

Critical Statistics as Resistance: The Disruption of White Supremacist and Racist Narratives in Social Work Quantitative Research

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Abstract: *We live in a globalized world whereby colonial and racist systems reproduce deep inequalities and systemic oppression. Many nations were built on imperialism and violence, and over time these have transformed into a capitalist and white supremacist system which is deeply entrenched in the way we live and think. These practices are also seen in our academic systems. Consider statistics, which have been used since their inception by researchers, government, and public health agencies to further colonial and neo-liberal agendas. While reproducing oppressive and harmful stereotypes about Indigenous and racialized communities, these narratives have resulted in transgenerational disparities. To disrupt injustices from being reproduced through statistical research, it is important to actively engage in reciprocal and respectful relationships and to create statistical counter-narratives. Drawing from my experiences as a Southeast Asian scholar working in settler colonial contexts, I propose critical statistics as a method of challenging white supremacist narratives. Critical statistics merges critical race theory, anti-colonial methods of inquiry, quantitative research, and storytelling. Together with participatory action research, racialized communities can develop narratives that are representative of our lived experiences while advancing social change. Through subversion and resistance, we move towards liberation from oppressive systems that maintain the status quo.*

Keywords *Statistics; participatory research methods; critical race theory; anti-colonialism; anti-racism*

Since their inception, statistics have been disseminated and accepted as objective facts. Our societal adherence to statistics not only as a method, but also as an unbiased truth, has resulted in, and continues to result in, substantial and systemic harm, including the codifying of systemic oppression and inequalities as individual and cultural deficits, the reification of Otherness, and the surveillance and control of marginalized groups (O'Neil, 2016; Smith, 2021; Walter & Andersen, 2013). At the same time, we increasingly use statistics to learn about others and ourselves. The reality is that statistics have the power to affect governance and social policies, which maintain the status quo, while contributing to the dehumanization of Black, Indigenous, and other racialized communities (O'Neil, 2016; Smith, 2021; Walter & Andersen, 2013). Far from objective facts, statistics are an interpretation of reality that influences how we understand society and reproduces concepts considered important to the state (O'Neil, 2016; Smith, 2021; Walter & Andersen, 2013).

Drawing from my experiences working in the Canadian and Australian settler colonial contexts, I propose that 'critical statistics,' a critical quantitative research methodology I developed over the past decade, is needed to resist white supremacist and racist narratives in knowledge production, and to create statistical counter-narratives that respond to questions that are meaningful and useful to Indigenous and transnational people with roots

in the Global South. Critical statistics is a model that comprises principles for conducting statistical research informed by critical race theory, intersectionality, Buddhist knowledge, Indigenous theory, and anti-colonialism. In this paper I present this critical statistics framework as a methodological alternative for those seeking to practice racial justice in their social sciences research. I describe the origins and role of statistics and quantitative research methods in the white supremacist and colonialist imaginations of the academy and explain how this history impacts quantitative research and evidence-based approaches in social work today. Lastly, I conclude by discussing critical statistics as an alternative methodology and an avenue for counter-storytelling.

About Me

Before we delve into numbers, colonialism, racism, and resistance, it is important to explain who I am and how my lived experiences inform my program of research and social work practice. I identify as a woman who was born in what is now known as Canada with roots in Southeast Asia. My work is grounded in my experiences as a racialized woman and a child of a forcibly displaced family. While I was born and raised in Tkaronto/Toronto, my family is from Vietnam. My ethnic and ancestral background is Teo Chew. Several generations of my family have experienced the effects of imperialism, colonization, and decolonization. Throughout my life I have struggled with my identity and culture. In the process of reconnecting with my roots and ancestral knowledge, Buddhism has been a guiding force in understanding my life and the world.

My paternal great-grandparents migrated from China to Vietnam in the early 1900s, displaced by war and drought. My family was then once again forcibly displaced from Vietnam in the late 1970s following the war in Vietnam. The paternal side of my family were the first Vietnamese family to arrive in Barrie, Ontario, while my maternal family were sponsored by community members in Kitchener, Ontario. Since my father was the only one who spoke English, he worked as an interpreter supporting Vietnamese folks who had arrived in Barrie and the surrounding areas. This led to him studying social work at Toronto Metropolitan University and becoming a social worker with the City of Toronto where he worked up until his retirement. My parents met in Chinatown and lived there until I was born. I followed in my father's footsteps and also studied social work. Like him, I learned about what's "right" and what's "wrong" as a social worker through a colonial, white supremacist lens. For instance, to speak up about racism, imperialism, and colonialism were seen as transgressions in academic and professional spaces.

