



Epistemic exclusion and invisibility in sex research: Revisiting the WEIRD dichotomy

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Abstract

In our article titled, “How WEIRD and androcentric is sex research? Global inequities in study populations,” we showed that the published sex research is dominated by male and WEIRD (Western, Educated, Industrialized, Rich, and Democratic) samples (Klein, Savaş, & Conley, 2022). Sakaluk and Daniel (2022) responded to our article, critiquing the dichotomous coding of WEIRD and non-WEIRD contexts. After acknowledging how the androcentric bias finding was disregarded in the whole discussion, we used this critique as an opportunity to expand our argument about the epistemic exclusion and invisibility of researchers and samples from the majority of the world in sex research. We think having this debate between two groups of researchers located at Western universities contradicts our intention. Thus, we invited researchers from Global South countries to join the debate via a short survey, and expanded our recommendations from the original paper with the help of these voices.

Keywords: epistemic exclusion, WEIRD, sample diversity, Global South

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Epistemic exclusion and invisibility in sex research: Revisiting the WEIRD dichotomy

In our paper titled, “How WEIRD and androcentric is sex research? Global inequities in study populations,” we demonstrated that the field of sex research is dominated by male and WEIRD (Western, Educated, Industrialized, Rich, and Democratic) samples, while gender diverse or non-WEIRD samples have been underrepresented (Klein, et al., 2022). Before we respond to the points that Sakaluk and Daniel (2022) raised in their commentary, we first want to acknowledge their disregard of the androcentric bias finding. An equally important and actionable finding of our study was that women and gender diverse samples were left out of sexuality studies across the world. While we argue for epistemic inclusion of researchers and participants who are not WEIRD, we simultaneously continue to argue for gender diversity in sex research.

First and foremost, we wrote the paper with the intent to start a conversation about representation and inclusion in sexuality research since our results pointed to an “epistemic exclusion and invisibility” (Settles et al., 2020) of the majority world while the field constructed generalized knowledge about human sexuality from a sliver of the world’s populations. We appreciate Sakaluk and Daniel’s (2022) additional analyses of our data since we genuinely

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welcome the refinements of our argument. In this vein, this paper invites additional perspectives from under-represented places in the field to the discussion about epistemic exclusion of the world’s majority from sex research. Epistemic exclusion involves practices that police boundaries of science, systematically diminishing, dismissing and discounting diversity of perspectives and multiplicity of methods in favor of dominant perspectives and methods, through resource allocation and consensus generation. This favoring happens not because one perspective or method has more merits over another, but because of the unexamined biases of the scientific community, especially of those who are in positions of power such as editorial boards, reviewers, and funders of research (Hekler, et al., 2022).

In their commentary, Sakaluk and Daniel (2022) used indices of Education, Industrialization, Richness, and Democracy, to show that Western and non-Western countries do not neatly align with the WEIRD vs. non-WEIRD dichotomy. We agree with their critique that the categorization of countries as WEIRD and non-WEIRD is reductionist, as with other binary system. Other examples of this that are abound in the literature are: Global North vs. Global South, First vs. Third World, middle- vs. low-income countries, developed vs. developing/underdeveloped countries, independent vs. interdependent or individualistic vs. collectivist cultures, and West vs. East. We agree that any of these binary categorizations of research samples are problematic and erase complexities. However, we need ways of talking about epistemic exclusions, (in)visibility, and (under/over)representation. To that end, we used the WEIRD vs. non-WEIRD binary, in pursuit of drawing attention to persistent challenges of conducting research in/from/about certain places in the world.

It is our understanding that when the WEIRD acronym was coined by Henrich and colleagues (2010), the letters were not meant to be separately evaluated. Henrich and colleagues’

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(2010) introduction of WEIRD was to create an opening where we can begin discussing the dominance of white/western, educated, industrialized, rich, and democratic samples. It is true that the acronym accomplishes its goal of making scientists' question a bias partly through labeling the problem and its catchiness and appeal to common sense. That said, we value the debate about the meaning of WEIRD as an acronym, its limitations in terms of accomplishing epistemic inclusion, and the critique about its overuse (e.g., Ghai, 2021; Syed & Kathawalla, 2022).

