered to emphasize the importance of their supervisory roles. In addition, because they are well positioned to catalyze agency change in practice, additional depth underscoring the effort toward a trauma-informed agency and developing trauma-informed systems of care is included.

The Center's technical report details the findings from data (2010-2016), from 55 faculty teaching at 36 schools, with 79 separate offerings of the course, and 985 matched (using participant designed unique identifiers) pre- and posttest student surveys (Popescu, Richards, Strand, & Abramowitz, 2016b). The evaluation of the CCCT over six years

resulted in ongoing revising of course content and delivery, for overall improvement and enhancement. The main objectives of the course as identified in the technical report are "to increase the students' trauma knowledge, skills, and confidence in relation to the 12 Core Concepts of Trauma" (Popescu et al., 2016a, p. 106). The main measure of these indicators comes from the Core Concept Confidence Scale (designed by Popescu & Moller, 2010; revised in 2012), in addition to general demographics and student learning objective questionnaires. In the national cohort, researchers at The Center found a statistically significant increase in student confidence, indicating a significant gain in confidence applying the Core Concepts of Trauma (In the national aggregate data, there was an increasing trend in post test scores from year to year, indicating that the ongoing adjustment and integration of course feedback was useful in improving the course outcomes over time (Popescu et al., 2016a).

Findings from The National Center for Social Work Trauma Education and Workforce Development Report: MCWEP Data. In addition to national aggregate data report on learning and course outcomes, collected by class, the Center provides an individualized technical report for each individual institution based upon the pre and posttest data collected each semester. The individualized data report is produced so each instructor can assess the outcomes of their specific class at their institution. MCWEP data provided to The Center for 2015 and 2016 cohorts indicate improvement between pre- and posttest, measured using a matched t-test for each of the 2015 and 2016 classes (Table 1).

Table 1. MCWEP TICWP Overall Student Confidence in Core Concepts of Trauma

Year	Pretest mean	Posttest mean	t-test	Wilcoxon Signed Ranks
2015 (n=11)	6.13	7.68	p = .013	p = .043
2016 (n=18)	5.12	8.39	p = .001	p = .018

Scale 1-9, 1 = not confident at all, 9 = completely confident

Mirroring the national aggregate data, the data for the MCWEP specific classes indicates an increase in the primary objective of the course, student confidence in applying the Core Concepts of Trauma (Popescu et al., 2015; 2016b). While the sample size for each analysis is small, which limits the generalizability of these findings, the MCWEP data reflect a trend similar to the national data, and provide a class by class assessment of student confidence for longitudinal consideration; akin to how one might use course evaluation data in teaching.

Outcomes of the MCWEP Trauma-Informed Child Welfare Course

Methods. In order to assess the impact of the TICWP course in increasing the knowledge of supervisors with regard to trauma, and their ability to apply the concept to their work, including integrating their knowledge, MCWEP has collected independent data through three different formats; self-efficacy surveys, overall MCWEP survey, and an exit survey. The data collected by MCWEP is intended to compliment and supplement the reports generated from the pre and posttest data collected and compiled by The Center (Popescu et al., 2015; 2016b).

The first source of program evaluation data supplemental data is the self-efficacy survey given to each student at the end of each semester to capture their perceptions of their learning and ability to apply their knowledge. The second is the overall MCWEP program survey which is sent each year to all current students, and the third is the exit survey, which is sent to students who are graduating.

Table 2. Self-Efficacy of TICWP Students with Identified Trauma Practice Behaviors (n=54)

			% Rating		St.
<u>Trauma Competency/Practice Behavior</u>	<u>Min</u>	Max	<u>4 or 5</u>	Mean	Dev.
1. I am able to integrate the concept of "child traumatic stress" in case practice and supervision by knowing what types of experiences constitute childhood trauma and utilize a trauma-informed lens to manage child welfare cases.	4	5	100	4.8	0.42
2. I am able to apply knowledge of how traumatic experiences affect brain development and memory and understand the relationship between a child's lifetime trauma history and his or her responses through comprehensive case planning.	3	5	98	4.5	0.54
3. I can articulate how trauma has an impact on the behavior of children over the course of childhood and how child traumatic stress is exacerbated over time by ongoing stressors (including separation from/loss of caregivers, and/or foster placement) in a child's environment and within the child welfare system.	4	5	100	4.6	0.50
4. I am able to identify and promote the utilization of trauma- sensitive interventions such as strategic referrals to timely, quality, and effective trauma-focused interventions and trauma- informed case planning with multi-disciplinary teams.	3	5	96	4.5	0.57
5. I can articulate how the impact of traumatic stress can be prevented and/or mitigated by trauma-informed responses of child welfare workers and child welfare systems.	3	5	94	4.5	0.61
6. I am able to consider how cultural factors influence the manner by which children may identify, interpret, and respond to traumatic events during the case practice process.	3	5	98	4.5	0.54
7. I am able to identify the impact of secondary traumatic stress (STS) on child welfare workers and employ appropriate interventions.	3	5	96	4.4	0.57
8. I support Child and Family Services Review (CFSR) goals of safety, permanency, and well-being by increasing skills to effectively serve children and families (biological and resource) in the child welfare system that have experienced traumatic stress.	4	5	100	4.5	0.50

Note. (Five-point Likert Scale, from 1 (very much disagree) to 5 (very much agree).

Self-Efficacy surveys ask students to rate the degree to which they agree with statements regarding Trauma-Informed Child Welfare Competencies and Practice Behaviors. These data were collected over four class cohorts (2013-2016). Responses were based on a five-point Likert scale from 1 (*very much disagree*) to 5 (*very much agree*). Means on individual items range from 4.44 to 4.78. Students consider themselves capable

in all eight categories in the CCCT TICWP competencies. The 2016 (not shown) cohort has the highest overall self-assessment means, indicating that improvements in course structure, instruction, and student perceptions of self-efficacy in the competencies are occurring.

Perhaps the most significant indicator of the magnitude of the impact of the TICWP course in the MCWEP program upon the New Jersey State CPS agency comes from the overall qualitative program assessment surveys students complete annually. A thematic analysis was conducted by study authors, once consensus on coding was reached, and ambiguities resolved. A priori categories, anchored in the overarching questions, were considered the guiding framework for coding and developing themes in the analysis, based upon grounded theory techniques (Corbin & Strauss, 2007).

In the analysis, responses from three questions included repeated thematic comments around the impact of the TICWP course. They are: 1) What are the strengths of MCWEP (Table 3); 2) How well do you think MCWEP is preparing you to be a more impactful supervisor at DCPP (Table 4); 3) Do you feel you are being prepared to play a role in the transformation of New Jersey's public child welfare system?

Five themes emerged across the three questions as described in Tables 3 and 4 below:

- Supervision
- Secondary Traumatic Stress
- Change in language
- Change in perspective/thinking/understanding
- Importance of trauma history

Table 3. Program Sta	rengths	
<u>Theme</u>	Common Code	In Their Voice
Supervision	Strengthen skills	"The program has strengthened my supervisory
	and incorporate	skills by helping me to help my workers and
	more clinical	supervisors understand the impact of trauma on
	supervision	the families we serve."
Secondary	Recognition	"Importance of recognizing STS and burnout is
Traumatic Stress		something I am constantly on the lookout for
		now."

When asked about feeling prepared to play a role in the transformation of New Jersey's public child welfare system, there was a strong consensus that students, indeed, feel prepared. In fact, 88% (44/50) respondents indicated they felt they are more prepared to play a role in the agency's transformation. Despite the majority of students affirming, many acknowledged that they experienced some tentativeness about the pace of the agency, and concern for the readiness of the agency to accommodate the transformation, for example:

I do feel that I am prepared, but I don't think New Jersey is prepared. We learn about different things our families need to be successful but they are not available for us to implement. An example of this is more trauma-informed services.

Table 4. Supervisor Preparation			
<u>Theme</u>	Common Code	<u>In Their Voice</u>	
Supervision	Strengthening skills	"It teaches what supervisors need to know and equip themselves for working in the field."	
	Access to tools	"continue using the theories and information in my day-to-day work during case consultation."	
	Change in delivery	"I have already seen a change in my supervision."	
		"The course was extremely useful to my case practice."	
		"It has definitely changed my way of thinking when providing supervision on case."	
Secondary Traumatic Stress	Acknowledgement of existence	"I remind my workers and supervisors that they are incapable of providing effective intervention if their own baggage is too heavy."	
		"Beyond speaking, I am able to step back and focus on what trauma exposure has done to my children and staff."	
Change in Language	Adaptation of trauma focus lens	"These classes provide the language necessary to invoke change in how we deal with families as well as how to effectively supervise."	
		"The class has changed my dialect. I speak about terms that are foreign to the workforce and it makes them want to learn more about it."	
Change in Perspective	Knowledge acquisition	"The TICWP elective was so informative that I will be able to use all I learned in that class to continue to service my clients in a more	
		sufficient way when dealing with trauma."	
		"The eye opening moments I had in Trauma in Child Welfare will stay with me throughout my career."	
		"The fact that we were exposed to trauma focus speaks volumes. At DCPP we are not exposed to this type of training."	
	Additional tools and resources	"continue using the theories and information in my day-to-day work during case consultation."	
	Understanding of trauma	"I understand trauma now, clinical trauma, I also understand how important it is to provide the correct services for families."	
		"I am now aware of the importance of reviewing cases with a trauma focused lens."	

Table 4. Supervisor Preparation			
<u>Theme</u>	Common Code	In Their Voice	
		"I do think from a more trauma focused/critical thinking perspective."	
	Need for change	"It makes no sense to have a child welfare agency staff that is not first and foremost educated in the long lasting impact and effects of child trauma and complex trauma."	
Importance of Trauma History	Data collection	"The trauma class made me realize how important it is to gather a trauma history with our children and parents." "We should be making all decisions with the consideration of past, present, and possibility of future trauma."	
	Informing the work	"I feel that making my supervisees aware of social justice concerns and impacts their work. I share with them the impact of trauma and the importance of history informing their work.	

Frustrations with the bureaucratic pace of change that CPS supervisors are encountering as they become trauma-informed create challenges in remaining invigorated as change agents. Students voice the personal preparation, feeling armed with knowledge to make a difference within their agency, but are tentative since they do not know how to begin.

Students are encouraged to take active advocacy roles within the agency to increase change within the organization; and there is opportunity to develop creative strategies to pursue this goal. As the number of graduates completing the program increases, there will be greater dissemination of this empirically driven CCCT in Child welfare, and thus greater the impact on the agency's internal momentum toward becoming a trauma-informed agency.

Discussion and Limitations

When considering the compelling evidence to suggest that children, caregivers, and workers in the child welfare system all contend with the adversity and suffering that traumatic experiences bring, it seems obvious that CPS agencies should embrace a trauma focused approach to benefit all those involved. ACF released a detailed information memorandum, in response to the 2011 legislative amendments, to provide guidance in both scope and comprehensiveness of how trauma-informed child welfare systems should approach the issue of trauma (ACF, 2012). However, the reality of transforming large bureaucratic child welfare organizations, whether it is at the county or the state level, is a daunting task. The Trauma-Informed Child Welfare Practice course, from the NCTSN, the learning communities, and the overall MCWEP program, have initiated a comprehensive approach to move the agency in the direction of transformation. The MCWEP program strategically educates mid-level supervisors, who are in positions to impact potentially

thousands of CPS cases around the state, and at the same time mitigate secondary traumatic stress among their workers. Additionally, these supervisors are located in the ranks that will likely vie for leadership positions in the long term. In a recent initiative, spawning from the MCWEP program, students and alumni have formed task groups to inform and assist the agency's policy unit on revising specific policies to be more trauma-informed. The group has been asked by administration to conduct presentations to key leaders around secondary traumatic stress in the work force. Students and alumni have indicated this is a significant stride in having an engaged and open agency.

There are several limitations of the assessment methods that should be considered. First, this study is a small-scale case study. While it can be replicated, the findings cannot be generalized. The TICWP/CCCT classes have had 20 or fewer students in each cohort, and in the first two years (2012, 2013), data was collected and reported from only two of the three MSW programs participating in the MCWEP course, making the N for the course only 11. Also, the technical reports that provide the statistical analysis of the data sent to the National Center for Social Work Trauma Education and Workforce Development were only available for the two most recent course years (Popescu et al., 2015, 2016b), with low rates of matched data, limiting our ability to assess the statistical efficacy of the course in the earliest sections, and longitudinally. Due to ending of the NCTSN contract with The Center, there will be no future reports unless MCWEP continues to replicate the analysis without the assistance of The Center.

The MCWEP Self Efficacy questionnaire uses questions designed to capture not only the transfer of knowledge, but also a student's capacity to apply the knowledge in their case practices. As such, the eight questions may be considered double barreled, and may not elicit full responses. Finally, additional longitudinal data related to retention and employment satisfaction of MCWEP students is needed to better assess type of supervisors the program draws in its applicants and participants. The self-selection process may be creating the impression that agency supervisors are generally highly motivated and engaged, which may not be the case across the agency.

Conclusion

The Trauma-Informed Child Welfare course is an effective academic course in educating students in the tenets of trauma-informed child welfare practice and when coupled with the learning communities as part of a Title IV-E MSW program, is likely to have a significant impact on the overall direction of the New Jersey state child welfare transformation. In fact, it may be the leading initiative at this point in time, in terms of driving the change from within, particularly with regard to the recommendations of ACF. In addition to informing case practice and supervisory roles, the course and program are cultivating leaders and advocates within the ranks, who will play key roles in the success of the overall agency's transformation to a trauma-informed child welfare agency in the long term.

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Perceptions of Recidivism Among Incarcerated Youth: The Relationship Between Exposure to Childhood Trauma, Mental Health Status, and the Protective Effect of Mental Health Services in Juvenile Justice Settings

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Abstract: Research suggests that youth involved in the juvenile justice system have trauma histories that are two times higher than youth in the general population. Juvenile justice-involved youth also have high rates of mental health symptoms. Fewer studies have examined how trauma links to mental health symptoms among youth offenders, and even less research focuses on how mental health status and service delivery can impact their perceived likelihood for success. This study examines the effects of mental health screening and service delivery on perceived future criminal justice interactions—arrest and incarceration—among adjudicated youth (n=7,073) housed in correctional facilities. Secondary data were used to examine trauma histories, mental health needs, and mental health screening and service delivery. Significant relationships between traumatic events and mental health problems were found, along with relationships between mental health problems and mental health screening and service delivery. Most interestingly, results pointed to the strong inverse relationship between mental health service delivery and youth's perceived likelihood for recidivism. These findings show the promise of juvenile justice systems appropriately responding to the mental health concerns of youth.

Keywords: Trauma, mental health services, juvenile justice, incarceration, youth

Trauma exposure, violence, and victimization are common experiences among youth. Estimates of a national sample of youth in the general population suggest that more than half of all youth have experienced childhood traumatic events and half of those youth experience multiple traumatic events (McLaughlin et al., 2012). A traumatic event "is one that threatens injury, death, or the physical integrity of self or others and also causes horror, terror, or helplessness at the time it occurs" (APA Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents, 2008, p. 2). Examples of childhood traumatic events include early life victimization such as sexual, physical, or emotional abuse (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Finkelhor, Ormrod, Turner, & Hamby, 2005; Ford, Chapman, Mack, & Pearson, 2006).

While traumatic experiences can lead to a host of negative emotional, behavioral, and psychological outcomes (McGloin & Widom, 2001), the cycle of violence theory (Smith & Thornberry, 1995; Widom, 1992) and ensuing research (Becker & Kerig, 2011; Bennett & Kerig, 2014; Evans & Burton, 2013; Kerig & Bennett, 2013) suggest that youth exposed to early trauma are at an increased risk for delinquency and involvement in the criminal justice system. In epidemiological reports, juvenile justice involved youth have trauma

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histories that are 2 to 3 times higher than youth in the general population (Coleman, 2005; Coleman & Stewart, 2010; Ford, Chapman, Connor, & Cruise, 2012). Two independent studies revealed analogous rates of elevated trauma among detained youth relative to general population youth; approximately 90% of the detained youth reported a history with at least one traumatic event (Abram et al., 2004). Specifically, 35% of detained youth indicated at least one experience of physical assault (Ford, Hawke, & Chapman, 2010). More recent research supports and expands upon the prevalence data to suggest juvenile justice youth have histories of poly-victimization and complex trauma (Ford et al., 2012; Ford, Grasso, Hawke, & Chapman, 2013).

Exposure to traumatic events in childhood may also be linked to mental health symptomatology. Trauma accounts for 45% of mental health disorders starting in childhood, 32% mental health disorders starting in adolescence, 29% of mental health disorders starting in early adulthood, and 26% in mid-later adulthood (Green et al., 2010). Furthermore, there are disproportionately high rates of mental health symptoms among youth involved in the juvenile justice system; approximately 50-70% of these youth have a diagnosable mental health condition (Skowyra & Cocozza, 2006) relative to approximately 40% of the general youth population who meet diagnostic criteria at some point in childhood and 20% who have a severe mental health condition (Merikangas et al., 2011).

The relationship between trauma and juvenile justice involvement, therefore, may be partially explained by associated mental health symptomatology (Kerig, 2012; Kerig, Ward, Vanderzee, & Moeddel, 2008). Research has widely acknowledged the effects of early physical, sexual, and emotional abuse on various mental health conditions including anxiety, depression, suicidal ideation, post-traumatic stress disorder (PTSD), and anger (Bolger & Patterson, 2001; Green et al., 2010; Hazen, Connelly, Roesch, Hough, & Landsverk, 2009; Higgins & McCabe, 2003; Martin, Bergen, Richardson, Roeger, & Allison, 2004; Runyon & Kenny, 2002). There is even a documented association between longer duration and frequency of traumatic events and co-occurring mental health disorders (Sabri, 2011). Given the disproportionately high rates of mental health problems among youth involved in the juvenile justice system, there are concerns that external or internal manifestations of mental health symptoms within facilities can lengthen stays leading to suicide attempts, and even pose greater danger to others (U. S. House of Representatives Committee on Government Reform, 2004, 2005). Furthermore, with early identification and screening, mental health symptoms can be treated at juvenile justice entry (Burke, Mulvey, & Schubert, 2015). Left untreated, however, mental health conditions can also create re-integration and rehabilitative challenges (Teplin, Abram, McClelland, Dulcan, & Mericle, 2002).

There is a dearth of research on the relationship between trauma and mental health symptoms among youth involved in the juvenile justice system, and how screening for mental health and mental health service delivery can impact youth's perceived likelihood for success. Using a nationally representative sample of youth housed in correctional facilities, this study endeavors to (1) test the relationship between traumatic events and mental health symptoms, (2) test the effects of traumatic events and mental health symptoms on perceived likelihood for recidivism, and (3) test how the introduction of

mental health screening and service delivery can influence youth's perceptions of recidivism.

Literature Review

Although trauma exposure is associated with juvenile justice involvement (Abram et al., 2004; Ko et al., 2008), the system has historically ignored trauma or mental health symptomatology in service delivery (Donisch, Bray, & Gewirtz, 2016). To effectively address the needs and improve outcomes for youth in juvenile justice systems, it is essential to recognize, assess, and provide treatment for trauma symptoms (Ko et al., 2008). Recently, there has been noteworthy attention paid towards standardizing trauma-informed care models in various child service settings including juvenile justice (Donisch et al., 2016; Ko et al., 2008).

Trauma-informed care is conceptualized as an organizational change process based on principles intended to promote healing and reduce the risk of re-traumatization for vulnerable individuals including those in correctional facilities or under correctional supervision (Wolf, Green, Nochajski, Mendel, Kusmaul, 2013). Although there is some debate around the definitions of trauma-informed care, some common elements of traumainformed or specific care include screening for trauma exposure, assessment of trauma impact, and increasing access to mental health treatment (Berliner & Kolko, 2016). Screening, assessment, and treatment are characteristics of broader behavioral health service provision (Sacks, Ries, & Ziendonis, 2005), and can address the underlying mental health needs associated with exposure to early childhood trauma (Cohen, Mannarino, & Deblinger, 2006). It may be less demanding or complex to target trauma as an external experience rather than the multiple residual and associated effects of mental health problems; trauma- based interventions largely fall under the broader category of mental health interventions. As such, to overcome trauma reminders, events, and to avoid retraumatization, cognitive behavioral techniques and narrative dyadic therapies, such as trauma-focused cognitive behavioral therapy, are employed (Cohen et al., 2006).

There is substantial variation in the rate and manner in which juvenile justice facilities systematically screen youth for mental health problems. A meta-analysis of prevalence of mental health conditions among youth in correctional facilities noted great variability in the instruments used, inter-rater reliabilities, and what constituted a mental health disorder (Fazel, Doll, & Långström, 2008). For example, some facilities may use clinical arbitration while others used mental health screening tools, and still yet, others may use diagnostic criteria. Some examples of tools include the Diagnostic and Statistical Manual of Mental Disorders (DSM-V; American Psychiatric Association, 2013) the Massachusetts Youth Screening Inventory (MAYSI; Grisso, Vincent, & Seagrave, 2005), or the Diagnostic Interview Schedule for Children - DISC (Shaffer, Fisher, Lucas, Dulcan, & Schwab-Stone, 2000). Furthermore, there are disparate ways these instruments are administered to youth with some being interview and others are self-report (Fazel et al., 2008). Furthermore, this meta-analysis did not include youth who were screened for mental health problems at entry into juvenile justice settings, nor did it link the mental health screening with early experiences of traumatic events. As such, there may be an advantage to considering nationally representative datasets that gather data on rates of screening across juvenile

justice settings.

Mental health service delivery in juvenile correctional facilities is inconsistent at best; some facilities may deliver services, some facilities may not have specialized staff or mental health professionals adequately trained to treat mental health symptoms (Maschi, Hatcher, Schwalbe, & Rosato, 2008; Swank & Gagnon, 2016). The juvenile justice system relative to the education or child welfare systems provides very little mental health resources and support to youth (Farmer, Burns, Phillips, Angold, & Costello, 2003). Research has also qualitatively identified inconsistencies in the delivery of traumainformed mental health care within the juvenile justice settings (Donisch et al., 2016). In fact, the philosophies of treatment for youth involved from the juvenile justice system differ greatly from other systems in that the juvenile justice system is largely focused on culpability and community safety (Maschi et al., 2008). Incarcerated youth have been found to have lower engagement in mental health services relative to other populations of youth with similar mental health needs (Liebenberg & Ungar, 2014; Pumariega et al., 1999).

Nevertheless, mental health treatments delivered in juvenile justice settings can be associated with positive outcomes including reduced mental health symptoms, PTSD, and reductions in recidivism. For example, correctional mental health treatment has been linked to reductions in suicidal ideation, emotional disturbances, and anger (Kaslow & Thompson, 1998; Kendall, Reber, McLeer, Epps, & Ronan, 1990; Underwood & Washington, 2016). Several randomized studies found trauma-focused cognitive behavioral interventions in juvenile justice facilities improved PTSD and depression symptoms among adjudicated youth (Cohen et al., 2016; Ford, Kerig, Desai, & Feirman, 2016). Cognitive behavioral interventions offered in juvenile correctional facilities have also been connected to decreased recidivism (Dowden & Andrews, 1999; Lipsey, 1999; Lowenkamp, Makarios, Latessa, Lemke, & Smith, 2010).

Recidivism can be operationalized in many ways, and official record data designating a new arrest or conviction is typically the most common (Lowenkamp, Latessa, & Smith, 2006; Lowenkamp et al., 2010). However, research studies have infrequently considered prospective perceptions of youth's future involvement with the criminal justice system. Youths' self-conceptions are powerful indicators of behavioral change. These are narratives that can link to one's core self-representation and are largely self- or socially constructed, rooted in internal or external messages (Bandura, 1986). These selfrepresentations are based on what the individual believes are facts or truths about themselves, their abilities, and subsequent behavioral change (Wallis & Poulton, 2001). Indeed, cognitive behavioral theorists have argued there is a substantial link between selfperception and behavior (Bandura, 1986; Wallis & Poulton, 2001). So, it may be imperative to understand a youth's perception in an effort to accurately assess behavioral changes; yet, very little research has explored the relationship between trauma incidents, mental health problems, and mental health service screening and service delivery on the perceptions of youths' likelihood for recidivism. Recognizing how mental health can influence youth's convictions towards behavioral change, and perhaps trauma can skew those beliefs, this study seeks to explore how perceptions of recidivism are influenced by mental health, traumatic events, and mental health screening and service delivery.

Current Study

The current study draws from nationally representative data on pre-and post-adjudicated youth (N=7073) that are housed in correctional facilities. We examined whether mental health screening and service delivery reduced perceived future interactions -- arrest and incarceration-- with the juvenile justice system. We proposed two hypotheses: a) youth with early exposure to trauma and current mental health problems will indicate increased likelihood for future interactions with the juvenile justice system, and b) youth who receive mental health screening and receive mental health services within correctional facilities will indicate reduced likelihood for future interactions with the juvenile justice system.

Method

Sample and Procedures

This study analyzed data from the Survey of Youth in Residential Placement (SYRP) that was developed and funded by the Office of Juvenile Justice and Delinquency Prevention (Sedlak, 2003). The SYRP is an anonymous youth self-report survey taken by pre-and post-adjudication youth aged 10-20 living in juvenile correctional facilities. The survey captures information on youth's criminal history, early traumatic experiences, and experiences in the facility. It is a nationally representative survey that used a probability proportional-to-size sample design, pooled from the Census of Juveniles in Residential Placement (CJRP) and the Juvenile Residential Facility Census (JRFC). A total of 290 facilities were selected, but 71% of those facilities participated (204). Of the eligible 9,495 youth, 74.5% or 7,073 youth participated in the survey (Sedlak & McPherson, 2010). Some youth did not participate for various reasons including failure to obtain parental consent or unwillingness to participate (Sedlak & McPherson, 2010).

Surveys were completed between March and June of 2003 and were administered on computers using an audio-assisted self-interview (ACASI) methodology. Weights have been assigned to the data and design effects were used to adjust for the nested structure of the data and youth and facility non-response rates. These methods included weight trimming, final weighting adjustments, and sampling variance calculations via jackknife replication. Once data were secure with minimal risk for participant detection, survey responses were made available to the public. The overall sample (n=7,073) averaged 16.5 years of age (SD=1.5), were primarily male (n=5,378;76.0%), with slightly more Hispanic youth (n=2,368;33.5%) than Black youth (n=2,068;29.2%) or White youth (n=2,005;28.3%).

The data have been distributed through the Inter-University Consortium for Political and Social Research (ICPSR) at the University of Michigan. Access to the data was granted through approvals from the University Institutional Review Board and the National Archive of Criminal Justice Data (NACJD) through the ICPSR Data Access Request System (IDARS).

Measures

Dependent variables. Two scaled dependent variables were *likelihood for future arrest* and *likelihood for future incarceration*. The youth were required to respond to two independent items "In the future, how likely do you think it is that you will be arrested?" and "In the future, how likely do you think it is that you will be locked up?" Responses ranged from $1 = Definitely \ will \ not \ to \ 4 = Definitely \ will$. On average, youth reported they will probably be arrested in the future (M = 3.20; SD = 1.22) and reported future incarceration between probably and definitely (M = 3.80; SD = 1.08).

Independent variables. Exploratory factor analyses were run to determine the factorability of items in generate composite scales that were used as independent variables for this study. There were several independent variables of interest that included youth mental health status (e.g., emotional disturbances, suicidal ideation, and anger), trauma incidents, mental health screening, and mental health service delivery.

Youth mental health status. Various items related to youth's mental health status were used in this in study. The SYRP included select questions on mental health status that were derived partially from the Massachusetts Youth Screening Instrument (MAYSI; Grisso & Barnum, 2006; Grisso, Barnum, Fletcher, Cauffman, & Peuschold, 2001; Sedlak & McPherson, 2010). Because all items were not included in the SYRP measure, Exploratory Factor analysis was conducted using principle axis factoring and promax rotation to determine the factorability of the set of items and how many factors loaded under each construct. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was .915 indicating there were high correlations among variables caused by a common factor. The eigenvalues (>1) indicated a three-factor solution, suggesting suicidal ideation, anger, and emotional disturbances were separate constructs. The communalities, or the percentage of variance explained was acceptable (ranging from .340 to .830), the factor loadings were high, and the scale reliabilities were good (see Table 1 for factor loadings and alpha scores). The mental health questions were prefaced with, "In the past few months, have you..." Example items included "Wished you were dead", "Felt angry a lot", and "Had bad thoughts or dreams". The binary responses (0=No; 1=Yes) were cumulated for each item to create an overall score for each factor.

Trauma incidents. The SYRP included select questions on early life trauma events that were not derived from a standardized or validated instrument. As such, Exploratory Factor analysis was also conducted using principle axis factoring and promax rotation to determine the factorability of a set of early life victimization items. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was .924 indicating there were high correlations among the variables caused by a common factor. The eigenvalues (>1) indicated a one-factor solution, suggesting all items loaded on one common factor labeled *Trauma Incidents*. This latent construct consisted of three disparate forms of trauma incidents (*physical, sexual or forced sexual*, or *emotional*). An example item was, "Were you physically abused when you were growing up?" The binary responses (0=No; 1=Yes) were combined to form a composite with a score ranging from 0 to 3 (0=none; 1=1 type; 2= 2 types; 3=3 types). The alpha for this scale was good $(\alpha=.748)$.

Mental health screening and mental health service delivery. Mental health screening was a variable that was based on facility administrators' answers to the 2002 Juvenile Residential Facility Census questions that asked, "Are all young persons evaluated or appraised by a mental health professional inside the facility?" The response items were (0=No; 1=Yes). Mental health service delivery was linked directly to the preceding mental health status questions. It consisted of one item that asked youth, "Since you have been in this facility, have you received counseling to help you deal with any of your feelings and emotions?" The response items were (0=No; 1=Yes).

Control variables. Controls included *gender*, *race/ethnicity*, *age*, and *program type*. Gender was dummy coded to indicate male or female (0= Female; 1= Male). Youth's race/ethnicity was measured in five categories (1= Black; 2= Any Hispanic; 3= American Indian/Alaska Native/Asian/Native Hawaiian/Other; 4= White; 5=Two or More Groups (Non-Hispanic)). Two different race dummy variables including Black (0=Else; 1=Yes) and Hispanic (0=Else; 1=Yes) were created to better understand the relative influence of each race. These variables were chosen because they represented the majority of the youth in the sample. Age was a continuous variable of the number of years old at the time the survey was administered. The final control variable was program type and was measured in five categories (1= Detention Unit; 2= Correctional Unit; 3= Community-based Unit; 4=Camps; 5=Residential Treatment Unit). This variable was dummy coded to reflect a correctional or detention setting (0=Else; 1=Correctional or detention). The variables' frequencies and distributions, and relative factor loadings provided in Tables 1a and 1b.

Table 1a. Sample Characteristics and Factor Loadings

	Endorsed	Factor
	n (%)	Loadings
Trauma Incidents (α=.748)		
Youth was physically abused when growing up	2548 (36%)	0.733
Youth experienced emotional abuse when growing up	2217 (31.3%)	0.721
Youth experienced sexual abuse/ forced sex when growing up	1030 (14.6%)	0.501
Suicidal Ideation (α=.879)		
Thought about killing self	1113 (15.7%)	0.951
Thought about hurting self	1242 (17.6%)	0.841
Life is not worth living	1950 (27.6%)	0.674
Wished I was dead	1519 (21.5%)	0.845
Anger (α =.753)		
Temper	4327 (61.2%)	0.746
Easily upset	4938 (69.8%)	0.704
Often angry	4396 (62.2%)	0.729
Emotional Disturbances (α=.681)		
Nightmares	1384 (19.6%)	0.565
Lonely	3851 (54.4%)	0.57
Non-fun friends	2422 (34.2%)	0.47
Bad thoughts	2473 (35%)	0.625
Nervous or worried feelings	3800 (53.7%)	0.517
Therapeutic services for mental health problems	3544 (50.1%)	
Screening by mental health professional	3129 (44.2%)	

Table 1b. Sample Characteristics

Controls	n(%)
Gender	
Male	5378 (76%)
Race	
White	1951 (27.6%)
Black or African American	2026 (28.6%)
Any Hispanic	2308 (32.6%)
American Indian/Alaska Native/ Asian/ Native Hawaiian/ Other	197 (2.8%)
Two or More Groups (Non-Hispanic)	421 (6%)
Program Type	
Detention Unit	2061 (29.1%)
Correctional Unit	2806 (39.7%)
Community-based Unit	768 (10.9%)
Camps	753 (10.6%)
Residential Treatment Unit	685 (9.7%)
	Mean (SD)
Age	16.2 (1.57)

Analyses

Complex survey methods were used to analyze the data using Stata 13.1 (StataCorp, 2013). Two types of sampling weights were used in the analysis. The final youth weight (FYWT) was used due to the complex sampling design in the SYRP survey, while the 74 replicate weights (R_FYWT1 to R_FYWT74) generated in the SYRP database were used in the variance estimation methods. Specifically, for our analyses, a balanced repeated replicate (BRR) variance estimator was used to generate standard errors used in the development of p-values and confidence intervals. BRR is a variance estimation technique used with complex designs with two primary sampling units (facility and youth) (McCarthy, 1996). It provides reasonable variance and standard error estimations that would otherwise be artificially inflated. The authors of the original project (see: Sedlak et al., 2012) require the use of survey weights for all analyses to account for nesting of youth within facilities and oversampling of females and Hispanic youth. We ran bivariate linear regressions to test the first hypothesis; there is a statistically significant positive relationship between trauma incidents and mental health problems among incarcerated youth. Then, we ran bivariate logistic regressions to test the relationships between mental health problems and mental health screening and service delivery. Next, we ran two stepwise linear regressions with the goal of testing the first hypothesis and then adding therapeutic services in the model to determine its mitigating effects on the variables of interest and effects on the outcome.

Results

Relationship between trauma incidents and mental health status. All bivariate regression models revealed a good fitting model with the F-statistic p<.001. The results revealed that there was a statistically significant positive relationship between trauma incidents and all three outcomes of mental health status. Youth with more trauma incidents reported more emotional disturbances (b=.52, p<.001), more suicidal ideation (b=.57,

p<.001), and more anger (b=.28, p<.001). The results from these analyses are provided in Table 2.

Table 2. Bivariate Analyses Regressing Trauma Incidents

Independent Variable: Trauma Incidents									
Outcomes	<u>B</u>	t(SE)	95% CI	Model Fit	\mathbf{R}^2				
Emotional Disturbances	.52*	144.07(.01)	.5152	F(1,73)=20756.22	$.1\overline{04}1$				
Suicide	.57*	234.00(.01)	.5657	F(1,73)=54755.57	.1712				
Anger	.28*	142.09(.01)	.2728	F(1,73)=20189.91	.0485				
*p<.001									

Relationship between mental health status and mental health screening and service delivery. All bivariate logistic regression models revealed a good fitting model (p<.001). The results revealed that youth with emotional disturbances had a greater likelihood of being screened for mental health (b=.06, p<.001) and receiving mental health services (b=.03, p<.001). Youth with suicidal ideation had a greater likelihood of mental health screening (b=.03, p<.001) and receiving mental health services (b=.02, p<.001). Youth with anger had a greater likelihood of being screened for mental health (b=.06, p<.001) and a reduced likelihood of receiving mental health services (b=-.06, p<.001). The results from these analyses are provided in Table 3.

Table 3. Bivariate Analyses Regressing Mental Health Problems

			0 0						
	Emotional Disturbances			Suicidal Ideat	tion	Anger			
Outcomes	<u>B</u>	<u>t (SE)</u>	95% CI	<u>B</u>	<u>t (SE)</u>	95% CI	<u>B</u>	t (SE)	95% CI
MH Screening	.06*	16.20 (.00)	.0607	.03*	4.32 (.01)	.0104	.06*	18.54 (.00)	.0507
MH Service	.03*	15.81 (.00)	.0304	.02*	5.23 (.01)	.0102	02*	-4.64 (.01)	0201
Delivery									
Legend MH= Me	ental Hea	lth, *p<001							

Relationship between trauma incidents, mental health status and future interactions with the criminal justice system. The results revealed that youth with more trauma incidents report a greater likelihood of arrest (b=.24, p<.001) and incarceration (b=.13, p<.01). Nevertheless, youth who report more emotional disturbances (b=-.22, p<.001), suicidal ideation (b=-.12, p<.01), and anger (b=-1.20, p<.001) reported a lower likelihood of future arrest. Youth with more emotional disturbances (b=-.38, p<.001) and anger (b=-1.42, p<.001) reported a lower likelihood of future incarceration, but youth with greater suicidal ideation reported greater likelihood of future incarceration (b=.09, p<.001). The results addressing the second hypothesis are provided in Table 4 and 5.

Table 4. Likelihood of Arrest Hierarchical Linear Regression Model

		Model 1			Model 2		
	В	t (SE)	95% CI	В	t (SE)	95% CI	
Age	25***	-6.69 (.04)	3217	22***	-6.22 (.04)	2915	
African American	.04	.38 (.12)	2919	.28**	2.50 (.11)	.5006	
Hispanic	.02	.80 (.07)	.1612	.03	.45 (.07)	.1711	
Male	.44*	2.46 (.17)	.8008	.32	1.82 (.17)	.6803	
Trauma Incidents	.24***	5.84 (.04)	.1633	.30***	7.09 (.04)	.2238	
Emotional Disturbances	22***	-6.77(.03)	2916	18***	-5.44 (03)	2411	
Suicide	12**	-2.92 (.04)	2004	14**	-3.27 (.04)	2205	
Anger	-1.20***	-33.45 (.04)	-1.271.13	-1.12***	-33.14 (.03)	-1.201.06	
Program Type	1.42***	10.27 (.14)	1.14-1.71	1.31***	8.82 (.15)	1.01-1.60	
MH Screening				29***	-11.91 (.02)	3424	
MH Service Delivery				-1.71***	-17.46 (.09)	-1.901.51	
Model Fit	F(9	(0,65)=366.62, p < 0.65	.001	F(11, 63)=365.79, p<.001			
R-Square		.0048			.0069		

Legend *p<.05, **p<.01, ***p<.001

MH= Mental Health

Relationship between mental health screening, mental health service delivery and future interactions with the criminal justice system. The results revealed that mental health screening was associated with reported reduced likelihood of future arrest (b=-.29, p<.001) (Table 4) and incarceration (b=-.31, p<.001) (Table 5). Furthermore, youth who reported receiving mental health services reported a reduced likelihood of future arrest (b=-1.71, p<.001) and incarceration (b=-1.34, p<.001).

