

A Conceptual Looking Back(for)wards to Foster Justice in Psychometrics

Evan Bishop¹ , Martin Camiré 

School of Human Kinetics, University of Ottawa, Canada

ABSTRACT

Although psychometrics has contributed to many facets of research in psychology, it has a troubling history that must be grappled with. With close ties to eugenics and colonialism, there is a need to interrogate how the foundations of psychometrics shape systems of thought that continue to perpetuate epistemic injustice (i.e., unjust practices related to matters of knowledge). The purpose of this commentary paper is to enact a conceptual looking back(for)wards to foster justice in psychometrics. The paper is divided into five sections: (a) a brief historical overview of psychology, specifically examining its positivistic and Eurocentric values; (b) an interrogation into the roots of psychometrics and its close ties to eugenics; (c) a discussion of coloniality and epistemic injustice in psychometrics; (d) an exploration of epistemic witnessing to instigate new decolonial directions for psychometrics; and (e) some concluding thoughts on responsibility and response-ability.

Keywords: psychometrics; coloniality; epistemic injustice; epistemic witnessing; Eurocentric.

RESUMO – Uma Reflexão Conceitual Retro(pro)spectiva para Promoção da Justiça na Psicometria

Apesar do reconhecido legado da avaliação psicológica na pesquisa em psicologia, a psicometria tem uma história controversa que precisa ser enfrentada. Com vínculos estreitos com a eugenia e o colonialismo, é necessário interrogar como os fundamentos da psicometria moldaram um sistema que continua a perpetuar a injustiça epistêmica (ou seja, práticas injustas relacionadas ao estudo filosófico do conhecimento). O objetivo deste artigo de comentário é realizar uma reflexão conceitual retro(pro)spectiva para promoção da justiça nas pesquisas em psicometria. O artigo está dividido em cinco seções: (a) uma breve visão histórica da psicologia, com um exame específico de seus valores positivistas e eurocêntricos; (b) uma investigação sobre as raízes da psicometria e seus estreitos vínculos com a eugenia; (c) uma discussão sobre a colonialidade e a injustiça epistêmica na psicometria; (d) uma exploração do testemunho epistêmico como forma de instigar novas direções decoloniais para a psicometria; e (e) algumas considerações finais sobre responsabilidade e capacidade de resposta.

Palavras-chave: psicometria; colonialidade; injustiça epistêmica; testemunho epistêmico; eurocentrismo.

RESUMEN – Una Reflexión Conceptual Retro(pro)spectiva para Fomentar la Justicia en la Psicometría

Aunque se reconozca el legado de la evaluación psicológica en la investigación en psicología, la psicometría tiene una historia controvertida que debe ser abordada. Con vínculos estrechos con la eugenesia y el colonialismo, es necesario interrogar cómo los fundamentos de la psicometría moldaron un sistema que continúa perpetuando la injusticia epistémica (es decir, prácticas injustas relacionadas con el estudio filosófico del conocimiento). El propósito de este artículo de comentario es realizar una reflexión conceptual retro(pro)spectiva para promover la justicia en la evaluación psicológica. El artículo está dividido en cinco secciones: (a) breve visión histórica de la psicología, específicamente los valores positivistas y eurocéntricos; (b) investigación sobre las raíces de la psicometría y los vínculos estrechos con la eugenesia; (c) discusión sobre la colonialidad y la injusticia epistémica en la psicometría; (d) exploración del testimonio epistémico como forma de investigar nuevas direcciones decoloniales para la investigación en psicometría; y (e) consideraciones finales sobre responsabilidad y capacidad de respuesta.

Palabras clave: psicometría; colonialidad; injusticia epistémica; testimonio epistémico; eurocentrismo.