A look into the history of science shows us that science needs moments of taking stock, reflection, and self-criticism to be able to move forward and do better. For instance, Guthrie's (1998 [original work published in 1976]) "Even the rat was White: A historical view of psychology" helped raise awareness about psychology's epistemic exclusions. However, the debate didn't stop there and was expanded when Mays published (1988), a decade later, "Even the rat was *white and male*: Teaching the psychology of Black women." Mays's work further helped us understand what/who has been missing from the literature and raise awareness about the critical work of Black women despite their exclusions from mainstream psychology. In the same spirit, we view Sakaluk and Daniel's (2022) commentary as an opportunity to expand the argument. This makes us pause and ask: How do we begin to take stock of the epistemic exclusions and invisibilities in the field without using these binaries? How do we name the problem itself without recourse to the problematic dichotomization of the world populations as WEIRD and non-WEIRD?

Coding and its limits

The coding system we used at the time was all that our resources allowed and we believe that the indices of *Education* (Organization for Economic Co-operation and Development, 2020),

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Industrialization (United Nations Industrial Development Organization, 2019), *Richness* (World Bank, 2017), and *Democracy* (Economist Intelligence Unit, 2020) pointed out in the review process were among many indices of a similar kind. There were also reasons for not using indices of W-E-I-R-D for precision. As Sakaluk and Daniel (2022) acknowledged, assessments are political and reflect the scientists’ worldview. These indices are conceptualized and constructed by researchers and institutions in European and North American countries. The measurement and data collection methods are not necessarily attuned to the internal social, cultural, and political dynamics of the countries in the Global South. Second, as Sakaluk and Daniel (2022) also noted, developing countries and non-WEIRD countries alike are more likely to have inconsistent scores and fluctuate more than western countries on these dimensions over time. For example, Taiwan has made the biggest jump in the democracy index between 2019 and 2020, rising from 31st place to 11th. Along with Japan, and South Korea, Taiwan moved from “flawed democracies” into “full democracies” in 2020. Between 2015-2019, the period that we covered in our analysis, the United Kingdom together with Western European and North American countries accounted for 86% of the “full democracies.” Therefore, using these indices for creating a composite WEIRD score for each country is just as subjective as creating a dichotomous WEIRD vs. non-WEIRD coding system.

Recently, the utility of the WEIRD dichotomy was put under scrutiny by multiple authors (e.g., Clancy & Davis, 2019; Ghai, 2021; Syed & Kathawalla, 2022). Scholars pointed to the tendency to “homogenizing” people in the WEIRD contexts when using the acronym (e.g., Clancy & Davis, 2019). In calling for within-country diversity to be taken seriously, authors suggested that future studies assess racial/ethnic diversity of the samples, instead of coding the samples based on the country where the sample was drawn from. We deeply care about sample

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diversity and representation both within country and across the world. In fact, identifying similarities and differences across underrepresented groups is critical for building solidarity among these groups across the world. Cole (2009) reminded us to ask three questions: (1) who is included in research? (2) what role does inequality play? and (3) where are the similarities? Since we would like to decenter Europe and North America in this debate, the US-based definitions of race/ethnicity that do not apply to the majority world needs to be considered carefully. We find that when the epistemic inclusion of racial/ethnic minorities is discussed, the focus of the debate easily shifts to the U.S. and cultural approaches to race and racism are rare (e.g., Salter, et al., 2018). We would love to continue this conversation about within country ethnic/racial and gender diversity, and encourage collaborations and connections that highlight these patterns across countries using intersectionality (Grzanka, et al., 2016).