Table 5. Likelihood of Incarceration Hierarchical Linear Regression Model

		Model 1			Model 2		
	В	t(SE)	95% CI	В	t(SE)	95% CI	
Age	07*	-2.20 (.03)	1407	04	-1.17(.03)	1003	
African American	.60***	4.90 (.12)	.8435	.84***	7.39 (.11)	1.0661	
Hispanic	.33***	4.73 (.07)	.4719	.36***	5.20 (.07)	.5022	
Male	.05	.31(.16)	3727	05	.31 (.16)	.2737	
Trauma Incidents	.13**	3.26(.04)	.0522	.19***	4.51 (.04)	.1127	
Emotional Disturbances	38***	-11.34(.03)	4531	34***	-9.84(.03)	4126	
Suicide	.09*	2.26(.04)	.0117	.09*	2.18 (.04)	.0117	
Anger	-1.42***	-40.27 (.04)	-1.491.35	-1.35***	-40.18(.03)	-1.421.29	
Program Type	1.68***	12.88(.13)	1.42-1.94	1.68***	12.32 (.14)	1.41-1.96	
MH Screening				31***	-13.16 (.02)	3627	
MH Service Delivery				-1.34***	-12.86(.10)	-1.501.13	
Model Fit	F(9	9,65)=476.06, p<.	001	F(11, 63)=450.34, p<.001			
R-Square		.71%			.90%		

Legend *p<.05, **p<.01, ***p<.001

MH= Mental Health

Discussion

The results from this study add to extant research on trauma, mental health, screening, and service delivery among youth involved in the juvenile justice system. This study found significant relationships between trauma incidents and mental health disturbances. This largely coincides with research suggesting that youth with previous trauma histories have

associated mental health problems including anxiety suicidal ideation and anger (Bolger & Patterson, 2001; Hazen et al., 2009; Higgins & McCabe, 2003; Martin et al., 2004; Runyon & Kenny, 2002). While this may not be new information, it is important to contextualize these associations for youth offenders. These findings help isolate some of the reasons underlying disproportionately high levels of mental health problems among juvenile justice involved youth (Fazel et al., 2008; Teplin et al., 2002; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002).

The results also pointed to the relationships between mental health problems and mental health screening and service delivery. These findings largely suggest that the more mental health problems reported by youth, the more likely they are to receive screening and service delivery, with the exception of the inverse association between anger and service delivery. While these relationships are marginally strong, they generally show the promise of juvenile justice systems appropriately responding to the mental health concerns of youth. It is not surprising that youth who have more anger are less likely to receive mental health services. Perhaps anger or the manifestations through externalizing behavior problems (DeLisi et al., 2009) warrants the use of control or force to mitigate problems (Day, 2002), rather than therapeutic responses; physical or psychological controls are common reactions by juvenile justice staff encountering anger and aggression (Hodge & Yoder, 2017; Mason & Magnan, 1995; Schwalbe & Maschi, 2011) and corresponds closely with the ideologies of juvenile justice – to remediate or control (Maschi et al., 2008).

The findings from this study revealed that trauma incidents were positively associated with perceived likelihood for future arrest and incarceration. This finding is not surprising in light of theory and research indicating substantial links between early exposure to trauma and the propensity for juvenile justice involvement (Coleman, 2005; Coleman & Stewart, 2010; Smith & Thornberry, 1995; Widom, 1992; Widom & Maxfield, 2001). This adds to the extant research on this topic, and informs the wider literature base indicating direct relationships between these two constructs. Yet, there were some surprising findings that revealed associations between mental health and perceived likelihood of recidivism. In most of the models, with the exception of suicidal ideation and likelihood for incarceration having a positive relationship, the results are somewhat antithetical; the more youth report mental health problems, the less likely they are to report interactions with the juvenile justice system. This finding is unexpected, but perhaps can be understood through the lens of social cognitive theory; one's perceptions of mental health problems contrast with the realistic implications of the problems on their behavioral outcomes. Scholars have talked about the notion of the social construction of cognition and how one's perception, while considered their "truth" may in all actuality be juxtaposed with reality (Caprara, Vecchione, Barbaranelli, & Alessandri, 2013). In fact, some research has revealed that it may be more common for youth to have "self-serving cognitive distortions" relative to adults that link to antisocial behavior (Wallinius, Johansson, Lardén, Dernevik, 2011, p. 288). Youth with mental health problems may not be aware of how these problems can impact their criminal behavior, and, conceivably, the self-serving distortions could be playing a role in their reports. Another consideration is the role and impact of social desirability on youth offenders that supports a greater tendency to provide socially desirable responses on surveys and risk assessments. Specifically, prior research suggests

that African American males have a greater tendency to provide socially desirable responses, so this could also be a factor with these findings (McCoy, 2011). This finding highlights the necessity to triangulate data sources and examine racial differences in future research.

Most interestingly, this study pointed to the strong inverse relationship between mental health service delivery and youth's perceived likelihood for recidivism. This finding suggests that perhaps even if the mental health symptoms are present, mental health screening and service delivery can lead to changes in self-constructed narratives. Although mental health screening demonstrated moderate effects, it suggests that this can be a coordinating mechanism to link to service delivery and advance rehabilitative efforts (Fazel et al., 2008). The addition of mental health services marginally mitigated the trauma incidents and mental health symptoms, and led to perceived recidivism reduction. The mental health services youth receive can impact the underlying trauma incidents and mental health symptoms, and may be considered helpful towards altering distorted cognitions (Dowden & Andrews, 1999; Lipsey, 1999; Lowenkamp et al., 2010). With more research identifying the promise of juvenile justice therapeutic services (Lowenkamp et al. 2006; Lowenkamp et al., 2010; Wallis & Poulton, 2001), this study may support the use of both screening and mental health service delivery.

Implications

This study reveals findings regarding the association between mental health screening and service delivery and perceptions of recidivism, indicating the necessity to provide mental health services in juvenile justice settings. Further, the high numbers of incarcerated youth who have trauma histories suggests that trauma-informed or trauma-specific services may be warranted. Trauma-informed care may be subsumed under current mental health practices but trauma specific interventions may be more effective and contextually appropriate for this population of youth. There have been several calls to develop systems that identify and treat traumatized youth (Berliner & Kolko, 2016; Crosby, 2016; Ko et al., 2008). Interventions such as trauma-focused CBT have led to improved outcomes for adjudicated teens including reduced depression, PTSD, and recidivism (Cohen et al., 2016).

There is a great need for juvenile justice systems to comprehensively address trauma. This may include a shift from a punitive to a more rehabilitative philosophy (Crosby, 2016). To do this the system must create an organized assessment and intake process that are sensitive to trauma and that avoid re-traumatization, that identify trauma histories through screening, and ensuring that once identified, youth receive appropriate treatment (Crosby, 2016; Ford et al., 2006). Implementing changes may require organizational oversight to ensure quality assurance for practice changes as well as incentives and reinforcement to ensure sustainability of practice changes (Berliner & Kolko, 2016). Because there have been recent changes in the PTSD and other mental health criteria according to the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM-V; American Psychiatric Association, 2013) since this data was collected, juvenile justice personnel can be trained on how to diagnose and screen according to the most up-to-date criteria.

Ideally, standardization in mental health practices across juvenile justice systems will be developed to prepare youth for re-entry. Re-allocation of funds to develop appropriate resources related to mental health screening and service delivery is necessary to prepare youth in multiple domains of life. Pursuing educational opportunities and employment can be difficult with unaddressed mental health conditions. Looking at outcomes differently and according to youth's perceptions of success can be the next step in translational research. Behavioral change occurs through mental state transformation. This may be the first step in making determinations of "rehabilitation" for release readiness or during transitional service integration. While not a robust measure of recidivism, it can help us determine the mental statuses of our youth in facilities.

Limitations

There are several limitations that this study must address. For one, this is a secondary dataset, and the authors had no role in the study design or data collection process. The survey data was cross-sectional, and the authors cannot guarantee the time-order sequence of the factors under investigation. Further research should account for this and be designed to longitudinally and prospectively measure these constructs. The findings from this study do no imply causality; rather, they are reflective of associations and relationships between the variables of interest. The survey items were not representative of validated measurement tools, and statistical methods to ensure the validity of the composites were used. Further, mental health screening and service delivery were a somewhat reductive way to measure this complex phenomenon. Mental health treatment was used as a proxy for trauma-informed treatment because there was no assessment of trauma-informed models in this study, and there is a need for a more robust measure. Additionally, the dichotomous (yes/no) response format failed to account for the frequency of the events being measured; all such instances could change the nature of the outcomes we found. Future studies could include additional measures through convergent tools or multiple informants to increase the validity and reliability of the data, thus leading to more nuanced analyses.

Further, this discussion and literature portions of this paper may be more relevant to a more contemporary sample of juvenile justice involved youth, as a significant limitation of this study is the aged data set. The authors acknowledge little can be done regarding the age of the dataset. Also, it can be extremely difficult to collect data on juvenile justice involved youth because of the added complexities surrounding their protections. This study is the only self-report nationally representative sample of incarcerated youth to date that encapsulates measures around trauma and mental health- another difficult concept to study among this group of youth. Lastly, in our attempt to test a basic model by only including race/ethnicity, gender, and age as covariates, we have left out other variables that may also be worth considering, such as perceptions of staff or time in facility. Despite these limitations, these study findings provide some clinical implications. The large sample size allowed us to explore a relatively understudied field of research with high practical relevance.

Conclusion

This study has yielded findings that support the linkages between trauma and mental health and the use of mental health screening and service delivery in juvenile justice settings. There is a need for greater transparency of the programmatic structures among juvenile justice systems, and certainly more robust models of trauma-informed care can be introduced. Mental health screening and services can be a first step in a more comprehensive look at the provision of services offered within juvenile justice settings. While important to maintain public safety and offender accountability, juvenile correctional facilities are also charged with rehabilitating youth. In doing so, we can collectively create solutions that are sensitive to the diverse needs of youth.

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Evaluation of a Multi-Phase Trauma-Focused Intervention with Latino Youth

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Abstract: This pilot study examined the effectiveness of a multi-phase trauma-informed intervention with 24 trauma-exposed Latino youth. Treatment included a somatic-based intervention to target physiological hyperarousal symptoms and a sensory/cognitive-based trauma-focused intervention targeting stabilization of the trauma experience. Twenty-four participants completed several measures for mental health symptomatology and psychosocial functioning at baseline, at the conclusion of treatment, and at 3-month follow-up. Results of paired sample t-test analyses showed significant improvements in scores on measures for trauma, anxiety, depression, psychosocial functioning, and emotional dysregulation following 12 weeks of treatment when compared to baseline. Improvements were maintained at 3-month follow-up. This community-based intervention shows promise in helping Latino children who have experienced trauma. Research using randomized controlled designs with larger samples is suggested to further test the efficacy of this intervention.

Keywords: Post Traumatic Stress Disorder; trauma-informed treatment; Latino youth; mental health

Latino children in the U.S. experience various traumatic events such as exposure to political and other forms of violence prior to and during the journey to the U.S., maltreatment, sexual abuse, and parental deportation (Cuevas, Sabina, & Milloshi, 2012; Dettlaff & Johnson, 2011; Fortuna, Porche, & Alegria, 2008; Rojas-Flores, Clements, Koo, & London, 2016; Sedlack et al., 2010; U.S. Department of Health and Human Services 2015). Experiencing prolonged violence within a chaotic environment can lead to complex trauma that can impair the ability to regulate emotions, thoughts, and physiological reactions (Cook et al., 2005; Lawson & Quinn, 2013). Physiological responses to traumatic events are associated with the body's natural stress response (i.e., fight or flee) and can lead to somatic reactions long after the trauma is over (Ogden & Minton, 2000).

Trauma can lead to physiological reactions to both traumatic reminders and neutral stimuli that can activate states of hyper- or hypoarousal (van der Kolk, 1994). Hyperarousal may include sensations of feeling frozen, racing thoughts, aggression, fear and emotional reactivity or dysregulation, while hypoarousal may include collapse (i.e., fainting), dissociation and emotional numbness (Ogden & Minton, 2000).

The high rate of violence experienced by Latino children and youth may make them more susceptible to difficulties with affect and behavioral regulation (Cook et al., 2005) that can lead to problem behaviors, depression, and anxiety (Buckner, Mezzacappa, & Beardslee, 2009; Warner, Koomar, Lary, & Cook, 2013). Furthermore, emerging evidence suggests that Latinos who have experienced trauma may experience more severe symptoms

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for longer periods of time and may be more likely to develop PTSD (Alcántera, Casement, & Lewis-Fernández, 2013). They may also be more likely to report positive symptoms of trauma such as hypervigilence, emotional reactivity, hyperarousal, and intrusive thoughts than their non-Hispanic, white counterparts (Marshall, Schell, & Miles, 2009).

Trauma intervention and research has focused on cognitive behavioral therapies (such as Trauma-Focused Cognitive Behavioral Therapy) and other language-based interventions (Warner, Spinazzola, Westcott, Gunn, & Hodgdon, 2014). According to Warner et al. (2013), for interventions that are language-based, "the child must be sufficiently regulated, organized, grounded and present, such that language, imagination, and symbolic expressive function can emerge" (p. 730). These interventions are generally effective in treating children, but may be less effective for those who experience intense physiological symptoms (Perry, 2009; Raio, Orederu, Plazzolo, Shurick, & Phelps, 2013; Wolf, 2013).

Somatic-based interventions, movement, and physical activities can help children develop self-regulation skills that help prepare them for traditional therapy interventions (Corrigan, Fisher, & Nutt, 2010; Perry, 2009; van der Kolk, 2006; Warner et al., 2014). Latino children with histories of trauma may benefit from somatic-based interventions either in lieu of or as a precursor to language-based interventions. These interventions aim to decrease states of arousal and may be especially helpful for community-based mental health programs with limited resources or that lack bi-lingual services.

The purpose of this pilot study was to evaluate the impact of multi-phase therapy that combined a somatic-based intervention with a trauma-informed language-based cognitive-behavioral intervention for Latino youth to address symptoms and behaviors related to emotional dysregulation and physiological hyperarousal. We hypothesized that the use of a multi-phase intervention would be associated with a significant reduction in trauma-related symptoms including depression and anxiety. We also hypothesized that these reductions would be maintained at 3-month follow-up.

Methods

Participants and setting

This study used a one-group pretest-posttest follow-up design. All participants were Latino children and youth exposed to traumatic events and who experienced clinically significant psychological or behavioral symptoms. This convenience sample included self-referrals and referrals from local schools or agencies to a community-based health clinic serving Latinos in a Midwestern city. The decision to not use control or comparison groups was based on the agency's reluctance to deny or delay services to their constituency.

A total of 53 participants enrolled in treatment. Out of that number, 24 (45%) fully completed both the treatment and follow-up phases of the study. Eligibility criteria included: (1) ages between 5 and 20 years of age; (2) lifetime experience of a traumatic event as determined by the DSM-IV-TR which involves actual or threatened loss of life or serious injury to oneself or others causing intense fear or horror (APA, 2000); and (3) the experience of clinically significant psychological or behavioral symptoms. The study

included a wide range of ages to maximize the number of persons who could be assisted by the intervention. The intervention was adapted to accommodate age differences on a case-by-case basis. Persons experiencing intellectual disabilities, active psychosis, suicidality, or who were receiving trauma-focused treatments or psychotropic medications in another setting were excluded. Eligible participants were guided through an informed consent process by a bi-lingual researcher. Informed consent documents were translated into Spanish by a professional service, using back-translation procedures. Ethical approval was obtained for this study from the Institutional Review Board at the host University of the principal investigators.

Interventions

The first author, a licensed clinical social worker employed at the agency at the time of the study, provided all treatment. This person developed the Somatic Soothing Intervention (SSI) Manual (Farina & Silversmith, 2013) and was trained in Structured Sensory Intervention for Traumatized Children, Adolescents and Parents (SITCAP; Steele & Malchiodi, 2012). To ensure fidelity, session checklists tracked the use of key intervention principles and activities. Participants received SSI until they were deemed physiologically stable enough to begin the SITCAP intervention. Some brief SSI activities were also used at the opening and ending of each SITCAP session.

Somatic Soothing: A Somatic-Based Intervention for the Treatment of Trauma. SSI helps children who experience hyper-arousal and dissociation develop skills that help them reach a state of stabilization. Key components of SSI include safety, choice, pace, success, checking in/mindfulness, and relaxation/breathing. The principles of SSI involve giving the child a sense of safety, mastery, and control. The intervention emphasizes the importance of checking in with the child about their internal experience throughout the intervention to help them build a sense and mindfulness of their internal experiences. Activities flow between activation and relaxation mimicking the body's natural rhythm of calming down after being activated.

Main categories of activities include relaxing, creating space and boundaries, movement, body resources, defending space, building core, and grounding. Relaxing activities counter the activation from the arousal activities such as rolling on a large exercise ball. There are a series of movement activities in which the child exerts some force with their bodies. Movement activities may be chosen based on problematic behaviors noted in a behavior checklist and can include activities such as squeezing the large exercise ball, rolling the ball up the wall, and running one's legs while pushing against a large stationary ball. Body resources are movements that invoke a sensation of calm used during times of stress (i.e., moving in hips, opening of the chest, stretching, hugging self, hugging legs to chest, putting hand to heart). Grounding resources help children learn how to stay present during dissociation such as lightly tapping on extremities. Clinicians continually assess the child to ensure activities are developmentally appropriate and engaging. They establish safety through routine and predictability, while also introducing new activities at the pace set by the child.

This was the first study to test the effectiveness of SSI as a part of a multi-phase intervention. This intervention is based on research and theory on the use of somatic-based interventions to aid in decreasing hyperarousal symptoms as a means to prepare children for more cognitive-based interventions (Perry, 2009; van der Kolk, 2006; Warner et al., 2014). Interventions that contributed to the development of SSI include sensory diet activities (Wilbarger, 1984), Sensory Motor Arousal Regulation Treatment (Warner, Koomar, & Westcott, 2009), Sensorimotor Psychotherapy (Ogden, Pain, & Fisher, 2006), Impact Basics (Rosenblum & Taska, 2014), and yoga.

Structured Sensory Intervention for Traumatized Children, Adolescents and Parents (SITCAP). SITCAP is a sensory and cognitive-based trauma intervention that was developed by the National Institute for Trauma and Loss for Children. SITCAP is considered a promising practice in SAMHSA's National Registry of Evidence-Based Programs and Practices and has been used in multiple settings with diverse children and adolescents. The intervention uses exposure, trauma narrative processing, and cognitive reframing through a series of drawing activities designed to process trauma while identifying thoughts, feelings, and body sensations (Steele & Malchiodi, 2012).

Assessment Measures

Participants and/or their guardians completed a full assessment at three time periods: (1) prior to treatment (baseline); (2) upon completion of both phases of treatment (posttest); and (3) at three months after treatment (follow-up). The first author, who previously worked for more than ten years providing mental health services to Spanish-speaking individuals and families, performed all research interviews. All assessment tools not previously available in Spanish were translated by a professional translation service, using back-translation procedures. In addition, assessment tools were pilot-tested to ensure clarity and understanding. All parents and caregivers in this study chose to complete the assessment in Spanish.

Trauma symptomology. Trauma histories and symptoms were assessed using the UCLA PTSD Index for DSM-IV (Birman & Chan, 2008; Pynoos, Rodriguez, Steinberg, Stuber, & Frederick, 1998). This measure screens for the presence of any type of traumatic event and the frequency of DSM-IV PTSD symptoms in children, adolescents, and parents. A number of studies across cultures indicate that the UCLA PTSD Index has good validity and reliability of the scale in terms of both internal consistency and test-retest reliability (Birman & Chan, 2008). For a sample of children and youth who have experienced at least one trauma, Steinberg et al. (2013) reported Cronbach's alpha across race/ethnicity from .88 to .90. The measure has an overall severity score that can indicate the presence of a potential Post-Traumatic Stress Disorder condition and a clinical cut off score of 38 (Rodriguez, Steinberg, Saltzman & Pynoos, 2001; Steinberg, Brymer, Decker, & Pynoos, 2004).

Anxiety. Anxiety symptoms were assessed using the Screen for Child Anxiety Related Disorders (SCARED). The SCARED is a 41-item parent and child self-report screening instrument used to detect anxiety in children across the anxiety domains of panic/somatic, generalized anxiety, separation anxiety, social phobia, and school phobia (Birmaher et al.,

1999). Participants rated a series of questions as 0 (*not true*), 1 (*somewhat true*), and 2 (*very true*) over the previous 3 months. The clinical cutoff score for the measure is 25. The SCARED has shown good convergent and divergent validity when compared to empirically supported scales such as the Child Behavior Checklist (CBCL) and the State-Trait Anxiety Inventory for Children (STAIC, Monga et al., 2000). Though a Castilian Spanish version has shown promise in Barcelona, Spain (Cronbach's alpha coefficient .83 and scale reliability between .44 and .72; Dobal, Martínez, & Doménech-Llaberia, 2011), a Spanish version translated by a professional service was used due to language and cultural differences for this Latino sample.

Depression. Depression symptomatology was measured using the National Institute of Mental Health Center for Epidemiological Studies Depression Scale for Children (CESDC). The CES-DC is a 20-item self-report depression inventory with scores ranging from 0 to 60, with a clinical cutoff score of 15. Participants rate the frequency of a range of depressive symptoms as rarely (< 1 day), a little of the time (1-2 days), a moderate amount of time (3-4 days), and most/all of the time (5-7 days) over the past week. This scale is well established with good reliability and validity (Faulstich, Carey, Ruggiero, Enyart, & Greshem, 1986; Weissman, Orvaschel, & Padian, 1980). The CES-D has shown good reliability (alphas between .84 to .87 across four racial/ethnic groups [Anglo, Mexican, Cuban, and Puerto Rican]) and has been found appropriate for use with Mexican American youths (Crockett, Randall, Shen, Russell, & Driscoll, 2005).

Psychosocial Functioning. Cognitive, emotional and behavioral functioning was assessed using the Pediatric Symptom Checklist (PSC). The PSC is a 35-item, parent-completed screening questionnaire of children's psychosocial functioning (Jellinek et al., 1988). Parents rated the frequency of the items on a 3-point Likert scale ranging from 0 (*never*) to 2 (*often*). The clinical cutoff score on the PSC is 24 for younger children and 28 for older children. In validity studies the PSC has correlated highly with the Children's Global Assessment Scale (Shaffer et al., 1983) and the CBCL (Jellinek et al., 1988). The PSC showed good sensitivity, specificity, and internal consistency (Cronbach alpha score of .94) across gender and race/ethnicity among a group of children and youth (6-22 years old) enrolled in Medicaid (Boothroyd & Armstrong, 2010).

Physiological Hyperarousal Checklist. The Physiological Hyperarousal Checklist is a 15-item parent self-report checklist developed by the first author. No reliability data currently exists. This measure was used in this study as opposed to the CBCL in this clinical setting and population due to the length and availability in Spanish and because of its clinical specificity in determining the somatic-based activities targeted towards decreasing hyperarousal behaviors. The measure asks about the frequency ranging from 0 (*not at all*) to 3 (*a lot*) of several hyperarousal behaviors including hitting, agitation, fighting, tantrums, etc. This instrument was developed in both English and Spanish.

Emotion Regulation Checklist (ERC). The ERC is a 23-item parent/caregiver report scale that assesses emotional regulation and dysregulation (Shields & Cicchetti, 1997). The Emotion Regulation subscale (Cronbach's alpha = .68) consists of 8 items that assess emotional competence and the ability to empathize (Shields & Cicchetti, 1997). The Negativity subscale includes 15 items that assess emotional dysregulation and reactivity.

Higher scores on the Negativity subscale indicate decreased emotional regulation. Higher scores on the Emotional Regulation subscale indicate greater emotional regulation skills (Shields & Cicchetti, 1997).

Data Analysis

Descriptive statistics were used to identify participant demographics and the mean scores for each measure at baseline, posttest, and follow-up observation points. Independent samples t-tests and paired t-tests were used to test for differences in scores based on gender and age level at baseline, post-test and 3-month follow-up for each of the measures and the number of trauma events experienced. For gender, females (n=14) were coded as 0 and males (n=10) were coded as 1. For age, participants were split into two age groups. Participants aged 5 to 10 (n=13) were coded as 0 and those aged 11 to 20 (n=11) were coded as 1. Due to the small sample size, it was not feasible to break participants into more age groups.

Paired sample t-tests were used to test the differences in baseline and post-intervention scores for each measure for the entire group. The same procedure was followed to compare posttest scores and scores collected at 3-month follow-up to see if gains were maintained. The alpha level was set to .01 to better control for Type I errors.

In the final dataset, scores for the depression (CES-D) and anxiety (SCARED) scales were missing for three participants. These missing scores were determined to be random and not due to systematic bias. Adding in mean scores for the missing data did not significantly alter scores or significance levels when compared to analyses that excluded these participants.

Results

Participant Characteristics

Table 1 displays the sociodemographic characteristics of the sample. The mean age for participants was 11.4 years and just over half the sample were aged 10 or older. The majority of the sample was female and born in the U.S. A third of the sample was born in Mexico. All of the parents/caregivers of the participants were born outside of the U.S. The average length of time between baseline and posttest was 12 weeks. Participants experienced on average 2.4 traumatic events (SD=1.94). Females average 2.5 events, while males averaged 2.3 events. The most common events experienced were domestic violence and sexual assault. Over 83% of participants reported either experiencing or witnessing domestic violence, and almost 40% of the sample reported experiencing sexual abuse.

Independent samples t-tests were conducted to explore the presence of any sub-group differences. Males had significantly higher hyperarousal levels than females, t(22) = -3.49, p = .002. Younger participants had significantly higher posttest scores for emotional dysregulation, t(22) = 2.87, p = .009. No other significant differences were found for age or gender across the three time periods. To test if any of these sub-group differences impacted treatment outcomes, four separate paired sample t-tests were conducted with each

sub-group (males, females, younger and older). Similar to the full participant group, results showed significant differences in mean scores for each sub-group between baseline and posttest for trauma, anxiety, depression, psychosocial functioning, emotional dysregulation and physiological hyperarousal.

Table 1. Sociodemographic Characteristics of Sample (n=24)

Sociodemographic Factors	n (%)
Age Range	
5-9 years	11 (45.8%)
10-15 years	6 (25%)
16-20 years	7 (29.2%)
Gender	
Female	14 (58.3%)
Male	10 (41.7%)
Country of Origin	
United States	14 (58.3%)
Mexico	8 (33.3%)
Honduras	2 (8.3%)
Traumatic Events	
Witnessing Domestic Violence	15 (62.5%)
Experiencing Domestic Violence Directly	5 (20.8%)
Sexual Abuse	9 (37.5%)
Natural Disaster	5 (20.8%)
Bad Accident	5 (20.8%)
Experiencing or Witnessing Physical Assault	3 (12.5%)

Trauma, Anxiety, Depression, Psychosocial Functioning, Emotional Regulation and Hyperarousal

As shown in Table 2, participants reported clinically significant symptoms for trauma, depression, anxiety, and psychosocial functioning at baseline. Results showed that the severity levels of participants' symptoms of trauma, depression, and anxiety significantly decreased following participation in treatment. Posttest scores for trauma and depression dropped an average of 48%, while anxiety posttest scores dropped an average of 42%. Similar decreases in posttest scores were seen in psychosocial functioning, with an average decrease of 38% from baseline. Average posttest scores on the Negativity subscale of the ERC showed a 27% reduction in scores from baseline indicating decreased emotional dysregulation. Finally, there was a 45% reduction in posttest scores for physiological hyperarousal from baseline. Reductions in scores at three-month follow-up for trauma, depression, anxiety, psychosocial functioning, emotional dysregulation, and physiological hyperarousal were maintained. Scores on trauma significantly decreased further during follow-up, t(23) = 3.11, p = .005.

Table 2. Paired t-test Results for Baseline, Posttest, and 3-month Follow-up (n=24)

	Baseline	Posttest				Posttest	Follow-up			
			Mean					Mean		
Outcome	M (SD)	M (SD)	Diff.	95% CI	t (23)	M (SD)	M (SD)	Diff.	95% CI	t (23)
Trauma	43.8 (11.3)	22.8 (8.7)	21.0	17.10, 24.73	*11.34	22.8 (8.7)	19.3 (8.4)	3.5	1.17, 5.83	*3.11
Depression	20.6 (9.9)	10.8 (5.5)	9.8	6.72, 12.90	**6.57	10.8 (5.5)	10.2 (5.3)	0.6	-1.07, 2.12	.678
Anxiety	33.3 (11.7)	19.4 (7.0)	13.9	9.82, 17.99	*7.05	19.4 (7.0)	17.8 (6.0)	1.6	336, 3.57	1.71
Psychosocial	24.8 (11.0)	15.3 (7.5)	9.5	6.34, 12.74	**6.17	15.3 (7.5)	14.5 (7.0)	0.8	-1.33, 2.74	.720
Functioning										
Emotional	31.9 (10.9)	23.2 (10.0)	8.7	4.21, 13.21	*4.01	23.2 (10.0)	23.0 (9.4)	0.2	-2.44, 2.78	.132
Dysregulation										
Emotional	24.5 (4.8)	27.5 (5.1)	-3.0	-5.32, -0.68	-2.679	27.5 (5.1)	26.5 (5.8)	1.0	-1.59, 3.59	.800
Regulation										
Physiological	17.3 (8.6)	9.5 (7.9)	7.8	5.49, 9.93	** 7.19	9.5 (7.9)	8.7 (6.5)	0.8	882, 2.55	1.01
Hyperarousal										
*p<.01 **p<.0	01					1				

Discussion

This pilot study explored the usefulness of a multi-phased, trauma-focused intervention with 24 Latino youth experiencing significant trauma-related symptomatology. Participants reported significant reductions in symptomology after intervention, which were maintained at 3-month follow-up. Developing emotional stability and physiological calming may provide benefits for those not ready to undertake the intense work of trauma reprocessing due to mistrust, cultural barriers, lack of access to adequate bi-lingual services, or lack of emotional readiness to address traumatic experiences directly.

While this intervention could provide benefits across multiple cultural groups, it may be particularly beneficial to Latino populations in at least three ways. First, Latino parents are less likely to seek mental health services for their children (Gudiño, Lau, & Hough, 2008). This intervention has the potential to decrease problematic behaviors in a targeted and safe manner without addressing trauma events before families are ready to discuss them safely.

Second, Latinos may also be more likely to meet criteria for PTSD following a traumatic event, report greater severity in symptoms, and experience their symptoms for longer periods of time (Alcántera et al., 2013; Galea et al., 2004; Lewis-Fernandez et al., 2008). Studies have also found differences in the consequences of sexual abuse among Latinas, including greater psychological, emotional, and behavioral difficulties than African-American and White females (Lefley, Scott, Liabre, & Hicks, 1993; Shaw, Lewis, Loeb, Rosado, & Rodriguez, 2001). In addition, Marshall et al. (2009) found evidence suggesting that Latinos may be more likely to experience hyperarousal symptoms such as hypervigilience and emotional reactivity than non-Hispanic Caucasians. These factors may suggest that Latinos, in particular, may benefit from interventions designed to reduce somatic symptomatology related to trauma. Third, Latino youth are at risk of experiencing traumatic events (Cuevas et al., 2012; Dettlaff & Johnson, 2011; Fortuna et al., 2008; Kaltman, Green, Mete, Shara, & Miranda, 2010; Sedlack et al., 2010) also placing them at risk for complex trauma. Indeed, our sample experienced multiple trauma events that included high rates of violence and high degrees of trauma symptomatology including physiological arousal and emotional dysregulation. Latino youth exposed to multiple traumas may benefit from somatic-based interventions, particularly prior to undergoing language-based interventions such as TF-CBT, which work best when youth are physiologically and emotionally regulated and can express feelings and thoughts effectively to a practitioner (Perry, 2009; Raio et al., 2013; Warner et al., 2013; Warner et al., 2014; Wolf, 2013). These somatic-based interventions may be beneficial in agencies with limited clinical capacity or bi-lingual resources that serve Latino populations.

Several limitations exist in the present study. First, the study employed a one-group pretest-posttest design with a small convenience sample. A waitlist-control was not implemented due to the request of the organization and in attempts to encourage individuals seeking treatment, especially in this community with low mental health service utilization. This design limited the ability to control for various threats to internal validity. Future research should assess the impact of this intervention using a randomized control design

with a larger, more diverse sample. Second, the dropout rate in the study was high (45%). Reasons for incomplete participation include lack of transportation, mistrust, change of residence or work schedules, symptom improvement, or a lack of treatment readiness, among others. Third, due to design limitations it cannot be determined if one phase of treatment (i.e., Somatic Soothing vs. SITCAP) had a disproportionate effect on symptoms compared to the other phase. Future research should rely on randomized control groups that assess the impact of each phase of the intervention. Lastly, there are limitations in the measurement instruments that we used because of the lack of psychometric testing with Latino children and youth, which may impact the reliability of test scores and interpretation.

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Child Attributions Mediate Relationships Between Violence Exposure and Trauma Symptomatology

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Abstract: Violence and trauma exposure have been increasingly investigated as contributing to a range of negative outcomes in child physical, cognitive, emotional, social, and psychological functioning, particularly among youth who are racial/ethnic minorities. This study presents findings related to children's attributions of their violence and trauma exposure. Attributions are inferences made about the cause of an event, situation, or action, with internal, stable, and global attributions most likely to lead to negative psychological outcomes. Data were drawn from an on-going clinical intervention study with families at risk for child maltreatment and/or neglect residing in a large metropolitan city on the East Coast. Mediation models provide evidence for a mediated relationship between violence exposure and PTSD through child attribution. Children develop their definitions of violence, formulate reasons why the violence occurs, and react to violence based on interpreting and developing cognitive attributions and schema about their experiences with violence in order to adaptively cope.

Keywords: Attributions; trauma; violence; PTSD; child therapy

Violence and trauma exposure continues to be an alarming public health concern and contributes to a wide range of negative outcomes for children. Violence and trauma exposure includes being a direct victim to, witnessing, or hearing about an actual or perceived threat of death, sexual violence, or injury (American Psychiatric Association [APA], 2013) as well as includes child neglect and abuse, community and family/intimate partner violence, natural and manmade disasters, accidents, and hospitalizations (Ghosh-Ippen et al., 2002). The majority of children living in the United States will be exposed to violence directly (e.g., direct victim of violence, abuse, or trauma) or indirectly (e.g., witnessing or hearing about violent events from family or peers) at some point during their childhood, and recent data suggest nearly 60% of children were violence exposed in the previous 12-month period (Finkelhor, Turner, Shattuck, Hamby, & Kracke, 2015). Research also suggests that children are more likely than adults to be exposed to violence at home, at school, or in the community (Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009). Further, children from low-income urban neighborhoods are disproportionately

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impacted since they are more likely to experience continuous exposure to traumatic events and violence in their home and community environment.

Impact of Violence and Trauma on Children

Exposure to violence can negatively impact and erode a child's physical, emotional, social, and psychological functioning. Violence exposure has been associated with numerous health risks including obesity, asthma, liver disease, heart disease and chronic obstructive pulmonary disease (Alves, Santos, Feitosa, & Barreto, 2012; Centers for Disease Control (CDC), 2014; Mitchell et al., 2013; Sternthal, Jun, Earls, & Wright, 2010). The Adverse Childhood Experience (ACE) Study assessed over 17,000 participants to examine the long-term effects of violence and trauma on biological, social, and psychological outcomes (CDC, 2014). The disturbing results suggest exposure to adverse childhood experiences often leads to depression, suicide attempts, alcohol abuse, sexual risk behaviors, illegal drug use, and unintended and early pregnancies (CDC, 2014). Other social effects of child exposure to trauma and violence include behavior problems in school, aggressive or criminal behavior, and setbacks in academic achievement (Busby, Lambert, & Ialongo, 2013; Kliewer & Sullivan, 2008; Salzinger, Feldman, Rosario, & Ng-Mak, 2010).

Children exposed to violence and trauma are also at increased risk for post-traumatic stress disorder (PTSD) which includes symptoms of unwanted, intrusive memories, avoidance of places, activities or talking about the event, emotional numbness and irritability, inability to maintain close relationships, guilt or shame, and inability to sleep or concentrate (American Psychological Association, 2017). Elevated rates of externalizing problems (anger, aggression and violence) and internalizing problems (anxiety, depression, and intrusive thoughts) are likewise found in youth who are exposed (Kelly, 2010; Salzinger et al., 2010). The deleterious impact of violence exposure on psychological symptoms is particularly pronounced among youth who are impoverished and are racial/ethnic minorities (Andrews et al., 2015).

Risk and Protective Factors Associated with Trauma Outcomes

While exposure to violence and victimization has the potential to cause harmful consequences, there are a variety of risk and protective factors that influence the effect of trauma on the individual child. Polyvictimization, which is the simultaneous exposure to violence across several domains (e.g., school, home, community), elevates risk for more severe child outcomes (Cyr, Clement, & Chamberland, 2014; Finkelhor, Turner, Hamby, & Ormrod, 2011). Individual characteristics, such as the developmental and psychological levels of family processes (i.e. parent-child interactions), and the broader social context made up of neighborhoods, community resources, and social support are all proposed to shape a child's response to trauma (Belsky, 1993). Specific protective factors that seem to ameliorate the impact of violence and trauma exposure include child perceived safety, social and family support, family cohesion and stability, and ability to discuss the violent event in a safe space (Gorman-Smith, Henry, & Tolan, 2004; Ozer & Weinstein, 2004).

The Role of Attributions in Trauma Response

The role of attributions that the child makes about the traumatic or violent experience is a fertile area of study in trauma science (Cohen & Mannarino, 2002; Collins, Koeske, Russell & Michalopoulos, 2013). Attribution theory suggests that the reason a child gives to the occurrence of a violent event or traumatic experience will impact his or her ability to cope with the event (Heider, 1958). Attributions are often characterized by the locus of control (internalizing versus externalizing), stability, and globality of the events. Internalizing attributions occur when people blame themselves for causing the event to happen, while externalizing attributions claim that the event was caused by factors outside of oneself (Kelley, 1973). Stability refers to whether the person views the cause of the event as constant or variable over time; such as saying that the event is inevitable (constant), versus attributing the cause of the event to be unstable (variable; Abramson, Seligman, & Teasdale, 1978). Globality describes whether or not the event is generalizable to other aspects of life, or attributed to specific causes. A global explanation a person might make is "I am a bad person and nothing good will ever happen to me." The majority of the literature on attributions posits that internal, stable, and global attributions are most likely to lead to negative psychological outcomes regardless of trauma type (Deblinger & Runyon, 2005; Knight & Sullivan, 2006; Wenninger & Ehlers, 1998).

Existing research suggests child attributions exert a significant influence on subsequent trauma symptomology (Collins et al., 2013; Knight & Sullivan, 2006; Wenninger & Ehlers, 1998; Zinzow & Jackson, 2009). Both Collins et al. (2013) and Knight and Sullivan (2006) found that children who are low-income living in urban environments have higher levels of trauma symptomology and also report negative attributions such as self-blame, feeling different from peers, lack of trust in others, and lack of credibility. Similarly, adolescents who had negative threat appraisals (i.e. concerns about harm to others, harm to self, self-blame for violent events were more likely to report internalizing problems such as depression and anxiety (Collins et al, 2010; Kliewer & Sullivan, 2008).