Despite its helpful applications in research and applied settings, psychometrics (i.e., the science of psychological assessment) has a troubling history that must be grappled with (Rust & Golombok, 2009). With close ties to eugenics and colonialism, there is a need to examine the foundations of psychometrics and how they continue to exert haunting influences today (Knight, 2017). Positivism, the paradigm of psychometrics, holds particular values (e.g., individualism, intellectualism) shaping

the views of psychological researchers. Contrary to the beliefs of many, psychometrics is not a neutral objective endeavour (Brinkmann, 2019). The colonial values of positivism and psychometrics have for years oppressed through epistemic injustices that mostly remain unaddressed in the literature (Dixon-Román, 2020). *Epistemic injustice* refers to unjust practices related to epistemology (i.e., branch of philosophy concerned with knowledge; Fricker, 2007). In psychological research, the prevalent

¹ Endereço para correspondência: E-mail: ebish031@uottawa.ca

positivistic lens has dictated with harsh outcomes whose/ what knowledge matters, who gets to engage with knowledge, and who gets a voice in circles of knowledge production (Alcoff, 2017). Going back centuries, colonialism has resulted in innumerable atrocities, violences, and oppressive occupations. The enduring vestige of colonialism, *coloniality*, extends the act of colonisation by continuing to oppress cultures and entire modes of thinking/being through intricate power-laden systems (Readsura Decolonial Editorial Collective [RDEC], 2022). *Epistemic witnessing* (Pillow, 2019a) is a conceptual apparatus of engaged awareness researchers can deploy to acknowledge and remedy epistemic injustices by inquiring from alternative paradigms that offer decolonialising ways of knowing and becoming. Through epistemic witnessing, researchers can illuminate and amplify voices that have been historically endarkened and suppressed by coloniality. Doing so may help instigate exciting future horizons for psychometrics by creating alternative inquiry approaches that extend beyond conventional “measurement” and produce other (more just) forms of knowledge in psychology.

Given the haunting legacy of psychometrics, as well as the future potential for change, the purpose of this commentary paper is to enact a conceptual looking back(for)wards to foster justice in psychometrics. The paper is divided in five sections. First, a brief historical overview of psychology is offered to trace the positivistic and Eurocentric values that drove its ascension as a social science. Following this overview, the genesis of psychometrics is examined by profiling some of its eugenics-inclined founders. The paper then focuses on coloniality by exploring how the sociopolitical manoeuvrings of epistemic injustices are exercised through psychometrics. To address these manoeuvrings, epistemic witnessing is deployed as a conceptual tool for imagining new decolonial directions for what psychometrics can become. The paper ends with concluding thoughts on responsibility and response-ability.

Psychology: Not a Value-Free and Context-Devoid Science

In late 19th century United States and Europe, psychology was created as the study of human cognition in efforts to identify universal laws/truths underlying and explaining human behaviour (Brinkmann, 2019). Arnett (2016) argued that many of the founders of psychology appeared to have “physics envy”, wanting to be recognised as equals (i.e., in terms of the scientific rigour of their discipline) by their peers in the natural sciences. To satisfy this envy, they adopted the scientific method in manners that did not do justice to their main protagonist (i.e., the human) by largely: (a) restricting who was considered fully human (i.e., the rational educated male adult) and (b) ignoring the crucial phenomenon (i.e., culture) predominantly responsible

for explaining human behaviour (Malone et al., 2020). As Arnett (2008) explained, during its beginnings, psychology was “the pursuit of fundamental processes and principles, modelled after the natural sciences and based on the assumption that cultural context is a variable best ignored or stripped away through the application of the scientific method” (p. 613). Thus, from its very creation, psychology was predicated on the values of its founders who wished to “fit in” by being recognised as legitimate “scientists”. These values spurred an approach to psychological research splitting nature from culture, thereby upholding the cartesian separation and pushing forth Man’s quest for discovering foundational knowledge (St. Pierre, 2023).

Over the decades that followed, psychology’s dogmatic reliance on positivism and the scientific method erected pillars of (mostly) unchallenged thought. It was unashamedly taken for granted that the objectivity afforded by applying “rigorous” empirical methods enabled the study of human cognition/behaviour in manners that liberated these phenomena from the confounding influences of culture (Brinkmann, 2019). It should be noted that key advances in understandings of human cognition/behaviour did occur over the 20th century, yet these advances were produced mainly from a narrow angle of vision (i.e., positivism) and enacted by a mostly heterogeneous cast of researchers (i.e., able-bodied white men; RDEC, 2022) who revered objectivity and rigour (see Abo-Zena et al, 2022) to such extents that they promoted a psychological science replete with privileges for some and laden with oppressions for others (Reddy & Amer, 2022).