We, in fact, coded for the gender diversity of the samples and found an androcentric bias across the world, which again was completely disregarded in the critique by Sakaluk and Daniel (2022). Gender binary is equally problematic, but was similarly necessary for us to demonstrate the bias in research practice. Sakaluk and Daniel's (2022) focus on the WEIRD vs. non-WEIRD dichotomy while completely ignoring the gender binary seems to be symptomatic of how gender is easily sidelined in these debates (Bueter, 2017; Grzanka & Cole, 2022; Cortina et al., 2012; Tiefer, 2000; Wood et al., 2006).

Sakaluk and Daniel (2022) pointed to "Ethical Concerns about WEIRDness in Klein et al." and asked "Is it Kind?" (p.822), – which derails the debate from the issue we were attempting to address. How do we define "kindness" in this context? Who decides on the "kindness" of a scholar's approach? We were surprised to read Sakaluk and Daniel's (2022) attribution of unkindness since we are not aware of kindness as a criterion for science. Thus, we

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were disturbed by the adhominem nature of this attribution. We maintain that dealing with categories in science, by nature, is crude. Categories do not necessarily let us understand the complexities within them, but they could be informative in helping us observe the patterns. The members of our research team publish research using various epistemologies, and utilize categories working from a post-positivist paradigm, while also critiquing them from a critical constuctivist paradigm when needed.

Survey of Researchers

In our article, we provided constructive recommendations to contribute to better representation in the field of sex research. Sakaluk and Daniel (2022) asserted that we will not change the status quo by “diverting a few more travel awards and research grants” (p.14). We never thought that these suggestions were the total solution (and at the same time, the fact that they are not the total solution does not strike us as a reason to disregard those suggestions, as every sociopolitical act is incremental). When a conversation devolves into how stringently we should protect the egos of dominant group members, it is clearly time for inviting the perspectives of those who are the most affected by the issue at hand.

Ultimately, from our point of view it does not make sense for those currently located at Western institutions to be exclusively having these debates. Thus, to expand the recommendations we provided in the original paper, we invited perspectives of researchers from countries that are under-represented in sex research ($N = 22$) to take an online survey. Researchers from Africa (Ethiopia, Nigeria), Asia (China, Hongkong, India, South-Korea), Latin America (Bolivia, Brazil, Chile, Peru), and Middle East (Iran, Iraq, Turkey) participated in our study (see supplementary material for methods). The goal of the short survey was to understand how to better support the research of sexuality scholars in places under-represented in the field.

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We were interested in how supported researchers feel within the field, and what resources could help researchers better disseminate their findings. The survey focused on three domains: 1) identifying the current publication outlets/publishing practice, 2) barriers in the publishing process, and 3) resources that might (albeit in some undoubtedly small way, as Sakaluk and Daniel pointed out) be steps in the way of transforming the status quo.

Under-represented Perspectives in Sex Research.

Publication outlets. The majority of the researchers reported that they mostly publish in international journals, followed by journals based within their own country. We identified a gap between the types of outlets researchers *prefer* publishing their work and the ones they end up *actually* publishing. Researchers in the Global South do not publish in the international and European-North American-based journals as much as they wanted. On the other hand, they reported publishing in local/national journals more than they actually wanted. Most researchers implied that they would prefer publishing in international journals followed by European- or North American-based journals and local/national journals (see Fig 1).

Insert Figure 1 about here

Barriers. The most commonly named barrier during the publishing process was negative feedback about command of English (54.5%), followed by questions about generalizability (50%), and disparagement of the sample (27.3%). Participants also provided open-ended responses citing the reasons they heard from journal editors and reviewers for rejections: “not adding to the literature,” being “culturally-specific,” “not generalizable,” or “non-representative,” and having “methodological problems.”

Resources. Researchers reported that funding for research provided by professional societies and organizations and open access to journals as most helpful resources that would support

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conducting research. Open access to journals was named as the most helpful resource to disseminate research (see Fig 2). Researchers also cited “collaboration with researchers in other places,” “funding for traveling for data collection and field research,” “editorial openness to communicate results to general public” for increasing research productivity. Moreover, participants noted “collaboration with well-known researchers,” “more or different journals or increasing the scope of the existing ones,” and “English editorial services.”