When my family arrived in Canada, there was already a history of the state condoning violence against people who spoke up against racism and colonialism and a lack of English fluency meant it was difficult to challenge these inequities in this society. But even with a language barrier, they learned that to disrupt the status quo was not what we were supposed to do, rather we needed to be grateful for refuge, refuge from a war that Canada was complicit and participated in. From the beginning, it was assumed that we were to fall into our place.

When I decided to become a social worker, it was with the intention of supporting people like my family and our community, while advocating for systemic and structural

change that would have prevented my family from having to leave their homelands in the first place. I did not see many people like me in social work classes, but found solace and refuge in my relationships with racialized women who were in the program with me. The reality is that as much as I have worked to disrupt mainstream social work, I acknowledge that I have perpetuated the model minority stereotype in various degrees, either to survive or to get ahead. Either way, I now recognize that each time I stayed quiet or ignored what was happening, I silenced and betrayed myself and took a step closer to white supremacy and capitalism while reproducing the idea that Asian people are the ideal subservient racial group who work hard and keep their heads down.

The increase in anti-Asian racism across the globe during the COVID-19 pandemic made me re-commit to supporting my community specifically. How can members of the Asian diaspora heal collectively while resisting systems of oppression and building solidarity across cultural and racial groups? What does it mean to be a Southeast Asian social worker and to be a part of a profession that is so deeply rooted in colonialism and white supremacy? Who are we serving if we continue to support mainstream social work? What does the future of social work look like in the face of rising white supremacy, xenophobia, and violence against Black, Indigenous, and other racialized people and migrants? These questions are the undercurrent that guide my work as a scholar, researcher, educator, and practitioner. They are the reason I started developing a critical statistics framework – to use statistical narratives to advance social change.

(Un)Critical Statistics

Relevant to my community, the Vietnamese diaspora, the dominant discourse in research, politics, education, and immigration problematically constructs Vietnamese folks living in Canada as productive and exceptional refugees, and grateful contributors to the capitalist nation (Ma, 2023; Ngo, 2016). Members of the diaspora are often described as model minorities in education, assimilation/acclulturation, and participation in capitalism (e.g., Dorais, 1991; Hou, 2020; Johnson, 2007; Ma, 2023; Montgomery, 1991; Nguyen, 2018; Nguyen, 2021; Phan 2003). These narratives, which focus on the description of the refugees' grim lives and situation under communism compared to their material successes in Canada, reproduce discourses of upward mobility, which is an exaltation from their "savage" existence (Ngo, 2016; Nguyen, 2021). This positions Vietnamese people as othered outsiders who can be a part of the circle of relative privilege if they fall in and stay in line. It contributes to the reproduction of racial hierarchies and is also used as a divide and conquer strategy amongst Indigenous and racialized communities and groups. At the same time, in quantitative studies, Vietnamese people have been infantilized and constructed as underdeveloped and uneducated (Ngo, 2016). For example, Montgomery (1991) described Vietnamese refugees as "pathetic wretches struggling to escape from a nation which sought to enslave its own population" (p. 89) while focusing on communism as the root of all evil. In addition, Montgomery compared data taken from Vietnamese refugees with data from previous studies using data from youth placing them on the same level regardless of their actual experiences. While attempting to show the successes of refugee rescue and resettlement efforts, researchers such as Beiser's (1999) modelling of Vietnamese refugees' transition into economically successful migrants, have in actuality

contributed to the construction of this group as exceptional while ignoring systemic issues and racism that Vietnamese people face in Canada (Ma, 2023; Ngo, 2016). This model minority narrative does not allow for space to voice experiences that disrupt the construction of Vietnamese refugees as a case of successful Canadian migration and settlement policy, the so-called good refugees (Ngo, 2016).

Studies on the experiences of refugees can be framed and interpreted in such a way to confirm these myths of successful migration. For instance, data in a study by Hou (2020) focused on the financial success that Vietnamese refugees have achieved, supporting the model minority discourse. These types of studies render invisible the significant struggles the diaspora continues to experience as a result of structural and systemic barriers in Canada. For example, racialized income and employment inequality has not changed over time and non-racialized migrants achieve financial success sooner than racialized migrants, with this inequality extending to second and third generations (Block et al., 2019). Moreover, these studies often leave out the experiences of other groups of people who were affected by the war, including Laotian and Cambodian people.