To exemplify this narrowness and heterogeneity, one only needs to look at those recognised as some of the founding fathers of modern experimental psychology (e.g., William James, Ivan Pavlov, Wilhelm Wundt, Sigmund Freud, Jean Piaget). Moreover, to this day, the conduct of empirical studies in psychology remains largely an American affair, especially if we consider the sheer number of studies conducted at American universities and published in US-based journals. Specifically, Arnett (2008) analysed top-tier APA journals (2003–2007) and showed how 73% of the first authors of papers were based at American universities and 68% of the samples were composed of (mostly white) American participants. Four other English-speaking countries (i.e., United Kingdom, Canada, Australia, New Zealand) accounted for 14% of first authors while Europe accounted for 11%, meaning that the rest of the planet represented only 2% of first authors in these APA journals. If we consider their current percentages of the world population (i.e., USA 4.23%, Europe 9.26%, United Kingdom 0.84%, Canada, 0.50%, Australia 0.33%, New Zealand 0.06%=15.24%), we can appreciate the disproportionate influence of these countries/regions on psychological research on the world stage.

The resultant of this disproportionality is invariably a largely incomplete picture of human cognition/behaviour. Moving forward, the theories and models (i.e., most often positioned as “universal”) developed by researchers in the 15% can no longer be attributed to adequately represent the whole of humanity. Although historically (i.e., in psychology and in many other disciplines) the West gets researched and the rest gets erased, moving forward, psychology can no longer continue to exist as a provincial discipline mostly confined to the USA, Europe, and a few other English-speaking countries. Humans in Western countries tend to live life in manners that remain quite distinguishable when compared to the eclectic diversity of modes of living permeating across the rest of the human population. For instance, as Arnett (2008) discussed, many attributes of adolescent development and the “difficult teenage years” (e.g., decreased closeness with parents, increased conflicts, behavioural disruptions) identified in Western cultures have rarely been observed in studies on adolescent development conducted in countries as such Brazil, India, and Indonesia. Such insights point to the pernicious dangers of extrapolating the tenets of psychological theories and models outside of the sociocultural contexts in which they were developed. Put simply, stripping away the nested doings of culture in favour of universalism severely hinders our understanding of psychological phenomena. Moving forward, we cannot continue to research the 15%, ignore the 85%, and herald the Westernised brand of psychology as a humanity-encompassing undertaking. Inference, as a preferred tool to extrapolate psychological findings from one context to another (i.e., from the West to the rest), must be severely questioned or perhaps even abandoned outright. We can no longer assume that what the 15% think/do universally accounts for how the 85% go through existence. Key next steps for psychology must include cutting across geographical and paradigmatic boundaries if it is to continue to be ethically defensible as a science of human cognition/behaviour. For psychometrics to play its rightful role in expanding the horizons of psychology, researchers must carefully consider the positivism and colonialism underlying the development and validation of psychological assessment tools, given that these tools may not always be culturally relevant. Perhaps even more importantly, researchers must realise that the very notion of scientific empirical “measurement” remains a narrow Westernised ideal, the results of which (e.g., statistically significant differences) may be seen to have divergent levels of worth for different human beings depending on what they consider to be insightful knowledge or not.

The Genesis of Psychometrics

Although the first psychometric tests measured intelligence (Knight, 2017), present day psychological assessments are wide-ranging, used in most subdisciplines

of psychology (Doaok-Oyry & Zeinoun, 2017). To diligently chart possible future directions for psychological assessment, the genesis of psychometrics must first be examined by profiling some of its eugenics-inclined founders (Knight, 2017; Rust & Golombok, 2009; Wijzen et al., 2021).