Present Study

The current study aimed to delineate the role of children's attributions of trauma on trauma symptomatology using a sample of children from a clinical intervention research protocol. Our main hypothesis is that both children's Direct Exposure (DE) and Indirect Exposure (IE) traumas and PTSD would be mediated by the children's attributions. However, consistent with the literature on negative attributions, we further hypothesized that the relationship between exposure to DE traumas and PTSD would be more strongly mediated by the attribution constructs compared with the IE traumas. Additionally, we expected each of the four attribution constructs (i.e., feeling different from peers due to their exposure, lack of perceived credibility [being believed] about their experience, lack of trust in others, and self-blame for the negative events or violence that occurred) to moderate the relationship between traumatic experiences and PTSD symptomatology.

Methods

Data for the current study were drawn from families who are residing in extreme poverty and at risk for child maltreatment and/or neglect residing in a large metropolitan city on the East Coast who were referred for treatment and services because they were having difficulty meeting the basic needs of their families. To be eligible for services, families must have at least one child between the ages of 5 and 11 years old, and have at least two child, family and/or caregiver risk conditions and one risk factor for child maltreatment or neglect. At the time of referral, families could not be involved in the child protection system, and the child had to reside with the custodial caregivers/guardians. Families are eligible for specialized trauma services if they have clinically significant scores on standardized measures for trauma symptomatology for caregiver and/or child. This includes caregivers with Post-Traumatic Checklist-Civilian (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993) scores greater than or equal to 50, children with UCLA PTSD index scores greater than or equal to 25, or children who met Criterion A (exposure to a traumatic event in which they felt threatened and responded with intense fear, helplessness, or horror) and any combination of criterions B (intrusive recollection), C (avoidance/numbing), or D (hyper-arousal) on the UCLA PTSD index (e.g., Criterion B and C, C and D, B and D)(Ruggiero, Ben, Scotti, & Rabalais, 2003). Participants must also sign an informed consent and child assent to participate in the study.

Sample

A total of 259 out of 389 children screened for the trauma services program were deemed eligible (Figure 1). Eight families refused study participation resulting in a baseline sample of 251 families. Due to the decline in children with complete data (130/251), attrition analyses were conducted to examine systematic patterns of missingness. Independent-samples t-tests were conducted to determine any systematic patterns of missingness comparing the full sample of eligible children to the analytic sample. Children with missing data were slightly younger, t(189) = 2.14, p < .05), and had higher average scores on two of the CAPS subscales: Feeling Different from Peers, t(147) = -4.34, p < .01; and Lack of Trust, t(146) = -2.85, p < .01) (Please see discussion on the CAPS instrument below). There were no other significant differences in socio-demographic characteristics or study constructs between the children with complete data versus those who were removed from the sample due to incomplete data.

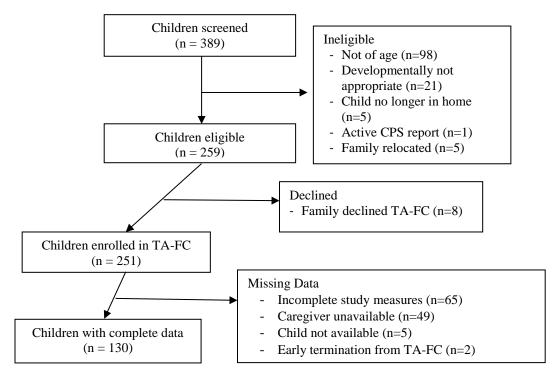


Figure 1. TA-FC Data Collection Diagram

Demographic characteristics for the current sample are provided in Table 1. The sample was comprised of 54% males and 46% female. On average, children were 8.35 years (SD = 2.12), and the majority of children were African American/Black (92.31%, n = 120).

Table 1. Child Demographic Characteristics					
-	n	%			
Gender					
Male	70	53.85			
Female	60	46.15			
Race					
African American/Black	120	92.31			
Caucasian/White	6	4.62			
Mixed Race	4	3.08			
	M	SD			
Child Age (± SD; in months)	8.35	2.12			

Instruments

Children's Attributions and Perceptions Scale (CAPS). The CAPS was created by Mannarino, Cohen, and Berman (1994) to assess children's attributions and interpretations after exposure to sexual abuse but is valid for use in children who have not experienced abuse. The scale contains four subscales which include eighteen total items. The four

subscales measure "Feeling Different From Peers, Self Blame for Violence and Negative Events, Perceived Lack of Credibility, and Lack of Interpersonal Trust in Others" (Mannarino et al., 1994, p. 206). Internal consistencies range from α = .65 to α = .73 for the various subscales (Mannarino et al., 1994; current study α = .53 to α = .85). Children are given the scale in an interview format, and are asked to respond based on a Likert Scale from 1 (*never*) to 5 (*always*).

UCLA PTSD Symptom Scale – Child/Adolescent version. The UCLA PTSD Symptom Scale is taken from the UCLA PTSD Reaction Index developed based off of the criteria for PTSD in the DSM-IV-TR (Pynoos, Rodriguez, Steinberg, Stuber, & Frederick, 1998). The symptom scale is comprised of 22 items that investigate reactions and feelings to a trauma that have occurred. Participants are asked to only evaluate their symptoms within the past month, and in the case of multiple traumas, are asked to evaluate their most severe or disturbing trauma. The frequency of symptoms is measured on a rating scale from 0 (*None of the time*) to 4 (*Most of the time*). The PTSD Reaction Index has high internal consistency (α = 90; Steinberg & Vivrette, 2013; current study α = .86) and high test-retest reliability (.84; Steinberg et al., 2013).

Traumatic Events Screening Inventory (TESI-C). The 16-item TESI-C is used to screen for a child's history of exposure to potentially traumatic events. The instrument assesses whether the event was perceived as potentially life threatening and/or a risk for severe injury, and includes three probes that elicit the child's appraisal of the event. The TESI-C includes violent and/or potentially traumatic events towards both self and others, such as community and family/intimate partner violence, disasters, physical and sexual abuse, accidents, hospitalizations, and injuries (Ghosh-Ippen et al., 2002). The 16 items are broken into four groups of traumas: being sick or injured in an accident, being directly exposed to violence, witnessing domestic violence, and witnessing community violence. For this study we use only 11 of the 16 items to construct our two subscales: Direct Exposure (DE) if the trauma exposure was the result of being directly exposed to violence; or Indirect Exposure (IE) if they were the result of witnessing domestic violence or community violence. The DE subscale is comprised of five items such as "Has someone ever told you they were going to hurt you really badly, or acted like they were going to hurt you really badly?" IE is comprised of six items such as "Even if they weren't physically attacking each other, have you ever heard people in your family really yelling and screaming at each other a lot?"

Data Analysis

Means, standard deviations, frequencies and percentages were calculated for the UCLA PTSD Symptoms Scale, the four CAPS subscales, the overall TESI, and two interpersonal violence subscales (see Table 2). The main analytic approach was a set of moderation models, followed by mediation models, quantifying the role that the four CAPS attribution subscales have on the relationship between trauma exposure (e.g., DE and IE) and PTSD symptoms.

Table 2. Summary of Means and Standard Deviations for Measures

	M	SD	Min	Max
UCLA PTSD Overall Score	28.0	19.83	0.0	83.0
CAPS Feeling Different from Peers due to their	8.73	4.06	0.0	20.0
Exposure Subscale				
CAPS Self Blame for Negative Events or	7.28	3.66	0.0	18.0
Violence that Occurred Subscale				
CAPS Lack of Perceived Credibility Subscale	13.47	4.60	0.0	25.0
CAPS Lack of Trust in Others Subscale	12.01	5.26	0.0	25.0
TESI Scale – Total Traumatic Events	4.50	3.60	0.0	15.0
Direct Exposure Subscale	1.04	1.27	0.0	5
Indirect Exposure Subscale	3.12	3.12	0.0	9

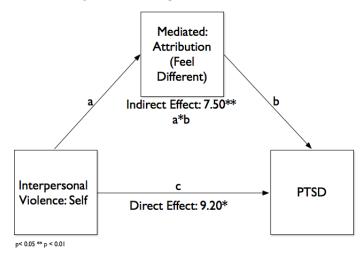
The moderation models test for the effect that attribution has on changing the direction or strength of the relationship between the trauma and PTSD. Moderation is tested by interacting the attribution subscale with trauma exposure. We estimated eight moderation models (four for DE traumas and four for IE traumas) using Stata 14.1. The dependent variable for all eight moderation models was the UCLA PTSD Symptom Scale and all models adjusted for the age of the child. We estimated models for each of the four CAPS subscales, either DE and IE, and an interaction term of between attribution and trauma exposure as the key moderation variables. We also adjusted models for family clustering using cluster adjusted standard errors. The regression models also serve as tests of main effects between trauma exposure and attribution with the dependent PTSD variable.

In contrast to moderation, mediation models test whether the mediating variable (e.g., attribution) accounts for the relationship between the independent variable (e.g., trauma exposure) and dependent variable (e.g., PTSD). For the mediation analysis we used Stata 14.1 and the package sgmediation, which performs the regression calculations and conducts a Sobel-Goodman test of the mediator, and then used bootstrap estimation to calculate confidence intervals for the standard errors (Preacher & Hayes, 2004). As with the moderation analysis, we estimated eight mediation models; each of the four subscales of the CAPS instrument were tested separately with the two different independent variables (DE and IE) and adjustments for child age and within family clustering. For each of the models the UCLA total PTSD scale score was used as the dependent variable. We also tested models that included sex and ethnicity, but they had no effect on either the moderation or mediation model coefficients (model results available on request).

The Stata user written command sgmediation uses three regression models to estimate the indirect and direct effects between the independent variable, the mediating variable and the dependent variable (see Figure 2). In the case of this analysis the first regression model estimated the association of the violence exposure (direct or indirect) with the UCLA PTSD scale (path c in Figure 2). The second model estimated the association of the DE or IE variables with one of the four attribution scales (path a in Figure 2). The final regression model estimated the association of both the Attribution scales and the violence exposure scales with the PTSD scale (path b and c from Figure 2). The program then estimates the joint effect of paths a and b, which is the indirect mediation effect, and the path c or direct effect of violence exposure on PTSD. We then used bootstrap resampling procedures to

get a more robust estimate of the standard errors of the direct path (c path) and the (a and b) indirect paths. The use of the empirical bootstrap approach is particularly important for the indirect path, since it is not clear what the appropriate distribution for the joint a*b coefficient is.

Figure 2. Attribution Mediating the relationship between DE and PTSD



Results

Descriptive data for our measures are provided in Table 2, including means, standard deviations, and ranges. Overall raw scores on the UCLA PTSD can range from zero to 88. The average PTSD overall score was 28.0, SD = 19.83, and there was a large range in symptomatology, with scores ranging from 0.0 to 83.0. The CAPS Feeling Different from Peers due to their Exposure subscale consists of 4 items, and scores can range from four to 20. The average score for the youth in our sample was 8.73, SD = 4.06, and a wide range of scores was reported. The Self Blame for Negative Events or Violence that Occurred subscale also consists of four items. The average score for our sample was 7.28, SD = 3.66, with a range of scores from 4.0 to 18.0. The Lack of Perceived Credibility subscale includes five items, and scores can range from four to 25. The average score of our sample was 13.47, SD = 4.6, with a full range of scores from four to 25. Lastly, the Lack of Trust in Others subscale contains five items. The average score for our sample was 12.01 (SD = 5.26), with a range of scores from five to 25. These averages are consistent with youth who have experienced trauma (Mannarino et al., 1994). On average, children reported being exposed to 4.5 different traumatic events, SD = 3.6, with the number of exposures ranging from zero to 15 exposures.

Table 3 relays the results from eight moderation models that test the association between DE and IE, four attribution subscales, and PTSD as the dependent variables. The test for moderation effects is the interaction between the exposure to violence (DE and IE) and child attribution on child PTSD symptomotology. We did not find any evidence for an attribution moderated relationship between the effect of trauma (e.g., DE or IE) and PTSD in this sample of minority children who are low-income. Further, there is little evidence of

a main effect relationship between exposure to trauma and PTSD and there is wide variation in the coefficients for violence exposure variables association with PTSD depending on which of the four attribution subscales were included. This wide variation in the violence exposure coefficients on PTSD and their wide confidence intervals suggests that after adjusting for children's attribution scores, there is little evidence for a main effect of exposure to violence to independently predict PTSD scores. The adjusted R2 value suggests that the combination of violence exposure variables, attribution variables and child age account for a relatively large 30% of the variance in PTSD.

Table 3. Moderation Models of Attribution and Violence Exposure on PTSD

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Attribution and DE on PTSD (UCLA)	Coefficient	SE	t	p-value	95%		R ²
DE	6.84	13.89	0.49	0.62	-20.83	34.50	0.26
Feel Different	1.61	0.40	4.07	<.001	0.82	2.39	
Interaction (DE by Different)	0.25	1.09	0.23	0.82	-1.91	2.41	
Child Age	1.12	0.59	1.88	0.06	-0.06	2.30	
Intercept	4.84	6.65	0.73	0.47	-8.41	18.08	
DE	1.95	12.83	0.15	0.88	-23.59	27.49	0.28
Self Blame	1.90	0.53	3.59	<.001	0.84	2.95	
Interaction (DE by Self Blame)	0.36	1.19	0.30	0.76	-2.01	2.73	
Child Age	1.16	0.57	2.05	0.04	0.03	2.28	
Intercept	5.66	6.25	0.90	0.37	-6.80	18.11	
DE	-9.06	14.02	-0.65	0.52	-36.97	18.85	0.31
Lack Credibility	1.33	0.40	3.30	<.001	0.53	2.14	
Interaction (DE by Credibility)	1.21	0.90	1.35	0.18	-0.58	3.01	
Child Age	0.89	0.55	1.62	0.11	-0.21	1.98	
Intercept	2.97	7.94	0.37	0.71	-12.83	18.77	
DE	-4.81	12.52	-0.38	0.70	-29.75	20.13	0.32
Lack Trust	1.15	0.32	3.59	<.001	0.51	1.78	
Interaction (DE by Trust)	1.12	0.77	1.45	0.15	-0.42	2.66	
Child Age	0.92	0.49	1.87	0.07	-0.06	1.91	
Intercept	6.64	6.34	1.05	0.30	-5.99	19.27	
Attribution and IE on PTSD (UCLA)	Coefficient	SE	t	p-value	95%		\mathbb{R}^2
IE	5.03	8.88	0.57	0.57	-12.65	22.72	0.29
E 1' D'CC + C D		1			0.14	2.52	
Feeling Different from Peers	1.33	0.60	<i>L.ZZ</i>	0.05	V. 14	2.52	
Feeling Different from Peers Interaction (Other by Different)	1.33 0.61	0.60 0.88	2.22 0.69	0.03 0.49			
Interaction (Other by Different)	0.61	0.88	0.69	0.49	-1.15	2.36	
Interaction (Other by Different) Child Age	0.61 0.70	0.88 0.65	0.69 1.08	0.49 0.28	-1.15 -0.59	2.36 1.99	
Interaction (Other by Different) Child Age Intercept	0.61 0.70 7.25	0.88 0.65 7.00	0.69 1.08 1.04	0.49 0.28 0.30	-1.15 -0.59 -6.69	2.36 1.99 21.19	0.32
Interaction (Other by Different) Child Age Intercept IE	0.61 0.70 7.25 23.25	0.88 0.65 7.00 8.06	0.69 1.08 1.04 2.89	0.49 0.28 0.30 0.01	-1.15 -0.59 -6.69 7.21	2.36 1.99 21.19 39.30	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame	0.61 0.70 7.25 23.25 3.17	0.88 0.65 7.00 8.06 0.87	0.69 1.08 1.04 2.89 3.63	0.49 0.28 0.30 0.01 <.001	-1.15 -0.59 -6.69 7.21 1.43	2.36 1.99 21.19 39.30 4.91	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame)	0.61 0.70 7.25 23.25 3.17 -1.98	0.88 0.65 7.00 8.06 0.87 1.09	0.69 1.08 1.04 2.89 3.63 -1.81	0.49 0.28 0.30 0.01 <.001 0.07	-1.15 -0.59 -6.69 7.21 1.43 -4.16	2.36 1.99 21.19 39.30 4.91 0.20	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age	0.61 0.70 7.25 23.25 3.17 -1.98 0.58	0.88 0.65 7.00 8.06 0.87 1.09 0.63	0.69 1.08 1.04 2.89 3.63 -1.81 0.92	0.49 0.28 0.30 0.01 < .001 0.07 0.36	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68	2.36 1.99 21.19 39.30 4.91 0.20 1.84	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15	
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78	
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility)	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08	
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29 0.53	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90 0.58	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33 0.92	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74 0.36	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49 -0.62	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08 1.69	
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age Intercept	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29 0.53 1.06	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90 0.58 9.36	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33 0.92 0.11	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74 0.36 0.91	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49 -0.62 -17.59	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08 1.69 19.70	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age Intercept IE	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29 0.53 1.06 17.88	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90 0.58 9.36	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33 0.92 0.11 2.06	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74 0.36 0.91	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49 -0.62 -17.59 0.60	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08 1.69 19.70 35.16	
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age Intercept IE Lack Trust	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29 0.53 1.06 17.88 1.77	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90 0.58 9.36 8.68 0.53	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33 0.92 0.11 2.06 3.33	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74 0.36 0.91 0.04 <.001	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49 -0.62 -17.59 0.60 0.71	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08 1.69 19.70 35.16 2.82	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age Intercept IE Lack Trust Interaction (IE by Trust)	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29 0.53 1.06 17.88 1.77 -0.69	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90 0.58 9.36 8.68 0.53	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33 0.92 0.11 2.06 3.33 -0.94	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74 0.36 0.91 0.04 <.001 0.35	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49 -0.62 -17.59 0.60 0.71 -2.16	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08 1.69 19.70 35.16 2.82 0.77	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age Intercept IE Lack Trust Interaction (IE by Trust) Child Age	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29 0.53 1.06 17.88 1.77 -0.69 0.33	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90 0.58 9.36 8.68 0.53 0.74 0.54	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33 0.92 0.11 2.06 3.33 -0.94 0.62	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74 0.36 0.91 0.04 <.001 0.35 0.54	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49 -0.62 -17.59 0.60 0.71 -2.16 -0.74	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08 1.69 19.70 35.16 2.82 0.77 1.40	0.32
Interaction (Other by Different) Child Age Intercept IE Self Blame Interaction (IE by Self Blame) Child Age Intercept IE Lack Credibility Interaction (IE by Credibility) Child Age Intercept IE Lack Trust Interaction (IE by Trust)	0.61 0.70 7.25 23.25 3.17 -1.98 0.58 -1.49 6.68 1.42 0.29 0.53 1.06 17.88 1.77 -0.69 0.33 1.73	0.88 0.65 7.00 8.06 0.87 1.09 0.63 7.85 11.94 0.68 0.90 0.58 9.36 8.68 0.53 0.74 0.54 6.64	0.69 1.08 1.04 2.89 3.63 -1.81 0.92 -0.19 0.56 2.08 0.33 0.92 0.11 2.06 3.33 -0.94 0.62 0.26	0.49 0.28 0.30 0.01 <.001 0.07 0.36 0.85 0.58 0.04 0.74 0.36 0.91 0.04 <.001 0.35 0.54 0.79	-1.15 -0.59 -6.69 7.21 1.43 -4.16 -0.68 -17.13 -17.09 0.06 -1.49 -0.62 -17.59 0.60 0.71 -2.16 -0.74 -11.50	2.36 1.99 21.19 39.30 4.91 0.20 1.84 14.15 30.45 2.78 2.08 1.69 19.70 35.16 2.82 0.77 1.40 14.96	0.32

Table 4 shows the results from the eight mediation models. In general, these models provide evidence for a mediated relationship between violence exposure and PTSD through child attribution. For each of the violence exposure variables (DE and IE) three of the four subscales of the CAPS had a statistically significant mediating effect on PTSD with only children's lack of trust in others not being significant at the p < 0.05 level. Figure 2 presents the first regression displayed in Table 4. The indirect path though the mediator (Children Feeling Different from their Peers) accounts for 43.10% of the total variance in the relationship between DE and PTSD. These findings of a mediated relationship, provide support for the hypothesis that children's attributions about their violence and trauma exposure impact their risk of developing PTSD.

Table 4. Indirect and Direct Mediation Effects

Tuble 1. matreet and Birect mediation Bijects									
	IE	(SE)	z-score	p-value	DE	(SE)	z-score	p-value	% Mediated
DE to Violence regressed o	n PTSD	(UCLA))						
Feel Different from Peers	7.12	2.62	2.72	0.007	9.40	4.87	1.93	0.053	43.10%
Self Blame	11.17	3.12	3.58	< 0.001	5.34	5.21	1.03	0.305	67.65%
Lack Credibility	6.98	2.83	2.47	0.014	9.53	4.68	2.03	0.042	42.29%
Lack Trust in Others	5.52	2.96	1.86	0.062	11.00	4.84	2.27	0.023	33.41%
IE to Violence regressed or	n PTSD (UCLA)							
Feel Different from Peers	5.04	2.08	2.09	0.016	10.50	3.60	2.91	0.004	32.44%
Self Blame	5.84	2.10	2.23	0.009	9.70	3.70	2.62	0.009	37.57%
Lack Credibility	4.92	1.98	2.18	0.024	10.62	3.05	3.48	0.001	31.66%
Lack Trust in Others	5.71	2.38	2.32	0.014	9.83	3.42	2.87	0.004	36.74%

As a further check on our hypothesis we believed that DE to violence and trauma would be more strongly mediated by attributions than children's IE. For three of the four CAPS subscales the relationship between the DE variable had a higher percent of total effect for a given the CAPS subscale, i.e. the mediating variables. Only children's Lack of Trust in others had a stronger mediating effect on IE variable compared with the DE variable (33.41% vs 36.74%, respectively). This provides some confirmatory evidence that the identified mediated relationship is consistent with the literature on risk of developing PTSD associated with internalizing and externalizing attributions.

Discussion and Practice Implications

As indicated in the Core Curriculum on Childhood Trauma (National Child Traumatic Stress Network [NCTSN], 2012), traumatic experiences are inherently complex. Children, adolescents and their families who are exposed to trauma experience subjective reactions to traumatic events that include changes in feelings, thoughts, and physiological responses, identity, relationship changes, and concerns for the safety of others. Through the range of experiences and attributions expressed by the children in both the DE and IE groups, we noted differences in exposures and the impact on PTSD. Garbarino (1995) stated that the most crucial feature of child development is the child's emerging capacity to form and maintain social maps. He suggested that social maps represent the world, reflect the simple cognitive competence of the child, and indicate the child's affective inclinations. Children's social maps include experiences in the larger environment in counterpoint with the child's

inner life, both rational cognitive forces and the unconscious impetus. In our study, the social and internal maps of the children included feeling different from their peers because of their exposure, not being believed when they told their stories of exposure, having a great amount of self blame for violence and victimization as well as not trusting others in their environments. Our supported hypothesis that attributions mediate the relationship between exposure and PTSD at a great degree suggests the importance of continuing to create specific therapeutic strategies and tools aimed to help children learn about the impact of violence and trauma exposure via psychoeducation. Further, practitioners may consider methods to help the children deconstruct and rebuild the meanings they make about their experiences to challenge negative attributions, such as self blame.

As practitioners work with children and families affected by trauma, Briere and Scott (2006) suggest the following areas as a focusing psychoeducation on types of violence and trauma, myths associated with trauma including "blaming the victim", long and short term reactions to exposure and developing safety plans. Each of these areas may provide the children in both the DE and IE groups with accurate information to lessen the burden of exposure and begin reframing attributions.

Based on the data garnered from the children in this study and the research literature on the development of children's cognitive schema, our present study indicates that there are associations between levels of violence and trauma exposure and children's attributions. Children from the DE group expressed higher levels of problematic attributions about their exposure than the IE group. However, one cannot overlook that both groups were similar in their patterns of attributions as well as had the outcome of developing PTSD. Children in this study constructed their personal realities based on a learning process of being active participants in their environment. This is evidenced through the extent of specificity of children's attributions as they had higher frequencies and degrees of violence exposure. Simpson (1996) stated, "perceptions of safety and danger are 'intersubjective' products of social construction, collective agreement, and socialization" (p. 549). This suggests that although objective danger and violence exist, perceptions do not derive directly from observation of the empirical world. Instead, the objective environment provides only discrepant and ambiguous information about danger and violence, providing room for socially constructed beliefs.

Narrative therapy is one approach that may be beneficial to help children make meaning out their traumatic experiences and their social and emotional environments. This postmodernist approach is grounded in the concept that people's socially constructed interpretations of their life experiences and the meanings linked to these interpretations shape subsequent experiences. The goal is to help children reauthor and re-produce their life script, also known as a conversational map, according to alternative stories of identity. For example, a child with a history of repeated victimization might be encouraged to transform her life story, through telling and retelling, to one that emphasized themes of survivorship (White & Epston, 1990). Duvall and Beres (2007) emphasizes, "Through the therapeutic conversation, this map provides a structure for therapists to introduce scaffolding to the person's story, helping him or her to move from the despair inherent in the knowable and taken-for-granted dominant story to the hope that is inherent in what is possible to know in the emergent alternate story" (p. 235).

Limitations

Our study had limitations. Our data were collected at intake for services from families struggling to meet the basic needs of their children in one area of a large metropolitan city on the East Coast. The data, while providing informative results do not represent the general population. Our sample was also nearly 100 percent African American and not representative of other races or ethnicities. We did not analyze data from parents or teachers related to child outcomes and solely relied on the child's self report of their exposure, attributions and trauma symptomatology. Gaining information from a broader population with the inclusion of differing ages of children, parents, extended family members, teachers, and clergy, would be helpful contributions to the literature. We were concerned about the low alphas on a few of the subscales of the CAPS. We conducted a factor analysis that replicated the four factors of the developers to aid in establishing validity. Yet, the study would have benefited from a psychometrically stronger attribution measure. Finally, it is important to continue to use quantitative and qualitative research to study the mediators and moderators that promote and deter children's health and well-being as they are exposed to violence.

Conclusion

Overall, children in our society live, play, learn, and grow in a world where violence is pervasive. Children develop their definitions of violence, formulate reasons why the violence occurs, and react to violence based on interpreting and developing cognitive attributions and schema about their experiences with violence in order to cope, survive, and maintain resilience. It is important to continue to build these interventions to address negative and paralyzing attributions of children and reduce their trauma sympatomatology.

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An Association Between Implementing Trauma-Informed Care and Staff Satisfaction

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Abstract: Despite its widespread adoption there is limited research on the influence of trauma-informed care (TIC). The current study examined the impact of implementing TIC on the satisfaction of agency staff by comparing the results of a satisfaction survey taken in January of 2014, a month prior to the agency's implementation of TIC, and again twelve months later. As collaboration, empowerment, and self-care are primary components of a TIC organizational approach, its implementation was expected to increase staff satisfaction. Following the implementation of TIC, agency staff reported higher scores on all but one of the six satisfaction survey factors. Increases in staff satisfaction have been associated with better staff retention rates, increased organizational commitment and better performance. In consequence, TIC implementation is associated with increased staff satisfaction, and may positively influence organizational characteristics of significance to social service agencies.

Keywords: Trauma-informed care; evidence; implementation; staff satisfaction

In recent years, trauma-informed care (TIC) has become increasingly adopted across disciplines and communities of practice (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013; Muskett, 2014). The rising interest in TIC is a natural consequence of repeated investigations demonstrating the prevalence of trauma in society (Kilpatrick et al., 2013), and the negative impact exposure to traumatic events has on a host of social, physical and mental health outcomes (Kuo, Goldin, Werner, Heimberg, & Gross, 2011; Park et al., 2014). TIC has three primary components: the realization of the pervasiveness of trauma; recognition of how trauma influences all persons involved in the receipt, delivery, and administration of programs; and being responsive to trauma survivors needs by implementing this knowledge into the organization's policies, procedures, practices and culture (Substance Abuse and Mental Health Services Administration, 2014). Despite the increase in implementation efforts the effectiveness of TIC remains largely unexplored, particularly in regards to its impact on the adopting system and accompanying staff members. The current study begins to overcome this gap by examining the effects of implementing TIC on the satisfaction of agency staff.

The current study is situated within two primary streams of research: research on the effects of implementing TIC and research on staff satisfaction. In regards to research on

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the impact of TIC, it is important to differentiate this research from that conducted on trauma in general and on trauma-specific treatments. There has been extensive research conducted on the pervasiveness of trauma and its influence on personal development, perhaps most notably of which is the Adverse Childhood Experiences (ACE) Study (Felitti et al., 1998). The ACE study included 17,337 men and women and found that 63.9% of the sample experienced at least one adverse childhood experience (Center for Disease Control and Prevention, n.d.). The primary finding in the study was the association between the number of ACEs participants experienced with risk of alcoholism and substance use, heart disease, sexually transmitted diseases, suicide attempts, adolescent pregnancy, and risk for sexual violence among others (Felitti et al., 1998). Further, there has been research on specific interventions that treat a variety of trauma and comorbid trauma and substance use or mental health disorders, including Trauma Focused Cognitive Behavioral Therapy (TF-CBT; Seidler & Wagner, 2006), Seeking Safety (Najavits, Weiss, Shaw, & Muenz, 1998), and Cognitive Processing Therapy (CPT; Resick, Nishith, Weaver, Astin, & Feuer, 2002). However, there has been extremely limited research on the effects of trauma-informed organizational approaches (Kusmaul, Wilson, & Nochajski, 2015).

To differentiate TIC from trauma and trauma-specific treatment, trauma-informed approaches such as Harris and Fallot's (2001; Fallot & Harris, 2008) five-dimensional model and Sandra Bloom's (2013) Sanctuary model are defined by the alteration of systems to ensure their physical and social environments are supportive and conducive to the recovering person that has a history of trauma. This includes creating atmospheres where all persons feel safe and relationships are based on shared assumptions, collaboration and trustworthiness (Madsen, Blitz, McCorkle, & Panzer, 2003). Trauma-informed systems recognize the pervasiveness of trauma and revamp formal and informal organizational properties (such as structure, culture, climate, policies, procedures and practices) to ensure trauma-sensitivity and promote growth and empowerment (Bloom, 2013; Harris & Fallot, 2001). Note that people as opposed to clients or service-users are referred to throughout this discussion because, contrary to research emphases in the literature, trauma-informed approaches are designed to have a positive influence on the staff of service organizations as well as clients. Nevertheless, the limited evidence that exists on implementing TIC approaches has focused primarily in its influence on clients (e.g., Morrissey et al., 2005).

Research on the Impact of TIC

The published evidence on the effects of TIC on clients has been promising. There are two bodies of research in this area: research exploring the effects of TIC reducing the number of seclusions and restraints in psychiatric inpatient settings and research exploring the effects of TIC on substance use and mental health outcomes. Research on seclusion and restraint reduction began with the work of Janice LeBel and colleagues from Massachusetts' Department of Mental Health who demonstrated that seclusion and restraints could be greatly reduced through systematic change efforts (LeBel & Goldstein, 2005; LeBel et al., 2004). Further, LeBel and Goldstein (2005) discovered that the reduction in seclusion and restraints led to decreases in employee sick time, turnover, workers' compensation, injuries to both staff and clients, and recidivism in clients. However, neither published study explicitly refers to the intervention as being part of a

trauma-informed approach. While seclusion and restraints are the prototypical examples of re-traumatization in service systems, because TIC is not explicitly referred to in LeBel's work it is unclear whether or not the reduction and subsequent effects are attributable to part of a broader TIC initiative. To address this gap in research, Azeem, Aujla, Rammerth, Binsfeld and Jones (2011) assessed the influence of a TIC model developed by the National Association of State Mental Health Program Directors (NASMHPD). Through the implementation of various components of TIC including physical and social (i.e., cultural) changes to the environment, staff training on trauma (i.e., prevalence and effects) and trauma-informed care, prioritizing collaboration between staff and residents, and debriefing with staff and clients after a crisis, the TIC approach led to a downward trend in seclusions and restraints (Azeem et al., 2011).

In regards to the second stream of research investigating the effects of implementing TIC on substance use and psychiatric outcomes, the Women, Co-occurring Disorders, and Violence Study (WCDVS) is the singular example (described in Morrissey et al., 2005). The WCDVS assessed the impact of core trauma-informed services (including collaboration between service providers and recipients in treatment planning and goal development, resource coordination, staff training on trauma, and crisis intervention) and integrated substance use, trauma and mental health counseling on substance use, mental health, and trauma symptom outcomes (Morrisey et al., 2005). The intervention was found to have positive and significant effects on substance use and mental health outcomes and a significant reduction in trauma symptoms. However, the significant effects were primarily attributable to the integrated treatment as opposed to the core TI services. Future research is required to determine the underlying mechanism of change in the study and to see if the findings are replicated. (Morrisey et al., 2005)

The only other studies in the literature examining TIC's effects are Kramer, Sigel, Connors-Burrow, Savary and Tempel (2013) and Kusmaul and colleagues (2015). Kramer et al. investigated the impact of a two-day training based on the National Child and Traumatic Stress Network's training for child welfare. The outcomes of the Kramer et al. study were limited to knowledge on TIC and supervisory behaviors (measured through self-report on survey items) which were assessed at baseline, immediately following the final training, and a three-month follow-up. The post-test and three-month follow-up displayed significant increases in TIC knowledge and supervisory behaviors supporting its implementation (Kramer et al., 2013). Kusmaul et al. (2015) explored differences in staff perceptions of the service environment following the implementation of TIC based on the principles of Harris and Fallot (2001). Kusmaul et al. discovered that staff members holding Master's level degrees had more positive experiences of the service environment following TIC implementation than staff members holding a Bachelor's degree. Further, perceptions of the service environment also differed as a function of position, with administrators having the most positive perceptions of the service environment, followed by line staff, and then support staff. Both of these findings were consistent across Harris and Fallot's (2001) five domains. While further research is needed to explain these differences, what is evident is that persons higher in the organizational hierarchy and persons holding a Master's level degree have more positive experiences of the service environment than their counterparts. This is the extent of published knowledge on the

effects of TIC on both staff and client outcomes. While the evidence is severely limited, especially in regards to the impact of TIC approaches on staff, initial reports are promising. There is however a need for continued research on the effects of TIC approaches.

Research on Staff Satisfaction and its Relationship with Trauma-Informed Care

On the surface, the relationship between TIC and staff satisfaction may be predicated on the emphasis trauma-informed approaches place on staff self-care. That is, a core component of all prevailing TIC models is the creation of safe and trusting atmospheres to avoid the re-traumatization of both staff and consumers of service (Bloom, 2013; Fallot & Harris, 2008). As the organization becomes more supportive of direct-care and support staff, it is likely the organization will experience a positive increase in the overall satisfaction of its agents (Babin & Boles, 1996; Griffin, Patterson, & West, 2001).

Above and beyond self-care, the core components of trauma-informed approaches are also expected to have a significant positive influence on staff's satisfaction with the organization. The elements of safety, trustworthiness, collaboration, choice and empowerment from both Fallot and Harris (2008) and Bloom's (2013) Sanctuary model are expected to enhance staff's experiences of satisfaction with the agency. Through collaboration, where all staff members are treated with equal regard and importance, the problems originating from hierarchy, power and authority may be overcome. Collaboration, freedom and autonomy of staff throughout the organization are expected to increase staff member's sense of commitment and responsibility for the organization's welfare. For empirical support of these hypotheses, both Babin and Boles (1996) and Strand and Dore (2009) discovered that the perceptions of supervisory support were positively associated with increases in staff satisfaction. Further, Brown and Peterson (1993) demonstrated how staff satisfaction predicted organizational commitment, which in turn has been associated with higher staff retention rates (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Strand, Spath, & Bosco-Ruggiero, 2010), and staff satisfaction and organizational commitment have both been tied to organizational performance (Koys, 2001; Meyer et al., 2002).

The Current Study

The current study assessed the influence of a TIC implementation approach on staff satisfaction by comparing the results of a satisfaction survey from two time points. The first assessment was taken in January of 2014, a month prior to the organization's implementation of TIC, while the second assessment was conducted twelve months following the organization's implementation (January of 2015). The satisfaction surveys were conducted by an external agency specializing in workforce development. All staff members within the organization were administered the online survey. Following the completion of both surveys, a brief report was provided to the agency summarizing the results and comparing the 2014 and 2015 surveys. Because self-care and the creation of supportive cultures are central to the implementation of TIC, we expected there to be an increase in staff satisfaction following the twelve-month implementation process.

Methods

Implementation Model

The implementation model consisted of a series of phases. The first phase included an initial baseline assessment of the organization on trauma-informed care. Two assessment tools were utilized: an instrument that assessed the culture and climate (described in Hales, Kusmaul, & Nochajski, 2016) of the organization in the context of Harris and Fallot's (2001) five-principles, and an instrument that assessed the organization's policies, practices and procedures (described in Gaurino, Soares, Konnath, Clervil, & Bassuk, 2009). Following the assessment, all staff members within the organization were trained on the basic tenets of trauma and trauma-informed care. The TIC trainings were based on Harris and Fallot's five-dimensional model. Professional staff holding advanced degrees delivered the trainings using a protocol developed by the authors.

After the initial training, the assessment data were used to inform each of the programs of their relative strengths and weaknesses in regard to formal (policies, practices and procedures) and informal (culture and climate) organizational elements. This information was incorporated into all follow-up training sessions, which were tailored to the particular program's needs and strengths. Follow-up sessions recurred on a monthly basis following the initial training. Supervisors were mentored and coached on how to incorporate the implementation of TIC into weekly supervision. To enhance sustainability, staff members across the organizational hierarchy were trained on how to conduct the initial training and follow-up sessions, which enabled the organization to deliver information to new employees, provide refresher courses to programs seeking them, and continue monthly consultations on the implementation of TIC without the aid of the consultants.

In addition to the trainings, a sub-group of clinical staff were trained on the delivery of Seeking Safety, an evidence-based treatment for persons experiencing comorbid substance-use and post-traumatic stress disorders (described in Najavits, 2002). This sub-group of personnel received formal training on the intervention's delivery, treatment protocols to ensure fidelity, and monthly consultations to discuss the implementation processes. Thus, the implementation model included the assimilation of a trauma-specific treatment in addition to training and overseeing the implementation of a trauma-informed organizational approach.