Research by Block et al. (2019), instead, shows employment and income disparities within the Asian community, which speak to the plurality and complexity of our experiences of white supremacy and racism. Asians are not a monolith, there are differences within and between ethnic groups and cultures which are fluid and change with time, place, and social circumstances. It is these types of nuances which quantitative data fails to adequately measure or show with depth or complexity. By evaluating data through a critical lens, we can tell an entirely different story using the same numbers. In doing so we can resist the racist origins of statistics, their link to eugenic theory, and how the use of statistics continues to impact people's lives in very real and tangible ways.

There are many historical and culturally relevant uses of mathematics, and I do not want to reproduce Eurocentric ideas about statistics as the dominant ideas around how to use numbers. However, given my formal education and experiences in a settler colonial context, I will focus on who are considered the founders of statistics in North America to provide the foundation from which the statistical study and analysis of people and their behaviours is justified and reproduces codified racial hierarchies in what is known as Canada and the United States of America. Francis Galton, along with Karl Pearson and Ronald Fisher, all early statisticians from Britain, were also the creators of eugenics (Galton, 1865, 1869, 1904). These two disciplines were thoroughly and systematically intertwined with one another. Through the guise of a neutral, objective analysis, this methodology was proposed as free from bias due to its use of numbers. But statistics have never been objective – they are political. They are used to *construct* the accepted realities most of us think they simply *describe*. The eugenics movement in North America led to the development of policies aimed at eradicating undesirable traits as defined by White supremacist, patriarchal, and ableist frameworks. They often included forced sterilization, institutionalization, withholding life-saving surgical interventions from infants born with (dis)abilities, mass killings, and genocide (Baynton, 1997; Clayton, 2020; Da Silva & Hubbard, 2024; Davis, 1995; Farber, 2008; King, 2025; Monroe-White et al., 2024; Yakushko, 2019). While eugenics intersected with public health in the 1900s and was supported by scientists, physicians, and lawmakers, there was never data to verify its

assumptions (Clayton, 2020; Farber, 2008). Furthermore, most of the attributes that eugenicists focused on included complex and subjectively defined concepts such as race, criminality, (dis)ability, trauma, mental health issues, and substance use disorders.

Environmental and structural issues, such as poor housing, poor nutrition, and inadequate education, were dismissed as causal factors. Researchers projected their own prejudices onto their work, and this was exacerbated by the measurement of concepts, which were ambiguous or subjectively quantified (Farber, 2008; Monroe-White et al., 2024; Yakushko, 2019). These studies were conducted in prisons, psychiatric hospitals, and other charitable institutions, and the result was an evidence-based narrative that those attributes considered undesirable were hereditary (Farber, 2008; Monroe-White et al., 2024; Yakushko, 2019). Eugenicists then calculated and publicized the costs of maintaining these institutions, gaining public support for their efforts. Issues of crime and poverty overwhelmed many city governments, and thus they supported eugenics, placing the blame for a city's social and structural issues on the people experiencing systemic discrimination themselves, rather than on inadequate approaches to solving issues related to poverty (Farber, 2008; Monroe-White, et al., 2024; Yakushko, 2019). While data scientists and statisticians are beginning to reckon with the white supremacist and racist roots of statistics, has much really changed? In what ways are racialized and marginalized people currently being dehumanized by statistical narratives that reproduce discourses of deficit, dysfunction, and difference? How are these narratives normalized in social work discourse? What counts as 'evidence' in the North American social work field? These questions will be pondered in the next section.

Evidence-Based Approaches in Social Work in North America

In the North American context, there were early social workers who used statistics differently than mainstream social workers and employed data to support social movements. For instance, Mary Richmond (1917) standardized case work, providing a framework for tailoring interventions to a person's environment using input from service users. Jane Addams and colleagues used neighbourhood mapping to document wage and racial distribution in Chicago's low-income neighborhoods (Residents of Hull-House, a Social Settlement, 1895). In another example, Ida B. Wells (Wells-Barnett, 1895/2005) collected statistics in support of anti-lynching campaigns. Brown (2019) asserts that since the 1960s, the growth in the use of program evaluation came hand in hand with the growth of government resources for social welfare. With this grew the demand for evidence-based practice (EBP), along with an overreliance on positivist epistemologies (Sayer, 2020). In response, decolonizing scholars argue that EBP reproduces colonial discourse by codifying social work professionalism as part of a larger civilization project (Shahjahan, 2011).