In most psychological academic circles, psychometrics is attributed as owing its origins in the 1880s to the work of Francis Galton on anthropometrics (i.e., study of differences between individuals from various groups). The prevalent lens that guided many scientific disciplines in the late 19th century was that of evolutionary theory which, as interpreted by numerous scholars during this time period, led to inclinations to and affinities with eugenics thinking. The eugenics movement spanned across numerous disciplines, culminating in the assumption that “white, English, middle-class men of letters were at the peak of the human evolutionary tree” (Rust & Golombok, 2009, p. 5). In psychometrics more specifically, eugenics thinking provided a key rationale for the creation of concepts, and their associated measurement tools, that inevitably, due to the ideologies of their founders, benefited some while marginalising others (Wijzen et al., 2021). For instance, through his eugenics-informed research, Galton developed the standard deviation, the regression, and correlation coefficients designed to support theories of individual difference (Rust & Golombok, 2009). Importantly, the standard deviation was deliberately created for purposes of differentiation (i.e., to show racial/ethnic superiority), with marginalising effects for those who did not fit in the racial colonial ideals of the times (Dixon-Román, 2020).

Galton’s work was continued and expanded upon by Karl Pearson who created the Pearson correlation coefficient, from which other concepts/tools (e.g., factor analysis, cluster analysis) were developed (Dixon-Román, 2020). Through the purported rigour and objectivity of statistical analyses, Pearson’s work aimed to provide convincing evidence for the existence of racial/ethnic hierarchies, deploying concepts/tools he himself devised to support his eugenics-informed theories (Zuberi & Bonilla-Silva, 2008). During his career, Pearson actively leveraged his academic credibility to influence the enactment of social policies restricting members of certain racial/ethnic groups from reproducing, deeming them unfit to take part in the propagation of the human species (Pilgrim, 2008). Despite its haunting origins, scholars today continue to engage with Pearson’s work, most often uncritically, with the Pearson correlation coefficient persisting as one of the most commonly used tools for quantitative assessment in psychology.

Alongside Galton and Pearson, Charles Spearman is another key figure in the genesis of psychometrics, known for developing the *g factor* theory of intelligence. This theory claims the existence of a clear hereditary component to cognitive ability deeply entrenched in

notions of white superiority (Pilgrim, 2008). Spearman upheld his g factor theory by creating psychometric measures to test it empirically, yet the basis of these measures did not account for sociocultural, socioeconomic, or racial/ethnic diversity (Gould, 1996). Spearman's eugenics-informed work saw him develop an alternate version of the Pearson correlation, as well as the first version of a factor analysis, which continue to be widely used in psychometrics (Rust & Golombok, 2009).

Taking a closer look at some of the papers authored by Galton, Pearson, and Spearman illustrates the disreputable origins of psychometrics. In 1873, Galton authored a paper titled "The Comparative Worth of Different Races" in which he argued for the superiority of the white race, claiming to use scientific logic to support his beliefs. In 1901, Pearson authored a paper titled "National Life from the Standpoint of Science" in which he argued for eugenics research to support policy change, especially in regards to the primacy of maintaining white racial purity. In 1904, Spearman authored a paper titled "General Intelligence Objectively Determined and Measured" in which he argued for the existence of a single heritable trait of intelligence, which was subsequently used to justify many racist and eugenics-informed arguments. The titles of these papers, as well as their eugenic lines of argumentation, offer palpable evidence of the haunting logics upon which psychometrics was built and how such logics are maintained, to this day, through intricate power-laden mechanisms of coloniality. As psychometric developments often build upon previous ones, it must be acknowledged how eugenics, racism, and numerous other nefarious movements remain entangled and sedimented in contemporary psychometric practices. Although some scholars are able to perform mental gymnastics and can look past the eugenic legacies detailed above, moving forward, it should be seen as irresponsible, perhaps even reprehensible, to myopically cling to ideals of rigour and objectivity as forming the basis of psychometrics and the development of its analytical tools. By genuinely coming to terms with the discriminatory origins of psychometrics, we can delineate diverse paths forward that account for the epistemic injustices endured by many through the suppressions enacted by coloniality.