Instrument Description

The Business Insight survey from WorkplaceDynamics (n.d.) consisted of a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). While the survey has been administered to over 40,000 organizations, the authors do not list the scale's psychometric properties (WorkplaceDynamics, n.d.). The survey measured staff satisfaction on two primary domains and six sub-domains. The two primary domains consisted of organizational health, which included *direction* of the agency, *execution* of the agency's policies and procedures, and *connection* with the workplace, and staff's work positions, which included perceptions of their *work*, relationship with their *manager*, and their *pay/benefits*. To describe the subdomains, *direction* of the agency inquired into staff

perceptions of the overall direction the agency, the competencies of leadership, and organizational values. Execution of the agency's policies and procedures measured satisfaction with organizational efficiency, innovation, and being informed of administrative decisions. Connection with the workplace assessed whether staff believed their role in the agency was valued by others in addition to whether or not they participated in meaningful work. The connection with the work factor inquired into staff experiences with flexibility in their work roles, receipt of appropriate training to successfully execute role functions, and whether or not their position had met their expectations. The management factor assessed staffs' relationships with their managers, including whether their manager was sensitive to their needs and concerns, fostered their growth, and enhanced their performance. Lastly, pay/benefits inquired into how fair staff believed their wages and benefit packages were. Each of the six domains ranged from two to four items, with a total of 19 items in the scale. Individual items that experienced the most improvement across time points were included in the report. The individual items were: "new ideas are encouraged at the agency" (encourage new ideas); "senior managers understand what is really happening at the agency" (mgmt. understanding); and "my manager cares about my concerns" (mgmt. care and concern).

Sample

The sample included staff from a private, not-for-profit 501(c)3 corporation that provides a range of services for individuals with mental health and/or substance use disorders. These services include: outpatient programs for adolescents and adults with substance use, mental health, and co-occurring disorders; personalized recovery oriented services (PROS); assertive community treatment (ACT) teams; residential programs for pregnant and parenting women with substance use disorders and chronically homeless persons with mental health diagnoses; homeless outreach services; mobile mental health teams; permanent supportive housing services; and vocational and supported employment services.

During the survey period, the number of staff members across all programs ranged from 212 to 238. For 2014, a total of 147 out of 212 employees completed the survey (69 percent completion rate). For 2015, 168 out of 238 employees completed the instrument (71 percent completion rate). The survey was administered to all staff across the organization's vertical hierarchy and throughout the various programs. Specific demographic information could not be reported due to their lack of inclusion in the satisfaction survey's report.

Analyses

Due to the data being collected by an external agency, raw data could not be obtained. The report only contained the aggregate means for the agency on the six factors of satisfaction across the two time points. It was not possible to match participants across time periods, and because the standard deviations were not provided, standard errors and significance tests could not be computed. In consequence, the analyses for comparing the 2014 and 2015 data were limited to assessing mean differences on each of the satisfaction's subscales. The differences between the years were assessed by comparing Likert-point and

percentile differences across time points. Further, the comparisons were primarily limited to the six subscales, as only those individual items that experienced dramatic increases or decreases were provided in the report.

Results

Following the implementation of TIC, the average scores on five of the six factors of staff satisfaction increased. Presented in Table 1 below, the largest increases were in execution of the organization's objectives, followed by staffs' relationships with their manager, staffs' connection with the workplace, then staff's perceptions of the work. Direction of the agency increased but was more modest relative to the other domains. The only scale which did not increase was pay/benefits, although it also experienced the smallest absolute difference/percentage change.

Table 1. Comparison of Average Satisfaction Subscale Scores for 2014 and 2015 (n=168)

			Absolute	Percentage
Scales	2014 (Mean)	2015 (Mean)	Difference	Change*
Execution	3.83	4.14	+ 0.31	+8.09 %
Connection	4.35	4.57	+0.22	+5.06 %
Direction	4.62	4.76	+0.14	+3.03 %
Manager	4.55	4.81	+0.26	+5.71 %
Work	4.21	4.39	+0.18	+4.27 %
Pay/Benefits	3.51	3.44	- 0.07	-1.99 %

*Note: For Table 1 and Table 2, percentage changes were calculated by dividing the absolute difference by the 2014 mean.

In regard to the individual item examination, a total of three indicators were reported, three of which were directly relevant to the implementation of TIC. To begin, the encouragement of new ideas by administration increased from an average of 4.10 to 4.52 (.42 Likert-points; +10.24 percent). The next item refers to staffs' perceptions of senior managers understanding the reality of daily programmatic affairs. This item also increased by approximately ten percent (from 3.64 to 4.01 Likert points). Lastly, staff reported an increase in the extent that management cares about their concerns (from 4.63 to 4.94 Likert points; + 6.70%).

Table 2. Comparison of Average Item Scores for 2014 and 2015 (n=168)

			Absolute	Percentage
Items	2014 (Mean)	2015 (Mean)	Difference	Change*
Encourage new ideas	4.10	4.52	+ 0.42	+10.24 %
Mgmt. understanding	3.64	4.01	+0.37	+10.16 %
Mgmt. care and concern	4.63	4.94	+ 0.31	+6.70 %

Discussion

The current study found increases in staff satisfaction in five of the six satisfaction factors following the implementation of TIC. The most notable differences were in staff's satisfaction with their ability to execute the agency's executives, their relationship with

management, and their connection to the workplace. These findings are theoretically plausible considering that trauma-informed approaches are expected to enhance collaboration across vertical hierarchies in addition to empowering staff throughout the organization by maximizing their experiences of control and autonomy (Bloom, 2013; Fallot & Harris, 2008). By engaging members throughout the organization in collaborative approaches in the obtainment of organizational objectives, staff's experiences of commitment to the agency were expected to increase. The only factor which did not increase across time points was *pay/benefits*. This is plausible, considering that the second assessment of satisfaction was only conducted twelve months following implementation. While implementing TIC may be expected to save the organization material resources by retaining a greater percentage of the workforce and by providing more responsive services to clients, these changes may take a greater length of time to emerge. A body of research indicates that changes to organizational culture generally occurs over a period of time (Cameron & Quinn, 2005), and the effects of implementing TIC on staff retention is expected to be a longer term outcome (Esaki et al., 2013).

Staff also reported increases in satisfaction with management's encouragement of new ideas and innovation. Administrative encouragement of new and better ways of performing their tasks is a critical element of empowerment, one of the primary principles of TIC. Staff also felt increases in management's ability to be understanding of the reality of day-to-day affairs. The principle of collaboration in TIC approaches requires that organizational hierarchies be flattened, minimizing the physical and social distance between front-line and senior staff members. Creating a more collaborative environment could enhance the communication and joint work efforts of management and direct-care staff. Staff also experienced an increase in satisfaction with management's concern over their general welfare, which is plausible considering trauma-informed approaches prioritize the experiences of direct-care staff by ensuring their physical and emotional safety.

As there is limited research on the influence of implementing trauma-informed approaches on staff, the positive association between the implementation of TIC and increases in staff satisfaction is an important finding. While the implementation of TIC only produced modest variations in staff satisfaction, it is important to note that the introduction of new technologies are frequently met with varied responses by staff members (e.g., Korunka, Scharitzer, Carayon, & Sainfort, 2003). As a core component of trauma-informed organizations is an increase in staff control, autonomy, and collaboration, it is possible that staff experience an increase in responsibility over obtaining the organization's objectives. This increase in responsibility and power may have a negative influence on some staff member's satisfaction, particularly if staff prefer a more centralized organization where job functions and roles are more instructive and formalized. Further, while previous research has found moderate associations between staff autonomy and supervisory support with satisfaction (Griffin et al., 2001), to the best of our knowledge no studies that have assessed longitudinal differences in satisfaction scores provide neither mean difference scores or effect sizes to compare to the current study's findings.

Nevertheless, because all but one of the satisfaction scores increased, the current study's findings suggest the assimilation of trauma-informed care within organizational settings enhances staff satisfaction. Due to the limited evidence supporting the widespread

adoption of trauma-informed approaches, this study provides preliminary support on the positive influence of TIC on agency staff. In addition, previous research has demonstrated that satisfaction with the workplace is a powerful antecedent of organizational commitment (Brown & Peterson, 1993), and that organizational commitment is positively associated with employee retention (Meyer et al., 2002; Somers, 1995). As staff satisfaction and organizational commitment have been associated with enhanced performance (Koys, 2001; Meyer et al., 2002), TIC may also have positive influence on performance. These arguments suggest that the implementation of TIC, through increasing staff satisfaction, may positively influence organizational characteristics of significance to social service agencies.

Limitations

There were several limitations in the current study. A primary limitation is the absence of raw data, and the subsequent ability to match pre and post test responses. The absence of raw data limited the analyses to absolute mean and percentile differences. However, due to the limited knowledge base on the influence of TIC implementation, the association between TIC and staff satisfaction is an important discovery. Further, while association and temporal precedence were obtained, confounding factors that may have explained the differences in satisfaction surveys were not controlled for. For instance, Seeking Safety was implemented to a subset of staff during the same time that staff were implementing TIC throughout the agency. In consequence, it is unclear what elements of the intervention (i.e., Seeking Safety, training, or consultation) influenced the aggregate differences in staff satisfaction. The relationship between TIC implementation and staff satisfaction is limited to one of association as opposed to causation. Further, because the second time point was only assessed twelve months following the initial implementation, it is possible that the effects of TIC on staff satisfaction were the result of increases in supervisory and organizational support, and increases in perceived competence as a result of the training and consultation sessions. The more subtle, informal changes to organizational culture and climate generally occur over a more extended period of time (Cameron & Quinn, 2005; Esaki et al., 2013). The contributions of increasing staff's perceptions of safety, trust, choice, collaboration and empowerment on satisfaction would likely be evident had the follow-up assessment occurred at a later point in time. Lastly, a limitation of the current study is the absence of sample demographics.

Future Research Directions

Future research will explore the relationship between the implementation of TIC and additional staff and client characteristics. Additional research that involves tracking individual scores in satisfaction over time and controlling for the various intervention components will enable a test of association that rules out the confounding factors found in the current study. Matching individual scores on culture, climate, and the implementation of TIC practices, policies and procedures will enable a more sophisticated model of the unique intervention effects to be explored. Future research will also examine a broader array of outcomes. As noted, the implementation of TIC is expected to increase employee retention, enhance organizational commitment, and may lead to increases in

organizational performance: these hypotheses will be tested in future research. In regards to client outcomes, due to the emphasis on collaborative and participative practices, the implementation of TIC is expected to positively influence the therapeutic alliance. Therapeutic alliance refers to the strength of the relationship between clients and direct-care staff (Bordin, 1979). Enhancement of the therapeutic alliance has been positively associated with retention in treatment and improvement in mental health outcomes (Martin, Garske, & Davis, 2000). These relationships will be tested in future research.

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You Learn What You Live: Prevalence of Childhood Adversity in the Lives of Juveniles Arrested for Sexual Offenses

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Abstract: Social workers often find themselves working with children or adolescents who have been victims of adverse childhood experiences (ACEs), including youths who have ended up in the juvenile justice system. Childhood trauma has been linked to negative health, mental health, and behavioral outcomes across the lifespan. The aim of this study was to examine the prevalence rates of child maltreatment and household dysfunction in the lives of juveniles who have been arrested for sexual offenses (JSO; n = 6,549). ACE prevalence rates for JSOs were compared by gender to juveniles arrested for other crimes, to adults arrested for sexual offenses, and to the general population. Youths in the delinquency system in Florida had much higher rates of high-ACE scores than the general population, indicating that they came from households where the accumulation and variety of early adversity is a salient feature in their lives. For those who have engaged in sexually abusive behavior, the existence of early maltreatment and family problems was prominent. Through a better understanding of the traumatic experiences of these youths, we can inform and enhance interventions designed to improve the functioning of sexually abusive juvenile clients and their families, and reduce risk of future recidivism.

Keywords: Juvenile; sexual offense; ACE; adverse childhood experience; early adversity; trauma-informed care

Social workers often find themselves working with children or adolescents who have been victims of maltreatment, including youths who have ended up in the juvenile justice system. Early adversity has been clearly linked to negative health, mental health, and behavioral outcomes across the lifespan (Centers for Disease Control and Prevention, 2013; Felitti et al., 1998). Social workers and social service organizations have begun to embrace trauma-informed practices as a crucial part of the psychosocial assessments and interventions provided to clients in general, and to adult sexual offenders more specifically (Levenson, 2017; Levenson & Willis, 2014; SAMHSA, 2014a; Strand, Sarmiento, & Pasquale, 2005). The aim of this study was to examine the prevalence rates of child maltreatment and family problems in the lives of juveniles who have been arrested for

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sexual crimes. Through a better understanding of the experiences of these youths, we can inform and enhance clinical and case management practices to improve the functioning of sexually abusive juvenile clients and their families, and reduce risk of future recidivism.

Adverse Childhood Experiences

In the early 1990s the Centers for Disease Control (CDC) partnered with Kaiser Permanente, a health maintenance organization, to study the prevalence of adverse childhood experiences (ACEs) in the lives of American adults (Felitti et al., 1998). Inspired initially by the observation of a curious phenomenon – that obese patients often had a history of childhood abuse - physicians hypothesized that adult health was sometimes compromised by traumatic experiences earlier in life. They postulated that painful childhood experiences, especially those that are chronic, can lead to high-risk coping behaviors (e.g., substance abuse, over-eating) which impact health and well-being across the lifespan (Felitti, 2002). Using a dichotomous 10-item scale, the ACE researchers investigated the rates of five child maltreatments (sexual, physical, and verbal abuse, and physical and emotional neglect) as well as five common areas of household dysfunction (domestic violence, unmarried parents, and the presence of a substance-abusing, mentally ill, or incarcerated household member) in a sample of over 17,000 adults. One's total ACE score is the sum of the items endorsed (range = 0-10), with higher scores indicating a greater degree of childhood adversity. Perhaps most revealing about the study was the staggering frequency of ACEs; nearly two-thirds of these middle-class adults endorsed at least one item, and 12.5% endorsed four or more (CDC, 2013).

Subsequently, many studies have shown significant correlations and a dose-response relationship between early adversity and a range of medical and behavioral disorders including chemical dependency, physical disease, and psychopathology (e.g., Anda et al., 2006; Douglas et al., 2010; Edwards, Holden, Felitti, & Anda, 2003; Weiss & Wagner, 1998). Adverse childhood experiences create toxic stress, leading to an over-production of hormones associated with survival responses (fight or flight), and producing neurobiological changes in the brain that can impede cognitive processing and self-regulation capacities (Alink, Cicchetti, Kim, & Rogosch, 2012; Creeden, 2009; Finkelhor & Kendall-Tackett, 1997; SAMHSA, 2014a; Streeck-Fischer & van der Kolk, 2000; van der Kolk, 2006). Research has indicated that the multiplicity, frequency, and chronicity of early adversity creates what has become known as complex post-traumatic stress, manifesting in a constellation of maladaptive coping strategies, mental health symptoms, and behavioral problems (Cloitre et al., 2009; Herman, 1992; van der Kolk, 2014).

The frequency and correlates of ACEs in criminal populations

ACEs were surprisingly common in the original CDC sample, but are even more pervasive in poor, minority, marginalized, and oppressed populations commonly served by social workers (Eckenrode, Smith, McCarthy, & Dineen, 2014; Larkin, Felitti, & Anda, 2014). Pathogenic parenting and deprivational environments hinder family functioning and reinforce maladaptive coping styles, and household dysfunction is often exacerbated by the stress of impoverished socioeconomic conditions (Patterson, DeBaryshe, & Ramsey, 1990). Criminal samples have higher rates of childhood maltreatment and household

dysfunction than the general population, and exposure to early trauma was significantly associated with mental health disorders, drug abuse, and violence in adult offenders (Harlow, 1999; Messina, Grella, Burdon, & Prendergast, 2007). Prospective analyses from the Chicago Longitudinal Study identified child maltreatment as a predictor of adult criminal behavior in a sample of over 1,500 low-income minority youths (Mersky, Topitzes, & Reynolds, 2012). Prisoners often witnessed violence in their childhood homes and communities, and reported many other types of traumatic experiences such as the death of a family member, parental abandonment, or out-of-home foster care placement (Harlow, 1999; Maschi, Gibson, Zgoba, & Morgen, 2011).

Both male and female adult sexual offenders report childhood trauma at rates greater than the general population (Levenson, Willis, & Prescott, 2015, 2016), with male sexual offenders (N = 679) three times more likely to report child sexual abuse (CSA), twice as likely to report physical abuse, thirteen times more likely to have been verbally abused, and four times more likely to experience emotional neglect or having unmarried parents. Among adult sexual offenders, ACE scores were associated with persistence and versatility in arrest patterns, increased sexual violence and sexual deviance, and substance abuse disorders (Levenson, 2015; Levenson & Grady, 2016; Levenson & Socia, 2015). Physical and sexual abuse prospectively predicted increased risk of being arrested for a sexual crime (Widom & Massey, 2015).

Juveniles involved in the justice system are especially likely to have lived in chaotic homes where caretakers were poorly equipped to parent effectively or to protect their children from harm. Research on justice—involved youths has consistently found higher rates of adversity compared to youths in the general population, and they are more likely to have suffered multiple and chronic forms of trauma (Abram et al., 2004; Baglivio et al., 2014; Dierkhising et al., 2013). Furthermore, these youths have a greater likelihood of child protection involvement and foster care placements, exacerbating traumagenic factors that contribute to the development of delinquent behavior (Barrett, Katsiyannis, Zhang, & Zhang, 2013). ACE factors are inter-related, and high-risk youths are especially vulnerable to increased odds of multiple adversities (Baglivio & Epps, 2016). The emotional and behavioral self-regulation deficits commonly seen in maltreated youths can pave the way for disciplinary problems in school which can shift a child's trajectory toward the "pipeline to prison" (Wald & Losen, 2003).

The link between early adversity and development of sexual behavior problems

Notably, childhood trauma is associated with risky sexual behavior, such as early onset of sexual activity, higher rates of sexually transmitted diseases, unwanted pregnancies, and higher numbers of sexual partners (Dietz et al., 1999; Hillis, Anda, Felitti, Nordenberg, & Marchbanks, 2000). Youths who were lured into sex trafficking and later arrested were found to have extraordinarily high rates of every single ACE (the highest being parental neglect and sexual abuse), and higher cumulative ACE scores than non-trafficked youths (Naramore, Bright, Epps, & Hardt, 2015). Thus, maltreated children are especially vulnerable to re-victimization by sexual predators and human traffickers, but they may also be at increased risk for engaging in behaviors that violate the sexual boundaries of others.

The pathways to juvenile sexual offending are certainly varied and complex (Burton, Duty, & Leibowitz, 2011). The etiology of sexually abusive behaviors seems to be fostered by early attachment disruptions, whereby attempts are made to satisfy unmet emotional and intimacy needs through sexual or aggressive means (Bushman, Baumeister, & Phillips, 2001; Grady, Levenson, & Bolder, 2016; Marshall, 2010; Smallbone & Dadds, 1998). Attachment theory proposes that if a child's caretakers are not trustworthy, nurturing, consistent, and responsive to needs, youngsters will have difficulties establishing secure bonds with others across the lifespan (Bowlby, 1977, 1988). Chaotic home environments can preclude the development of healthy interpersonal skills, and inconsistent or abusive parenting styles may not model empathy (Carlson & Sroufe, 1995; Cicchetti & Banny, 2014; Rutter, Kim-Cohen, & Maughan, 2006). Abused and neglected children are therefore exposed to relationships characterized by betrayal and invalidation, which contributes to distorted cognitive schema, boundary violations, disorganized attachment patterns, personality pathology, and emotional dysregulation (Chakhssi, Ruiter, & Bernstein, 2013; Loper, Mahmoodzadegan, & Warren, 2008; Young, Klosko, & Weishaar, 2003). Sexual offending may be one manifestation of these maladaptive responses.

Purpose of the Current Study

The current exploratory and comparative study examines the prevalence of ACE items and the distribution of ACE scores of juvenile offenders at the time of their first arrest. Juveniles who were charged with a sexual offense prior to turning 18 years of age are compared to those with only non-sexual arrests on each ACE type and overall ACE score. Additionally, the juvenile sample ACE measures are compared to prevalence rates in a sample of adult male and female sexual offenders reported in prior published research. Finally, the rates of early adversity in this specialized population of juveniles arrested for sexual offenses (JSO) are compared to general population statistics reported by the Centers for Disease Control and Prevention (CDC) based on data from over 17,000 adults in the original ACE study. Because differences have been found in prevalence rates of different adversities for males and females (Felitti, 1998), all comparisons are gender-specific, meaning females and males are compared across samples separately. We hypothesized that JSOs will have higher ACE scores and higher prevalence rates on every ACE item than the original CDC study participants.

Method

Sample

The current study employs official Florida Department of Juvenile Justice (FDJJ) charge data on all youths who aged out of the juvenile justice system (turned 18 years of age) between January 1, 2007 and December 31, 2015. Of note, a youth may be continued on juvenile justice probation supervision past his/her 18th birthday. However, any new law offense committed after the age of 18 will be processed at the local adult jail and the charges will be handled in the criminal justice system. The purpose of the current study is to examine juveniles who were arrested for sexually-based offending prior to 18 years of age. Additionally, arrest in the current study is not meant to imply all youths are "booked" and processed at a juvenile assessment center (i.e., there may not be a custody event). Many

instances, especially for sexual offending, there may be a gap between the event (the offense) and discovery. In these instances, charges may be incurred without a custody event.

Upon arrest, all juvenile offenders are assessed using the FDJJ risk/needs assessment, the Community Positive Achievement Change Tool (C-PACT). The C-PACT has been found predictive of recidivism for multiple samples of Florida juvenile offenders for both males and females, and across age and dispositions (such as diversion, probation, and day treatment; Baglivio, 2009; Baglivio & Jackowski, 2013; Baird, Healy, Johnson, Bogie, Dankert, & Scharenbroch, 2013; Winokur-Early, Hand, & Blankenship, 2012). Additionally, the reliability of the C-PACT was assessed using videotaped interviews and an offense history file, finding an intra-class coefficient (ICC) of .83, with 4% of items (5 items) with less than 75% agreement with an expert rater (Baird et al., 2013).

The C-PACT has two versions, a pre-screen and a full assessment, which both produce identical overall risk to re-offend classifications (low, moderate, moderate-high, and high risk). The versions differ in that the full assessment contains 80 additional items (not used in the overall risk to re-offend classification) that provide more detailed information about each youth. FDJJ policy dictates that all rated as moderate-high or high-risk receive the full assessment, as must all youths being considered for residential placement, day reporting/day treatment, or the FDJJ intensive family therapy services termed Redirections (predominately Multisystemic Therapy and Functional Family Therapy). These policies result in thousands of low- and moderate-risk youth also being assessed using the full assessment version annually. Additionally, the vast majority of youth with sexual offending charges are assessed with the full assessment, regardless of overall risk to re-offend.

The current study includes juveniles assessed with the C-PACT full assessment during the study period (n=89,045; 19,910 females, 69,135 males). Youths who were only assessed with the C-PACT pre-screen were excluded, which intentionally oversamples higher risk youths. The C-PACT pre-screen does not contain items to compute complete ACE scores and therefore youths who were only assessed with the pre-screen were excluded from the current study. This process oversamples higher risk youths. Specifically, an additional 423,413 youths that also aged out of the juvenile justice system during the study period were assessed with the C-PACT pre-screen. The 89,045 youths included in the current study represent 17.4% of all youths that aged out, and were significantly (at p<.05) more male, Black, younger at first arrest, had more history of detention placements, and were assessed as higher risk to re-offend. This demonstrates the current study may not be as generalizable to all juvenile offenders, but is generalizable to the most policy-relevant group, i.e., higher risk juvenile offenders. Of note, only 0.3% of the excluded youths (prescreen only) has a history of sexual misdemeanor offense, and 1.6% had a history of a felony sexual offense.

Thus, the current sample of 89,045 youths included 46.3% low-risk, 18.7% moderaterisk, 21.9% mod-high-risk, and 13% high-risk youths, as classified by the full assessment. Just under 7.4% of the juveniles evidenced an official charge for sexual offending prior to the age of 18. Specifically, 312 females and 6,237 males were arrested for a sexual offense,

making the prevalence of female juvenile sexual offending 1.6% and male juvenile sexual offending 9% of all delinquent youths in the current sample. Table 1 provides the race/ethnicity and age of the juvenile subgroup samples.

Table 1. Male and Female Juvenile Offenders with and without Sexual Offenses- Descriptive Statistics

Female JSO*	Female non-JSO	Male JSO	Male non- JSO
41.7%	48.7%	36.5%	40.1%
45.0%	42.9%	46.0%	46.1%
12.8%	8.0%	17.0%	16.6%
0.5%	0.3%	0.5%	0.5%
15.5	16.2	15.9	16.3
	41.7% 45.0% 12.8% 0.5%	JSO* non-JSO 41.7% 48.7% 45.0% 42.9% 12.8% 8.0% 0.5% 0.3%	JSO* non-JSO Male JSO 41.7% 48.7% 36.5% 45.0% 42.9% 46.0% 12.8% 8.0% 17.0% 0.5% 0.3% 0.5%

Notes: *JSO= juvenile sexual offense

Measures

Juvenile with sexual offense history (JSO). Study participants who had an official sexual offense charge prior to the age of 18 were classified as juveniles with a sexual offense history (=1, else= 0). Sexual offenses could be either misdemeanor or felony offenses. Juveniles classified as JSO must have been arrested one or more times for a sexual offense prior to age 18, and could have been arrested for non-sexual offenses as well (meaning we are simply comparing juvenile offenders with at least 1 sexual offense to those without any sexual offenses, not necessarily general juvenile offenders to sexual offense-only juvenile offenders). Of the 6,549 juveniles with sexual offense histories, the most sexual offense charges included felony sexual battery (58%), felony kidnapping with sexual offending (0.6%), other felony sexual offenses (34.7%), and misdemeanor sexual offenses (6.7%). Thus, most juveniles with a sexual offense history (93.3%) were arrested for felony sexual offenses. The most frequent specific charge was felony sexual assault by sexual battery to a victim under 12 years of age (n=2,012, 30.7%). To clarify, "sexual battery" in Florida refers to oral, anal, or vaginal penetration by, or union with, the sexual organ of another or the anal or vaginal penetration of another by any other object.

ACE Exposures & ACE Score. While created to assess juveniles' overall risk to commit delinquent/criminal offenses, the C-PACT assessment contains items which encompass the ten specific ACE items identified by the CDC (see Felitti et al., 1998). The ACE scale includes five child maltreatments and five types of household dysfunction. The exact items, responses, and coding used to create ACE indicators and the ACE score from C-PACT data have been reported elsewhere (Baglivio et al., 2014), and have been replicated in several prior studies (e.g.,Baglivio & Epps, 2016; Baglivio et al., 2016; Wolff & Baglivio, 2016; Wolff, Baglivio, & Piquero, 2015). The following ten ACE indicators were included and coded dichotomously (yes = 1, no = 0):

• Emotional abuse: Parents/caretakers were hostile, berating, and/or belittling to youth;

^{**}Average age at assessment upon first arrest.

- Physical abuse: The youth reported being a victim of physical abuse by a family member;
- Sexual abuse: The youth reported being the victim of sexual abuse/rape;
- Emotional neglect: The youth reported no support network, little or no willingness to support the youth by the family, youth does not feel close to any family member;
- Physical neglect: The youth has a history of being a victim of neglect (includes a negligent or dangerous act or omission that constitutes a clear and present danger to the child's health, welfare, or safety, such as: failure to provide food, shelter, clothing, nurturing, or health care);
- Family violence: The level of conflict between parents included verbal intimidation, yelling, heated arguments, threats of physical abuse, domestic violence, or the youth has witnessed violence at home or in a foster/group home;
- Household substance abuse: History of parents and/or siblings in the household abusing alcohol or drugs;
- Household mental illness: History of parents and/or siblings in the household includes mental health problems;
- Parental separation/divorce: Youth does not live with both mother and father;
- Incarceration of household member: There is a jail/prison history of family members.

ACE exposures were summed for a cumulative ACE score, ranging from 0 (no exposures) to 10 (exposed to all indicators). Again, ACEs were assessed at the time of first arrest of the juvenile. Each ACE indicator is self-reported by the youth (consistent with the original ACE Study; Felitti et al., 1998), as well as corroborated with child welfare records (to which the assessors have access). The youth's self-reported affirmative response, as well as instances in which child welfare records indicate abuse/exposure are counted as an endorsement of each ACE item. Instances in which child welfare investigations led to decisive findings that the maltreatment did not occur are counted as a "no" for a given ACE indicator, and inconclusive child welfare investigations are captured according to the youth's self-reported response.

Analytic Strategy

First, we conducted descriptive statistics for the ACE items and ACE score distributions of the JSO group. Group comparisons were then used to explore the prevalence rates of each ACE item as well as the distributions of ACE scores for JSOs by gender, compared to non-JSOs, adult sex offenders, and the general population. Chi-square statistics were used to assess prevalence differences. Due to the large sample sizes of juvenile offenders without sexual offense histories, we additionally supply measures of effect size to assess substantive significance (Phi and Cohen's *d*). The adult sex offender data used in the comparison has been reported elsewhere (Levenson et al., 2015, 2016) and was collected in a nonrandom sample of male and female participants surveyed in outpatient, prison, and civil commitment sex offender treatment programs across the United States (n=679 males, 47 females). Finally, we provide a visual representation

comparing the overall ACE scores of JSOs, juveniles without a sexual offense history, adult sex offenders, and the general population (with gender-specific figures).

Results

Table 2 provides the results of analyses comparing female JSOs with female juvenile offenders without a sex crime history. The original CDC study of female prevalence rates are also provided to provide reference for how juvenile offenders differ from a population-based sample of adults. As shown, female JSOs have higher prevalence rates than non-JSO females in every ACE category except emotional abuse and household incarceration histories. Significant differences were found in the rates of physical abuse, sexual abuse, and physical neglect, as well as higher overall ACE scores. The magnitudes of the effects are statistically significant, but would be considered small (Cohen, 1988). Importantly, results suggest that while two exposures are slightly higher for non-JSO females, there is no exposure for which female non-JSOs have statistically significantly higher rates than female JSOs. Additionally, female JSOs evidenced higher prevalence on eight of the ten ACE indicators than the female CDC sample.

Table 2. Female Juveniles with and without Juvenile Sexual Offenses- ACE Prevalence and Comparisons

	JSO	Non-JSO			CDC Study
Measure	(n=312)	(n=19,598)	χ^2	Phi	(n=9,367 ♀)
Emotional Abuse	30%	34%	1.97	=	13%
Physical Abuse	39%	28%	15.72***	.028	27%
Sexual Abuse	42%	23%	64.78***	.057	25%
Emotional Neglect	31%	27%	1.98	-	17%
Physical Neglect	23%	11%	49.29***	.050	9%
Family Violence	58%	55%	1.05	-	14%
Household Substance Abuse	22%	18%	3.25	-	30%
Household Mental Illness	10%	7%	3.30	-	23%
Separation/Divorce	89%	87%	0.69	-	25%
Household Incarceration	52%	53%	.052	-	5%
			t-statistic	Cohen's d	
Average ACE Score	4.0	3.4	-4.06***	.23	

Note: JSO= juvenile sexual offense history; *p<.05, **p<.01, ***p<.001.

Table 3 compares male JSOs to non-JSO males, and provides the original CDC study male prevalence rates for reference. JSO males have significantly higher prevalence rates of physical abuse, sexual abuse, physical neglect, household mental illness, and separation/divorce than male juvenile offenders without a sexual offending history. Additionally, the overall ACE score is significantly higher for JSO males, though not substantively meaningful, as both JSO and non-JSO males averaged just shy of 3 ACE exposures. Non-JSO males evidenced higher emotional neglect and household incarceration than male JSOs. It should be noted that only the sexual abuse difference (13% for male JSO, 5% for non-JSO males) is substantively meaningful, per effect sizes, but both groups show lower rates of CSA than the CDC male population (16%). Additionally, the overall ACE score of 2.7 for male JSO is more than 1 ACE exposure lower than the 4.0 average for female JSOs presented in Table 2 (*t*=11.066, *p*<.001). Male JSOs evidence

higher rates than the male CDC sample on five of the ten ACE indicators, with a greater than ten times prevalence in household incarceration (46% compared to 4%; of note, non-JSO males evidence even greater emotional neglect and household incarceration than the CDC males).

Table 3. Male Juveniles with and without Juvenile Sexual Offenses- ACE Prevalence and Comparisons

	JSO	Non-JSO			CDC Study
Measure	(n=6,237)	(n=62,898)	χ^2	Phi	(n=7,970 ♂)
Emotional Abuse	21%	26%	81.78***	034	8%
Physical Abuse	20%	15%	133.93***	.044	30%
Sexual Abuse	13%	5%	725.25***	.102	16%
Emotional Neglect	20%	22%	14.33***	014	12%
Physical Neglect	11%	6%	201.93***	.054	11%
Family Violence	38%	38%	.242	-	12%
Household Substance Abuse	13%	14%	2.58	-	24%
Household Mental Illness	5%	4%	10.28**	.012	15%
Separation/Divorce	85%	83%	29.45***	.021	22%
Household Incarceration	46%	48%	4.42*	008	4%
			t-statistic	Cohen's d	
Average ACE Score	2.7	2.6	-4.81***	.06	

Note: JSO= juvenile sexual offense history; *p<.05, **p<.01, ***p<.001.

Table 4 compares the 312 female JSO youths (those reported in Table 2) with 47 adult female sex offenders examined in prior work (Levenson et al., 2015). The female JSOs have significantly higher rates of physical neglect, family violence, separation/divorce, and household incarceration than those reported by adult female sex offenders, while the adult females reported higher rates of household substance abuse. The average ACE score was also higher for female JSO than adult female sex offenders, by almost one ACE exposure (JSO= 4.0, adult female SO= 3.2). Of note, the effect sizes are more substantial for this comparison than the prior comparisons within juvenile groups (Tables 2 and 3).

Table 4. ACE prevalence of Females JSOs compared to Adult Female Sex Offenders

	Female JSO	Female SO	-	
Measure	(n=312)	$(n=47)^a$	χ^2	Phi
Emotional Abuse	30%	38%	1.17	-
Physical Abuse	38%	34%	0.34	-
Sexual Abuse	42%	50%	0.97	-
Emotional Neglect	31%	40%	1.75	-
Physical Neglect	23%	11%	3.91*	104
Family Violence	58%	23%	19.67***	234
Household Substance Abuse	22%	40%	7.40**	.144
Household Mental Illness	10%	21%	5.19*	.120
Separation/Divorce	89%	47%	51.70***	379
Household Incarceration	52%	17%	20.32***	238
			t-statistic	Cohen's d
Average ACE Score	4.0	3.2	2.11*	.33

Notes: JSO= juvenile sexual offense; SO= sex offender; a= sample size for each ACE indicator for adult females ranged from 46 to 47 due to missing data; *=p<.05, **p<.01, ***p<.001.

Table 5 compares the 6,237 male JSOs to 679 adult male sex offenders (SO) examined in prior work (Levenson et al., 2016). The prevalence rates of every ACE indicator differed significantly between the groups; all but one had meaningful effect sizes. Specifically, male JSOs evidenced more family violence, absent parents, and household incarceration than adult male SOs. Adult male SOs, in contrast, reported higher rates of emotional abuse, physical abuse, sexual abuse, physical neglect, household substance abuse, household mental illness, and a higher overall ACE score. The largest substantive difference is in reports of household mental illness (26% for adult male SO, only 5% for male JSO). Additionally, the reported rate of sexual abuse is nearly three times higher for adult male SOs compared to male JSOs (38% compared to 13% for male JSO).

Table 5. ACE Prevalence of Male JSOs compared to Adult Male Sex Offenders

	Male JSO	Male SO		
Measure	(n=6,237)	$(n=679)^a$	χ^2	Phi
Emotional Abuse	21%	53%	345.01***	.223
Physical Abuse	20%	42%	169.19***	.156
Sexual Abuse	13%	38%	288.49***	.204
Emotional Neglect	20%	38%	113.28***	.128
Physical Neglect	11%	16%	15.42***	.047
Family Violence	38%	24%	51.63***	086
Household Substance Abuse	13%	47%	513.17***	.272
Household Mental Illness	5%	26%	381.01***	.235
Separation/Divorce	85%	54%	398.31***	.64
Household Incarceration	46%	23%	136.30***	140
			t-statistic	Cohen's d
Average ACE Score	2.7	3.5	-7.27***	.30

Notes: JSO= juvenile sexual offense history; SO= sex offender; a= sample sizes for each ACE indicator for adult male sex offenders ranged from 635 to 676 due to missing data; *p<.05, **p<.01, ***p<.001.

Finally, Figures 1 and 2 compare JSO, adult SO, and the original ACE study sample of adults on each ACE indicator for females and males, respectively. Of particular importance are the comparisons at the tails of each distribution, namely the proportion with zero ACE exposures, and the proportion with four or more exposures. As shown in Figure 1, only 3.2% of the female JSOs reported zero exposures, compared to 19.2% of adult female SOs, and 34.5% of the females in the original CDC Study. In contrast, while 15.2% of the CDC females self-endorsed four or more ACE items (proven to have staggering health and psychosocial consequences later in life), 41.4% of adult female SOs and 55.1% of female JSOs reported four or more ACE exposures.

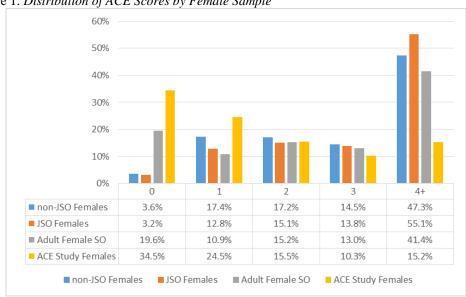


Figure 1. Distribution of ACE Scores by Female Sample

Figure 2 illustrates similar findings. Thirty-eight percent of the ACE study males evidenced zero exposures, compared to only 15.6% of male SOs and 7.3% of male JSOs. Additionally, while 12.5% of ACE study males reported four or more exposures, 45.7% of male SOs, and 32.1% of male JSOs endorsed four or more ACE items. In contrast to the females discussed above (Figure 1), for males, the adult SOs evidenced higher overall ACE prevalence than male JSOs.

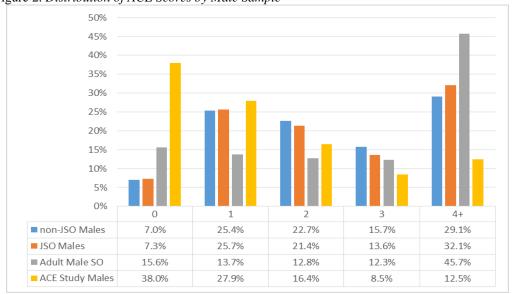


Figure 2. Distribution of ACE Scores by Male Sample

Discussion

This study represents a large-scale investigation of the prevalence of early adversities in the lives of youths who encounter the criminal justice system, and in particular, those who are arrested for sexual crimes as minors. The findings lend support for our hypothesis: youths in the delinquency system in Florida have much higher rates of high-ACE scores than the general population, indicating that they come from households where the accumulation and variety of early adversity is a salient feature in their lives. For those who have engaged in criminal sexual behavior, the existence of early maltreatment and dysfunctional family dynamics is prominent.

