## **Peer Review Report**

# Review Report on Acknowledging the intersectionality of geoscientists with disabilities to enhance Diversity, Equity, Inclusion, and Accessibility

Original Research, Earth Sci. Syst. Soc.

Reviewer: Anthony Feig Submitted on: 30 Aug 2023

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#### **EVALUATION**

Q 1 Please summarize the main findings of the study.

No answer given.

Q 2 Please highlight the limitations and strengths.

No answer given.

Q3 Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

No answer given.

Yes.

### Q 4 Check List

Is the English language of sufficient quality?

the quality of the figu

Is the quality of the figures and tables satisfactory? Not Applicable.

Does the reference list cover the relevant literature adequately and in an unbiased manner? No.

Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test) Not Applicable.

If relevant, are the methods sufficiently documented to allow replication studies? Yes.

Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

No.

Does the study adhere to ethical standards including ethics committee approval and consent procedure? Not Applicable.

If relevant, have standard biosecurity and institutional safety procedures been adhered to? Not Applicable.

# Q 5 Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List):

Thank you for the opportunity to review your work. This topic is timely, and the discipline is ready for someone to tackle the theory and foundations of "geo-intersectionality." As far as I know, this would be the first paper to do so. I always identify myself to authors, so this is Anthony Feig from Central Michigan University writing this review.

You need to address some major issues before you can publish this. Don't get discouraged by the comments here, because you've got a good start. This can be a significant paper with good reach if you can make it more accessible and punch it up.

- 1. The data you collected and the themes you identified do not adequately scaffold and support intersectionality, which is the purpose of your study. I think you can do this by adding a section that articulates your specific research questions. WHY are you asking those questions, and who are you doing the asking? Then every theme and quote needs to refer back to intersectionality.
- 2. There are so many "call to action" papers out there that don't provide practical advice and support for readers to implement or consider. It is not enough to say "something must be done about these things!" and stopping there. Make yours stand out. For example, by lines 183-6, it was time to talk about HOW to do those things. By the end of line 272 I wanted to hear your ideas of what I should do as a teacher, advocate, member of society. The purpose of participant-action research is to work towards a just world.
- 3. The human element is missing from your writing. You personify phenomena and concepts but don't talk about people (e.g., Lines 81, 83, 95, 172–3, 275, 437). Reading this, I felt that you, the authors, were mostly absent. I get the desire to appear "objective," but the presentation of data, themes, and participants is sterile. The reader should develop rapport with your work and empathy to your participants. You are studying the human condition, so your writing should embrace that in the tradition of participant–action research.
- 4. This is the most profoundly troubling: You have sent a very strong message that the reader, and other well-intentioned people, cannot possibly hope to interact appropriately with people who have disabilities. Look, as someone with an invisible disability, I get it; I feel what you feel—the anger and frustration of trying to navigate environments that run from uncaring to hostile. But you have sent a strong message that there is no allyship possible, that interpersonal advocacy is pointless, that every effort someone might take towards inclusiveness & accommodation will result in anger and failure. For example, lines 320–330: offer an alternative strategy! Otherwise you are alienating potential allies. If I want to do something experiential and make it inclusive, why can't I ask my students what they need? You don't want me to do that, despite the fact that your participants (Teri) don't want me to just decide what accommodations are needed. So what's the message? It sounds like, "Don't ask." Your paper has a wholly inappropriate tone of scolding.
- 5. Your treatment of power is insufficient. It may be that analysis of power—and Power—are beyond the scope of this paper.
- 6. You need to add a Future Work section. I'd love to see a paper on the intersections of different disabilities in field settings, for example.
- 7. I would like to see your interview protocol, and you should mention IRB approval.

Line-by-line discussion:

- 22: proportionate to what?
- 41: include not includes
- 81: Say people with disabilities vs. "disability"
- 82: write out "one"
- 83: "identity" is not a thing that happens; it's not an event. It's a construct that is assigned or adopted. Say instead that people can move or be moved into different identities.

- 89: try "Theoretical foundations and defining intersectionality."6
- 95: "is used" instead of "works"
- 104: What origins?
- 113: "is" instead of "serves as"
- 114: there might be a pattern to how you capitalize the different theories, but it's distracting, so keep it all lower case.
- 123: i.e., comorbidities
- 134: It is known to me that the "it is" sentence technique particularly aggrieves Atchison.
- 139-143: unpack this, I don't grok the problem here.
- 144: lowercase intersectionality
- 146-152: find a more efficient and less clunky way to say this. Also, the sentence is too long.
- 150: to support?
- 155: This is a good place for some concrete advice to the reader.
- 160: just say intersectional
- 161: to, to
- 172-176: use plainer language.
- 173: collaboratively identify?
- 175-178: This is passive and not humanized. It's people that do these things. Make your ideas more accessible and audience-friendly.
- 180: I've never heard of "Missing Millions." What is it?
- 181: Spell out NSB, and I don't know why "Vision 2030" is important here.
- 183: Diversely? Not a good word.
- 184-185: You keep saying this and by now it's wearing thin.
- 192-193: this is a throwaway statement that says and means nothing.
- 194: you need a transition to this section, it's too abrupt.
- 200: Teri being queer is never part of your thematic analysis. Take a hard look at why you report it here. If you decide to keep it, spend a lot of time with the queer/Queer studies literature. I feel that geologists, scientists, professors, teachers who are not queer don't really understand queer phenomena, or even the basic definition. It's really complex and person-specific and iterative. If you decide to venture forth, provide some working terms for those who are not queer/Queer/queer studies people.
- 247: Why? I am not convinced.
- 260-261: This is really important. It's too important to be buried like this. At the very least start a new paragraph here.
- 264: Geophysical
- 272: Here is where you say something helpful & constructive that the reader can act on.
- 273: Are we in a new section here? This transition is abrupt.
- 275: awkward
- 278: OK, good
- 280: Make this a stronger statement. Also give an example of what "valued" would look like.
- 290: you can't talk about power/Power without citing Paolo Freire
- 292: More citations—there is so much work on this.
- 306: I like "non-apparent" more than I like "invisible" and I'll start using that
- 308-310: Another really huge thing. Don't bury it.
- 310-315: Not mentioned in the abstract and seems like it ought to be
- 317-319: This has been extensively written about (e.g., the Vancouver accessible trip). Really important, but I'm not seeing how you connect it to intersectionality.
- 332: Did someone ask why? Did I miss that?
- 336: Scolded again, without guidance on how to "correct" behavior
- 347-348: Yes, but you are not helping the reader get there.
- 348-351: I agree, but this is not aligned with the manuscript.
- 360: Need a smoother transition to Safety section
- 368: I don't think you've talked enough about fieldwork to go here
- 388: But you said earlier that if they ask, it is bad
- 395: See Gilley et al
- 397: can you provide a link to the handbook?
- 404: citation for allyship training.

- 437: they are not demographics, they are people!
- 442: first mention of microaggressions
- 443: first mention of UD
- 457: Power/power is not sufficiently unpacked. I don't buy what you're saying.
- 471-473: HOW???????
- 474-478: This comes across as sanctimonious, especially in light of the scolding the reader gets for inquiring.

QUALITY ASSESSMENT	
Q 6 Originality	
Q 7 Rigor	
Q 8 Significance to the field	
Q 9 Interest to a general audience	
Q 10 Quality of the writing	
Q 11 Overall quality of the study	