Coloniality and Epistemic Injustice

Dixon-Román (2016) explained how there remains a haunting logic of colonialism that may not be evident at first but is intricately woven into the fabric of contemporary psychometrics. This logic contributes to the propagation of systemically oppressive performances of epistemic injustice often exacerbated by how researchers are trained to conduct psychological assessments and how they engage in practices of knowledge production (Byсков, 2020; Fricker, 2007). Although coloniality and epistemic injustice were briefly defined

in the introduction, you may still wonder: what exactly are the doings of coloniality and epistemic injustice? In what follows, we peer back(for)wards to ponder what lines of flight might actualise as we trace the entanglements of coloniality and epistemic injustice in psychometrics.

Coloniality differs from *colonialism* in subtle yet important manners. While colonialism refers to the political, economic, and physical project of land occupation and resource extraction, coloniality denotes the patterns of cultural and knowledge inequity that materialise into the colonisation of minds and lives (RDEC, 2022). Coloniality is thus concerned with how power dynamically flows because of colonialism and comes to define individual/group experiences of intersubjectivity and knowledge production over time (Maldonado-Torres, 2007). Of note, the effects of coloniality are not restricted to the exact time periods when lands are physically occupied but remain omnipresent, long after colonisation processes have occurred, through the ongoing suppression of various knowledge practices and ways of becoming (Reddy & Amer, 2022). This suppression occurs globally (i.e., for those living *differently* outside but also inside the Western world), through the forces of Eurocentric coloniality which continue to spread their aftershocks following centuries of colonial "earthquakes" endured by peoples the world over (RDEC, 2022). What some characterise as the Enlightenment in the 17th and 18th centuries was actually experienced as prolonged periods of intellectual darkness for those whose knowledges (e.g., languages, philosophies) lied outside European idea(l)s. This darkness perdures to this day for the many whose knowledge practices continue to be situated as inferior or primitive (Dixon-Román, 2020). Such are the effects of coloniality, often witnessable through the interpenetrative workings/forces of capitalism, neoliberalism, individualism, and meritocracy. Psychometrics is not exempt from these workings/forces. In many instances, it reinforces them. Moving forward, psychometrics must acknowledge its role in enabling epistemic injustices. We must ask: how does coloniality continue to permeate in the scales that are constructed, the data that are collected, and the conclusions that are drawn when empirically measuring human cognition and behaviour?

Epistemic injustice refers to how individuals/groups can be oppressed and discriminated against due to their positions (or lack thereof) as knowers when accounting for race/ethnicity, gender, and sexuality, amongst other markers (Byсков, 2020). Fricker (2007) delineated several types of epistemic injustices, with *hermeneutical epistemic injustice* referring to the creation of knowledges that do not portray the experiences of marginalised and oppressed groups. The result is that "the powerful have an unfair advantage in structuring collective social understandings" (p. 147). As shown

by Dixon-Román (2016), the measurement of psychological phenomena through quantification comes with important onto-epistemological limitations given that positivism is simply one paradigm (i.e., of significant Eurocentric influence) amongst countless others. The hauntings of colonialism in psychometrics (e.g., questionnaires laden with cultural assumptions) contribute to the propagation of epistemic injustices by silencing the legitimacy of ways of knowing/feeling/becoming for the many groups who have directly experienced colonisation (i.e., and continue to experience colonality). These hauntings also enact epistemic injustices by privileging modes of quantification and analysis inherently designed to fragment lived experience and neglect to account for the subtleties, intricacies, and nuances of time/place. Lambert et al. (2018) expressed deep concern for the lack of cultural and ecological validity (i.e. localised contextuality) of many psychometric tools developed by researchers in the 15% which are then used to conduct research on subjects in the 85%. Specifically, two literature reviews (Lambert et al., 2016; 2018) showed how most of the psychological research conducted in Anglophone Caribbean nations since the 1990s has employed psychometric tools originally developed and validated by researchers of European heritage using samples composed of mostly white middle-class respondents from North America and Europe. Lambert et al. (2018) seriously questioned why so few scholars have given thought to the (ir)relevance of *McDonaldising* psychological assessment tools across cultures, especially in light of psychometrics' glaring eugenics history. Nonetheless, some examples do exist of psychometric tools that have been adapted with cultural contextuality in mind. For instance, Yang et al. (2023) conducted a systemic review examining the psychometric properties of culturally adapted depression scales for use with Indigenous populations. The authors highlighted how the modifications made to the measures appeared to help increase cultural relevance but in the process, these modifications decreased specificity and led to negative predictive values. Elsewhere, Thompson (2016) validated a measure of ethnic identity intended for use with Afro-Caribbean American students, showing how ethnic identity was experienced differently when compared to previous studies conducted with Black/African American students, speaking directly to the need to develop culturally specific instruments. Despite the potential benefits that can be derived from culturally adapting psychometric tools, a crucial talking point remains how the very epistemological project of measurement espoused through psychometrics remains deeply incongruous with many/most Indigenous and Afro-Caribbean ways of knowing/being. In this sense, adapting a psychometric scale for cultural relevance may be seen as beneficial in some epistemological circles yet persists as a futile endeavour in