The differences in some of the prevalence rates between JSO and adult SOs are noteworthy. We speculate that some of the differences are due to the data collection methodologies. The JSO data included official record reviews, while the adult SO data were all self-reported retrospectively. Most of the differences are seen on the household dysfunction items (e.g., domestic violence, substance abuse, mental illness, household member incarcerated, parental absence), which may be more likely to be documented in official records. On the other hand, it may be that official records of youths are less likely to detect certain events if the child is not disclosing it (such as sexual abuse). Many children do not report abuse by close relatives or acquaintances, due to shame, fear, or loyalty to the perpetrator. It is also possible that some individuals do not recognize their own victimization, and this may be especially true for youths for whom abusive households or violent communities have seemed normalized. Conversely, some offenders may embellish their maltreatment history as a way to gain sympathy or to obfuscate their criminal culpability. There may also be some generational differences. Perhaps the adult SOs grew up in an era where parents were less likely to be unmarried, and when policing was less aggressive, resulting in lower endorsements of unmarried parents and justice-involved household members. On the other hand, the adults tended to have higher rates of reported mental illness and substance abuse in their families, suggesting perhaps a greater awareness of these conditions in retrospect than during childhood, as well as a societal consciousness and responsiveness to these issues in recent years.

Interestingly, the female JSOs had substantially higher rates of childhood sexual abuse (CSA) than the general female population (42% compared to 25% in the CDC sample), but the male JSOs reported lower rates than the general population (13% vs. 16% of males in the CDC sample). While adult male SOs have reported much higher CSA rates (38%) than males in the general population, perhaps male adolescents are less apt to report CSA due to the stigma that remains for male victims. It is also possible that the male youths do not fully understand the parameters of sexual abuse and/or that they minimize the effects of their own victimization in attempts to alleviate guilt and shame for their own sexually aggressive behaviors. Both male and female JSO youths in the current sample had markedly greater rates of family violence, absent parents, and household members involved with the criminal justice system than the CDC sample, suggesting that an understanding of the role played by these interpersonal dynamics in the homes of justice-involved youths can provide insight into the psychosocial etiology of delinquent behavior.

Implications for Trauma-informed Social Work Practice and Policy

Predictors of sexual deviance in adult male sex offenders have been found to include CSA, emotional neglect, mental illness in the home, and unmarried parents, while physical abuse, substance-abusing parents, and having incarcerated family members have been found to predict sexual violence (Levenson & Grady, 2016). Though there is no definitive victim-to-victimizer trajectory for maltreated children who go on to perpetrate sexual assault, sexually abusive behaviors sometimes compensate for feelings of disempowerment or invalidation. They may be learned from modeling an abuser's behavior and distorted thinking, or they become associated with sexual arousal due to early abusive conditioning experiences (Seto, 2008). Sexualized coping can become a way of soothing distress, and can also become a maladaptive strategy used to satisfy emotional needs such as intimacy, affection, attention, and control (Bushman et al., 2001; Levenson et al., 2016). The abused or neglected youth may seek out victims whom he perceives as weaker and who will not hurt him; younger children seem "safe" and therefore the JSO feels less vulnerable.

Witnessing domestic violence models aggression and poor self-regulation, and distorts perceptions of intimate relationships. Growing up with family members who are justice-involved may reinforce criminal modeling, and may also exacerbate feelings of hopelessness and helplessness for children observing such conditions in their own homes or experiencing the absence of a parent due to incarceration. Disempowerment can create a distorted sense of entitlement, and violence can become instrumental in grasping a sense of power and control. Finally, the chaotic household dynamics characterized by family violence may offer few opportunities to observe and experience healthy emotional attachments, paving the way for affective and behavioral dysregulation (Ford, Chapman, Connor, & Cruise, 2012).

Thus, youths with sexual behavior problems would likely benefit from traumainformed practices aimed at corrective experiences that help troubled youngsters identify unmet emotional needs and to meet those needs in healthy and non-victimizing ways. Clinical staff and others working throughout the juvenile justice system are encouraged to avoid disempowering dynamics such as unnecessarily authoritarian interactions, and to model appropriate boundaries and respectful communication. The use of restraints and seclusion can be re-traumatizing for physically or sexually abused children. Although they are occasionally necessary to ensure safety to self and others, they should be used cautiously and as a last resort. Engaging youths in activities that foster self-efficacy is profoundly important, as they can promote cognitive transformation by which maltreated youths begin to view themselves as competent and worthy of love and respect. Treatment for juveniles who have committed sexual offenses has historically relied heavily on psycho-educational models focused on distorted thinking about sexual abuse and relapse prevention, but should emphasize process-oriented relational interventions that can help youths improve interpersonal skills and alter general maladaptive cognitive schema (Burton et al., 2011; Cicchetti & Banny, 2014).

By understanding how childhood trauma contributes to deficits in self-regulation and relational skills, we can inform and refine correctional interventions that reduce future risk of recidivism (Abbiati et al., 2014; Levenson, 2014). The assessment and understanding of

the impact of early trauma is crucial in social work educational curricula and in practice across all problems and populations. Trauma-informed treatments are those which incorporate common elements of client-centered engagement, therapeutic alliance, and emotional safety that transcend specific models of intervention (Strand, Hansen, & Courtney, 2013; Strand et al., 2005). Childhood victimization can result in anxious and insecure attachment styles, and thus it is crucial for social workers to attend to the environmental context of delinquent youths and expose them to healthy emotional experiences that model empathy and effective interpersonal styles (Grady et al., 2016; Grady, Swett, & Shields, 2014; Marshall, 2010; Strand et al., 2013). The Substance Abuse and Mental Health Services Administration (SAMHSA, 2014b) emphasizes the need to engage behavioral health consumers in treatment settings that provide psychological safety and collaborative treatment planning, and to avoid harsh responses that can re-enact disempowering family dynamics and re-traumatize clients.

Finally, due to its long-reaching effects, childhood adversity is now commonly viewed as a public health crisis (Anda, Butchart, Felitti, & Brown, 2010; Felitti, 2002; Larkin et al., 2014). It is essential that public policies be reflective of our knowledge about the lasting impacts of toxic stress in childhood and their role in the development of criminal behaviors. Childhood trauma, which is more prevalent in disadvantaged communities and oppressed populations (Eckenrode et al., 2014), increases risk for poly-victimization and subsequent psychopathology (Cloitre et al., 2009; Finkelhor, Turner, Hamby, & Ormrod, 2011). Unfortunately, American social policies designed to address child maltreatment have focused more heavily on offender punishment and child placement rather than primary prevention strategies (Larkin et al., 2014). In order to interrupt the intergenerational transmission of crime and victimization in our communities, it is critical that the child protection and juvenile justice systems invest in comprehensive prevention programs for high-risk families and intervene early with trauma-informed services for child victims (Anda, et al., 2010; Baglivio, et al., 2014; Miller & Najavits, 2012).

As a final note, there were some important racial and ethnic disparities present in the data analyzed. JSOs were more likely to be black than white, which differs from adult SO samples (where about 67% are white and about 22% black; Levenson, Willis, & Prescott, 2016). Both suggest a significant over-representation of blacks compared to the U.S. Census (13%) (U.S. Census Bureau, 2010). In this study, black girls and boys were extremely over-represented in the JSO population. Blacks and minorities are commonly seen in disproportionate numbers in criminal justice samples, suggesting that the legacy of historical trauma and the persistence of racial inequities are important factors to consider when serving delinquent youths with sexual behavior problems.

Limitations

Like any research, the current study is not free from limitations. The ACE scale as a measure of early adversity is imperfect. Clearly, there is an immeasurable array of traumatic experiences beyond child maltreatment and family dysfunction; the ACE scale does not include extrafamilial or environmental factors such as community violence, poverty, discrimination, death, illness, natural disasters, or bullying. The ACE scale is not intended to be an exhaustive measure of trauma, nor does it fully capture the scope of

variables that contribute to sexually abusive behavior. Furthermore, the dichotomous nature of the ACE items does not allow for estimations of the frequency, duration, or severity of childhood traumas. Given the retrospective and cross-sectional research design, statements of causality cannot definitively be made about the link between early maltreatment and juvenile delinquency, but the large sample size provides a generalizable estimate of the prevalence of early adversity in the lives of JSOs. The current study relies on official records of sexual crimes by juveniles and, as such, may underrepresent the prevalence of offenses that do not come to the attention of authorities. Furthermore, as the current study included only juveniles assessed with the PACT full assessment (necessary to calculate ACE scores), results may not be generalizable to lower-risk juvenile offenders. However, we note that higher-risk youths are the most policy-relevant group due to the fiscal and human costs of their offending on society, as well as prior work indicating higher-risk youths have greater childhood traumatic exposure (Baglivio et al., 2014). The current analyses performed approximately 44 separate comparison of means tests for ACEs across samples. A very conservative Bonferoni correction would suggest a p-value of .0011 (.05/44). We note, that all but five of the comparisons reached that very conservative level of significance. As such, we note the limitation of our experimental design in choosing to analyze ACE by gender, as opposed to an aggregate analysis using composite scores with gender as a covariate. However, in defense of our approach, differences among specific ACEs are arguably more relevant to the practitioners and the field than simple comparisons of aggregate ACE scores.

Conclusions

The research is clear and compelling that childhood adversity, especially when it is chronic, contributes to a complex web of neuro-biological, social, psychological, cognitive, and relational impacts across the lifespan, and increases risk for criminal behavior (Larkin et al., 2014; Young, 2014). Trauma-informed workers in the juvenile justice system should recognize the prevalence and impact of childhood adversity, expect the majority of clients to have experienced early trauma, and be well-versed in knowledge related to complex trauma responses and how they contribute to delinquent behaviors. Social work practice with delinquent youths can be informed and enhanced by the literature on attachment, developmental psychopathology, and trauma-informed care. Evidence-based programs include Multi-Systemic Therapy (MST) (Borduin, Schaeffer, & Heiblum, 2009) and Trauma-Focused CBT (Cohen, Mannarino, Kliethermes, & Murray, 2012). The cycle of victimization can be interrupted by a commitment to social policies that provide a preventive safety net for marginalized children and families, and offer comprehensive, evidence-based, and trauma-informed early intervention services for children and their parents when identified as at-risk by the child protection system.

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Identifying Trauma-Related and Mental Health Needs: The Implementation of Screening in California's Child Welfare Systems

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Abstract: A central aspect of trauma-informed care in child welfare (CW) systems is the use of a trauma-informed screening process. This includes the use of a broadly administered measurement approach to assist professionals in identifying current trauma-related symptomology or a history of potentially traumatizing events. With a high prevalence of unmet mental health needs among CW-involved children, screening can be a crucial step as systems strive to identify children impacted by trauma. This paper offers a summary of CW screening approaches in county-administered CW systems across California. Through a web-administered survey, 46 county administrators reported on their screening practices and perceptions. Information about ages of children screened and screening tools used, perceptions of screening implementation priorities, degree of implementation and satisfaction with screening processes is provided. Several implementation considerations for future trauma-informed care efforts are offered including maintaining a focus on childhood trauma, closing the science-practice gap, and evaluating the state of the science.

Keywords: Childhood trauma; trauma-informed care; screening; implementation; child welfare

With ongoing policy, research, and implementation efforts, screening has become a central and active aspect of trauma-informed care (TIC; Hanson & Lang, 2016). A number of national organizations have encouraged the use of broadly administered measurement approaches to assist practitioners in identifying current trauma-related symptomology or potentially traumatic events in a child's history, including the U.S. Department of Health and Human Services (DHHS), Substance Abuse and Mental Health Services Administration (SAMHSA; DHHS, SAMHSA, 2011); the National Child Traumatic Stress Network (NCTSN; 2007); the Attorney General's National Task Force on Children Exposed to Violence (2012); and the DHHS, Administration for Children and Families (ACF), Administration on Children, Youth and Families, Children's Bureau (DHHS, ACF, 2011). By and large, these organizations have emphasized the role of screening and identification as part of TIC in child welfare (CW) systems. The role of CW systems includes promoting safety when children are at risk for maltreatment and enhancing wellbeing in instances where child maltreatment has occurred, making these systems particularly well-positioned to identify children who have been adversely impacted by maltreatment. Given the advancing research on the lasting impact of adverse childhood

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experiences across the lifespan (e.g., obesity, depression, heart disease, smoking, alcoholism; Felitti et al., 1998; Larkin, Felitti, & Anda, 2014), linking CW's trauma screening efforts with a thorough mental health (MH) assessment and trauma-focused interventions could contribute to meaningful public health benefits. As Ko and colleagues (2008) point out, "For the child welfare system to become increasingly trauma-informed, effective trauma screening and assessment protocols are needed at every level" (Ko et al.; p. 398).

In the U.S. general population, 61.8% of adolescents have been found to experience one or more potentially traumatic events (PTE), such as interpersonal violence, accidents, injuries, or witnessing others experience a PTE, with 32.7% experiencing 2 or more PTEs (McLaughlin et al., 2013). Almost all children who become involved in CW have been impacted by maltreatment, a specific subset of PTE (DHHS, 2016) and 61.8% of the children and youth involved in current investigations are estimated to have previous reports of maltreatment (Horwitz et al., 2012), indicating that the maltreatment has persisted over a period of time. Although experiencing PTE is fairly common in childhood, it is more common and more persistent for CW-involved children and youth, and children who experienced multiple PTEs are more likely to develop posttraumatic stress disorder (PTSD; McLaughlin et al., 2013).

CW systems are also well-positioned to identify children impacted by other forms of MH impairment. Almost one-quarter of adolescents (22.2%) in the general population have experienced a significant MH need during their lives (Merikangas et al., 2010). In contrast, approximately half (47.9%) of a nationally representative sample of children and youth investigated by CW services for child maltreatment were identified as having a significant MH need (e.g., emotional and behavioral problems; Burns et al., 2004), indicating a high rate of MH need among CW-involved children and youth.

Moreover, the second wave of the National Survey of Child and Adolescence Well-Being uncovered a stark underutilization of MH services among children and youth with significant MH need involved in CW services, with only one-third (33.3%) of these youth receiving MH services (Horwitz et al., 2012). A disproportionate underutilization of MH services has been well-established among children and youth of color with significant MH need who are involved in CW compared to their white counterparts (Garland et al., 2000; Garland, Landsverk, & Lau, 2003; Horwitz et al., 2012; Kim & Garcia, 2016). While underutilization of MH services is problematic in the general population (Merikangas et al., 2010), CW-involved children and youth, who are already connected to social services providers and might presumably have greater access to other MH services, are still much more likely to have unmet MH needs. This is particularly true for CW-involved children and youth of color.

With longstanding leadership from organizations like SAMHSA, NCTSN, and ACF, these findings have contributed to ongoing policy changes at federal, state, and local levels, resulting in widespread screening implementation efforts in CW systems across the nation. In California, similar to many other states, class action litigation has been spurred by advocacy groups on behalf of former CW-involved youth whose MH needs were unmet while involved in CW services (Kosanovich, Joseph, & Hasbargen, 2005). The Katie A. et

al. v. Diana Bonta et al. Class Action Settlement Agreement (Case No. CV-02-05662 AHM [SHx]) [now referred to as *Pathways to Mental Health Services* (California Department of Social Services [DSS] & California Department of Health Care Services, n.d.)] established the requirement for each of California's 58 county systems to implement screening procedures for identifying children and youth involved in CW with significant MH needs to help increase their access to MH assessment and treatment. Technical assistance and implementation materials, including monthly phone calls, a practice manual, and a review of screening tools (Crandal & Conradi, 2013), have been provided by the state through *Pathways to Mental Health Services*. State leaders have facilitated opportunities to support California's county leaders with the development of procedures to identify children and youth involved in CW whose well-being has been disrupted, particularly as a result of maltreatment, and ensure referral to assessment and treatment (see California Department of Health Services, 2017; California Department of Social Services, 2017 for more information).

Despite this new energy behind screening among children and youth involved with CW, there has also been considerable autonomy and some ambiguity for CW administrators and staff to implement the actual screening programs for the children and youth they serve, both in California and across the country. ACF has provided funding to technical assistance teams in multiple states across three cohorts to support state screening efforts by way of five-year grants (DHHS, ACF, 2011). However, in many CW systems, the mandates for screening led administrators to rapidly implement a screening process without piloting, technical assistance collaboration, or detailed planning. Questions remain regarding the constructs targeted by screening practices, the screening tools utilized, the ways tools are utilized, the ways screening practices are tied to intervention, how key decision points are prioritized, and how decision makers perceive their implementation efforts.

To date, there has been no systematic evaluation of how screening efforts have been implemented by CW leaders and staff. The California screening implementation under *Pathways to Mental Health Services* presents an opportunity to investigate how CW systems have responded to screening mandates and to offer new frameworks for other CW systems moving to implement similar screening processes. The current study provides an investigation into new screening implementation efforts in CW services by characterizing California's CW systems' screening approaches, offering examples of how this aspect of TIC has been implemented in practice, and evaluating the diverse attempts to implement and sustain screening from a trauma-informed framework.

Research Questions

- Following statewide implementation efforts, what are the characteristics of screening approaches used in county CW systems to identify trauma-related and MH needs?
- In response to policy mandates accompanied by broad implementation support, what are CW leaders' perceptions of the selection and implementation of screening approaches for identifying trauma-related and MH needs?

Methods

Procedure

California's CW system is county-administered, with oversight provided by the state's DSS. The authors developed a web-administered survey to obtain information on MH and trauma screening practices in each county. The survey invitation was disseminated through an email from the state's association of human service directors to the association's representative in each county CW agency. The California DSS also endorsed the need for counties to complete the survey. The email recipient was asked to identify one respondent in their county with knowledge of screening practices for children involved with CW, from either the county CW or MH agency (based on the particular county system responsible for screening in that county) to complete the survey. In order to maximize the response rate, two reminder emails were sent by the state association. An in-person reminder was also provided at a standing monthly meeting attended by representatives from county CW agencies and staff from the California DSS. The survey was administered between February 24, 2016, and March 23, 2016.

Sample

The survey was completed by a respondent from 46 of the 58 counties in California. The breakout of respondents by position in their agency was as follows: director or chief, 13.0%; assistant or deputy director, 19.6%; manager, 47.8%; supervisor, 6.5%; and other, 13.0%. The participating counties represented 96.8% of the state's population according to 2010 census information (U.S. Census Bureau, 2015), and they represented 97.4% of the 46,261 CW case openings that occurred in all counties in the state between April 1, 2015 and March 31, 2016 (Webster et al., 2016). Based on the National Center for Health Statistics' 2013 Urban-Rural Classification Scheme for Counties (Ingram & Franco, 2014), the percentage of counties in the sample in each urban-rural category and the percentage of counties in that category statewide, shown in parentheses, were as follows: 17.4% were large central metro (13.8% of counties in the state), 15.2% were large fringe metro (13.8% of counties in the state), 13.0% were small metro (13.8% of counties in the state), 13.0% were micropolitan (13.8% of counties in the state), and 17.4% were noncore (22.4% of counties in the state).

Measure

The web-based survey contained questions on screening practices for identifying MH and trauma-related needs of children involved with the CW system. Respondents were asked to indicate the extent to which screening had been implemented in their county (e.g., full implementation, partial implementation, implementation being planned, or no plans for implementation), the degree of satisfaction with current screening procedures, and whether changes in screening procedures were being considered. The survey contained a list of tools commonly used to screen or assess MH and trauma-related symptoms (see Table 1), and respondents were asked to indicate which tools were being used or considered by their county. An open field was included so respondents could also report on tools that did not appear on the list. An additional question asked about the age groups of children

being screened or being considered for screening (ranging from infants to transition-age youth). Finally, respondents were asked to rank order a list of 10 considerations (see Table 2) for determining a screening procedure/selecting screening tool(s) ranging from 1 (most important) to 10 (least important).

Results

Screening Implementation Status

With regard to implementation status, 84.8% (n=39) of respondents reported that a screening procedure to identify MH and/or trauma-related needs of children involved with CW had been fully implemented in their county, 13.0% (n=6) indicated a screening procedure had been partially implemented, and 2.2% (n=1) reported that a screening procedure was being planned. Those who indicated that screening had been fully or partially implemented (n=45) were asked whether changes to screening were being considered (e.g., "We are thinking about changing our current screening tool(s)/procedures for MH and/or trauma-related needs") and about satisfaction with screening (e.g., "We are satisfied with our current screening tool(s)/procedures for MH and/or trauma-related needs"). Both questions were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Out of the 45 participants who answered the question, 20% (n=9) agreed that they were thinking about changing current screening tool(s)/procedures, 26.7% (n=12) were not sure, 37.8% (n=17) disagreed, and 15.6% (n=7) strongly disagreed (M=2.51, SD=0.99). As for their satisfaction with current screening tool(s)/procedures, 20% (n=9) of respondents strongly agreed they were satisfied, 57.8% (n=26) agreed, 15.6% (n=7) were not sure, 4.4% (n=2) disagreed, and 2.2% (n=1) strongly disagreed (M=3.89,SD=0.86).

Screening Tools Being Used and Under Consideration

Of the 46 participants, 44 reported use of at least one of the tools listed in the survey or reported use of at least one other tool that was not listed to screen for MH and/or traumarelated needs. Information on reported use of each tool for these 44 participants is shown in Table 1. The list of tools was presented in alphabetical order in the survey, but in Table 1, the tools are grouped into categories: tools to assess MH symptoms completed by caregivers and/or youth; tools to assess trauma-related symptoms completed by caregivers and/or youth; tools completed by providers; and unknown. Approximately half of the participants (52.3%; n=23) reported use of provider-completed tools only, 40.9% (n=18) reported use of both provider-completed and caregiver- and/or youth-completed tools (MH and/or trauma), and 6.8% (n=3) reported use of caregiver- and/or youth-completed tools only (MH and/or trauma).

Almost a quarter (23.9%, n=11) of the 46 participants reported that at least one tool was being considered for use in their county to screen for MH and/or trauma-related needs. Information on tools being considered is also reported in Table 1. Of the 10 participants who answered the follow-up questions, 20.0% (n=2) were considering a provider-completed tool, 40.0% (n=4) were considering one or more caregiver- and/or youth-

completed tools, and 40.0% (n=4) were considering both provider-completed and caregiver-and/or youth-completed tools.

Table 1. Screening Tools Being Used and Under Consideration

Table 1. Screening Tools Being Usea and Under Consider		ıg Used	Being Considered		
_	(n	=44)	(n=11)		
Screening Tools	n	%	n	%	
Mental Health Symptoms - Caregiver- or Youth-Con	pleted			_	
Ages and Stages Questionnaire: Social-Emotional					
(ASQ-SE)	18	40.9%	1	9.1%	
Child Behavior Checklist (CBCL)	3	6.8%	1	9.1%	
Pediatric Symptom Checklist (PSC)			1	9.1%	
Strengths and Difficulties Questionnaire (SDQ)	4	9.1%	2	18.2%	
Treatment Outcome Package (TOP)			4	36.4%	
Other	1	2.3%			
At least one caregiver-and/or youth-completed mental	20	45.5%	8*	80.0%	
health tool					
Trauma Symptoms - Caregiver- or Youth-Completed	l				
Acute Stress Checklist for Children (ASC-Kids)	3	6.8%	1	9.1%	
Child PTSD Symptom Checklist (CPSS)			1	9.1%	
Children's Revised Impact of Event Scale					
(CRIES/CRIES-8)			1	9.1%	
Screen for Child Anxiety Related Disorder Brief					
Assessment of PTS Symptoms (SCARED-PTS)	3	6.8%	2	18.2%	
Trauma Symptom Checklist for Children (TSCC)	1	2.3%	1	9.1%	
Trauma Symptom Checklist for Young Children			1	9.1%	
(TSCYC)					
UCLA PTSD Reaction Index (UCLA PTSD RI)	2	4.5%	1	9.1%	
Other	2	4.5%	1	9.1%	
At least one caregiver- or youth-completed trauma	10	22.7%	2*	20.0%	
tool					
Provider-Completed					
Child and Adolescent Needs and Strengths-Mental					
Health or Trauma Version (CANS)	14	31.8%	6	54.5%	
Mental Health Screening Tool (MHST)	27	61.4%	2	18.2%	
Structured Decision Making (SDM)**	14	31.8%			
Agency-developed tool	2	4.5%			
At least one provider-completed tool	41	93.2%	6	60.0%	
Tool Unspecified by Respondent	2	4.5%	1	9.1%	

^{*} number of respondents for these items=10

Age Groups for Screening

The following proportion of county administrator respondents (n=46) reported screening or planning to screen these different age groups of children: infant (0-1 years) 84.8%, toddler (2-3 years) 91.3%, preschool (4-5 years) 97.8%, middle childhood (6-11

^{**} This row offers information on perception of use of SDM for screening purposes but is not representative of the proportion of counties who use SDM throughout the state for other purposes.

years) 100%, younger adolescent (12-14 years) 100%, older adolescent (15-18 years) 100%, and transition-age youth (19-21 years) 71.7%.

Considerations for Determining Screening Tool(s) or Procedures

Respondents' ranking of considerations for determining screening tool(s) or procedures are reported in Table 2. A list of 10 considerations was provided in the survey and the respondent was asked to place the items in order of importance. The item "It's evidence-based or supported by research" was ranked as most important by 56.5% (n=26) of respondents (Mdn=1.0), and the item "The tool(s) was designed to be completed by staff" was ranked as most important by 19.6% (n=9) of respondents (Mdn=3.0). Half of the items were ranked as most important by less than 10% of respondents, and three items were not ranked as most important by any of the respondents.

Table 2. Ranking of Considerations for Selecting Screening Tool(s)/Procedures

			% of respondents that
		Range*	ranked consideration
Considerations	Median	High to Low	as most important
Other counties are already using it	6.0	1-10	8.7%
It satisfies stakeholders (like county	5.0	1-10	4.3%
or state administrators)			
It's evidence-based or supported by	1.0	1-10	56.5%
research			
Children, youth, and families like it	6.5	2-10	
Staff like it	6.0	2-10	
It doesn't add extra strain on staff	6.0	1-10	4.3%
It makes sense to me	7.0	2-10	
The costs involved in using it	7.0	1-10	2.2%
The tool(s) was designed to be	3.0	1-10	19.6%
completed by staff			
The tool(s) was designed to be	8.0	1-10	4.3%
completed by parents/ caregivers			
and/or youth			
*1=most important, 10=least important			

Discussion

This evaluation of the *Pathways to Mental Health Services* screening process implementation offers several findings germane to TIC. Most participants perceived their screening process as fully implemented and expressed satisfaction with the process. Generally, these processes included screening all or nearly all ages of children and youth served, most commonly with practitioner-rated tools that examine general child functioning, potential for risk, or family strengths and needs. Survey results also showed that a majority of respondents collectively viewed "evidence-based or supported by research" as the top consideration when determining a screening tool or process in their respective counties. Although these findings are specific to California's implementation of screening for CW-involved children, there are implementation considerations demonstrated here that can inform future attempts to broadly implement TIC.

TIC Implementation Consideration 1: Maintaining Focus on Childhood Trauma

After longstanding national emphasis on screening in CW as a crucial component of TIC, California's statewide screening implementation ultimately occurred as a result of class action litigation with an emphasis on access to MH services. A focus on MH services was intended to convey an inclusive array of services, targeting trauma-related as well as other MH needs a child may have. The California DSS offered a practice model and technical assistance which included emphasis on the importance and role of TIC in this implementation effort. Disconcertingly, however, an open-ended focus on broad MH may have diluted the salience of identifying PTSD- and trauma-related needs for the CW-involved population at the county level, as evidenced by the 36 counties (78.3%) whose respondents reported no trauma-related content or results included in their screening tool approach.

For more than a decade, TIC researchers have highlighted the importance of linking trauma-related needs with research-based trauma treatment services (Kerns et al., 2016; Ko et al., 2008; Taylor, Wilson, & Igelman, 2006), rather than general MH services (Leslie, Hurlburt, Landsverk, Barth, & Slymen, 2004). Advocates of TIC need to ensure the mission and meaning of TIC is directly translated into specific policies and implementation practices in future efforts, particularly within large multilayered systems where aspirational aspects of an effort may become attenuated across layers.

TIC Implementation Consideration 2: Closing the Science-Practice Gap

Of the four most commonly used tools used for screening reported in this survey, three are completed by professionals involved in the case, rather than by direct report from the child or caregiver. While there are examples of professional- or practitioner-completed measurement tools performing well and providing meaningful data, they are generally less represented in measurement literature (Crandal et al., 2015). This may, in part, be due to the risk for measurement error because the targeted construct is distanced from the measurement source. For example, measuring a child's trauma history or symptoms from the point of view of a professional produces a score that represents the professional's knowledge of the child's history or symptoms, which can vary widely based on each professional's interactions with the child, familiarity with the child's case, understanding of screening procedures, or skill investigating childhood trauma. High caseloads, overburdened workers, and strained organizations or systems may exacerbate these potential sources for systematic measurement error (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Since the psychometric performance of the practitioner-completed measurement method is not clearly established, particularly in applied settings, there is cause for caution when interpreting results from professional-rated screening tools. Additionally, literature review of peer-reviewed published research on several of the most commonly reported tools used for screening in the respondent counties suggested these tools were not developed for use as MH or trauma screening tools and have not been evaluated for performance when used to assist professionals making screening decisions (i.e., cut scores,

sensitivity, specificity, predictive power; Crandal & Conradi, 2013; Haynes, Smith, & Hunsley, 2011).

Given these measurement concerns, the commonly implemented screening tools are often those with uncertain performance. Nonetheless, a majority of survey respondents ranked "It is evidence-based or supported by research" as the highest priority consideration when determining screening tools or procedures. This illustration of a science-practice gap in CW has been noted by others (Burns et al., 2004; Raghavan, Inoue, Ettner, Hamilton, & Landsverk, 2010). In his study of the use of research evidence in public youth-serving systems, Palinkas (2015) found that systems leaders tend to rely on the availability of resources, local indications of a need, and their personal experience when deciding if they will use evidence to make changes. CW leaders were more likely than other system leaders to ignore evidence when making changes (Palinkas, 2015). Emerging literature on addressing the science-practice gap in CW calls for research-practice partnerships that build on cumulative and collaborative efforts to close the science-practice gap (Aarons & Chaffin, 2013; Palinkas, 2015; Palinkas, Short, & Wong, 2015; Testa et al., 2014). Future TIC implementation efforts in CW should address the science-practice gap beginning with an awareness of the need for collaboration among leaders with diverse science- and practice-related expertise.

TIC Implementation Consideration 3: Evaluating the State of the Science

While there are research-practice partnership and implementation models for expanding access to evidence-based practices for child-welfare-involved children (Palinkas et al., 2015; Testa et al., 2014), these models have focused on increasing access to established evidence-based treatments. Evidence-based screening for CW-involved youth, on the other hand, is still taking shape. Evidence-based screening is commonly misrepresented as merely the use of tools that have produced data that was found to have strong reliability and validity, sometimes without regard for screening-specific test performance (e.g., sensitivity, specificity, predictive power).

There are measurement tools which have performed well when screening for general MH needs (Gardner, Lucas, Kolko, & Campo, 2007; Goodman, Ford, Simmons, Gatward, & Meltzer, 2000), as well as screening tools developed to detect trauma-related need or assess histories of childhood traumatic stress (Conradi, Wherry, & Kisiel, 2011; Crandal & Conradi, 2013). However, only recently have these tools been evaluated in broad CW contexts to identify children who might benefit from further MH assessment and treatment (Kerns et al., 2016). Nonetheless, "screening should involve a system, not just a test," (Raffle & Gray, 2007, p. 42) and a screening system that is evidence-based includes evaluation of the screening test performance as well as the outcomes for individuals involved in the process.

To date, TIC advocates do not have sufficient information about screening programs to determine how many children with positive screens are found to have serious MH conditions and benefit from treatment, how many children with positive screens are found to have no serious MH condition or do not benefit from treatment, how many children with negative screens later demonstrate significant MH need, or which services might be

appropriate for children with negative screen results. Researchers, policy makers, administrators, and other stakeholders are embarking on a nascent application of a longstanding element of TIC. The barriers identified in the *Pathways to Mental Health Services* screening implementation process bring to light the importance of acceptability and feasibility in existing evidence-based screening models. Meaningful steps remain to understand and implement this crucial component of identifying children whose well-being has been disrupted by traumatic events and develop evidence-based screening processes that are feasible to implement in CW systems.

Limitations

The current study offers a point in time glimpse of an on-going, expansive implementation effort in a large state. There are a number of factors that have facilitated effective and ineffective aspects of implementation at the national, state, county, and local levels that are beyond the scope of this project. Furthermore, although attempts were made to identify the most appropriate respondent, data were collected based on report from a single representative from each county. Accuracy of the reported information was not assessed and the extent to which social desirability influenced responses is unknown. County screening programs are likely to involve multiple stakeholders with a range of perspectives and there may be additional information that was not captured based on the methodology used in this study. Respondents from different counties may have different perceptions of screening and the distinction of screening from assessment, which could contribute to imprecision in the survey responses. Finally, given the large county-administered organization of California's CW services, these findings may not generalize to all other CW settings.

Future Research

Future attempts to explore broad screening implementation could include evaluations of fidelity and sustainment of the implementation effort (e.g., training and professional development among direct service staff, quality assurance monitoring, evaluating perceptions of the practice among staff providing the service) as well as evaluation of the effectiveness of the implemented TIC practices. Additionally, TIC implementation models would be useful to support CW organizations looking to implement specific practices. For example, Kerns and colleagues (2016) describe an approach to strengthening the CW workforce capacity to identify trauma symptoms for children and youth involved in services. This articles describes different screening approaches that were implemented or under consideration for implementation and leadership perceptions of those approaches in the context of a statewide effort. An implementation model, on the other hand, would examine the lessons learned from researchers and practitioners and concretize an implementation approach designed to be translated to different CW organizations. While further steps are needed to make trauma-related and mental health screening more accessible and practical for CW systems, this study offers information and considerations intended to encourage the progress of this crucial element of TIC.

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Adding Trauma-Informed Care at a Bereavement Camp to Facilitate Posttraumatic Growth: A Controlled Outcome Study

Irene Searles McClatchey Rachel Frances Raven

Abstract: Background: Studies on posttraumatic growth (PTG) among bereaved youth are rare; outcome studies on how to facilitate PTG among this population are even more scarce. Objectives: This study examined the addition of trauma-informed care to bereavement interventions to foster PTG in youth attending a weekend-long bereavement camp. Method: A total of 105 participants completed standardized measures of posttraumatic growth and posttraumatic stress disorder after which 52 of the participants took part in a camp session. Ninety-five of the participants from both groups were posttested four weeks after the camp session. Results: Multiple Regression showed that PTG scores were significantly greater at posttest for the treatment group. No significant changes in PTSD were found in either group, although the presence of dissociative symptoms decreased significantly among campers in the treatment group. Conclusions: Findings suggest trauma-informed care may increase posttraumatic growth among youth coping with loss. Implications for future studies and clinical practice are discussed.

Keywords: Posttraumatic growth; trauma-informed care; childhood bereavement; bereavement camp; posttraumatic stress disorder symptoms

Many children experience the death of a parent. There were 153 million orphans under the age of 18 worldwide in 2009 (United States Agency for International Development [USAID], 2012). Twelve percent of these were double orphans, having lost both parents. In the United States, approximately 1.9 million children under the age of 18 received death benefits from a parent in 2014 (U.S. Social Security Administration [SSA], n.d.). This estimate does not include children with uninsured, unemployed, or undocumented parents, suggesting that the number of children who have experienced the loss of a parent is higher. The loss of a loved one, though traumatic for anyone, can be especially difficult for children and adolescents. Research has shown several short and long-term effects of parental bereavement in children: difficulties in school, developmental delays, higher rates of substance abuse, depression, deviance, increased risk of mortality into early adulthood, and numerous physiological, health, social and psychological issues (Dopp & Cain, 2012; Ellis, Dowrick, & Lloyd-Williams, 2013; Li et al., 2014; McClatchey, Vonk, & Palardy, 2009). However, data have also consistently presented the potential for positive change following a struggle with trauma, also known as posttraumatic growth, or PTG (Kilmer, 2006; Tedeschi & Calhoun, 1995). This construct helps researchers investigate the transformative effects of distress and has been documented in youth following various traumas: illness, earthquakes, hurricanes, terrorism, and death of a loved one (Arpawong, Oland, Milam, Ruccione, & Meeske, 2013; Jia, Ying, Zhou, Wu, & Lin, 2015; Kilmer & Gil-Rivas, 2010; Laufer & Solomon, 2006; Lin et al., 2014). With the negative effects on children who have experienced loss, the ability to recognize, and possibly even encourage posttraumatic

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growth through trauma-informed care is imperative (Kilmer et al., 2014; Steele & Kuban, 2011). Nevertheless, despite this stated need, there are few outcome studies examining whether trauma-informed care increases PTG in children. The current study is an attempt to fill this gap in the literature.

Definitions and Distinctions

PTG, though frequently studied amongst adults, has garnered little attention among children, with no clear standard for measurement in youth and few findings regarding the trajectory of growth (Kilmer et al., 2014; Kilmer et al., 2009). Various studies have examined resilience in children, but researchers have only recently begun scrutinizing the role of trauma-informed care in fostering PTG (Hooper, Marotta, & Lanthier, 2008; Malchiodi, Steele, & Kuban, 2008; Steele & Kuban, 2011). Posttraumatic growth stems from the idea of "cognitive processing," which is the re-examination of beliefs that occurs after an unexpected trauma (Tedeschi, Calhoun, & Cann, 2007, p. 398). Though similar to resilience, PTG differs in that it denotes positive changes following distress, as opposed to "the ability to manage despite trauma" (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009, p. 285). Posttraumatic growth does not come from the event itself, but rather "the struggle in the wake of the trauma" (Tedeschi & Calhoun, 1995, p. 157). This struggle is a result of the traumatic events casting doubt on an individual's pre-trauma perspectives: "shattering their assumptions about the world and forcing a reconfiguration of an individual's goals, beliefs, and...worldview" (Meyerson, Grant, Carter, & Kilmer, 2011, p. 950).

In the wake of disaster, there are countless adverse effects, but burgeoning literature in the last two decades has identified the many positive changes associated with posttraumatic growth (Kissil, Nino, Jacobs, Davey, & Tubbs, 2010; Levine et al., 2009; Tedeschi & Calhoun, 2004). These changes come in many forms, but tend to fall into a few main categories: changed self-perceptions, a different perspective on one's relationships, a changed philosophy of life, and a deepening of one's spiritual and existential being (Calhoun & Tedeschi, 2006). Changed self-perceptions include an increased sense of survival, strength, and endurance; altered views concerning one's relationships including deeper compassion and empathy, greater appreciation of one's real friends, and an understanding of whom one can rely on; a new worldview as exemplified in modified values and priorities; and proliferation of one's spiritual life providing a broader view of one's existence (Meyerson et al., 2011).

However, not all researchers agree that cognitive change is enough to create personal growth. Hobfoll and colleagues (2007) argue that there also needs to be some evidence of behavioral changes to show real posttraumatic growth. Other researchers see PTG as having an illusory side in addition to growth (Zoellner & Maercker, 2006).