In the Canadian context, the social work profession is inextricably connected to settler colonialism given social workers' roles in removing Indigenous children from their families since before the implementation of the residential school system. In the field, evidence is used as a concept in the child protection system in North America via risk assessments and the eligibility spectrum, to reproduce the concept of individual failings while ignoring systemic oppression. Social work approaches and practices become

standardized, and are based on colonial frameworks and Eurocentric conceptualizations of care, safety, and risk (Meshelemiah, 2025). Data is then collected to paint a statistical image of who needs care, fixing, saving, managing and civilizing.

Many people across professions and disciplines treat quantitative research and their statistical narratives as if they are distinct and superior to qualitative research and their discourses. In addition, numbers are not just used to describe the world and social relations, statistics are increasingly used as an integral part of the development of technology and artificial intelligence that is being used to shape social, cultural, and political systems, which are susceptible to racial bias (Danks & London, 2017; Dodson & Bartley, 2024; Gillespie 2014; Kelly et al., 2021; Kennedy-Shaffer, 2023; King, 2025; Mayer-Schönberger & Cukier, 2014; Monroe-White et al., 2024; O'Neil, 2016). In the field of social work, the problem is that statistics are used to protect the status quo by legitimizing and protecting white supremacy and racial inequality (Meshelemiah, 2025). For example, statistics play a major role in evidence-based practice. Social workers are taught to use evidence to inform their practice, and while this is important to consider, relying solely on statistics and evidence produced from randomized clinical trials marginalizes other forms of knowledge (Adams et al., 2009; Hipple & Jones, 2024). These studies are restrictive, taking place in controlled environments often isolated from the realities and structural/systemic problems in which social issues exist (Adams et al., 2009; Hipple & Jones, 2024). Another consideration is which interventions get researched and more importantly, which interventions are not researched? Who is constructed as the helper, expert, knower and who is constructed as the service user and what type of service user?

Our development occurs within a social, cultural, political, and historical context. Within that context, each person's experiences vary based on their social identities and the intersection of the layers of their positionality in relation to systems of oppression (Crenshaw, 1991). Social identities have socially constructed meanings that reflect biases towards marginalized groups, resulting in differential experiences of power, privilege, oppression, and injustice. Dominant narratives reflect the ways in which society has granted or denied privilege to people based on their positionality, e.g., white supremacy/whiteness, race, ethnicity, heteropatriarchy, class, sexuality, ability, gender, age, religion.

Knowledge production is framed by the attributes of the knowledge producer. As such, positionalities and ontologies must be acknowledged. Even among researchers who do not believe they hold any explicit biases, implicit biases are associated with differential judgments about and treatment of people based on their race, gender, ability, body type, physical appearance, and social, economic, and language status. The reality is that racial discrimination, racist views, personal bias – explicit and implicit – are related to the system of white supremacy. What happens when what is considered evidence is determined by how closely it fits within a white supremacist framework? Whose knowledge and narratives get left out from important decisions regarding service provision?

It is important to recognize that there are social work scholars in North America who have used statistics to promote social and health equity, such as Dr. Desmond Patton (Patton et al., 2022; Patton et al., 2023), Dr. Maria Rodriguez (Rodriguez et al., 2019;