others. Thus, instead of automatically integrating quantitative measurement in their studies, psychological researchers should first consider who they are working with and then choose inquiry approaches that resonate with their participants' relationship with epistemology.

Epistemic Witnessing

For Pillow (2019a), epistemic witnessing is most often experienced as an unsettling and uncomfortable undertaking because it is intended to directly intervene and, in the process, transcend mere observation. For genuine witnessing to occur, researchers must be deliberate in their efforts to peer deeply into the racist and colonial forces lurking just beyond our immediate lines of sight, forces that most often remain invisible. Epistemic witnessing, as positioned by Pillow (2019a, 2023), thus encompasses an intent to illuminate the discriminations, oppressions, and injustices that lurk yet evade analytical capture. Researchers engaging in epistemic witnessing must commit to enacting decolonial ethics that push past the conventional reflexive practices (e.g., journaling, positionality statements) that many researchers rely on. Epistemic witnessing, when deployed through genuine ethics of care, can prompt psychometrics researchers to push the limits of what psychological assessment can become by acknowledging the colonality and epistemic injustices entangled in the measurement of human cognition and behaviour on a global scale, in (vain) efforts to create universal laws/truths.

Pillow (2019a) offered five guiding principles to help researchers engage in epistemic witnessing in decolonial and caring manners. First, it is important to acknowledge how epistemic injustices influence the very fabric of how we know what we know and who we regard as the rightful possessors of legitimate knowledge. Second, epistemic injustices must be regarded as constraining forces often resulting in various forms of violence. Third, researchers should constantly remind themselves of their collective responsibility to dismantle and rethink colonial onto-epistemologies. Fourth, researchers raising awareness about theoretical oppressions must be adequately supported in all facets of their work. Fifth, engagement, delearning, and relearning are key steps to undertake to combat theoretical oppressions. When researchers work with these guiding principles, they can become better equipped to interrogate the values and assumptions of psychology deriving directly from its (i.e., eugenic, racist) past. The ability to engage in epistemic witnessing is of utmost importance in psychometrics when we consider the colonial hauntings (Dixon-Roman, 2016) and Eurocentric values (e.g., rigour, objectivity) underpinning the dominant ways of doing things in psychological research (Abo-Zena et al., 2022). To be clear, when we say, "the ability to engage in epistemic witnessing", we do not presuppose that there is one universal way to do so that all researchers must

learn and abide by. Epistemic witnessing is not and can never be an approach enshrined in a textbook that is operationalised and deployed in a singular manner. Rather, acts of epistemic witnessing must be intimately sensitive to local historical events, deployed anew every time. Thus, the notion of epistemic witnessing is intended to get researchers to peer into the doings of racist/colonial forces, but to do so in manners that always remain nimble and flexible. These same principles are meant to inspire, guide, and shape the doings of researchers working with the many concepts related to and complementing epistemic witnessing. For example, for researchers wishing to engage in *faithful witnessing*, they should seek to become intimately sensitive to the theorising approaches of oppressed peoples by being nimble in terms of their ability to situate psychology, cognition, and behaviours from different epistemological lenses. Similarly, for researchers working with the concept of *theoretical debt*, they should seek to find locally and historically relevant ways to flexibly illuminate the (too) numerous onto-epistemologies that remain endarkened, such as those of many Indigenous and Afro-Caribbean populations. By remaining nimble and flexible, epistemic witnessing and associated concepts can help researchers engage in knowledge production and knowledge dissemination in plural manners that are ethically relevant to those being researched.