Posttraumatic Growth and Posttraumatic Stress Disorder

The *Diagnostic Statistical Manual* (DSM-5, American Psychological Association [APA], 2013) describes the diagnostic criteria for Posttraumatic Stress Disorder (PTSD) to include having experienced, witnessed, or learned about a traumatic event happening to a

close friend or family member, or being exposed to "repeated or extreme aversive details of the traumatic event" (p. 271). In addition, symptoms from each of the following clusters need to be present: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity. The symptoms have to last more than one month, and cause "clinically significant distress or impairment in social, occupational, or other important areas of functioning" (p.272) not caused by substance abuse or a co-occurring illness.

Posttraumatic stress disorder symptoms have been shown to be significantly associated with PTG in several studies (Devine, Reed-Knight, Loiselle, Fenton, & Blount, 2010; Hafstad, Kilmer, & Gil-Rivas, 2011; Jia et al., 2015), with research suggesting that it may play a catalytic role in the posttraumatic growth process among youth (Kilmer & Gil-Rivas, 2010; Kilmer et al., 2009). Zebrack et al. (2015), in their work with adolescent cancer survivors, found that PTG is not only related to PTSD, but is potentially predicated upon experiencing or re-experiencing some degree of distress. These findings have lead researchers to the two-dimensional stress response perspective (Linley & Joseph, 2004), which posits that growth and distress, rather than being opposite endpoints on the experiential scale, are instead independent dimensions capable of coexisting within an individual at the same time where "high scores on one dimension do not necessarily imply low scores on the other dimension" (p. 18). Other studies have found no relationship between PTSD and PTG (Glad, Jensen, Holt, & Ormhaug, 2013; Laufer, Hamama-Raz, Levine, & Solomon, 2009; Phipps, Long, & Ogden, 2007).

Posttraumatic Stress Disorder and Grief

Uncomplicated grief involves feelings of sadness, temporary lack of interest in regular activities, sleep and appetite problems, and inability to focus (Friedman, 2012). Some researchers have found that children generally do well in the grieving process (Brown, Sandler, Tein, Liu, & Haine, 2007). Other studies show that a fairly large number of children experience PTSD and complicated grief symptoms when losing a parent (McClatchey et al., 2009). In addition, studies have shown that PTSD is present to an equal degree in bereaved children whether the death was expected or sudden and violent (Kaplow, Howell, & Layne, 2014; McClatchey et al., 2009). Regardless of the number of bereaved children affected by PTSD, for those who are, the PTSD symptoms may interfere with the grief process (Cohen, Mannarino, Greenberg, Padlo, & Shipley, 2002).

PTG among Youth

Although there has been a growing body of literature on PTG among youth following various events such as hurricanes (Kilmer & Gil-Rivas, 2010), natural disasters (Cryder, Kilmer, Tedeschi, & Calhoun, 2006), earthquakes (Jia, et al., 2015), terrorism (Laufer & Solomon, 2006), and illness (Arpawong et al., 2013), few studies address posttraumatic growth among bereaved children and adolescents. PTG among bereaved youth may manifest as increased caring for and stronger bonds with loved ones and friends (Oltjenbruns, 1991), gratitude, and an appreciation for life (Brewer & Sparkes, 2011). Psychological distress and seeking support from adults are predictors of PTG among bereaved youth, but age, gender, ethnicity, time, or seeking support from siblings and peers

are not (Wolchik, Coxe, Tein, Sandler, & Ayers, 2009).

Kilmer et al.'s (2014) recent literature review, though not an outcome study, discusses the implications of emerging PTG research and offers ways in which professionals can foster this growth in juveniles. Current evidence has demonstrated the capacity for children and adolescents to experience PTG and has even uncovered some fundamental components of this process. However, as Kilmer et al. (2014) underscore "it is imperative to acknowledge the variability in children's psychological mindedness or self-understanding and awareness" (p. 507). By not just recognizing this adaptability in youth, but catering specifically to it, practitioners can begin to facilitate PTG through trauma-informed care. Using trauma-focused cognitive behavioral therapy (TF-CBT), Judi's House, a nonprofit, community-based grief center, does just that. A ten-week intervention, including individual, family, and group modalities, this program is "designed to help promote emotional regulation and provide psycho-education about trauma and loss, grief reactions and responses, and diverse positive coping strategies" (p. 514). Through the use of TF-CBT, peer support, reflection and reframing practices, and carefully paced activities, professionals can expand on the Judi's House model and develop innovative strategies for fostering PTG in youth. Again, there are no outcome studies on the effectiveness of the program.

Outcome Studies

There are few outcome studies on fostering posttraumatic growth among children, with recent literature only providing a glimpse of the possibilities. One study, completed by Glad and colleagues (2013) examined the prevalence of PTG among 148 Norwegian youth exposed to various traumas. Each child was treated using trauma-focused cognitive behavioral therapy in a mental health clinic and was assessed for both PTSD and PTG at pre- and post-treatment. PTG increased significantly from pre- to post-treatment, with 15% of participants reporting positive changes at pre-test and 35% at post-test. However, the study lacked a control group. Also, although there were clinically significant posttraumatic stress reactions displayed among all of the participants, PTSD was not found to have a substantial relationship with levels of PTG. Little, Akin-Little, and Somerville (2011) studied the efficacy of Project Fleur-de-lis, a program designed to help children in the aftermath of Hurricane Katrina. The project used a three-tier method, moving from least intensive to most intensive intervention: Classroom-Camp-Community-Culture Based Intervention (CBI), Trauma-Focused Cognitive Behavior Therapy (TF-CBT), and Cognitive Behavioral Intervention for Trauma in Schools (CBITS). PTG, PTSD, psychosocial functioning, and depression were all assessed throughout the program. Marked improvements were made in all areas and on every tier, except for TF-CBT, which did not have a significant effect on levels of depression. However, the sample was small and there was no control group.

Supporting PTG among bereaved children is an even less explored topic, with only a few researchers addressing this subject. Wolchik and colleagues (2009) discussed an analysis of 50 adolescents and young adults who participated in a sub-study of a larger exploration. The respondents, aged 14 through 22, were randomly assigned to either a preventative group program for youth and caregivers or to a self-study program. Six years

after entering the study, participants completed the Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996). Participation in the Family Bereavement Program, meant to enhance coping and the caregiver-child relationship, did not increase posttraumatic growth levels. Both the small sample size and the fact that the intervention did not specifically address PTG were offered as potential reasons for this outcome. To better promote PTG among youth, the researchers recommend offering a therapeutic environment in which children who have experienced trauma can come together to share and discuss positive changes (Wolchik et al., 2009).

Lin et al. (2014) studied 124 children orphaned by AIDS in Central China. Though PTG is not specifically mentioned, several themes of posttraumatic growth were addressed in the study. Research participants were divided into an intervention group, which included six weekly sessions based on grief theory, and a control group. Results demonstrated that children in the intervention group scored significantly higher than those in the control group in grief processing (thinking about the deceased, searching for meaning, having positive memories, talking and expressing feelings about the deceased), future expectations, hopefulness, and control, and significantly lower in trauma symptoms. However, trauma-informed care was not part of the intervention.

In summary, few studies look at bereaved children and PTG. Of those that exist, the treatment of one did not address PTG specifically (Wolchik et al., 2009) and one did not measure PTG although it did measure cognitive growth (Lin et al., 2014). The current lack of controlled research on effective ways to facilitate PTG among bereaved youth leads to the question: can adding trauma-informed care to grief interventions facilitate PTG among bereaved youth as suggested by some (Kilmer et al., 2014; Steele & Cuban, 2011)? The current study, based on a subset of data from a larger study, describes, as far as the researchers know, the first controlled outcome study on fostering PTG in bereaved youth with a camp intervention that included trauma-informed care.

Method

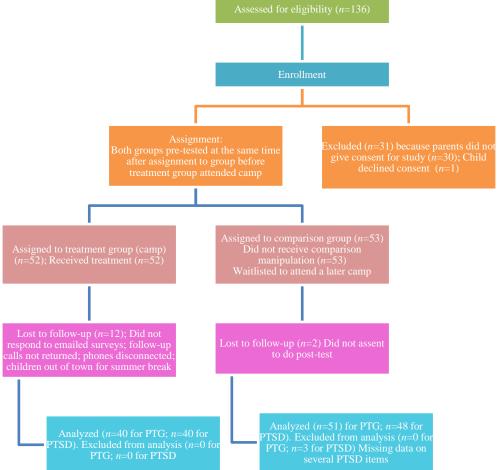
Participants

Participants for this study were campers at a weekend-long healing camp for bereaved children and adolescents ages 6 through 17. This purposive sample was selected to examine the effect of adding trauma-informed care among bereaved youth in this non-equivalent comparison group study. Bereaved youth were recruited for two separate camp sessions through the school system by a general announcement to school counselors three months before the first camp session and four months before the second camp session. After having registered their children for camp, the parents/guardians were informed of the research project via phone calls and email. A total of 67 campers signed up for the first camp session. The parents/guardians of 52 of the 67 participating campers (78 percent) agreed for their children to participate in the study. A total of 69 campers signed up for the second camp session, and parents/guardians of 54 of these campers (78 percent) agreed to allow their children to participate. All children whose parents allowed them to participate assented to do so except for one child in the second camp session. Thus, a total of 105 campers were available for pre-testing. One month later 91 of the campers from the two sessions (87%

response rate) were available for post-testing (see Figure 1).

The 105 campers who completed the pre-test were mostly males (63%); 53% were Caucasians; 39% African Americans, 4% Latino, and another 4% Indian and Pacific Islander. Forty-seven percent of the campers had lost a mother, 35% a father, 13% a sibling, and 5% a guardian or grandparent. The campers' age ranged from 6 to 17 (M=10.72; SD=2.85). The majority of the children and adolescents had experienced a sudden loss (70%). Sudden or unexpected causes of death included aneurysm, homicide, heart attack, accidental drug overdose, suicide, stroke, car and motorcycle accidents, SIDS, pneumonia, drowning, and asthma. Expected causes of death included cancer, liver failure, end stage heart or kidney disease, chronic heart failure, chronic obstructive pulmonary disease, and alcoholism. Time since death ranged from one month to 57 months (SD=11.30) (see Tables 1 and 2).

Figure 1. Flow of Participants for the Study's Procedures, Assignment, Follow-Up, and Analysis.



Notes. PTG=Posttraumatic Growth; PTSD=Posttraumatic Stress Disorder; Follow-Up: Both groups post-tested at same time four weeks after treatment group attended camp

Table 1. Gender, Race, Ages, Type of Loss, Type of Death, and PTSD Dissociative

Subtype for Treatment and Comparison Groups

	Treatment Comparis		oarison				
	G	Group		Group			
Demographics	n	%	n	%	χ2	df	p Value
Gender							
Female	21	40	18	34	0.46	1	.50
Male	31	60	35	66			
Ethnicity							
Caucasian	34	65	22	42	6.01	1	.02
African America	15	29	26	49			
Hispanic	3	6	1	2			
Indian			3	5			
Pacific Islander			1	2			
Age Groups [Mean (SD)]	10.73 (2.72)		10.72 (3.00)				
6-11	32	62	34	64	.08	1	.78
12-17	20	38	19	36			
Range	6-17		6-16				
Type of Loss							
Mother	18	35	31	58			
Father	20	38	17	32			
Sibling	12	23	2	4			
G Gparent	2	4	3	6			
Type of Death							
Sudden/violent	37	71	36	68	.13	1	.72
Expected	15	29	17	32			
PTSD Dissociative Subtype							
Yes	29	56	28	58			
No	23	44	20	42	.07	1	.80

Notes. G Gparent = Guardian Grandparent; PTSD = Post-traumatic Stress Disorder.

Table 2. Independent Sample t-Tests of Mean Differences in Time Since Loss, PTG and PTSD Index Scores for Treatment and Comparison Groups

	Trea	atment G	roup	Con	Comparison Group				_
Measure	M	SD	n	M	SD	n	t	df	p Value
Months	12.25	11.07	52	9.75	11.50	53	1.13	103	.26
Range	1-48			1-57					
PTG scores	30.40	6.46	52	27.21	7.08	52	2.33	102	$.02^{*}$
Ranges	13-40			10-40					
PTSD Scores	24.85	17.64	52	26.75	19.45	48	51	98	.61
Range	1-71			0-84					

Notes. PTG = Posttraumatic Growth; PTSD = Post-traumatic Stress Disorder

Measurements

Posttraumatic Growth. The researchers used the Revised Posttraumatic Growth Inventory for Children (PTGI-C-R) (Kilmer et al., 2009) to measure posttraumatic growth. This inventory is a 10-item self-report measurement revised from Cryder et al.'s (2006)

^{*}Significant at alpha ≤ .05

Posttraumatic Growth Inventory for Children (PTGI-C). The PTGI-C-R assesses five PTG domains, including new possibilities, relating to others, personal strength, appreciation of life, and spiritual change using a 4-point scale with 1 representing "no change" and 4 representing "a lot." Questions posed in the different domains include "I now have a chance to do some things I couldn't do before," "I feel closer to other people (friends or family) than I used to," "I can now handle big problems better than I used to," "I appreciate (enjoy) each day more than I used to," and "I understand how God works better than I used to." The Cronbach's alpha for the PTGI-C-R in Kilmer et al.'s study (2009) ranged between 0.77 and 0.81. For the current study Cronbach's alpha was 0.83 at pretesting, and .89 at post-testing.

Posttraumatic Stress Disorder Symptoms. To measure posttraumatic stress disorder symptoms, the researchers used the fifth section of the University of California at Los Angeles (UCLA) PTSD Reaction Index for DSM-5 (Pynoos & Steinberg, 2014). This is a 27-item self-report measure of thoughts, feelings, and behaviors that represent posttraumatic stress disorder symptoms linked to the DSM-5 (APA, 2013). The respondents rate items as they pertain to the past month, such as "I am on the lookout for danger or things that I am afraid of (like looking over my shoulder even when nothing is there)", "I have trouble concentrating or paying attention", "I have thoughts like, 'The world is really dangerous", and "I have trouble going to sleep, wake up often, or have trouble getting back to sleep," as none, little, some, much, or most. In addition, the scale contains 4 items to assess dissociative subtype, such as, "I feel like things around me are not real, like I am in a dream." Psychometric properties of the UCLA PTSD Reaction Index for DSM-5 are not available but studies are currently being conducted (A. Steinberg, personal communication, December 29, 2015). The UCLA PTSD Index for DSM-5 is created similarly to the UCLA PTSD Reaction Index for DSM IV (Steinberg & Brymer, 2008). The UCLA PTSD Reaction Index for DSM IV includes three PTSD symptom clusters (re-experiencing, avoidance, and arousal) whereas the UCLA PTSD Reaction Index for DSM-5, in accordance with the DSM-5, includes a fourth cluster – negative alterations in cognitions and mood (APA, 2013; Pynoos & Steinberg, 2014). When scoring the scale, a score of 3 or 4 indicates that the symptom is present except for items 4, 10, and 26 where a score of 2 or higher indicates presence of the symptom. One or more dissociative symptoms indicate dissociative subtype. In the current study Cronbach's alpha was .90 at pre-testing and .92 at post-testing.

Procedures

After the local university's Institutional Review Board gave approval for the study, the parents/guardians of campers, who had been recruited through the school system, were informed of the study by a phone call followed by an email to those who indicated interest in the study. The researchers attached a consent form to the email asking for the parents'/guardians' permission for their children to participate in the study. The parents/guardians of the first camp session (Camp A) who agreed for their children to participate (treatment group) brought signed consent forms to the camp when arriving to drop their children off for the weekend camp. Graduate social work students, who had been trained in research procedures and the test instruments, asked the campers who had parental

consent if they would assent to take part in the study. The graduate students found private spots to administer the instruments to those who assented. The campers then participated in the weekend long camp.

Meanwhile, campers who had signed up for the second camp session (Camp B), to take place four weeks after Camp A, served as the comparison group. The parents of the children in the comparison group had been asked to mail signed consent forms to the researchers in pre-stamped self-addressed envelopes. Graduate social work students contacted these campers the week preceding Camp A via email with an attached assent form. If the youth assented to participate in the study, they were directed to a Qualtrics link (a software tool for the university's researchers to use for on-line surveys) and were asked to assent once more on the site. They then completed the instruments using Qualtrics.

Four weeks after Camp A the campers in the comparison group arrived to Camp B. Upon their arrival, the graduate social work students administered the second testing—before the campers started participation in camp. In the week leading up to Camp B, the campers from Camp A were emailed a link to the instruments on Qualtrics and were asked to complete the second testing. Thus, the campers attending Camp A (treatment group) were pre-tested right before Camp A and post-tested four weeks later during the week immediately prior to Camp B. The comparison group was pre-tested during the week prior to Camp A and post-tested right before Camp B four weeks later as they arrived to camp but prior to participating in camp (see Figure 1). Therefore, the comparison group did participate in camp, but only after the study was concluded.

The Intervention

The intervention, developed by a social worker, consisted of a therapeutic weekend stay at a camp. The participants arrived on a Friday afternoon and stayed until Sunday afternoon. During the weekend, they participated in several recreational camp related activities such as a ropes course, canoeing, rock climbing, archery, etc. They also took part in grief-related activities such as poetry writing, journaling, arts performances, a balloon release, and a memorial service. In addition, the campers were divided into groups of six to eight campers according to age and developmental levels to receive six counseling sessions based on trauma-focused grief interventions. The camp follows the four assumptions and six principles of trauma-informed care as described by the Substance Abuse Mental Health Services Administration (SAMHSA, 2015). The four assumptions include basic realization of trauma and its affect; ability to recognize the signs of trauma; a response to trauma; and a pursuit to resist re-traumatization. The six principles stress safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, and awareness of cultural, historical, and gender issues. This approach is a philosophy that guides the camp agency in all of its aspects and for all its shareholders, such as campers, camper families, staff, volunteers, and funders. It is thus far more than a particular intervention. The counselors and co-counselors, the majority of whom were professional social workers and Master of Social Work students, received extensive training in the approach and were provided with a scripted manual that integrates best practices in trauma intervention. These techniques included psycho-education, feeling identification, exposure, stress inoculation techniques, mindfulness, and cognitive

behavioral therapy. The intervention was based on work by Cohen and Mannarino (2004) and Pynoos, Steinberg, and Wraith (1995).

Analysis and Results

The Treatment and Comparison Groups

The researchers first examined the treatment and comparison groups to see if they were comparable. Chi-square analyses revealed that the groups were similar in regards to demographic variables such as gender, age group (6-11; 12-17), type of loss (mother, father), and type of death (expected, unexpected). However, the two groups were different in regards to ethnicities, such that the treatment group had fewer Black participants than the comparison group, $\chi^2(1)=6.01$, p=.02. Independent samples t-test showed that the two groups were similar regarding time since loss and mean PTSD scores at pretest. The treatment group had higher PTG scores at pretest, t(102)=2.33, p=0.02. The campers who dropped out of the study at post-test were not different from those who remained in the study in regards to age group, gender, ethnicity, loss, mode of loss, time since loss, PTG and PTSD pre-test scores.

PTG and PTSD Scores After Camp

To examine whether PTG scores were different after the trauma-informed camp-based intervention, the researchers used a regression model to look for differences in total PTG scores between participants in the two camps at post-test controlling for total PTG scores at pre-test. Several extraneous variables were added to the model to look for possible predictors of PTG but also to control for differences across the two camps. These variables included age groups (6-11, 12-17), ethnicity (White versus non-White), gender, time, type of loss (parental versus non-parental), and mode of loss (sudden/violent versus expected). The children who attended camp had statistically significantly higher PTG scores than the children in the comparison group at post-test (β_{Tx} = -2.598; p=0.04). None of the covariates entered were significantly linked to PTG scores (see Table 3). In addition, in a separate regression model, there was no relationship detected between PTSD and PTG scores (p=.63).

Table 3. Regression Coefficients Model Results for Posttraumatic Growth Outcome

	Outcome (1				2
Variable	B	SE	p Value	F	R^2
Camp	-2.60	1.27	0.04^{*}	7.55	0.42
Age-group	-1.67	1.26	0.19		
Ethnicity	-0.95	1.28	0.46		
Gender	0.26	1.29	0.84		
Time	0.06	0.06	0.33		
Loss ^a	-1.26	1.57	0.43		
Mode of Loss ^b	-0.78	1.28	0.54		
PTG Pretest Scores	.53	.09	< 0.001		

Notes. PTG = Posttraumatic growth; ^aParental versus non-parental; ^bSudden versus expected; *Significant at alpha ≤ .05

A similar regression model was used to examine the level of PTSD symptoms after camp. Total PTSD scores at post-test were entered as the dependent variable and camp was entered as the independent variable. Total PTSD scores at pre-test were entered as a covariate. The same extraneous variables entered in the first regression model, such as age group, ethnicity, gender, time, type of loss, and mode of loss, were also included in the model. The children who attended camp had lower total PTSD scores than the children in the comparison group. However, the difference was not statistically significant (β_{Tx} =3.31; p=.34). None of the covariates were significant predictors of PTSD scores.

Furthermore, the researchers studied if participating in the camp decreased the possibility that the children would continue to experience dissociative symptoms. At the post-test, 14 campers (35%) in the treatment group experienced dissociative symptoms compared to 29 (56%) at the pre-test. In the comparison group, 32 campers (67%) experienced dissociative symptoms at post-test as compared to 28 (58%) at the pre-test. Chi-square showed that this difference between the two groups at the post-test was statistically significant with children not attending camp having higher odds of continuing to experience dissociative symptoms than those children who did attend camp, $\chi^2(1)=8.77$, p<.01.

To investigate whether there were any differences in outcome among various demographic groups, a series of paired t-tests (PTGPostTotal-PTGPreTotal and PTSDPostTotal-PTSDPreTotal) were conducted on the treatment and comparison groups. The results indicated that there was a statistically significant increase in PTG in the treatment group for Caucasian children, t(24)=3.30, p<0.01, but not for non-White campers; for those who had lost a father, t(14)=3.26, p=0.01, and among those participants who had lost a family member to sudden/unexpected loss, t(27)=3.11, p<0.01 (see Table 4). There was also a statistically significant decrease in PTSD symptoms among males in the treatment group, t(22), p<0.04. None of these statistical changes were detected in the comparison group.

Table 4. Paired Samples t-Test Posttraumatic Growth: Treatment Group

		Paired Differences 95% Confidence Level							
	n	Mean	SD	Lower	Upper	df	t	p Value	Power
PTG									
Overall	40	2.60	4.58	1.13	4.07	39	3.59	0.001^{*}	0.95
Whites	25	3.28	4.97	1.23	5.33	24	3.30	0.003^{*}	0.91
Non-whites	15	-1.47	3.74	-3.54	0.60	14	-1.52	0.15	0.24
Females	16	3.13	4.12	0.85	5.42	15	2.94	0.01^{*}	0.84
Males	25	2.28	4.89	0.26	4.30	24	2.33	0.03^{**}	0.65
Father loss	15	4.40	5.22	1.51	7.29	14	3.26	0.01^{*}	0.90
Mother loss	12	-0.83	4.42	-3.65	1.98	11	-0.65	0.53	0.11
Sibling loss	11	-1.45	3.11	-3.54	0.63	10	-1.55	0.15	0.30
Sudden loss	28	2.86	4.87	0.97	4.74	27	3.11	0.04^{*}	0.87
Expected loss	12	-2.00	3.98	-4.53	0.53	11	-1.74	0.11	0.38

^{*}Significant at $\alpha \le .01$. **Significant at $\alpha \le .05$.

To examine whether camp had a different outcome for those campers who had experienced a sudden/violent loss versus those who had experienced an expected loss, a regression model using post-PTG scores as the dependent variable and camp, pre-PTG scores, type of death, and the interaction between camp and type of death as independent variables. The camp-type of death coefficient was not significant (p = .815). Thus, camp had the same effect on the PTG scores for the two types of death.

Discussion

In this study, the researchers examined the effects of a bereavement camp using trauma-informed care on posttraumatic growth and posttraumatic stress disorder symptoms among bereaved youth. To the authors' knowledge, this is the first controlled outcome study of a program for bereaved youth applying trauma-informed care to examine its effects on PTG levels. The findings showed statistically higher levels of posttraumatic growth among youth participating in camp as compared to those who did not take part in camp. The results coincide with previous findings in pre-experimental studies examining PTG among youth that had experienced trauma (Glad et al., 2013; Little et al., 2011). PTSD symptoms decreased, but not to a statistically significant degree. However, the number of campers attending the treatment camp experiencing dissociative symptoms was statistically significantly lower after attending camp compared to the number of campers in the comparison group.

In addition, the study showed that the effects of camp on PTG were statistically significant among White youth but not among non-White youth. It may be that the lack of diversity in counselor composition at camp did not allow for the same bonding between African American campers and counselors as for Caucasian participants. Schafer (2007) found that similarities, such as ethnicity, between the counselor and camper are important to a positive camp experience. It is also possible that different ethnicities react differently to trauma and this warrants more exploration.

The change in PTG was also statistically significant among those campers who had lost a father but not for those who had lost a mother. For many of the families attending this camp, the deceased fathers were the primary providers. A new financial situation may have created extra struggles for those who lost a father. However, coming to camp and meeting others with similar struggles, may have given them a sense of increased strength and endurance (Wolchik et al., 2009).

In the current study, campers who had experienced a sudden loss also experienced a statistically significant increase in PTG levels but this was not the case for those campers who had experienced an expected loss. Losing a parent suddenly and/or in a violent manner may create struggles for bereaved children and families, such as ruminations and feelings that the death could have been prevented (Currier, Holland, & Neimeyer, 2006). This may in turn create feelings of guilt (Nader, 2001). Such feelings of guilt are highlighted at camp in the cognitive behavioral therapy (CBT) group counseling sessions. The use of CBT may help those with sudden loss to be able to let go of their guilt and create the noted posttraumatic growth in the group of campers who experienced a sudden loss.

Posttraumatic stress disorder symptoms declined to a statistically significant level among males in the treatment group but not among females. Males oftentimes have a more difficult time than females to express emotions (Chaplin & Aldao, 2013). At camp, males are together with other children and teens their own age, who have had similar traumatic experiences. Such peer support may facilitate processing, an important part of treatment for PTSD, and may have decreased their PTSD symptoms.

Limitations

Although the treatment intervention described in this study is cost-effective, convenient for participants' families, and demonstrates positive findings, there are some limitations that need to be considered when interpreting the results. First, despite the fact that the quasi-experimental design controls for most threats to internal validity (Campbell & Stanley, 1963), there are some concerns including the Hawthorne effect and the Placebo effect. The Hawthorne effect, also known as the observer effect, occurs when participants alter their responses or behaviors simply because they are being observed (McCambridge, Witton, & Elbourne, 2014). It is possible that the campers knew why they were being observed and responded in kind. The placebo effect occurs when participants describe themselves as feeling better because of beliefs about the treatment (Rogers, 2014). The campers knew they were at a healing camp for bereaved youth and may have had preconceived expectations about the treatment rather than have experienced actual changes.

Further limitations include a lack of randomization, limited diversity among the participants, and a shortage of information pertaining to possible intervening variables. While the study did involve a comparison group, due to cost factors and various ethical concerns, the researchers could not incorporate a randomized control group. The treatment and comparison groups were different on two variables – ethnicity and PTG pretest scores. A selection-history threat is a possibility, i.e., some event other than the treatment took place that the treatment group reacted to, but not the comparison group (Trochim, 2006). Regression to the mean also needs to be considered. In addition, it is possible that if the treatment group had included a more diverse ethnic group, the results would have been different. Furthermore, since the children and adolescents referred to the camp may be those who are struggling with their loss as opposed to children who are ostensibly coping well, the results of the study cannot be generalized to all bereaved youth. Moreover, some intervening variables, such as level of relationship intimacy with the deceased and/or surviving parent/guardian or social supports, remain unknown. The subgroups examined were small and the statistical power insufficient to identify small differences between groups. Finally, no method for family-wise error was used. Therefore, care needs to be taken when drawing conclusions in regards to the effectiveness of camp.

Even if camp did influence posttraumatic growth, it is not known if this was due to the addition of trauma-informed care, or whether it was due to other aspects of camp. It may be that just sharing similar experiences with other campers in a therapeutic environment, as suggested by Kilmer et al. (2014), created the positive change. Additionally, having several social work students administering the instruments leaves questions about interrater reliability. It is also unknown what participants' prior treatment experiences were.

Finally, the authors of the UCLA PTSD Reaction Index for DSM-5 (Pynoos & Steinberg, 2014) have not shared the instrument's psychometric properties, making the measure's convergent validity with PTSD symptoms unknown. In spite of and because of these limitations, there are significant implications for future research and practice.

Implications for Future Research and Practice

The findings of this research showed that those campers who had lost a father experienced PTG to a stronger degree than those who had lost a mother. This may be due to financial struggles. It would behoove researchers to include income or socioeconomic status (SES) in future studies to see if it has an impact on PTG. White campers in this study showed more growth in PTG than non-White campers. The possible impact of counselorcamper ethnicity on the outcome of PTG deserves examination. There are also other variables that were not addressed in this study. Social support plays an important role in grief resolution among children (Sveen, Eilegard, Steineck, & Kreicbergs, 2014), but current studies on its impact on PTG are inconclusive (Kilmer & Gil-Rivas, 2010; Yu et al., 2010). Future research may want to explore how social supports impact posttraumatic growth. Furthermore, studies with more ethnically diverse participants are needed to examine the relationship between ethnicity and PTG. It would also be important to follow up with campers some time after camp to ascertain whether gains are enduring or temporary. Finally, since there was no relationship between PTSD symptoms and PTG, is trauma necessary for growth after a death? Or is Horowitz (2010) correct in claiming that any successfully completed grief creates growth? One could argue that any bereavement creates a struggle of sorts, even if the death was not traumatic. As Meyerson et al. (2011) state, the event is "shattering their assumptions about the world and forcing a reconfiguration of an individual's goals, beliefs, and...worldview" (p. 950). It is the struggle that creates PTG (Tedeschi & Calhoun, 1995). Is trauma-informed care and trauma interventions necessary to create this growth? In this study, PTSD symptoms did not decrease significantly, except among males; however, the possibility that the children would continue to experience dissociative symptoms did decrease significantly. In addition, children who had experienced a sudden death had a significant increase in PTG. These findings, and Kirwin and Hamrin's (2005) claim that death of a parent is traumatic for any child, would support the use of trauma-informed care. However, more research is needed to examine the relationship between PTSD symptoms, PTG, and grief.

The results from this study indicate that adding trauma-informed care can be a beneficial approach to guiding children and adolescents through grief and can be done is various settings such as in individual counseling sessions and group settings in schools, hospitals, and hospices. The camp setting used in this study is a convenient setting for most families, who bring their children to the camp setting for one weekend. More agencies that provide services to bereaved youth may want to explore the possibility of establishing weekend camps for their clients. The results also suggest the importance of having counselors from various ethnicities, who are culturally competent to adequately serve all bereaved children and adolescents. Finally, it is recommended that social workers, counselors, and other professionals working with bereaved children and adolescents familiarize themselves with and educate themselves about trauma-informed care. Bereaved

children and adolescents deserve the guidance of well-informed professionals.

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Feasibility, Acceptability, and Clinical Trends of a Mindfulness-Informed Child Welfare Intervention: Implications for Trauma-Informed Practice

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Abstract: Exposure to stress and early life trauma have been linked to child maltreatment and parental substance misuse. These issues often co-occur, yet few child welfare services target their shared underlying causes in a single intervention. Teaching mindfulness-informed strategies to substance-misusing families in the child welfare system may be one promising trauma-informed approach. As part of a larger pilot study testing the initial efficacy of a mindfulness-informed intervention for parents in public child welfare, this study explored the feasibility, acceptability, and clinical trends of the intervention using weekly reports of stress, coping, and mindfulness. Findings show support for the feasibility and acceptability of the intervention as well as positive responses to the intervention on measures of stress and mindfulness. However, the impact of the intervention varied with regard to improving weekly coping among participants. Implications for the integration of mindfulness into child welfare practice as a trauma-informed approach are discussed.

Keywords: Child welfare, coping, mindfulness, stress, trauma

Early adversity can impact multiple domains of an individual's life. Two pernicious, and frequently co-occurring risk factors, often linked to childhood adversity are maltreatment and parental substance misuse. Approximately one-half to two-thirds of child welfare cases involve parental substance misuse (National Center on Addiction and Substance Abuse at Columbia University, 2005). The consequences of concomitant parental substance misuse and child maltreatment are significant. Parents with substance misuse tend to remain involved in the child welfare system longer (U.S. Department of Health and Human Services, National Clearinghouse on Child Abuse and Neglect, 2003) and have an increased likelihood of termination of parental rights (Harris-McKoy, Meyer, McWey, & Henderson, 2014). However, child welfare services tend to focus on addressing the symptoms of substance misuse and parenting, rather than their shared underlying causes, including parental stress and trauma. Child welfare-involved parents have experienced their own histories of trauma as a population (National Child Traumatic Stress Network, 2011). For example, Oliver (1993) found that approximately one-third of parents who maltreated their children have experienced abuse in childhood.

Although trauma-informed services have become more common in child welfare, substance misuse treatment programs and parenting services tend to be delivered to parents in silos. Parents' own trauma histories, in combination with additional stressors associated with the demands parents must meet in the context of child welfare, highlight the need to develop practice approaches that are trauma-informed and that target the underlying mechanisms implicated in both substance misuse and maladaptive parenting. Mindfulness-informed programs may be one promising approach that offers this support to families

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using a trauma-informed perspective (Follette, Palm, & Pearson, 2006). Mindfulness has been used with a variety of groups with high levels of trauma, including child abuse survivors (Kimbrough, Magyari, Langenberg, Chesney, & Berman, 2010) and combat veterans (King et al., 2013).

Mindfulness is defined as a nonjudgmental acceptance and awareness of present moment experiences (Bishop et al., 2004; Kabat-Zinn, 1994). It has been conceptualized by an awareness of present moment experience with a quality of *curiosity*, and by the ability to *decenter* or distance oneself from unpleasant thoughts and feelings without being carried away by them (Lau et al., 2006). Teaching mindfulness to families aligns with traumainformed child welfare practice such that strategies can be used to help target stress and coping with the potential to improve long-term parent-child interactions and family functioning. For example, individuals exposed to adversity may struggle to adaptively cope, thereby affecting self-regulation skills (Cloitre et al., 2009) and engaging in more avoidant-related coping (Benotsch et al., 2000) in the presence of distressing thoughts and feelings. Exposure to stress and impaired coping may in turn increase the likelihood of unhealthy behaviors such as substance use or hostile parenting practices.

Cultivating mindfulness may help to counteract the effects of previously avoided internal experiences as well as habitual, impulsive behaviors (Kabat-Zinn, 1990). In a review, mindfulness has been shown to buffer against maladaptive behaviors and, instead, replace these behaviors with controlled coping responses (Weinstein, Brown, & Ryan, 2009). In addition, because experiencing adversity may result in avoidant-related behaviors subsequently impacting parent participation in treatment (Littell, Alexander, & Reynolds, 2001; Littell & Tajima, 2000), promoting acceptance and awareness through mindfulness may also positively affect parents' engagement in child welfare services more broadly. Prior research demonstrates that mindfulness-based interventions are effective in reducing stress (Carlson, Speca, Patel, & Goodey, 2004; Williams, Kolar, Reger, & Pearson, 2001), trauma symptoms (Kimbrough et al., 2010; King et al., 2013), and substance misuse (Bowen et al., 2009), as well as improving parent-child interactions (Duncan, Coatsworth, & Greenberg, 2009a).

Despite progressive efforts to improve outcomes for child welfare-involved families with substance misuse, few programs target stress-precipitated child maltreatment and concomitant substance misuse in a single intervention. As such, this study is part of a larger pilot study testing the initial efficacy of a mindfulness-informed intervention for parents in public child welfare. The goals of this study were to pilot a new mindfulness-informed child welfare intervention and explore the feasibility and acceptability as well as assess participants' response to the intervention using weekly clinical reports of stress, coping, and mindfulness.

Method

Sample and Procedure

This study was conducted in an urban area in the rocky mountain region of the United States. The sample of participants were recruited by child protection caseworkers and health department nurses. Caseworkers and nurses referred parents for participation in the mindfulness program if the following criteria were met: 1) the family was involved in, or at risk for involvement in, child welfare, 2) substance misuse was a presenting concern, and 3) children remained in the home with parents or parents had weekly visitation with their children. The caseworkers and nurses gave recruitment flyers to eligible parents, and the parents were instructed to release their names and phone numbers to the principal investigator if they were interested in participating in the research study. Participants were then contacted by phone by the principal investigator to confirm eligibility and consent to participation. The study procedures were approved by the authors' Institutional Review Board.

The mindfulness program implemented in the present study was delivered to parents in six weekly, in-home sessions, lasting approximately one-hour. The first 5-15 minutes of the session included a weekly check-in about participants' stress experiences and use of mindfulness-informed strategies. Next, participants were provided with psychoeducational content on issues related to stress, triggers, parenting, and the use of mindfulness techniques to address these domains. The last 15 minutes of the session included an experiential mindfulness-informed exercise, which participants could use in their day-to-day lives. Participants also completed brief questionnaires in each session that assessed stress, coping, mindfulness, and their reaction to the session content. In addition, at the conclusion of the six-session intervention, participants completed a program satisfaction questionnaire to assess their experiences and thoughts regarding the acceptability of the program.

Sessions were developed and delivered by a masters-level, licensed counselor. In contrast to traditional cognitive-behavioral therapies, it is recommended that providers delivering mindfulness are trained in implementation and engage in their own mindfulness practice (Segal, Williams, & Teasdale, 2002). As such, this provider received specific training in mindfulness, which included approximately 24 hours of in-person training, consisting of didactic and experiential education and clinical skills practice, in addition to an online training on mindfulness developed by Kabat-Zinn (2015).

Mindfulness-Informed Intervention for Child Welfare-Involved Parents

The intervention included sessions on mindfulness (i.e., awareness of present-moment experiences), cognitive reappraisal (i.e., changing the meaning of emotionally triggering stimuli), and savoring (i.e., selectively focus on positive stimuli) that were adapted from an extant mindfulness program (Mindfulness-Oriented Recovery Enhancement; Garland, 2013) that has demonstrated positive effects on stress and substance use among adult populations (Garland, Gaylord, Boettiger, & Howard, 2010), but has not been used with

parents in child welfare. Additional sessions on stress, mindful parenting, and future planning were developed by integrating theory and research on parent-child relationships, family functioning, and mindfulness-based parenting (e.g., Duncan, Coatsworth, & Greenberg, 2009b; Hillson & Kuiper, 1994; Kabat-Zinn & Kabat-Zinn, 1997; Patterson, 1982). In addition, in order to provide an individualized and flexible intervention to meet multiple familial needs and align with the constraints of the child welfare system, sessions were delivered in family's homes and session content was tailored to address each family's unique stressors and strengths. Sessions were delivered for approximately one hour as prior research indicates that standard 2.5-hour mindfulness-based sessions may be too long for vulnerable populations (Dutton, Bermudez, Matas, Majid, & Myers, 2013). As such, the newly developed mindfulness program for child welfare-involved parents aimed to increase parents' awareness regarding the triggers associated with stressful situations and substance use, and provide insight into how automatic maladaptive patterns of coping may lead to dysfunctional parent-child interactions. Parents were taught both formal and informal strategies including mindful breathing, reappraisal, savoring of pleasant experiences, and mindful parenting such that they could pay attention to and self-regulate their own thoughts and feelings in present moment experiences, while also responding to their children in a conscious effort by attending to their child's needs. The content of each of the sessions are presented in Table 1.