Rodriguez & Storer, 2019), Dr. Karina Walters (Walters et al., 2011; Walters et al., 2012), and Dr. Keith Chan (Chan et al., 2021; Chan & Marsack-Topolewski, 2022). However, a closer look at the work beyond these scholars and at the extant social work EBP literature demonstrates that evidence-based approaches often exclude or marginalize knowledge produced by people directly affected by social issues (Adams et al., 2009; Bates, 2011; Devlieghere et al., 2022; Gray et al., 2009). They are also rarely intersectional in their construction, interpretation, and application and while there is a move towards co-creation involving people with lived experiences, they are often performative and tokenistic. The EBP research in the field of social work minimizes Indigenous ways of knowing, collective resistance, activism, and grassroots community organizing, methods which engage with structural and critical analyses that are not easily measured or quantifiable (Bates, 2011). Doing so undermines our personal and collective ability for social justice practice (Bates, 2011). In this way, evidence-based approaches support the notion that an individual is responsible for adapting to oppressive, capitalist, and white supremacist systems, dealing only with the symptoms of social issues. Ultimately, these approaches ignore questions related to why inequities exist, who benefits from the status quo, who is harmed and what keeps them in place, and the implications for service provision and supporting service users. There has been a recent shift, and emerging research has shown the capacity for the co-creation of program evaluation models rooted in the principles of community-based participatory research with marginalized communities (e.g., Andrews et al., 2019; Beatriz et al., 2018; Syeda et al., 2021). Building on this, a critical statistics framework would provide a methodology for conducting statistical research in social work.

Critical Statistics: A Quantitative Research Methodology for Social Work

In response to the critiques of statistical research, program evaluation, and their ties to eugenics and neoliberalism outlined above, I present what I have conceived as critical statistics: a framework that centres statistical counter-narratives, ones that represent the lived experiences and realities of communities in meaningful ways while working to redistribute power and resources. This framework has emerged from almost 20 years of experience learning and unlearning from and eventually working in the social sciences in postsecondary settings. What I have observed is that research and knowledge production are not problematic in and of themselves, but they become problematic when they dominate and are accepted as objective, fair, and neutral. This is in contrast their being rooted in the subjective positionalities of researchers, which are often themselves based in the dominant power structure and ways of knowing of our society. Academic spaces sustain and perpetuate colonialism through the imposition of ontology and epistemology based on white supremacist ideas that declared Europeans beliefs as material facts and scientific while simultaneously deeming Indigenous and transnational knowledge, pedagogies, and perspectives as myths or fallacies.

Researchers create statistics that reflect and construct social, cultural, economic and political perspectives, both explicitly and implicitly. While statistical narratives are used to generalize social complexity, people and communities are more nuanced and diverse, and the cultural weight and power of statistical techniques and their findings often come to represent a “truth” about these very individuals and communities that doesn’t reflect their

realities (Walter & Andersen, 2013). To address this issue in social work research, a critical statistics approach incorporates critical race theory (CRT), examining race and racism across dominant cultural modes of expression and focusing on understanding how Black people, Indigenous peoples, and other racialized people are affected by cultural perceptions of race and ways we can construct narratives that reflect our knowledge and lived experiences to counter racism.

According to Delgado and Stefancic (2017), our social world is fluid. We construct it with words, stories, and silence. CRT emphasizes the importance of examining and attempting to understand the socio-cultural forces that shape how we and others perceive, experience, and respond to racism. As such, literature, legal documents, and other cultural works, including statistical narratives, are treated as evidence of a culture's collective values and beliefs. In this approach, racism is centered as both a theoretical and historical experience that affects all members of a community regardless of their racial identification or group. Grounded in the tenets of CRT (Delgado & Stefancic, 2017), critical statistics involves five principles: 1) racism is an inherent part of statistical methods; 2) numbers are biased and uphold white supremacy; 3) racial categories and statistical outcomes are social constructions; 4) statistical narratives are a form of counter-storytelling; and 5) protecting the status quo is at the intersection of white supremacy and statistics.

Racism is an Inherent Part of Statistics

A central tenet of the origins of statistics is the eugenicist belief that the population can be normed, a concept which gained cultural and socio-political significance in the 19th century (Da Silva & Hubbard, 2024; Davis, 1995). A normal distribution is a socially constructed measure based on several statistical dimensions upon which humans and their bodies are placed along a bell curve. In this way, any deviations from what is considered the norm are redefined as non-normative and actively eliminated. These deviations are standardized and assume that all the probabilities which resulted in the placement along the bell curve were the same for all people ignoring colonial, imperial, and racist realities.

Statistics supported the conceptualization of categories and hierarchies of physical, psychological, social and cultural differences along racial lines (Davis, 1995; Solomos & Back, 1996). According to Cintron (1997), the discourse of measurement is focused on the development of precise orderings and the formation of a group of experts that apply constructed hierarchies to individual and social life to control both spheres. Through his work, Galton gave racist beliefs and attitudes the support of scientific evidence. Racist discourses were then normalized as natural differences and mainstream knowledge, providing the justification for the colonization of Asia, Africa, and Turtle Island (Clayton, 2020; Yakushko, 2019). We see this tradition carry on in the reproduction of racial hierarchies via racial stratification in statistical studies. Why does it make sense to use settler colonial conceptualizations of race? How can we respect and acknowledge differences within a racial group? How can we involve people in determining how a racial group is defined and for what purpose?

