BEYOND A BUZZWORD: Exploring Intersectionality to Revolutionize Our STEM Workplaces

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How to effectively conduct research on STEM workplaces from an intersectionality perspective remains a scientific grand challenge that, left unaddressed, inhibits our ability to understand and create equitable and inclusive STEM workplaces. Like any grand challenge, this important problem is not impossible to solve. With the appropriate tools, initiative, and innovative perspective, together we can address this challenge and revolutionize our STEM workplaces.

**What is Intersectionality?**

Contextual framework for systemically understanding how multiple social identities intertwine to influence experiences and opportunities

**How does it help us gain new STEM workplace knowledge?**

An intersectionality approach contributes to deepening our understanding of barriers to STEM workplace participation

**How can we incorporate it in our work?**

Whether using existing or gathering new data, there are many ways to adopt this framework

**Recommendations**

- Analyze existing data from an intersectional approach, even when the n is small. These are often the most underrepresented groups in STEM.
- Gather data on social categories & options often neglected or dropped in STEM workplace studies. Just the act of including these categories has a big impact on inclusion for participants who rarely see themselves reflected in surveys.
- Incorporate qualitative elements in your research to provide context. Whether it’s conducting interviews, adding open-ended questions to surveys, or analyzing text in a policy document, it helps situate your findings & understand how participants are reacting to the questions posed.

"Wow, thank you for allowing so many answer possibilities!"

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**Challenges**

STEM workplace data is difficult to access, collect, analyze, and interpret from an intersectionality perspective. Key challenges include:

- Balancing privacy and inclusion
- Obtaining timely data access
- Handling outmoded, missing, or shifting social categories
- Balancing meaning and significance
- Situating and interpreting data within context

**How does intersectionality affect research on STEM retention?**

Research exploring retention in STEM often focuses on gender and attributes women’s departure from STEM for non-STEM jobs to family-related reasons. However, when we apply an intersectionality framework, we see a more complex story about STEM attrition.

**Primary Reason Women with STEM Degrees Take Jobs Outside Field, by Race**

- NH/PI
  - Family
- White
  - Pay, Promotion
  - Change in interest
  - Job unavailable
- Hispanic
  - Working Conditions
  - Job unavailable
- Black
  - Pay, Promotion
  - Job unavailable
- AI/AN
  - Job unavailable
- Asian
  - Pay, Promotion

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**STEM workplace harassment research focuses on sexual harassment, but intersectionality approaches also show harassment & exclusion by gender, race, sexuality, & disability.**

"Accusations of being lesbian (or slurs about it) are one way men impose power over junior women. A woman with opinions may be called a dyke, as an insult... as though being gay is worthy of insult, but challenging straight women’s sexuality, too.” ~ Gay, white, woman, PhD, biosciences

"I feel like my disability comes with stigma and it is hard to come out and ask for support at work.” ~ Straight, Filipino-American woman, PhD, biosciences

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**LGBT Physicists’ Experiences of Harassment**

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**Comfort sharing disability in STEM Workplace**

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2. Original analysis of 2015 NSF SSTEM data, n=1,357,513.
3. American Physical Society analysis of LGBT Climate in Physics survey data, n=324.
4. Original analysis of AWIS Member Demographic Survey data, n=327.