Table 1. Outline of Mindfulness-Informed Program

Session #	Training Sessions
1	Introduction to Mindfulness, Automatic Habits, and Maladaptive Behaviors
2	Mindful Reappraisal
3	Savoring Positive Experiences and Interactions with Children
4	Understanding Impulses and Relationship to Stress
5	Mindful Parenting
6	Mindful Planning in the Context of Parenting

Measures

Demographics. A basic demographic questionnaire was administered to parents to capture parent characteristics as well as their mental health, substance use, and child welfare histories.

Stress. The *Short Stress State Questionnaire* (SSSQ; Helton, 2004) was used to measure weekly state stress. The SSSQ is a 24-item instrument comprised of three domains of stress (Distress, Worry, and Engagement). Only the Distress subscale was used in the present study. Since participants were taught skills that aimed to increase positive emotions under conditions of stress, the Distress subscale was used to measure changes in reports of negative affect-emotion. Participants were asked to rate statements on the degree to which they agree with how they felt during the past week $(1 = not \ at \ all; 5 = extremely)$. Eight items comprise the Distress subscale, ranging in scores from 8-40. The SSSQ Distress subscale demonstrates high reliability (Cronbach's $\alpha = .87$; Helton, 2004).

Coping. Coping was examined using the *Brief COPE* (Carver, 1997). The *Brief COPE* includes 14 scales of two items each, which participants rate on a 4-point scale from 1 (*I*

haven't been doing this at all) to 4 (I've been doing this a lot). To align with the reappraisal skills taught to participants in the mindfulness intervention, only the Positive Reframing subscale was used in this study. Therefore, scores range from 2-8. This subscale was hypothesized to assess changes in weekly coping, though prior reliability estimates of this subscale yield a questionable Cronbach's α of .60 (Yusoff, Low, & Yip, 2010), perhaps due to the subscale being comprised of only two-item indicators.

Mindfulness. To assess state mindfulness that can vary in a short period of time, the *Toronto Mindfulness Scale* (TMS; Davis, Lau, & Cairns, 2009) was used. Thirteen items comprise the two factors (Curiosity and Decentering) of the TMS. Mindful Curiosity refers to the awareness of present moment experiences with a quality of curiosity. Mindful Decentering captures how well participants are able to distance themselves from situations that may provoke unwanted thoughts or feelings. After engaging in a brief 5-10 minute mindful breathing and/or experiential exercise, participants were asked to rate items on a scale from 0 (*not at all*) to 4 (*very much*). Internal consistency reliability include a Cronbach's α of .88 for Curiosity and .84 for Decentering (Davis et al., 2009). Scores on the Mindful Curiosity scale range from 0-24 and on the Mindful Decentering scale from 0-28.

Feasibility. Intervention feasibility was determined by recruitment, retention, and treatment attendance rates among parents involved in the child welfare system with co-occurring substance use. Three measures of recruitment and treatment attendance were used for this study: 1) the number of participants enrolled in the intervention, 2) the number of participants who dropped out prior to completion of the post-intervention questionnaires, and 3) the number of intervention sessions attended.

Acceptability to Parents. To assess the acceptability of the mindfulness-informed intervention, we assessed participant's perspectives of the intervention, overall, as well as during individual sessions. With regard to the acceptability of each session, participants were asked four questions to assess their reaction to session content. Specifically, participants were asked to rate on a 5-point Likert-type scale (1 = strongly disagree; 5 = strongly agree) if they gained something positive from participating in the session, if the session raised emotional issues they had not expected, if they gained insight about their experiences during the session, and if the session made them think about things they did not want to think about. These questions were selected in order to understand the degree to which each session helped participants cultivate awareness regarding their experiences within the session as well as identify whether session content may have been more detrimental to participant outcomes. These ratings were subsequently used to inform future adaptations to the intervention.

A program satisfaction questionnaire was also administered to assess the acceptability of the overall program. Participants completed 10 items (e.g., "The program I received was a big help to me"; "I got the kind of help through the program that I needed"; "I enjoyed learning about the concept of mindfulness"; "I would recommend this program to other families") in which they rated the way they felt about the services they received on a 5-point scale ($1 = none \ of \ the \ time$; $5 = all \ of \ the \ time$). Percentages of each of the 10 items were computed for analysis. The survey also consisted of five open-ended questions

describing the benefits and challenges of participating in the intervention as well as recommendations for future iterations of the mindfulness sessions.

Data Analysis

Descriptive statistics (means, standard deviations, or percentages) were used to describe the sample characteristics, as well as the feasibility and acceptability of providing this intervention in the context of child welfare. This can be examined by describing the proportion of families retained and number of sessions attended, and by participants' reactions to session content and overall program satisfaction levels. To analyze the openended questions on the participant satisfaction questionnaire, a template approach (Crabtree & Miller, 1999) was applied such that a priori codes were used that were associated with the strengths and weaknesses of the program. Specifically, these codes were used to address the open-ended program satisfaction questions that included the following: 1) What were the benefits of participating in this program?, 2) What were the drawbacks of participating in this program?, 3) What did you notice change in yourself since participating in this program?, 4) How could sessions be improved? and 5) What else would you like to add that relates to your experience while participating in this program? An iterative process was used to identify codes within these a priori categories and were subsequently grouped into themes. Two coders reviewed participant responses and percent agreement was calculated with high rates (90%) of inter-rater reliability.

Participants' scores from the stress, coping, and mindfulness questionnaires were aggregated and their mean scores were calculated to evaluate weekly group-level trends of the mindfulness-informed intervention. Although primarily used for single-subjects research, a similar procedure to the Percentage of Nonoverlapping Data (PND) metric (Scruggs, Mastropieri, & Casto, 1987) was used to understand weekly clinical trends. The PND metric is a systematic approach used in single-subjects research that produces a common outcome metric across participants, allowing for ease of data interpretation and providing meaningful information on whether or not a program is beneficial to participants.

To calculate the PND for this study, the proportion of data points in the treatment condition that exceeded or fell below the baseline value was identified. The intervention was designed to *increase* mindfulness and coping among participants, and therefore, the proportion of treatment data points that exceeded the baseline value was calculated to determine if the intervention had positive effects on these domains of functioning. In contrast, the intervention was designed to *decrease* participant stress. As such, the proportion of treatment values that fell below the baseline data point was calculated to identify reductions in stress.

According to guidelines established by Scruggs and Mastropieri (1998) for single-subjects research, and which were applied to the aggregated mean scores in this study, PND scores greater than 90 indicate extremely successful treatments, scores that range from 70 to 90 represent successful treatments, scores from 50 to 70 are questionable, and scores less than 50 are often identified as unsuccessful treatments. For example, if half of the treatment data points in the current study for participant mean scores (3/6 sessions) do not exceed the baseline level mean score, then the PND score is 50%, thereby indicating that

the intervention was not beneficial to participants in a particular domain. In addition to calculating the PND statistics, participants' aggregated graphical data were displayed to provide visual insight into how intervention participants changed over time on outcomes of stress, coping, and mindfulness across each of the six weekly sessions.

Results

Feasibility

Over the recruitment period, 15 participants were selected to participate in the mindfulness-informed intervention. One parent selected to participate in the intervention dropped out prior to the start of the intervention and three others dropped out early in the program (after the second or third sessions) due to moving to another state, personal life changes and feeling overwhelmed, or being unreachable at subsequent contacts by the researcher. Thus, 11 of the 15 parents (73%) were retained in the program. With respect to treatment attendance, on average, parents completed 5.8 (SD = .40) sessions. The provider sent weekly reminders to participants and flexibly scheduled sessions, which may have positively contributed to study participation. The primary barrier to attending all six mindfulness sessions included frequent rescheduling due to other demands parents had to meet, such as attending other child welfare-mandated services or visitation with children.

Sample Characteristics

Eleven parents completed the mindfulness-informed intervention. Eight were mothers (72.7%) and three were fathers (27.3%) who identified racially and/or ethnically as White (n = 9; 81.8%), Black (n = 1; 9.1%), and Puerto Rican (n = 1; 9.1%). Participants averaged 33.18 (SD = 11.05) years in age, ranging from 21- to 53-years-old. Slightly less than half of the sample were employed (n = 5; 45.5%) and resided within lower socioeconomic status (SES) households (n = 6; 54.6%) or middle SES households (n = 4; 36.4%). One parent was in a higher SES household (9.0%). Approximately half (n = 6; 54.5%) of the participants had been previously reported for abuse and neglect to child welfare and nearly half had been previously diagnosed with a mental health and/or substance use disorder (n = 5; 45.5%).

Acceptability to Parents

Ratings of session content indicated that all of the participants gained something positive out of each session, with the majority of participants strongly favoring the content on mindful parenting. In sessions where participants rated that the content raised emotional issues or elicited unwanted thoughts, they also indicated that they gained insight into their experiences during these sessions. Table 2 displays the frequencies of parent ratings of session content.

Table 2. Participant Ratings of Reactions to Session Content (n=11)

Table 2. Furticipant Katings of Kear	Strongly	t Content (n=	11)		Strongly			
	Disagree	Disagree	Neutral	Agree	Agree			
Reaction to Session Item	n (%)	n (%)	n (%)	n (%)	n (%)			
Session 1: Introduction to Mindfulness, Automatic Habits, and Maladaptive Behaviors								
Gained something positive			-	4 (36.4)	7 (63.6)			
Raised emotional issues	4 (36.4)	2 (18.2)	3 (27.3)	2 (18.2)				
Gained insight				7 (63.6)	4 (36.4)			
Thought about unwanted things	3 (27.3)	4 (36.4)	3 (27.3)	1 (9.1)				
Session 2: Mindful Reappraisal								
Gained something positive				5 (45.5)	6 (54.5)			
Raised emotional issues	5 (45.5)	2 (18.2)	3 (27.3)	1 (9.1)				
Gained insight			1 (9.1)	6 (54.5)	4 (36.4)			
Thought about unwanted things	5 (45.5)	3 (27.3)	2 (18.2)		1 (9.1)			
Session 3: Savoring Positive Experiences and Interactions with Children								
Gained something positive				5 (45.5)	6 (54.5)			
Raised emotional issues	4 (36.4)	3 (27.3)	2 (18.2)	1 (9.1)	1 (9.1)			
Gained insight			4 (36.4)	5 (45.5)	2 (18.2)			
Thought about unwanted things	4 (36.4)	5 (45.5)	2 (18.2)					
Session 4: Understanding Impulses and Relationship to Stress								
Gained something positive				5 (50.0)	5 (50.0)			
Raised emotional issues	3 (30.0)	2 (20.0)	2 (20.0)	2 (20.0)	1 (10.0)			
Gained insight			1 (10.0)	6 (60.0)	3 (30.0)			
Thought about unwanted things	5 (50.0)		2 (20.0)	2 (20.0)	1 (10.0)			
Session 5: Mindful Parenting								
Gained something positive				3 (27.3)	8 (72.7)			
Raised emotional issues	4 (36.4)	2 (18.2)	2 (18.2)	2 (18.2)	1 (9.1)			
Gained insight				6 (54.5)	5 (45.5)			
Thought about unwanted things	8 (72.7)	2 (18.2)		1 (9.1)				
Session 6: Mindful Planning in the Context of Parenting								
Gained something positive				3 (30.0)	7 (70.0)			
Raised emotional issues	2 (20.0)	2 (20.0)	4 (40.0)	2 (20.0)				
Gained insight			1 (10.0)	5 (50.0)	4 (40.0)			
Thought about unwanted things	6 (60.0)	2 (20.0)	1 (10.0)	1 (10.0)				

Findings from the overall post-program satisfaction questionnaire indicated that the majority of parents felt they benefited from the intervention. Ninety-one percent (n=10) of participants indicated that, "all or most of the time," the program was a big help to them, they got the kind of help through the program they needed, and they learned a lot about how to manage their stress. Moreover, all (n=11) participants reported they enjoyed learning about the concept of mindfulness.

Several themes were identified from the open-ended questions on the program satisfaction questionnaire. Parents reported that the program helped them to (a) recognize triggers to stressful situations, (b) become calmer and more attentive, and (c) improve communication with their child. For example, when asked about what was helpful through participating in the program, one parent stated, "...I learned how to step back and look at a situation, take a deep breath, and not stress about the future...[I could] focus on the here

and now." Another parent said, "...it helped me to be more aware...and brought to my attention behaviors that I was doing that I didn't like." When asked about how the session content had been applied to interactions with their children, one parent stated, "We are communicating better...not as many screaming matches and not at the level that it used to be." One parent also reported, "I have been able to listen and be more attentive to my daughter." In addition, parents expressed that the "in-home aspect [of the program] was good" and they appreciated the individualized nature of the program. For areas of improvement, parents stated that some of the visual content used to discuss the relationship between substance use and stress could be updated.

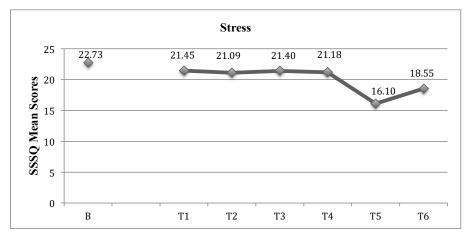
Weekly Clinical Trends

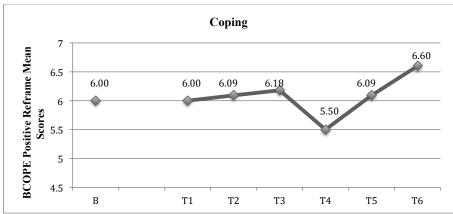
As illustrated in Figure 1, mean score ratings for participants on measures of stress, coping, and mindfulness suggest that the mindfulness-informed intervention was helpful in reducing stress and promoting mindful curiosity and decentering, but questionable for fostering positive coping. Despite subtle decreases in weekly reports of stress across participants, the PND statistic for stress (1.00) indicated that all treatment data points fell below the baseline stress score. Trends illustrate that a greater decrease in stress was reported among participants at the fifth session, but slightly increased by the final session.

Evaluation of the PND statistics for mindful curiosity (1.00) and mindful decentering (1.00) indicated that all data points in the treatment phase exceeded the baseline subscale scores. Trends illustrate that, as a whole, participants reported an increase in awareness and ability to step back from situations without getting taken over by them from baseline. These trends remained predominantly stable until the fifth and sixth sessions at which point there were greater increases in mindfulness. Finally, the PND statistic for the coping subscale (.67) demonstrated that four data points in the treatment phase exceeded the baseline score with the greatest increase at the final session, suggesting that mindfulness-informed training may have been questionably helpful in promoting positive reframing as a coping mechanism for participants.

Discussion

Findings from the present study suggest that a brief mindfulness-informed intervention for this sample of child-welfare involved parents can be feasibly integrated in public child welfare and is acceptable among parents. In addition, findings suggest that the intervention shows positive changes over time on weekly outcomes, specifically improving state mindfulness and reducing stress, but it may be less useful in increasing the coping skill positive reframing.





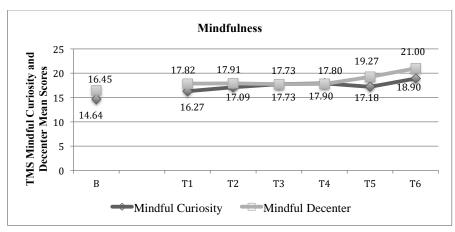


Figure 1. Participant mean scores derived from the Short Stress State Questionnaire Distress Subscale, Brief COPE Positive Reframing Subscale, and Toronto Mindfulness Scale Mindful Curiosity and Mindful Decenter Subscales.

That the intervention was found to be feasible, as evidenced by recruitment, retention, and treatment attendance rates, may offer a promising approach to address the needs of child welfare-involved families. Of the parents recruited, few dropped out of the intervention, and when they did it was generally due to time constraints or other concerns not related to the intervention itself. With regard to treatment attendance, of the 15 families randomly allocated to the intervention, 11 participated in at least five of the six sessions. Given that this is a challenging population with many barriers to treatment, attrition is in line with prior research using similar samples (e.g., Beasley et al., 2014; Gopalan et al., 2010). Rates of attrition may have been supported by the intentionally brief, flexible, and individualized aspects of the program, as evidence suggests that parents benefit more from programs that are delivered in-home and tailored to meet their unique needs, compared to rigid, group-delivered manual-based programs (Kendall & Chu, 2000).

The use of a mindfulness-informed intervention for this sample of child welfareinvolved parents with substance misuse was also found to be acceptable. Positive session ratings and qualitative feedback indicated that the intervention was well-received, as parents endorsed multiple benefits of the program. Consistent with previous reports (e.g., Lundahl, Risser, & Lovejoy, 2006), a number of participants indicated the individualized nature of the program was especially favorable for them such that it allowed for more continuity between sessions compared to their prior experiences in group settings. Moreover, for many participants, the session specifically pertaining to mindful parenting was the most highly rated. Although mindful parenting techniques were infused within each session, parents noted that, from this later session, they gained the most insight into their experiences and received resourceful information from which they could use mindfulness-informed skills as a means to cope with stress in the context of parenting. This suggests that future adaptations to the program should include enhanced content on mindful parenting that is introduced at the start of the program and is a more central focus in additional sessions. This content could potentially replace some of the less preferred content rated by participants. Some of the less preferred content, from the parents' perspective, included the sessions on savoring and understanding the relationship between impulses and stress. Because participants reported many daily stressors, it may have been difficult to broaden their positive emotions in a single session on savoring. Parents also reported increased distress at the third session on savoring and therefore may have been hyper-focused on negative thoughts and feelings. Moreover, in the session that highlighted the relationship between impulses (e.g., use of substances) and stress, participants reported that, in addition to stress, many impulses arose from boredom or social pressure. Adapting this content to include discussions about these differential associations may improve acceptability and would benefit from testing in future studies.

It is important to note that, in light of these findings, the majority of parents involved in the current study identified racially and ethnically as White and therefore may not be representative of the larger child welfare population. Racial and ethnic minority families are often overrepresented in the child welfare system, and research finds that there may be cultural differences regarding their attitudes toward mindfulness practice (Dutton et al., 2013). Notably, researchers have designed mindfulness-based interventions that are culturally suitable for vulnerable populations. For example, Dutton and colleagues (2013)

conducted focus groups to inform the implementation and enhanced tailoring of Mindfulness-Based Stress Reduction for low-income African-American women with histories of trauma. They found that shorter sessions, diverse applications of both informal and formal mindfulness practice, and clarification of participants' expectations regarding mindfulness practice (e.g., religious beliefs associated with mindfulness) may improve the feasibility and acceptability of mindfulness programs among this population (Dutton et al., 2013). Although some qualities from the mindfulness intervention for child welfare-involved parents described in this study are consistent with qualities from Dutton and colleagues' (2013) work, their findings have important implications for future research on the feasibility and acceptability as well as adaptation to the current intervention, particularly with a larger and more diverse sample of parents involved in the child welfare system.

Despite questionable results of the intervention on parents' coping skill of positive reframing, it appeared that most parents successfully changed in their weekly stress levels, mindful curiosity (i.e., ability to attend to present moment experiences with a quality of curiosity), and mindful decentering (i.e., awareness of one's experiences without being carried away by them). The initial steps in mindfulness are to increase awareness of where attention gets drawn to and bring it back to the present moment, as well as to note these experiences rather than label or place judgment on them (Bishop et al., 2004). This was a central focus of the mindfulness-informed intervention – particularly attending to thoughts, feelings, and sensations, and recognizing automatic patterns of behavior such as maladaptive parenting and substance misuse – and therefore may support participants' improvements in these specific domains. However, the majority of participants had a substantial increase in their mindfulness curiosity and decentering scores from baseline in sessions five and six, which may indicate that these mindfulness skills required more practice or that the specific content and exercises taught to parents (e.g., mindful parenting, planning for the future) may have been a factor in enhancing parents' ability to better let go of unwanted thoughts, feelings, and sensations. These findings are promising as prior research suggests that brief mindfulness-based training can improve state mindfulness with the potential to spill over into other domains of individual functioning. Specifically, increases in mindfulness have been associated with reduced fatigue, anxiety, and trauma (Kimbrough et al., 2010; Zeidan, Johnson, Diamond, David, & Goolkasian, 2011), improved affect (Brown & Ryan, 2003), and better communication (Barnes, Brown, Krusemark, Campbell, & Rogge, 2007), qualities that may be particularly important in healthy family relationships.

The majority of participants reported slight reductions in stress across treatment sessions, with the greatest decline in stress in session five. Only minor reductions in stress across the other treatment sessions may be attributed to high levels of stress often found in families involved in the child welfare system (Curenton, McWey, & Bolen, 2009), and the complex, cumulative stressors reported by the participants in this study. For example, many of the participants reported stressors centered on finances, multiple demands of service providers, and interpersonal problems. As these stressors may be more persistent in the lives of child welfare-involved parents and may be exacerbated in particular situations (e.g., receiving a bill in the mail when financial strain already exists), experiencing such

stress may have contributed to the varying reports of stress across participants. Although there were only slight decreases in stress during the intervention, it is promising that parents also reported improvements in mindfulness such that these skills may have served as potential buffers against new and persistent stressful experiences. Future studies might test the extension of sessions, add additional stress-reduction approaches, or identify other opportunities to practice mindfulness strategies in order to increase the effectiveness of the approach in reducing stress.

Findings should be considered in light of the study's limitations. First, this pilot study included a small homogenous sample, which may in turn limit generalizability of the feasibility, acceptability, and weekly trends of the mindfulness-informed intervention among larger, diverse samples. Second, although the PND metric is a common and systematic approach to evaluate outcomes of single-participant research, the small sample size also reduced statistical power, limiting the opportunity to conduct more traditional and rigorous statistical analyses of the weekly outcome data. Third, as this intervention was designed to reduce participant burden, delivery of content within six sessions may have not allowed for ample time to identify important trends of the program on weekly outcomes of stress, coping, and mindfulness, and may have not provided sufficient time for parents to realize the maximum benefit from the intervention. Fourth, since it was postulated that affecting stress and coping in child welfare-involved parents would lead to positive family functioning outcomes in the long-term, a heterogeneous measure of coping consisting of more than two-item indicators as well as observational data collection methods may have provided more accurate measures on these outcomes. Finally, some dimensions of feasibility and acceptability were not measured in this pilot study, and future research would benefit from including standardized measures of these constructs.

Despite these limitations, this study has several important implications for practice. Stressful life events, including involvement with child welfare, may lead to significant consequences for well-being and parenting. An individual's history of adverse experiences may contribute to automatized and habitual ways of thinking and behaving (Dumas, 2005). For example, the use of behavioral disengagement techniques to cope with stress, such as substance use, may serve to relieve unwanted distress and be implemented without conscious intent. These, often maladaptive, coping strategies may be particularly effective and reinforced because they reduce distress in the immediate term (Sinha, 2001). However, teaching mindfulness to parents has the potential to disrupt automatic, maladaptive coping patterns (e.g., substance use; Bowen et al., 2009) and increase individuals' attention to triggers associated with stressful situations (Creswell & Lindsay, 2014). When parents have more attentional control over their thoughts, feelings, and sensations, they may be better equipped to respond in a more controlled, rather than reactive, manner even under conditions of stress.

Participating in a brief mindfulness-informed program may in turn facilitate parents' ability to engage in other child welfare-mandated services. Anecdotal reports by participants indicate that mindfulness helped to provide a sense of calmness physiologically as well as increase attention in the present moment. Practicing mindfulness may therefore create a greater capacity to deal with unpleasant situations, and also help parents put aside negative feelings and thoughts associated with the demands of the child

welfare system. This is particularly well-suited to parents with a history of trauma, which can include physiological problems and difficulty with focus or attending. Mindfulness also has the potential to transfer to parent-child interactions and help parents mindfully attend to their children's behaviors (e.g., Singh et al., 2010), perhaps providing an opportunity to enhance overall family functioning. Teaching mindfulness practice to both parents and children may be another particularly fruitful enhancement to the current intervention, and future studies would benefit from rigorous measurement of parent, child, and family outcomes.

Other adaptations to this mindfulness-informed intervention might include additional mindfulness-informed strategies that also promote the use of alternative emotional, cognitive, and behavioral coping strategies. Given the types of stressors families faced (e.g., finances, pressure from service providers, interpersonal problems), practical guidelines for handling these stressors and refinement of the intervention to meet the individual needs of families may also be a favorable enhancement.

Taken together, the data indicate initial support for the use of a brief mindfulness-informed intervention for child welfare-involved families with substance misuse. This study adds to the growing body of literature on mindfulness practice such that it may be a useful and feasible approach to integrate within public child welfare settings. However, given the range of stressors likely experienced by participants in the current study and the variability in affecting the domain of coping, mindfulness-informed training may better help families reach their full potential if it is delivered in conjunction with other therapeutic skill-building programs. An integrated mindfulness intervention for targeting stress and improving coping may in turn better serve as a trauma-informed approach and impact long-term family functioning for child welfare-involved families with substance misuse.

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Equine-Assisted Psychotherapy: An Emerging Trauma-Informed Intervention

Page Walker Buck Nadine Bean Kristen de Marco

Abstract: Equine-assisted psychotherapy (EAP) has emerged as a promising intervention for the treatment of trauma and stressor-related disorders. This experiential therapy offers an option for clients whose traumatic experiences may render traditional talk therapies ineffective. Initial research on the most robust model of EAP, developed by the Equine Assisted Growth and Learning Association (EAGALA), indicates positive effects for children, adolescents, and adults who have experienced trauma. The EAGALA Model® was designed to allow for rigorous evaluation of efficacy, a clear theoretical base, standardized implementation, and ongoing training for practitioners. As the primary providers of mental and behavioral health services in the United States, social workers are keenly aware of the need for a portfolio of treatment methods to manage the increasing demand for services. This article provides an overview of EAP, including a review of the literature, the history of human-horse relations, an EAGALA case example, and a call for more rigorous research.

Keywords: Equine-assisted psychotherapy; trauma-informed; trauma and stressor-related disorders; EAGALA

A number of cross-sectional and longitudinal studies regarding traumatic experiences indicate a far higher prevalence of exposure to trauma than once believed (Anda, Felitti, & Corwin, 2014; Cronholm et al., 2015; Felitti et al., 1998; Murphy et al., 2016). Findings from the CDC-Kaiser Permanente Adverse Child Experiences (ACE) study reveal a graded dose-response relationship between ACEs and negative health and well-being outcomes across the lifespan (Anda et al., 2014). The more exposure an individual has to adverse events such as child maltreatment, intimate partner violence, violent crime, disaster, terrorism or war, the higher the likelihood of physical and mental health issues throughout the lifespan. Individuals face a higher risk of suffering from substance use disorders, depression, and trauma and stressor-related disorders, including post-traumatic stress disorder (PTSD). Unresolved trauma is linked to poor academic achievement, early sexual activity, financial stress, poor work performance, heart disease, and liver disease (Anda et al., 2014; Larkin, Shields, & Anda, 2012).

The effects of trauma are significant, leaving indelible footprints on the brain. Increasingly, sensitive brain imaging techniques such as functional MRIs have illustrated that traumatic experiences, particularly severe and chronic exposure, affect brain development and functioning. Imaging results show changes in the amygdala, corpus callosum, cerebellum, hippocampus, and prefrontal cortex (Baker et al., 2013; Bourne,

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Mackay, & Holmes, 2013; Dannlowski et al., 2012). For individuals with a significant trauma history, these changes can overwhelm cognitive processes, including the ability to use words to express feelings and psychomotor sensations, as the prefrontal cortex goes *off line* (Sekiguchi et al., 2013; van der Kolk & McFarlane, 2012).

In addition to the effects that trauma has on the brain, trauma also lives in the muscles, bones, and the neurons serving the musculoskeletal system (van der Kolk, 2014). van der Kolk (2014) explains that when the limbic system is repeatedly triggered during stress responses, there is an increased risk that it will remain *on* and leave the body in a hypervigilant state. Not surprisingly, traditional psychotherapy sessions can feel unsafe to clients whose systems are already overwhelmed. When the effects of trauma on the body are combined with the effects of trauma on cognitive processes, talk therapy alone is often rendered ineffective (van der Kolk, 2002; van der Kolk & McFarlane, 2012). This is especially true for people who experienced their first traumatic experiences as children (Anda et al., 2006).

The Substance Abuse and Mental Health Services Administration (SAMHSA, 2014), in collaboration with the National Center for Trauma-Informed Care & Alternatives to Seclusion and Restraint (NCTIC), outlines the Six Key Principles of a Trauma-informed Approach: 1) safety, 2) trustworthiness and transparency, 3) peer support, 4) collaboration and mutuality, 5) empowerment, voice and choice, and 6) cultural, historical and gender issues sensitivity. Underlying these principles is the conviction that recovery is possible and that through an appropriate trauma-informed approach; resiliency can be nurtured.

The notion of recovery is a shift in perspective from the medicalized use of the term disorder in describing post-traumatic stress response, particularly in the military and in disaster mental health services. As understanding about the nature of post-traumatic responses has evolved, there is a wider appreciation for the fact that trauma responses are normal reactions to abnormal situations (American Red Cross, 2012). The call to fill the treatment gap for complex trauma, however, is pressing. Practitioners need access to an expanded set of treatment options that includes modalities designed to specifically address the embodiment of trauma, especially given that the vast majority of mental and behavioral therapies are talk-based.

Rapidly emerging in the effort to enhance recovery and build resilience for trauma survivors are mind/body, experiential approaches and expressive therapies, including: mindfulness programs (Davis & Hayes, 2011; Omidi, 2013), Trauma-focused Cognitive Behavioral Therapy or TF-CBT (Getz, 2012; Kliethermes & Wamser, 2012), trauma-sensitive yoga (Rhodes, 2015; van der Kolk et al., 2014; West, Lian, & Spinazzola, 2016), and expressive art therapies including psychodrama (Zucker, Spinazzola, Pollack, Pepe, & Barry, 2010). By deemphasizing verbal communication, these approaches allow for the inclusion of non-verbal approaches that support the therapeutic relationship and the establishment of safety and trust, which in turn can improve affect regulation and cognitive processing (Bray, Stone, & Gaskill, 2017).

In this paper, we present a synthesis of literature on equine-assisted psychotherapy (EAP) as unique addition to the portfolio of e trauma-informed interventions. Combining the therapeutic use of metaphor in client-directed settings such as play therapy (Boyd

Webb, 2015; Landreth, 2002) with the unique experience of interacting with horses (Hayes, 2015; Yorke, Adams, & Coady, 2008), EAP offers a promising approach to the treatment of trauma and stressor-related disorders. Unique to EAP is the inclusion of large prey animals in the therapeutic setting, inviting trauma survivors to interact with other sentient beings experiencing hypervigilance. The transparency and trust required of connection with the horses create an opportunity for survivors to experience safety in the therapeutic process.

Animal-Assisted Therapy

Animals have long been used to address issues of human suffering. Morrison's (2007) review of this history indicates that the practice has been around since the late 18th century when rabbits and chickens were included in the care of people with mental illness in England. Today animals are used to address an increasingly wide range of mental, behavioral and physical health conditions. Animal-assisted therapy (AAT) is the deliberate inclusion of a non-human animal in an intervention setting to enhance client outcomes (American Veterinary Medical Foundation [AVMA], 2017). Common interventions include the presence of dogs, rabbits (Pitheckoff, McLaughlin, & de Medeiros, 2016), and guinea pigs (O'Haire, McKenzie, Beck, & Slaughter, 2015) for outcomes such as stress reduction, reading fluency and the development of prosocial skills. Client populations include school-aged populations, older adults, incarcerated populations, individuals testifying in court cases, and college students. In these cases, the presence of the animal is theorized to provide a social buffer that maximizes the effect of the intervention (O'Haire et al., 2015). Children, for example, have been found to read more fluently when a dog is present (Jalongo, 2005). Horses are often included in animal-assisted activities and therapies, especially miniature breeds, for many of the same reasons (McCullough, Risley-Curtiss, & Rorke, 2015). Full-size horses are included in some psychotherapeutic settings because of their distinction as large prey animals, specifically creating an environment that is not socially buffered. In their hypervigilant state, horses provide immediate, yet nonjudgmental, feedback to clients about their behavior (Hayes, 2015).

The Evidence for Equine-Assisted Therapy

The evidence for the impact that horses can have on therapeutic outcomes is limited due to small sample sizes and the lack of rigorous research designs. The results that have been published, however, are encouraging and worthy of consideration given the pressing need for alternative approaches to the treatment of trauma. A meta-analysis of equine-assisted therapy for at-risk adolescents who had experienced trauma found a medium effect size for seven studies (g=0.714, p<0.001) that all included pre- and post-intervention data (Wilkie, Germain, & Theule, 2016). This effect reduced to a small/medium size (g=0.402, p=0.002) when only the five studies that had both treatment and comparison groups were included. It is impressive that this effect is robust across the variations in treatment programs.

Systematic reviews of using horses in psychotherapy also indicate that interventions are promising for a range of populations (Kendall et al., 2015; Selby & Smith-Osborne, 2013). Kendall et al. (2015) identified 15 studies that qualified for inclusion in their review.

Only two of the studies (Bass, Duchowny, & Llabre, 2009; Davis et al., 2009) were randomized-controlled trials. Kendall and colleagues (2015) report that although additional rigorously-designed studies were needed to conclude that equine-assisted interventions are efficacious, "equine-assisted interventions hold much promise, particularly in terms of child/adolescent social and behavioural issues" (p. 75). Selby and Smith-Osborne (2013) found a similarly small group of studies for review of equine-assisted therapy for populations with chronic illness or health conditions, noting that their analyses "lend credibility to the employment of equine-assisted techniques as an adjunct to traditional interventions for populations with health challenges" (p. 428).

Studies not included in the meta or systematic reviews of EAP include a qualitative study of adults in recovery from trauma, which identified the importance of the equinehuman bond given the horses' non-judgmental approach (Yorke et al., 2008). One participant in this qualitative study reflected on her experience, noting, "they [the horses] don't try and analyze you" (p. 23). Nurenberg and colleagues (2015) designed a randomlycontrolled trial using clinical incident reports and independent staff observations to compare both equine and canine-assisted therapy to standard treatment for 90 adults hospitalized for psychiatric conditions. Results indicate that the use of the EAGALAmodel EAP, delivered weekly for less than an hour and for no more than 10 sessions, was statistically more effective than canine therapy in reducing occurrence of violence in study participants. The authors posit that the differential effect of incorporating equines for psychiatric clients may be related to the fact that the horses are prey animals. "Nonpredatory equines, tending to mirror rather than direct human responses, may have a therapeutic advantage for some patients over more predatory species, such as canines and humans" (Nurenberg et al., p. 85). They further suggest that this status may have particular significance for clients who have experienced interpersonal trauma.

Horses and Humans

Humans have relied on horses for thousands of years, using them as a primary means of transportation on fields of battle and agriculture. In more recent years, horses became known for their ability to help people with both physical and emotional challenges. Today horses are used for a range of therapeutic activities including treatments for traumatic brain injury, autism spectrum disorders, sensory disorders, and stressor related disorders such as PTSD (Hayes, 2015).

What makes horses particularly suited to psychotherapeutic work is their distinction as prey animals (Hayes, 2015; Thomas & Lytle, 2016). Horses live in a heightened state of awareness. This allows them to perceive outside stimuli with precision, keeping them, and their herd, safe. Horses pay close attention to even the most subtle shifts in congruency and mirror their behavior accordingly. When faced with an external threat, horses are often compelled to flee. They become closer and more cohesive as a group, protecting one another. Horses remain connected to the herd in times of stress. This is distinct from the individualistic model that humans often engage in and from the social isolation that trauma survivors can adopt. Observing equine behaviors provides humans the opportunity to think differently about the value of connectedness, especially in times of stress, anger, and fear as they process these emotions while interacting with the herd (Thomas & Lytle, 2016).

Horses' flight instinct is balanced with an innate curiosity and desire for connection. Horses are social, herd animals. They have distinct personalities and moods, just like people, and they have a hierarchical structure similar to that of families or the workplace. Like people, horses form special relationships with one another, give and accept affection, and set boundaries with one another (EAGALA, 2015).

Because the horses react and interact with humans consistent with their status as prey animals, clients receive feedback about their own behaviors in immediate, candid and nonjudgmental terms. The opportunity to observe how their behaviors - including attitudes, emotions, body language, and boundaries - affect the horses and to receive feedback in the moment is leveraged in equine-assisted interventions. The transparency of communication from prey animals living in a state of heightened awareness may paradoxically create a sense of safety in clients, especially those who have survived trauma, and allows space for nonjudgmental self-examination. With assistance from the treatment team, clients can become more open to examining their own post-traumatic stress responses. As Hayes (2015) states,

Many humans with certain types of emotional damage experience positive feelings of familiarity as they unconsciously identify with the two primary equine survival traits of hypervigilance and herd-dynamic-based social skills. These shared traits and interspecies identification can create mutual feelings of safety, acceptance, and compassion for both human and horse. In turn, this identification can lead a person to the self-awareness necessary for healing their emotional wounds. (p. 62)

EAP works with this mutuality to nurture the safe space initiated by the connection between clients and horses.

The EAGALA Model of EAP

While there are several emerging models of equine assisted psychotherapy, the EAGALA Model® offers a professional, standardized approach to engaging horses in treatment (Equine Assisted Growth and Learning Association [EAGALA], 2015). Founded in 1999 by L. Thomas, LCSW, EAGALA is a leading, international organization that supports the incorporation of horses into mental health and personal development work (EAGALA, 2010). Thomas recognized the efficacy of EAP as well as the need to professionalize standards for practice. She developed manuals, trainings, and a code of ethics to serve as scaffolding for this innovative therapeutic approach. With over 4,500 members in 50 countries and 700 active programs, EAGALA is the most widely known and respected equine-assisted psychotherapeutic model. EAGALA offers a fully-developed and professionally-endorsed treatment model for mental health professionals practicing EAP.

The EAGALA model is based in four tenets: 1) a team approach, 2) all sessions to be focused on the ground, 3) a solution-oriented belief system, and 4) an adherence to the EAGALA code of ethics. In each session, a treatment team is present. A licensed mental health professional and a certified equine specialist, along with horses and client(s), combine to form the treatment team. The mental health professional is charged with providing emotional safety for clients, treatment planning for each session, and ensuring

ethical practice. The equine specialist provides physical safety for clients and horses, collaborates with the mental health professional to structure sessions, and offers observations of horse behavior. Working as a team, facilitators combine their individual expertise to provide an emotionally and physically safe experience for the client.