Insert Figure 2 about here

Conclusions

Euro-American-centric ways of knowing dominate scientific sex research. Research in/from/about elsewhere in the world is difficult due to *epistemic exclusion* that privileges researchers, institutions, discourses and practices from places that dominate the world economically and culturally. Global inequities are recreated in and through research by production and dissemination of knowledge from these centers. Epistemic exclusion does not only restrict distribution of resources to the majority of the world, but also diminishes the value of producing local knowledges. Instead, knowledge produced in/from/about “the West/North” is valued as “generalizable” and is imported to elsewhere in the world shaping scientific, and medical discourses, as well as the culture via everyday social interactions. We would like to emphasize the main goal of the original paper (Klein et al., 2022) and not let the discussion about legitimacy of using the WEIRD acronym derail the conversation. The field of sex research has a problem. Ultimately, it does not matter what we call that problem – be it preference for the Global North or WEIRD countries, or something else. The problem is epistemic exclusion and

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invisibility of researchers and participants from parts of the world where knowledge produced is not neatly “generalizable” or that contradicts with Euro-American-centric ways of knowing.

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Figure 1. The actual/preferred journal gap in publishing sexuality research from under-represented places ($N = 22$)

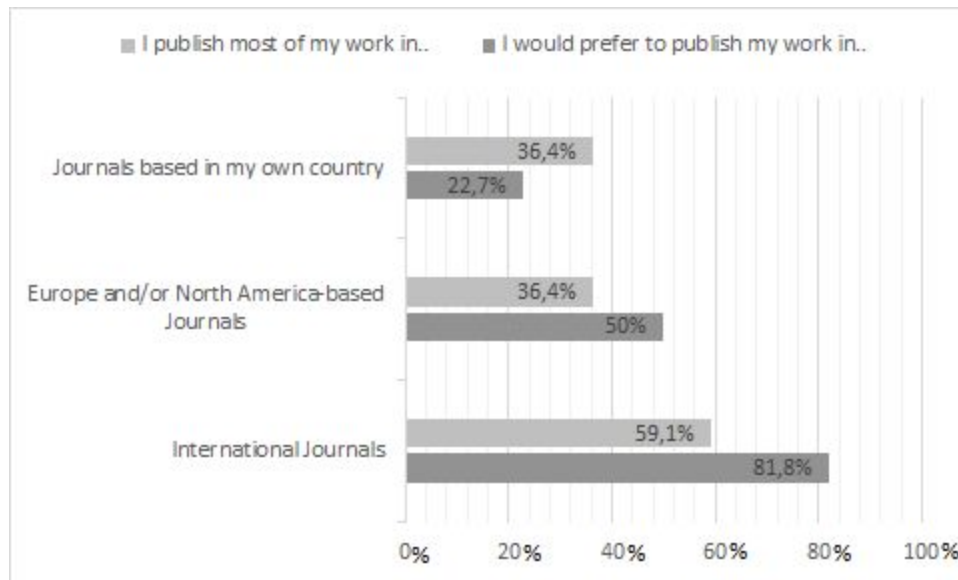
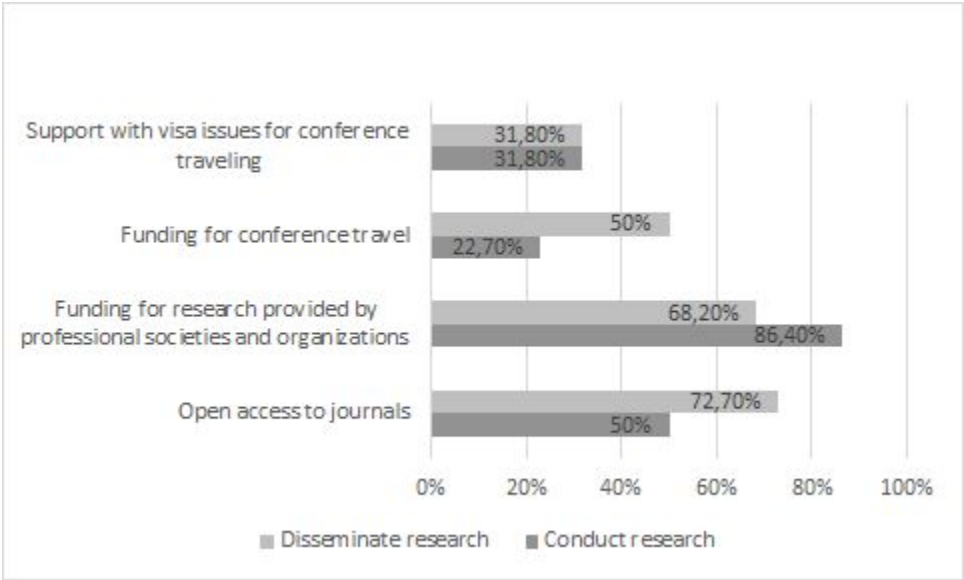