Numbers Are Biased and Uphold White Supremacy

Statistical methods have not changed over time and as such, continue to reproduce oppression through their contribution to neoliberal discourses. The fact is that even if a program and computer are analyzing data for researchers, all of the data is created by, and the analysis is driven by human knowledge and decision-making. From developing research questions and categories to gathering, analyzing, and interpreting data, these processes are shaped by theories and beliefs that are rooted in racial bias and white supremacist thinking. Critical statistics disrupts the sterile nature of the conception, collection, analysis, interpretation, and representation of statistical data by incorporating critical reflexivity throughout the process.

Statistical constructions of groups are grounded in racialization processes specific to the colonial context of a particular nation. Data is used to tell a story that reflects our experiences in and understanding of the world. According to white supremacist ontology, whiteness is the norm and there is a presumption of pejorative non-white racial/cultural difference and a norm of racialized deficits. We need to look beyond the numbers to understand how results have been generated and how white supremacy and racism have influenced the interpretation of the findings. Data is currently one of the most sought-after resources and statistics continue to have the power to positively or negatively affect decision-making, governance, and the development and implementation of social policies (Walter & Andersen, 2013). Researchers, government, and media often use statistical narratives to redefine aspects of the lives of Black, Indigenous, and other racialized peoples without their consent or participation. When numbers are seen as being objective and neutral, quantitative researchers and statisticians assert their findings as objective facts or the only legitimate understanding of the world and social relations. For those who are not actively anti-racist in generating statistical narratives, they may normalize and reproduce harmful stereotypes about racialized people while silencing or erasing the lived realities of racialized communities. Rather than creating another study portraying the lives of racialized bodies what about subverting the gaze and focusing on people in positions of power and structures of oppression? How can we measure white supremacy? How can we evaluate how anti-racist an institution or program is that goes beyond performative measurement tools? What statistics would be useful for racialized people and in what context? What statistical story do we want to tell using data created for us by us?

Racial Categories and Statistical Outcomes Are Social Constructions

Rarely are racial categories used in quantitative research carefully thought out and employed in ways that reflect the knowledge and experiences of racialized communities. CRT asks us to understand that race is a social construct, and as such, so are racial categories in statistical analyses (Delgado & Stefancic, 2017). We need not look no further than the link between the development of statistics and hierarchies meant to serve white supremacist agendas. When we acknowledge this history and the reality that racial categories have been used to label and control racialized communities through research and measurement to support a deficit-based narrative (Lett et al., 2022; Russell et al., 2022),

we interpret findings within an anti-racist framework to acknowledge the ways in which racism plays out and shapes our experiences.

On the other hand, race is often left out as a variable and ignored as having any significant impact on the lives of racialized communities because researchers do not want to deal with racism. This reproduces the belief that race and racism are not important. If race is to be included, there must be considerations about how it is measured and operationalized within the context of the study. For starters, race cannot be segregated from racism. It must be seen as a social construct that separates and oppresses racialized communities, historically and during contemporary times. It is not a biological, fixed identity with which to conflate ethnicity and culture (Delgado & Stefancic, 2017). When race is included in studies, it is not a causal factor in and of itself. It does not represent an issue with the people included in the analysis. Rather, it represents and reflects what is *happening* to them, specifically racist patterns of inequality and discrimination. It also intersects with other layers of our positionality and our interactions with systems of oppression. When race is included in quantitative datasets, researchers generally do not consider the power relations inherent to racism. Attempting to represent race without being led by or being in meaningful collaboration with those who are members of the community being studied and directly affected by racism makes space for the misunderstanding and misrepresentation of the power dynamics at play in our social relations. How can we conduct statistical research in ways that acknowledge its limitations but also illuminates factors driving racial disparities and who benefits from the status quo? How can we co-create evaluations with service users for use in examining social service institutions and service providers as an act of accountability? How do people want to identify themselves and how do they want this represented in the data?