While therapeutic riding uses the kinesthetic connection between humans and horses to foster wellness, unmounted therapies primarily focus on the emotional connections that are present. EAGALA-model EAP is focused on the ground. None of the interactions between clients and horses include horsemanship or riding. Horsemanship develops horse skills, while EAP develops people skills. This greatly reduces the incidence of injury and enhances the accessibility of the treatment. Further adding to the accessibility of EAGALA as a treatment option is the fact that clients are not required to have any previous horse experience.

Usually, horses have no equipment on them during an EAGALA session. They are roaming freely in the space, allowing clients to meet them on equal footing rather than controlling them from a saddle - a powerful experience with a 1,200-pound animal. Because of the unmounted nature of the EAGALA model, clients are able to experiment through trial and error a multitude of ways for creating connection, developing relationships, and solving challenges. While clients can choose how close to get and where to touch the horses, the horses also have choices to move away or move closer. In order to interact with the horses, clients must experiment with different ways in which to connect.

The theoretical framework of the EAGALA-model is grounded in the use of selfdistancing through metaphor as the foundation for a solution-oriented approach. In the arena, the clients often find it easier to talk about what is happening with the horses in the moment than talking about their issues rather than reflectively and after the fact. The treatment team assumes that each client has solutions to their challenges and are capable of reaching their goals if given the opportunity to discover them. "We do not offer solutions, nor do we instruct the clients in how to interact with horses. We encourage them to develop their own methods, their own interpretations, and their own form of problem solving. This in turn enables them to take these new skills and apply them in the real world" (Thomas & Lytle, 2016, p. 66). To be able to identify these solutions, EAGALA-model EAP allows clients the opportunity to shift from a self-immersed perspective to a selfdistanced perspective through the use of metaphor in interaction with the horses, "...People who self-distance focus less on recounting their experiences and more on reconstruing them in ways that provide insight and closure" (Kross & Ayduk, 2011, p. 188). This happens within the context of trusting relationships with horses and humans often allowing clients the opportunity to gain some distance from their traumatic experiences before they can make meaning of them (Kross & Ayduk, 2011).

Also setting this model apart from other equine models is its code of ethics. EAGALA's code of ethics creates a culture of professionalism for both mental health practitioners and equine specialists. Additionally, EAGALA has an ethics committee, providing rigorous and global enforcement of the code of ethics (EAGALA, 2015).

Facilitating EAGALA-Model EAP

Through a learned facilitation framework of reflective listening and observation known as SPUD'STM (EAGALA, 2015), the treatment team is able to create a therapeutic environment for a client's own story, perceptions, attitudes, emotions, and feelings to emerge.

The SPUD'S framework includes four criteria: Shifts, Patterns, Unique aspects, and Discrepancies ...(this) methodology (is) used by the team to track the activity and responses of both horse and client, although the primary focus is on the horses and symbols. As a client session progresses, the first four SPUD'S criteria allow the team to focus, pinpoint, and define moments of significance. The treatment team then takes these observations and reflects them back to the client in the form of question-asking, observational statements, metaphors, and invitations for clients to share their story. The four SPUD's, combined with these two actions - observing and reflecting - form the backbone of session execution. (Thomas & Lytle, 2016, p. 71)

When people first enter the arena with the horses, they typically rely on their usual life coping skills to try to interact with or cajole the horses. If clients are unsure how to build rapport with the horse, they are often observed doing the same thing over and over again. Horses mirror that behavior back to the client through patterns of behavior. When the client shifts his or her awareness internally, such as an awareness that their prior actions were not working, the horses seamlessly shift their physical position, outward behaviors, and patterns. Thomas and Lytle (2016) explain that

Shifts in an EAGALA session pertain to any physical or behavioral change in the horses, other symbols, or the humans. Example of Shifts: The horses were together, but now they are apart. They were standing still, but now they are moving. The gate was open, and then it was closed. The client was outside along the wall but is now standing in the center of the arena. Every Shift in session, no matter how small, correlates to *movement*. Tracking movement is essential because *movement* indicates change. And change, in one form or another, is the global objective for both client and team. Shift by Shift, bit by bit, the client moves further from whatever state has him or her mired or stuck in place. (p. 72)

Unique to EAP is the focus on observable horse behavior using the SPUD'S framework. This model of intensive observation provides structure for the treatment team to stay within the model and resist interpreting client behavior, thus, allowing the client's own interpretations and solutions to come forth.

Metaphors

Metaphors reflecting trauma-related challenges arise frequently as clients seek to make meaning out of their experiences (McCormick & McCormick, 1997; Pernicano, 2014, 2015). The interplay that occurs between the horses and clients often feels familiar. Clients describe their inner experience by relating it to what is happening externally in the moment. In an example from an actual session, the treatment team observed one horse putting its teeth on another horse's side repeatedly. The client exclaimed, "Why does he keep doing that to her?" The treatment team responded, "What is he doing to her?" The client said,

"He's beating her up! Can you make it stop?" The client recognized a pattern with the horses and began to place her own narrative onto the experience. The treatment team probed, "What needs to happen to make him stop?" The client directed, "they need to separate." As the session progressed, the horse behavior shifted. The horse that had teeth on her sides and was being "beaten up" walked away from the other horse as the client approached to "separate them." The client said, "she left him but she needs protection." For a client with a traumatic abuse history, the concept of protection and safety are paramount to continue to explore in session with the horses. As this article expands upon later, the ability to create distance from the actual trauma through the experience with the horses allows the client to find new solutions for themselves as it relates to protection in an abusive situation.

The treatment team always follows the client's lead. The mental health professional assesses when and if the client is ready to further explore the metaphor verbally. Clients sometimes respond to the treatment team's questions about the horses with stories from their own lives using the metaphors as a bridge. Sometimes clients reveal histories of abuse and trauma for the first time in EAP sessions.

In the above-mentioned example, the one horse was being "beaten up" by the other horse and "needs protection." By her own description, this client's abuse history was playing out between the horses. In the EAGALA model, incorporating the interaction with the horses allows the metaphors to emerge by creating *distance* from the actual traumatic events that have occurred and allowing space for new interpretations (Thomas & Lytle, 2016).

As the session continued, the client asserted that she and the treatment team needed to surround the horse to protect her and keep the other horse away. No matter how much the "abusive" horse tried to push his way into the circle of people, he was kept away from her. After several minutes, he walked away to the far end of the arena and stayed there for the remainder of the session. After a long pause looking in his direction, the client shared, "he's just like my ex-boyfriend."

Engaging with horses from a "self-distanced perspective" (Kross & Ayduk, 2011, p. 188) allows clients to manage memories of their traumatic experiences that may emerge in sessions, while receiving a non-threatening, constant feedback system from sentient beings. "The ability to self-distance in the retelling of a negative experience or story allows storytellers to retain some form of objectivity in how they see that story....the third person allows a different perspective, shifting the client/storyteller from 'recounting/reliving' to reconstructing the story in a new way - a way that provides insight" (Thomas & Lytle, 2016, p. 155).

The goal of EAGALA and other trauma-informed approaches is to move from problem-saturated narratives to more hopeful, solution-oriented narratives (Abels & Abels, 2001). The theories informing these trauma-informed approaches include cognitive theory (Beck, 2011; Ledley, Marx, & Heimberg, 2010), constructivist theory (Buckman, Kinney, & Reese, 2008; Granvold, 2008) and neuroscience (Briere & Lanktree, 2013; Germer, Siegel, & Fulton, 2013). In EAP, the narratives, often in the form of metaphors, are at first constructed by the client (e.g., "He's beating her up! Can you make it stop?"). With

reflective listening and feedback from the treatment team in a safe and affirming environment, the client then moves to changes in cognitive processing and more hopeful constructions of the horses' and personal experiences (e.g., "She left him but she needs protection."). These changes are facilitated at the neurobiological level as the limbic system is calmed through the establishment of trust and safety in a unique treatment setting. Even clients who experience human relationships as threatening due to prior experiences are able to engage safely with the horses and develop new healing pathways. The client can move past being "frozen" in prior trauma reactions and cognitively, neurologically, and somatically move to empowerment and hope.

Presence

Full presence is often a challenge for people who are experiencing trauma symptomatology. A "common denominator of all traumas is an alienation and disconnection from the body and a reduced capacity to be present in the here and now" (Emerson & Hopper, 2011, p. xi). Disembodiment is a powerful coping mechanism, yet one that does not easily allow engagement in the therapeutic process. Although clients can feel initially anxious about interacting with horses in an EAGALA session, their perspective often shifts to feeling safe in the presence of a nonjudgmental being. The horses provide honest feedback free of ego, bias, or agenda, allowing individuals to be more receptive to the exploration and acceptance of the sensation. These feelings of safety and sensation are scaffolded by the rhythms of tail swishing, ear movements, hoofbeats and expressive exhales. Once clients can experience safety and explore their metaphors and symbols with the horses, they are better equipped to process their emotions and make meaning out of their experiences in an emotionally safe manner (Kross & Ayduk, 2011).

Meeting Standards

Although EAP does not yet meet the gold standard for an evidence-based practice, it meets the SAMSHA key principles for a trauma-informed approach. Being a relatively new field, outcome studies were not published until 2008, thus only one meta-analysis has been conducted to date (Wilkie et al., 2016). The emerging nature of this field has also limited the amount of targeted funding available to researchers often needed to conduct randomized-controlled trials. The vast majority of public and private funding on animal-assisted interactions has gone to studies including canines. Early indications, however, are that EAP holds promise for work with at-risk populations (Wilkie et al., 2016). Additional, rigorously-designed studies are needed to further explore the potential of EAP.

The EAGALA model of EAP meets the Six Key Principles of a Trauma-informed Approach (SAMHSA, 2014). The key principles, as mentioned previously include: 1) safety, 2) trustworthiness and transparency, 3) peer support, 4) collaboration and mutuality, 5) empowerment, voice, and choice, and 6) cultural, historical, and gender issues. EAGALA's Code of Ethics (EAGALA, 2015) directly links to these key principles. Safety is paramount. Trustworthiness and transparency are critical aspects of the EAGALA model. Peer support can include either working with those with lived experience or in regard to children and adolescents, non-offending parents or caregivers who can give validation and voice to the children's experiences. In EAGALA, one can work in groups

of those with lived experiences or in the case of individual work, one can argue that the horses provide peer support, collaboration and mutuality - affirmation in the most basic and pure ways. The EAGALA model is clearly client-directed, promoting empowerment, voice, and choice. Finally, the EAGALA Code of Ethics promotes practice that is sensitive to cultural, historical and gender issues. "The ethics code is based on the fundamental values of overall safety and well-being of clients, foremost above all other considerations...it is our quest to build the emerging field of Equine Assisted Psychotherapy as a valid, professional, safe, and respected instrument for growth and learning" (EAGALA, 2015, p. 20).

Further supporting the claim that EAP is well-suited to trauma work is its synchronicity with Peter Levine's work. Levine (2010), a leading trauma therapist, developed steps that can help a person move from alienation and disconnection from their body to healing through somatic experiencing. These include establishing an environment of relative safety, supporting initial exploration and acceptance of sensation, and establishing pendulation and containment - the innate power of rhythm. EAP provides each of these. SAMHSA has been leading the way in promoting trauma-informed care in the U.S., acknowledging that both recovery and resilience are key outcomes for in both individual and family work. The EAGALA®-model of EAP promotes these same tenets through its Code of Ethics, requiring clinicians to utilize empowering methods that provide voice and choice to those who have had none.

Limitations

One clear limitation of EAP is accessibility in terms of both location and cost. Horses tend to live in barns and on land that can be inaccessible to public transportation, often requiring clients to have private transportation. This can be a significant barrier to access for clients in urban areas. Further, the cost of maintaining a herd of horses and compensating two members of the treatment team is not insignificant. While some mental health professionals do accept insurance, the reimbursement rate is typically not enough to cover the entire session. Some organizations, such as Gateway HorseWorks of Malvern, Pennsylvania, have worked to reduce this barrier by operating as a non-profit and securing grants from local and national organizations (Gateway HorseWorks, 2017).

Social workers are encouraged to learn more about EAP by connecting with local treatment teams including equine specialists and behavioral health professionals, receiving training and attending demonstrations. EAGALA-certified mental health professionals and equine specialists are often willing to meet with behavioral health professionals and discuss their work.

The evidence base for EAP is limited due to both historical and practical reasons. Social workers also need to support the building of an evidence base by engaging in research, serving as liaisons between university research teams and EAGALA teams, and referring research participants to ongoing studies. Specifically, there is a strong need for randomized controlled trials that can isolate both the active elements of the treatment and shed light on the mechanisms of change. These studies then need to be replicated with varied populations with varied presenting issues. Animal-assisted therapy, with horses or

other animals, is not for everyone, nor is it for every condition. More research is needed to identify those populations and those conditions for which it is most effective.

Next Steps

As the primary providers of mental and behavioral health services in the United States, social workers are keenly aware of the need for a portfolio of treatment methods to manage the increasing demand for services. Vulnerable clients who have experienced trauma deserve to have an array of treatment options available - in addition to or instead of traditional talk therapies. Talk therapies are simply not efficacious for many who are struggling with the impact of trauma, who are alienated and disconnected from their bodies and unable to verbally process a myriad of sensations (Levine, 2010). As Kazdin and Blaze (2011) suggest, "interventions that vary widely in their reach, focus, costs, effects, and other dimensions are crucial" (p. 33), including experiential and expressive therapies such as EAP.

The ethical call to meet the needs of vulnerable populations is loud. Social workers are poised to take a lead role in promoting a robust, accessible and inclusive approach to the delivery of mental and behavioral health care services. With a core mission of enhancing human well-being and meeting the basic human needs of all people, the role of promoting the use of and research on interventions such as EAP is a natural fit. The EAGALA model of EAP is a particularly good fit with social work. Perhaps most important is the core belief that people have the inherent capacity to recover and be resilient; they already have solutions to the challenges they face and can access them when provided the appropriate space to do so. This is evidenced by the way in which EAGALA supports client-directed work.

Another key congruence between social work and EAGALA is the way in which the treatment team allows individuals to be the experts in the arena, explicitly resisting a controlling role. EAGALA also challenges the assumptions of talk therapy by privileging the power of nonverbal and nonhuman communication. This explicit shift in power dynamics supports social work's anti-oppressive and empowerment approach, allowing subjugated knowledge to emerge in treatment (Dominelli, 2002; Hartman, 1992). The American Counseling Association (2016) has already adopted practice competencies for animal assisted therapies. It is time for social work to join this movement and specifically consider the ways in which EAGALA might be an appropriate treatment for some clients.

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Equine Facilitated Therapy and Trauma: Current Knowledge, Future Needs

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Abstract: Equine-facilitated therapy (EFT) is a relatively new treatment for trauma and PTSD. EFT as well as animal assisted interventions in general have been introduced and implemented in mental health treatment for children and adults, though the research in support of these interventions has not kept up with practice. The purpose of this review is to examine the use of EFT for clients suffering from trauma/PTSD. Studies were included if PTSD/trauma was assessed and/or was measured as an outcome. A search of relevant databases resulted in nine peer-reviewed studies that met criteria. Studies are summarized and implications for future research are discussed. In general, findings suggest that EFT is a promising intervention for trauma/PTSD. Recommendations include a call for more research that includes veterans as well as for research that explicates the mechanisms by which EFT may be effective.

Keywords: Trauma; PTSD; equine therapy; EFT

In recent years animal-assisted interventions (AAI) have been increasingly used as an adjunct to traditional mental health treatment. As is often the case with the introduction of new interventions, the research has lagged behind practice: that is, AAI's have been implemented without research evidence supporting their effectiveness. However, this is beginning to change, and studies with more rigorous designs are increasing (Hoagwood, Acri, Morrissey, & Peth-Pierce, 2016).

The use of horses in treatment is one type of AAI, and is often referred to as equine-facilitated therapy (EFT) or psychotherapy, or equine assisted counseling. Although the importance and relevance of humans interacting with animals has been noted for some time (Amiot & Bastian, 2015), it is only recently that horses have been integrated into mental health treatment. As is true with AAI's in general, literature is just beginning to emerge on EFT (Selby & Smith-Osborne, 2013).

Trotter (2012) describes three models of EFT, each of which has an accrediting body. The Certification Board for Equine Interaction Professionals (CBEIP) offers credentialing for mental health professionals who incorporate horses into their practice. The Professional Association of Therapeutic Horsemanship International (PATH Intl.) certifies equine specialists who partner with mental health professionals who use horses in treatment. In this model mental health professionals could also be credentialed as an equine specialist. The Equine Assisted Growth and Learning Association (EAGALA) requires cofacilitators, one being an EAGALA certified mental health professional and the other being an EAGLA certified equine specialist. EAGALA also requires that activities be non-mounted, with the client on the ground.

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Activities in counseling sessions using horses can vary widely, and include mounted and non-mounted exercises as well as caring for the horse (Meinersmann, Bradberry, & Bright Robers, 2008), and can occur in group or individual sessions. EFT is pan-theoretical and can be integrated into treatment no matter the theoretical orientation of the therapist. Most often it is complementary to or an adjunct to traditional therapy, though it can be a stand-alone treatment.

While reviews of EFT (Anestis, Anestis, Zawilinski, Hopkins, & Lilienfeld, 2014; Lentini & Knox, 2009, 2015; Selby & Smith-Osborne, 2013) and AAI for trauma (O'Haire, Guerin, & Kirkham, 2015) have been published, none have focused solely on EFT applied to trauma. Lentini and Knox (2009, 2015) conducted two reviews of EFT. Study samples in the first review included adults with psychiatric disabilities, bereaved children, "at-risk" youth, and women with PTSD. The authors (2009) concluded the literature was "possibly convincing on an individual basis," (p. 56), but called for more controlled, longitudinal, and larger studies. They also noted the need for studies with homogeneous and well described samples. Their updated review in 2015 focused on EFT with children and adolescents. The samples in the studies included youth with and without mental health diagnoses. Many of the youth had autism spectrum disorder or were described as "at-risk." Acknowledging that more research is needed, they described the overall findings as "promising with regard to the effectiveness of EFT for children and youth" (p. 300). Selby and Smith-Osborne (2013) also concluded that therapies involving equines show promise in increasing psychosocial outcomes for youth and adults with chronic health conditions or disabilities, but noted the need for more rigorous research designs. In contrast, Anestis et al. (2014), in a review of only experimental design studies, recommended that mental health programs not offer EFT, stating "there is negligible evidence that it offers benefits to individuals with mental disorders or other psychological difficulties" (p. 1129). Thus, reviews of EFT to date offer different conclusions, most likely based on the criteria used for study inclusion and the approach to conducting the review.

O'Haire and colleagues (2015) conducted a systematic review of AAI for trauma. They too concluded that AAI's show promise as complementary treatments to traditional services, but also called for more rigorous research. Their review included what are referred to as "at-risk" samples in other reviews, and PTSD/trauma either was not measured or was not present in some of the study samples. Of the ten articles included in their review, seven of the AAI's used dogs or a combination of animals.

To the best of our knowledge, no review has focused on the use of equines in working specifically with individuals with PTSD and/or trauma symptoms. Thus, the purpose of our study is to examine the peer-reviewed literature to ascertain what is known about EFT with individuals who have PTSD/trauma symptoms.

Method

We conducted a database search for studies that addressed the use of EFT for individuals who had experienced trauma. We did not restrict the search based on years, because the literature in the field is recent; nor did we restrict the search to a certain type of study design. Initially we conducted a wide search. For example, we included studies

that provided EFT to students at-risk, or to individuals with bereavement issues. Our thinking was that some individuals in these study samples would have experienced trauma. However, it became difficult to decide which studies to include or exclude, and ultimately we included only studies that measured for trauma at assessment and/or included a measure of trauma as an outcome variable.

The data bases searched were Social Work Abstracts, Scopus, CINAHL, ERIC, Web of Science, PsychArticles, PsychInfo, and Google Scholar. We also examined the references of articles found through the database search for additional relevant articles. The search terms used were [(equine therapy) OR (equine assisted) OR (equine facilitated) OR (therapeutic riding) OR (therapeutic horseback) OR (equine-facilitated) OR (equine assisted) OR (equine psychotherapy)] AND [(PTSD) OR (trauma)].

Inclusion criteria were: 1) the study was published in a peer-reviewed journal; 2) the intervention used horses as the primary treatment or as an adjunct to traditional treatment; and 3) the sample consisted of individuals who were assessed for PTSD/trauma, and/or PTSD/trauma was measured as an outcome. At each stage of the search each of the authors read the abstract and then met to discuss which articles to include, and when a decision could not be made based on the abstract we obtained and read the full article to make a final decision. This process resulted in nine articles being included in the review.

Results

Table 1 shows highlights of the nine studies, wherein five consisted of adults and four consisted of youth. Studies are presented in order of rigor (in terms of control for threats to internal validity) of the studies, from least (qualitative) to most rigorous (group comparison design). Table 1 shows that standardized assessment or outcome for trauma was not included in the study by Schroeder and Stroud (2015). However, all the women were recruited from a domestic violence organization, in collaboration with their mental health services coordinator, and an inclusion criterion was the presence of PTSD symptoms. In addition, the treatment of trauma was the major aim of the group. Table 1 also shows that studies of EFT for trauma have all been published within the past seven years. The studies are summarized first for youth, then for adults.

Youth

Of the four studies with youth, one was a correlational single system study and three were intervention studies. Yorke et al. (2013) recruited children 8 to 10 years of age from child welfare agencies, a woman's shelter, and counseling agencies. Children met the criteria for PTSD based on the Child PTSD Symptom Scale. The purpose of the study was to ascertain whether children's and horses' heart and cortisol levels would fluctuate in tandem. Using an ABCBA design across four children, correlation was found between child-horse pairs after a 12 day intervention where the children rode or otherwise interacted with their horse. The authors suggested that EFT may be especially beneficial to children who are neurophysiologically deregulated. They also recommended more research on the process of EFT, as increased understanding of the mechanism by which EFT works can lead to improved EFT programming.

Table 1. Results of Articles Reviewed: Ranked by Design

Study		Population	Study design	Standardized Trauma Measures Used	
	Child &	•			
	Adolescent, Adults	Trauma	_	Assessment	Outcomes
Schroeder & Stroud (2015)	Adults	Trauma, interpersonal violence	One group, Qualitative	No	No
Nevins, Finch, Hickling, & Barnett (2012)	Adult	War	Case study, pre-/posttest with multiple follow-up	Yes	Yes
Yorke et al. (2013)	C&A	Abuse, general	Case studies, Multiple baseline (ABCBA)	Yes	No
Earles, Vernon, & Yetz (2015)	Adults	Trauma, life events	Pre-/posttest	Yes	Yes
McCullough, Risley-Curtiss, & Rorke (2015)	C&A	Abuse/neglect, physical, sexual, or emotional	Pre-, mid-, and posttest	Yes	Yes
Shambo, Seely, & Vonderfecht (2010)	Adults	Trauma, interpersonal violence	Pre-, mid-, and posttest with follow-up	Yes	Yes
Goodkind, LaNoue, Lee, Freeland, & Freund (2012)	C&A	Trauma, historical	Pre-/posttest with multiple follow-up; Mixed methods	Yes	No
Kemp, Signal, Botros, Taylor, Prentice (2014)	C&A	Abuse, sexual (all), neglect and/or physical (some)	Pre-, mid-, and posttest within group comparison	Yes	Yes

Goodkind and colleagues (2012) reported on a project to develop, implement, and test an intervention for American Indian tribal youth and their families. The community based intervention was based on the premise that historical trauma must be acknowledged and addressed in intervention programs. The study was open to youth aged 7-17 years. Of 18 participants, 11 had clinically significant levels of exposure to violence and PTSD symptoms. Trauma symptoms were not measured after the program. However, improvements were found in cultural identity, coping strategies, quality of life, and social adjustment. The 27 session multi-component psychoeducational group intervention included six equine sessions.

Two of the intervention studies focused on children who had experienced maltreatment or sexual abuse. McCullough and colleagues (2015) examined the outcomes of eight weekly outpatient equine facilitated psychotherapy sessions (for 1½ to 2 hours each) with eleven youth ages 10-18 who had experienced maltreatment and had posttraumatic stress symptoms, as measured by the Children's Revised Inventory of Events Scales (CRIES-13). In order to be included in the study, youth had to score a minimum baseline score of 12 points out of a possible 60 on the CRIES-13 or at least four questions answered at Level 3, or "sometimes." The equine sessions were structured using object relations theory and reality therapy. Nine of the 11 youth had significantly decreased PTSD symptomatology scores at post-test, compared to the pre-test.

Possibly the strongest intervention study was conducted by Kemp et al. (2014). The sample consisted of 15 children, 9 males and 6 females, ages 8 to 11 years, and 15 female adolescents, ages 12 to 17 years, all of whom were referred because of sexual abuse. Assessment occurred at three time points: intake, after in-clinic individual counseling of an unspecified therapeutic modality (once weekly for about 6.5 weeks) but prior to EFT, and after completion of EFT. The EFT was based on the EAGALA model and took place weekly for 9–10 weeks. Different measures were used for the children and adolescents (see Table 2). Significant improvements were found for children on depression, internalizing, externalizing and total behavior Child Behavior Checklist (CBCL) scores from Time 2 to Time 3, but not from Time 1 to Time 2. For the adolescents, significant improvements were shown from Time 1 to Time 2 for all measures except depression, and significant improvements from Time 2 to Time 3 were found across all measures. Notably, the change scores from Time 2 to Time 3 were significantly greater than the change scores from Time 1 to Time 2. The findings suggest EFT, although helpful for both groups, may be especially helpful for children.

Adults

Five studies were conducted with adults (Table 3) including one qualitative design, one case study and three intervention studies. Two studies consisted of samples with combat-related trauma and three had samples with non-combat related trauma. Sample sizes were small, ranging from one to 16, and all studies used purposive sampling. Combat trauma is unique as compared to other types of trauma and so the results are presented separately for combat and non-combat related trauma.

Table 2. Summary of Child and Adolescent Studies

Authors	Year		I	Participants		Intervention	Study design	Primary outcomes
		n	Age (Years)	Gender (% Female)	Trauma Assessment			
Yorke, Nugent, Strand, Bolen, New, & Davis	2013	4, purposive sample	8 to 10	unknown	PTSD: met criteria per Child Post Traumatic Stress Disorder Symptom Scale (CPSS)	12-day riding/grooming Human- Animal Bond (HAI) intervention to study cortisol levels in child- horse pairs	Multiple baseline, ABCBA single case design. Pilot study.	Meta-analysis of SCD data: examined weighted-mean cross-correlation for each child/horse cortisol level during riding phase***
McCullough, Risley-Curtiss, & Rorke	2015	11, purposive sample	10 to 18	45.5	Childhood maltreatment (physical, sexual, or emotional abuse or neglect) with PTSD symptomatology	Equine-facilitated psychotherapy (EFP); 8 weekly sessions (1.5 - 2 hours each), delivered by therapist.	One group, quantitative, quasi- experimental, repeated measures (pre, midpoint, post). Pilot study.	↓Children's revised Inventory of Events Scale (CRIES-13)* ↑Human Animal Bonding (HABS)*
Goodkind, LaNoue, Lee, Freeland, & Freund	2012	18 American- Indian youth (13 families), convenience sample	7-17 (M = 11.1, SD = 3.2)	78	Historical trauma assumed for recruitment purposes. Trauma assessed by Recent Exposure to Violence Scale and Childhood PTSD Symptoms Scale	Our Life, a 6-month community-based mental health intervention based on 4 components: heal historical trauma;, reconnect to culture; build parenting/social skills; strengthen family relationships through equine-assisted activities. Families met 3 evenings/week for components 1-3. 6 sessions (1x/month) equine-assisted activities to build relationships, develop self-awareness and trust.	One group, quasi experimental: mixed methods withingroup longitudinal design (5 time points over 18 months)	†Native American Enculturation Scale*** †Harter Self-Perception Profile for Children*** †Rosenberg Self-Esteem Scale*** †Children's Coping Strategies Checklist*** †Multidimensional Student's Life Satisfaction Scale (MSLSS)*** †Social Adjustment Inventory for children and Adolescents (SAICA)***
Kemp, Signal, Botros, Taylor, Prentice	2014	30 purposive (8 Indigenous, 22 non- Indigenous) referred to sexual abuse agency	8 to 11 (15 subjects); 12 to 17 (15 subjects)	80	All victims of sexual abuse; some also neglect and/or physical abuse.	Equine Facilitated Program (EFT) as adjunct therapy. In-clinic counseling for 6-7 weeks, followed by EFT, 9-10 weeks, 90-minutes each. Delivered by counselors.	One-group, repeated measures (Time 1 (pre-counseling), Time 2 (post-counseling, pre-EFT), Time 3 (post-EFT). Program Evaluation.	Child results for Time 2 to Time 3. ↓Child Depression Inventory (CDI)*** ↓Child Behavior Checklist (CBCL)- Int.* ↓Child Behavior Checklist (CBCL)- Ext.* ↓Child Behavior Checklist (CBCL)- Total***. Adolescent results. ↓Beck Depression Inventory (BDI)*** ↓Beck Anxiety Inventory (BAI)*** ↓Trauma Symptom Checklist (TSCC)*** for each subscale (Anxiety, Depression, Dissociation, PTSD, Sexual Concerns). A subjects, change-score comparison. All change scores (all measures) from time 2 Time 3 were significantly greater*** than those from Time 1 to time 2

PTSD, Posttraumatic Stress Disorder; -, not reported; Pre-post, simple pre-test and post-test only; AB, waitlist + treatment; \downarrow , decrease; \uparrow , increase; \uparrow p < 0.10; **p < 0.01; ***p < 0.01; ***p < 0.01;

Combat

Nevins et al. (2012) conducted an AB single system case study with a 52 year-old combat medic. The intervention focused on natural horsemanship instead of psychotherapy but was delivered by a licensed mental health professional. It was a 5-part intervention covered in 4 daily sessions, totaling about 12 hours. From pre- to 12-week follow-up, the veteran's PTSD symptoms improved dramatically as did his depression and other symptoms (see Table 3).

Non-combat Trauma

Each of the three non-combat related studies used EFT delivered by mental health professionals. The qualitative study (Schroeder & Stroud, 2015) and one of the intervention studies (Shambo et al., 2010) addressed interpersonal violence (IPV) with female-only groups. Schroder and Stroud (2015) developed an 18-hour, 2 hours per session, mindfulness- and CBT-based here-and-now intervention for women with posttraumatic symptoms and a history of IPV. Based on self-report and observation, the four women improved in mindfulness and competence and demonstrated genuine communication with their horses as well as with each other and the facilitators. The authors attributed the use of regular here-and-now processing (as opposed to reliving trauma) as key to the success of the group. Although the women had symptoms of posttraumatic stress, PTSD outcomes were not examined through self-report or observation.

Shambo et al. (2010) also studied women with a history of IPV. The six women presented with symptoms of or diagnosis of PTSD and/or Borderline Personality Disorder. All were in psychotherapy but not showing clinical improvement. The 20-hour group mutual-aid intervention included both EFT and psycho-education, and was delivered over 10 weeks. The model, based on Kohanov (2003), was eclectic, and included somatic awareness and modulation, CBT, and assertiveness and boundary setting. From pre-test to the four-month follow-up, improvements were found for depression and dissociative symptoms.

Earles and colleagues (2015) examined the effectiveness of Equine Partnering Naturally© (Yetz, 2011), a 12 hour intervention provided over six weeks. The sample consisted of 12 women and 4 men who had experienced a traumatic life event, such as rape or a serious accident, and had PTSD symptoms. PTSD, anxiety, depression, and mindfulness had improved by the post-test.

Table 3. Summary of Adult Studies

Authors	Year	Participants				Intervention	Study design	Primary outcomes
		n	Age (Years)	Gender (% Female)	Trauma Assessment			
Schroeder, & Stroud	2015	4, purposive sample	mid-20s to early 60s	100	Symptoms of posttraumatic stress and history of interpersonal violence victimization	Equine-facilitated psychotherapy (EFP) with here-and-now, mindfulness focus. 9-weeks, 2 hours per session plus post-group debrief. Co-facilitated by master's level counselor and master's counseling intern.	One-group descriptive study: observational and reflective. Pilot study.	Observations: all members interactive (authentic disclosures among memberto-member, member to facilitator, and member to horse). Reflections by subjects: \(\)being mindful and aware of selves and in relation to others; \(\)\feeling capable and competent
Nevins et al.	2012	1 veteran, twice- deployed combat medic, Operation Iraqi Freedom (OIF) -	52	0	Assessed for PTSD and depression	Connection methodology uses nonhippotherapy, non- psychotherapeutic, natural horsemanship principles, delivered by licensed mental health professional. 4 hours of educational classes followed by 5-part intervention covered in 4 daily sessions, totaling about 12 hours.	Case study, quantitative, repeated measures (pre, post, follow- up at 2, 4, 6, and 12 week follow-up)	Pre- to follow-up Results: 58%\PCL-C (Post-traumatic disorder checklist); 44%\BDI-II (Beck Depression Inventory), from 25 to 14; 44%\RSES (Response to Stressful Event Scale); 68%\MSSS (Modified Social Support Scale); QOLI(Quality of Life Index): 5%\perp Happiness, 247%\Satisfied, 10%\Dissatisfied
Earles et al.	2015	16, recruited through mental health practitioners	33-62 (M = 51.25, SD = 9.99)	75	Assessed: Trauma life events and PTSD	Equine Partnering Naturally© program (Yetz, 2011). Equine therapy delivered by Yetz. 2-hour sessions for 6 weeks.	One-group, pre- /post-test. Each group consisted of 5-6 subjects.	↓PTSD Checklist (PCL-S)*** ↓Trauma Emotion Questionnaire* ↓Generalized Anxiety Disorder Scale** ↓Patient Health Questionnaire (PHQ-9) * ↓Alcohol Use Disorders Identification Test (AUDIT)* ↑Five Facet Mindfulness Questionnaire ***
Shambo et al.	2010	6, purposive sample currently in psychotherapy without satisfactory results	18 yrs or older	100	History of traumatic interpersonal violence; DSM- IV symptoms and/or diagnosis of PTSD or BPD	Equine-facilitated psychotherapy (EFP) and psychoeducation group. 10 weeks, 2-hour sessions. Cofacilitated by mental health therapists	One-group, repeated measures (pre-, mid-, post-, and 4 month follow-up). Pilot study.	Pre- to follow-up Results: \pmailton Rating Scale for Depression (HAMD)** \pmailtop\text{Beck Anxiety Inventory (BIA) n.s. \pmailtop\text{Dissociative Experiences Scale (DES)* \pmailtop\text{Outcome Questionnnaire-45.2 (overall treatment effectiveness)*}

PTSD, Posttraumatic Stress Disorder; -, not reported; Pre-post, simple pre-test and psot-test only; AB, waitlist + treatment; \(\psi, \text{ decrease}; \(\psi, \text{ increase}; \(\psi > 0.10; \(*p < 0.05; \(*p < 0.01; \(***p < 0.01; \)

Discussion

The purpose of this review was to focus on the use of EFT for PTSD and trauma. Four studies included youth (Goodkind et al., 2012; Kemp et al., 2014; McCullough et al., 2015; Yorke et al., 2013). Children who had experienced sexual abuse or maltreatment showed improvement in PTSD after EFT, as well as in depression, anxiety, and internalizing/externalizing behaviors. Historical trauma experienced by American Indians and other groups is often overlooked in the trauma literature, but youth who participated in a multi-component intervention that included EFT showed improvement in cultural identity, coping strategies, quality of life and social adjustment (Goodkind et al., 2012). Of the five studies with samples of adults, one included veterans (Nevins et al., 2012) two included women who had experienced interpersonal violence (Schroeder & Stroud, 2015; Shambo et al., 2010), and one included men and women with various traumatic events (Earles et al., 2015). Improvement was found in PTSD symptoms, mindfulness, depression, dissociative symptoms, anxiety, and depression. Even though the review included only nine studies, each with limitations, the findings suggest that EFT may be a useful intervention for youth and adults with PTSD and trauma symptoms as a result of child maltreatment and sexual abuse, combat, interpersonal violence, and other traumatic events. As discussed below, some of the studies also explored the mechanisms by which EFT has effects.

A limitation of our review is that we did not include theses, dissertations, or otherwise search for gray material. Also, our review was limited to studies of EFT where trauma symptoms were assessed and/or included as an outcome. This limiting of our search can be both a limitation and strength. As a limitation, studies that included samples of individuals who had been exposed to potentially traumatic experiences, but trauma itself was not explicitly assessed, were not included. Inevitably some of the participants in these studies may have had trauma symptoms/PTSD. Limiting studies in our review to those that measured trauma symptoms increases understanding about whether EFT is effective in addressing trauma and PTSD symptoms, as well as how those with trauma experience EFT.

As many reviews of studies do, recommendations for more studies of increased rigor (increased sample sizes, explicit assessment for trauma, stronger designs, monitoring for treatment integrity, etc.) can be made. Qualitative studies that address the acceptability of EFT, including the perspectives of both clients and providers, as well as ascertaining the barriers and facilitators to EFT implementation, are also needed. Going beyond this, a number of recommendations can be made for future research.

First, on a national level, more and more attention is being paid to the mental health needs of veterans. However, veterans do not always seek out traditional mental health services (Nevins et al., 2012). Only two studies were included in this review that focused on veterans, and one of the studies with veterans was quite non-traditional, focusing on telepathic communication between the horses and veterans. The acceptability and effectiveness of EFT for veterans is a field ripe for future research. It seems plausible that EFT could increase access to mental health services for veterans, but research is needed to test whether this is so.

Second, research is needed that further confirms, or sheds light on, the mechanisms by which EFT leads to improved outcomes. Some of the studies in this review touched upon this. For example, Schroeder and Stroud (2015) reported that group members remarked that the calm dispositions of the horses provided safety in relationship with their horse. Moreover, increased effective interactions with other group members and the group facilitators were observed. The bond between horse and youth was measured by McCullough and colleagues (2015) and then correlated with change in PTSD symptoms, and findings partially supported this relationship. A suggestion for future research is to incorporate measures of the working alliance between the clinician and client and examine changes as horses are introduced into treatment.

Third, research is needed regarding when equine therapy may be contraindicated, as well as termination issues. If indeed the connection between the horse and client is central in the healing process, how is termination dealt with? Are there any negative implications of developing a strong relationship with a horse during EFT and then no longer having access to the horse?

Fourth, a challenge for researchers is to isolate the effects of EFT from other treatment components. Kemp et al. (2014) attempted to do that by administering measures after traditional counseling but prior to EFT, then administering the measures again after EFT. More studies like this are needed, as well as qualitative studies that gather the impressions of clients and treatment providers regarding the stand alone and interactive effects of traditional treatment and EFT.

Finally, EFT is a relatively new modality that offers promise for treating trauma/PTSD symptoms. As EFT becomes more integrated into traditional mental health treatment, schools of social work (and of other helping disciplines) will need to address whether, how and where to implement it into the curriculum. Although much remains to be learned, and more gaps in knowledge exist than those we have mentioned, the studies in this review provide a base upon which to build.

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