Researchers who (un)intentionally decide not to engage in epistemic witnessing in their work are deemed to perpetuate what Pillow (2016) has termed *whiteout theorising* and what Medina (2013) referred to as “epistemic arrogance, laziness, and closed-mindedness” (p. 42). Whiteout theorising is evident in many aspects of psychometrics if we consider that most researchers doing psychological assessments: (a) do not read decolonial literatures, (b) rely on American/European-built scales, and (c) are unaware and/or fail to question the use of analytical tools (e.g., standard deviation, regression) with reprehensible colonial and eugenics-informed origins (Dixon-Roman, 2020). The privileging of American/European literatures/scales/tools fuels epistemic myopia whereby over time, positivistic ways of engaging in psychometrics become crystalised and sedimented (e.g., in textbooks, in journals, in conferences) to such extents that they become the *only* way to do psychological assessments, endarkening and even erasing other onto-epistemologies and their ways of knowing/becoming. In this sense, it is argued that in its current formulations and implementations, psychometrics, as an overarching logics system guiding psychological assessment practices, contributes to sustaining what Pillow (2019b, 2019c) has termed *ontological whiteouts*. Although psychometrics has benefited in the past few decades from a vast expansion of statistical analyses (i.e., difference by degree), these remain within the capture of positivism, narrow-mindedly foreclosing alternate opportunities to invigorate the

field with ontological creativity (i.e., difference by kind). Moving forward, epistemic witnessing must become a worthwhile endeavour for psychometrics researchers to undertake. Doing so can help the field of psychological assessment make meaningful strides towards decolonial ways of thinking/doing that can create exciting overtures for what “measuring” and “assessing” can become. Examples of how researchers can engage in epistemic witnessing are discussed next.

Epistemic Witnessing for Psychometrics Researchers

Epistemic witnessing is a conceptual tool but also a sincere call to action. To epistemically witness requires an authentic recognition of the fundamental roles played by eugenics, coloniality, positivism, and Eurocentrism (i.e., and all their entanglements) in the genesis and continued workings of psychometrics in psychological research. For psychometrics researchers willing to respond to the call to action, epistemic witnessing “offers possibilities for shifting foci, responsibilities, interpretations, power, and knowledge” (Pillow, 2019a, p. 130). These possibilities for shifting require psychometrics researchers to detach their thinking from the stickiness of coloniality and move their measuring/assessing in decolonial directions (RDEC, 2022). Adams et al. (2020) pointed to epistemic injustices occurring in psychological research in West African countries where Eurocentric selfways continue to be praised at the expense of local selfways which remain pathologised. Consistent with the guiding principles of epistemic witnessing, Adams et al. (2020) expressed the need for decolonial responses when epistemic injustices do occur (e.g., naïve beliefs in superior/inferior selfways) to allow the research to be conducted ethically in manners that respond with sincerity to the needs of participants.

Psychometrics researchers can also epistemically witness by engaging in *reparative decolonial reading* (Pillow, 2019a). A simple logical starting point for epistemic witnessing through reading is to ask: “Who/what am I not reading and why?”. There are numerous overtures reparative decolonial reading affords psychometrics researchers. Reading widely in literatures privileging alternative onto-epistemologies (e.g., critical feminism, posthumanisms, Indigenous ontologies, new materialisms) can help researchers detect the ontological whiteouts imbued in psychometrics, with such acts of detection playing meaningful roles in shifting power away from dominant colonial voices. To this day, in contemporary psychological research, such colonial voices continue to dictate (an almost blind) adherence to validity, reliability, and generalisability (i.e., holy trinity of positivism), which psychometrics researchers must invariably adhere to. However, as Rosiek and Adkins-Cartee (2023) discussed, becoming familiar with other philosophies of science can help researchers see their