Figure 2. Named resources needed by under-represented sexuality researchers for increased research productivity and dissemination (*N* = 22)



Supplemental Online Material

Method

Data collection

We invited sexuality researchers from majority world via e-mail to participate in an online survey. We targeted professional societies and personal networks of sexuality researchers for the dissemination of the survey. The invitations were sent to the presidents of the sub-federations of the World Association for Sexual Health: African Federation for Sexual Health and Rights (AFSHR), Asia-Oceania Federation for Sexology (AOFS), and Latin American Federation of Sexology and Sex Education Societies (FLASSES). Presidents of the federations were asked to distribute the invitations and a link to the study to their members. Additionally, researchers from an international research cooperation (International sex survey) as well as cooperation partner were contacted via email.

Measures

We inquired into three main areas: (1) the gap between the kinds of outlets researchers in the majority world publish in and the ones they actually *want* to publish in, (2) the barriers to publishing, and (3) the resources that they think would be helpful for them to conduct research and publish from their locals. We provided space for participants to reflect on each survey item as well as a text box at the end of the survey to provide their overall reflections.

Publication outlets. We wanted to learn whether there is a gap between the outlets the participants typically publish and the ones they want to publish. Participants responded to a) “*I publish most of my work in..*”, and b) “*I would prefer to publish my work in..*” choosing from the provided categories of (1) journals from my own country, (2) international journals, and (3) European-or North American-based journals, (4) other. We provided our definitions of

international and European-or North American-based journals, as well as open space for them to provide what may not be captured.

Barriers. Barriers in the current publishing practice were assessed with one item. We asked participants: *“Which of these, if any, have you encountered.”* with the following response options: (1) negative feedback about your command of English, (2) disparagement of your sample, (3) questions about whether your findings can be generalized, and (4) other.

Resources. To identify resources researchers might find useful, we asked two questions: a) *“Please choose from the list below any resources that would help you better carry out your research”*, and 2) *“Please choose from the list below any resources that would help you better disseminate your findings.”* The following response options were provided: (1) funding for research provided by professional societies and organizations, (2) funding for conference travel, (3) support with visa issues for conference traveling, (4) open access to journals, (4) other.

Sample

In total, 22 researchers filled out the questionnaire (31.8% female). Overall, the sample showed a good representation of different regions in the Global South, although we certainly missed some countries. Researchers from Africa (Ethiopia, Nigeria), Asia (China, Hongkong, India, South-Korea), Latin America (Bolivia, Brazil, Chile, Peru), and Middle East (Iran, Iraq, Turkey) participated in our study. Most participants hold a faculty position (68.2%), four researchers were grad students (18.2%), one researcher an independent researcher (4.5%), and two researchers used the category other (9.1%; provided open ended response: researcher, head of research). Out of those, thirteen researchers indicated that their research addresses sexuality (59.1%), nine indicated their research addresses gender (40.9%), and six participants selected

both options (27.3%). Three participants who picked the option “other” stated sexuality in their open responses (e.g., problematic sexual behavior).