Statistical Narratives Are a Form of Counter-Storytelling

Communication that is shared within a certain socio-political-cultural context constructs meanings related to people, objects, or events. Stuart Hall, Black Marxist cultural theorist, defines representation as “the production of meaning through language” (Hall, 2025a, p. 12). Hall (2025b) suggests that hegemonic power often constructs ideas and meanings about marginalized people that can perpetuate dominant–subordinate power relations. Stereotypes, for instance, are products of such constructed meanings and shape the public image and perception of racialized communities in the North American context, including social workers practicing in the field.

This is facilitated by the power to narrate, or to block other narratives from being created and emerging. Data and statistical narratives are open to various interpretations, often conflicting. Unfortunately, most of the time these interpretations are not led by those who are the subjects of a given study, they are not involved in checking to make sure that interpretations are representative of their lived experiences. A rigorous and thorough study involves people who are community members and participants to lead the process of developing research questions, defining the operationalization of concepts, measurements, collection of data, analysis, and contributing to the interpretation of findings. A research team will be led by people who are a part of the community and who are accountable to

the community they are responsible for. What information do we need to tell the story of who we are? Who are we telling the story to? Who will the data belong to and who will have power to make decisions about the data?

Data has been constructed to serve the personal, professional, or corporate interests of white social work scholars and researchers, often justifying unwarranted government intervention rather than ensuring that racialized people benefit in significant ways. When data is developed, gathered, interpreted, and used appropriately and in meaningful ways, it supports racialized people with a foundation of evidence of issues that could have otherwise been ignored. For example, this is apparent in the statistical narratives demonstrating the chronic overrepresentation of Black, Indigenous, and other racialized people in child welfare and carceral systems, as well as in pandemic-related racial disparities. When racialized people oversee data and information and it is integrated with our respective knowledges, cultures and traditions, we can take on leading roles in support of community well-being and in how personal and collective well-being is defined. When we work on creating critical statistical narratives, we can create discourse which shifts the power dynamics through agency over the ways we are represented in statistical research. Through subversion and resistance, we move towards liberation from oppressive systems that maintain the status quo and the ongoing marginalization of racialized people and communities.

Protecting the Status Quo is at the Intersection of White Supremacy and Statistics

White supremacy is an ideology representing a set of theories and institutions, which have been reinforced through legal and discursive mechanisms, including statistics. For example, racial and ethnic disparities in socioeconomic status (SES, household income, educational attainment, wealth accumulation) reproduce the intergenerational transmission of inequality (Bowles et al., 2005). SES is a reflection of social stratification, which is inextricably linked with racial stratification in the North American context. SES is the most powerful determinant of almost all forms of child morbidity, both biomedical and psychiatric (Boyce & Hertzman, 2017). Patterns of societal stratification place racialized families in social positions that subject them to institutionalized racism, interpersonal prejudice, and sociocultural marginalization thereby reproducing a vicious cycle of death by dehumanization and oppression (Henry et al., 2019).

Razack et al. (2010) write about the ontology of forgetting Canada's history of colonialism and racism. Violence and harm related to experiences of slavery, genocide, exploitation, segregation, incarceration, exclusion, and forced migration are erased in favour of a myth of happy multiculturalism. These deeply embedded biases maintain systems of privilege and result in structural inequalities that grant greater access, opportunity, and power to some at the expense of others. To disrupt white supremacy and racial injustices from being reproduced through statistical research, it is important that the process be led by racialized communities and for people involved to engage in critical reflexivity and inquiry throughout the process.

Critical Statistics as Resistance

Critical statistics is a form of epistemic justice (de Sousa Santos, 2014) that involves a democratization of the data collection and analysis process, as well as a decentralization of analysis and interpretation of findings. Critical statistics provides an avenue for self-determination and for racialized people to share our stories on our terms, and to advocate for and track social change.