work in a much different light, whereby “accountability involves understanding things in the context in which they occur. Ethical research is not achieved by transcending context, but by being responsive to it” (p. 163). In this sense, reparative decolonial reading fosters decolonial attitudes, helping researchers gain a growing sense of responsibility to push back against the sticky coloniality suppressing the emancipatory potential of their work. Reparative decolonial reading practices can thus prepare psychometrics researchers to enact praxes of justice by engaging in iterative cycles of (a) increasing their awareness of injustices and then (b) acting to counter these injustices. By reading beyond the confines of positivism, psychometrics researchers can discover concepts that open entire worlds of possibilities for what psychological assessment can become, from a justice perspective. For example, Barad (2007) gave us the concept of ethico-onto-epistemology, making a highly compelling case for why we should inquire in manners that situate justice, knowing, and becoming as always already entangled. Engaging in epistemic witnessing provides conceptual tools for psychometrics researchers to gauge the extent to which it may be possible for psychological assessments to be conducted in manners that intricately resonate with the emancipatory ideals afforded by ethico-onto-epistemology. From a Baradian perspective, justice, and its associated efforts toward decoloniality, can never be “add-ons” to a research project. Justice must always be regarded as relationally woven in researcher-participant intra-actions. Through epistemic witnessing, conducting psychometrics research in the coming decades of the 21st century can become an emancipatory endeavour of interrogating who has been forgotten, unseen, erased, hidden, and portrayed as “less than” through psychological assessment practices (Pillow, 2019a). The hope is that the question: “Whose knowledge counts?” may perhaps be answered with a greater variety of responses as more epistemologies become legitimated as worthy lenses from which we can inquire on human cognition and behaviour.

Concluding Thoughts

The purpose of this commentary paper consisted of enacting a conceptual looking back(for)wards to foster justice in psychometrics. Epistemic witnessing (Pillow, 2019a), as a conceptual tool and call to action, was presented and situated as an opportunity for researchers to come to grips with psychometrics’ eugenics/colonialist past, opening future passageways toward decolonial approaches to psychological assessment. That being said, for researchers willing to engage in epistemic witnessing, justice in psychometrics must become more than an opportunity. It must be a responsibility, or in the words of Barad (2010), a response-ability. The play on words may

appear simplistic but it carries deep ontological ramifications, moving the act of duty from unidirectional (i.e., I am responsible for you) to relational (i.e., we are responsible for each other). Response-ability is thus a mutual responsiveness (i.e., enabling the capacity to respond) compelling a profound rethinking of the very notions of “self” and “other”. Therefore, as researchers, when we engage in psychological assessments, our ability to respond to epistemic injustices must manifest itself as a profound co-articulation attending to the intricacies of the irreducible relations of obligation that bind us to participants who must also be provided with capacities to respond. There is no neutral, objective, stand-aside position from which we can assess/measure. All inquiries, irrespective of their methodologies, occur in the middle, with researchers and participants always already agentially separated (Barad, 2007). Inquiry (i.e., psychological assessment) must thus be positioned as a transindividual performance.

In sum, moving forward, response-ability in psychometrics must materialise as a decisive dismantling of epistemic injustice and coloniality through genuine deployments of epistemic witnessing during the conceptualisation and implementation of psychological assessments. Practically speaking, it means throwing into radical doubt the domination of approaches to psychology coming from the 15% and imposed on the 85%. It also means challenging psychology’s heavy reliance on positivism’s holy trinity and obsession with rigour/objectivity, instead situating inquiries as always entangled in historical, cultural, political, and contextual forces (Rosiek & Adkins-Cartee, 2023). The centuries-long spotlight on Eurocentrism, which gave rise to psychology, must give way to onto-epistemologies that have been hiding in the shadows of Man’s epistemological project for far too long. Now is the time for psychometrics to shed its double ignorance, acknowledge its colonial past, and do the reparative work necessary for psychology to pay its theoretical debt and become a social science offering promising decolonial futurities.

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Sobre os autores

Evan Bishop is a third-year Ph.D. candidate at the University of Ottawa in the School of Human Kinetics. His research interests include cultural sport psychology and postqualitative inquiry.

Dr. Martin Camiré Ph.D. is a full professor at the University of Ottawa in the School of Human Kinetics. His research interests include sport psychology, youth development, and postqualitative inquiry.

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