The following are core values of the critical statistics framework derived from my decades long experience conducting and supporting quantitative studies for social work research:

1. **Nothing about us without us:** The construction of statistical narratives should be led and created by racialized people to quantify what we know and have been saying for a very long time. Our attitudes, expectations, experiences, and knowledge need to inform the development of these concepts and narratives in order for them to be meaningful to us, to be representative of our lived experiences, and to advance social change for Indigenous and transnational people from the Global South (Smith, 2021). Our voices need to be heard, and our questions need to be answered, particularly those in relation to racial capitalist violence.
2. **Know yourself:** Unequal power relations must be addressed. Researchers must engage in ongoing critically reflexive practice throughout the process (de Sousa Santos, 2014), from a project's inception to winding down and moving into the next phase of work. Personally, I actively engage in a critically conscious, reflexive practice on an ongoing basis, taking into consideration my social-cultural positionality and how this is reflected in my research practice and methodologies. Questions I ask myself on a regular basis: Why am I interested in doing this work? Who am I doing this for? Who am I accountable to? Am I actively listening to people who this work affects? How can I share power? Where are my blind spots and how do I plan on addressing them?
3. **Check yourself before you wreck yourself (Ice Cube, 1992):** Biases should be named, and we need to be ready for when we are pulled in white supremacist and oppressive directions (Jones & Okun, 2001). Mistakes will be made and that's okay, what's important is taking responsibility and being accountable for harm we might cause in the research process. What matters is repair and learning together with curiosity, courage, and humility. Critical statistical research is comfortable with unknowns and randomness. We will not measure what we don't know, and we will be transparent with our data collection and analytical methods. How can I be a trustworthy and ethical researcher? How can I humanize the data I am creating?
4. **Inclusive data collection and analysis processes:** It is vital to work in collaboration with communities to create and develop theories, concepts, measurement tools, and data collection processes. Once the data is collected, researchers must work alongside communities to analyze the data, interpret the

results, and present the findings. People are trained to conduct research as partners, building their capacity for leading their own research. We will commit to following established guidelines, such as The First Nations Principles of OCAP® (First Nations Information Governance Centre, 2023) and Engagement, Governance, Access, and Protection [EGAP] (Black Health Equity Working Group, 2021), on ownership and creative control over the data and any outputs developed from the research. We will also follow any guidelines deemed necessary by the co-researchers.

5. **Accountability to your people:** We need to be accountable to our communities when developing statistical narratives. They need to be created in service of our people and to advance social change (de Sousa Santos, 2014). What matters to us? What do we need? How are policies and practices affecting us on the ground? What type of change would we like to see and how would we measure it? Are we proud of the work we are doing? In addition to integrity, accountability includes training racialized people so that they have critical statistical literacy and are able to speak back to biased statistical narratives.
6. **Flipping the gaze:** Rather than focusing on racialized people, critical statistics strives to identify the ways in which colonialism and racism continue to manifest through inequities in white supremacist structures and systems and to imagine ways in which we can redistribute resources. This type of research recenters imperialist white supremacist capitalist patriarchy (hooks, 1984) as the root of all evil, rather than reproducing stereotypical, deficit-based narratives about racialized people. How can we measure drivers of racism and how can we measure changes in racist policies and practices over time? What is working for Indigenous, Black, and other racialized people? How can we quantify what we need?
7. **Integrating storytelling into statistical narratives:** Rather than focusing solely on numbers, we could integrate storytelling methods in our research that visualize the data in the lived experiences and realities of communities. This could come in arts-based forms such as data visualization, zines, podcasts, short films, and documentaries. This is important as a core principle of critical statistics is counter-storytelling and healing. An example is Indigenous stories as described by Archibald (2008) whereby stories guided by interrelatedness, respect, responsibility, and reciprocity are conduits for learning and healing. How can we use stories and data together to transform complex statistical narratives into engaging and relatable visualizations and graphics?

Conclusion

Research can never exist in an objective, value-free zone, void of intent. Claiming this to be true of statistical research can elide the white supremacist assumptions that underly the research process. Statistics are fundamentally political in nature. When statistical research is held up as the gold standard of social science methodologies because of its

supposed ability to eliminate bias, we fail to recognize the power relations that uphold this belief. As this paper shows, we must contend with the colonization of education and knowledge production both in the content of research and the methods we use to develop our work. As social workers and academics we reflect, maintain, and sustain dominant societal understandings of who knowers are and can be and the white supremacist ways of organizing the hierarchy of both knowledge and knowledge production itself.

Ultimately, critical statistics is interested in the liberation of Black, Indigenous, and other racialized peoples. In addition to counter-storytelling and increasing our participation and social inclusion, critical statistics, as a methodology, is invested in educating people to be able to produce, critique, and utilize statistical information. Through increased knowledge and the developing of statistical narratives grounded in our lived experiences, we can provide a counter narrative that is critical of the mainstream while imagining an alternative vision for the future.

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