

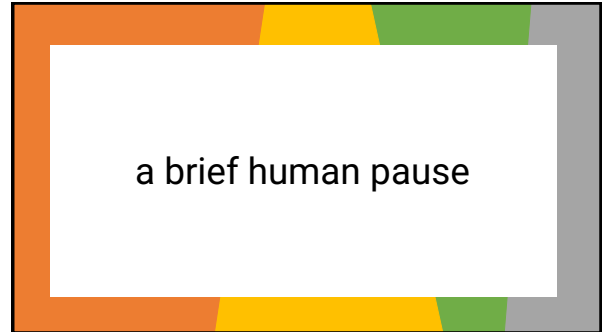


**Equitable counts:
Inclusive data analysis,
data quality, and
dissemination**

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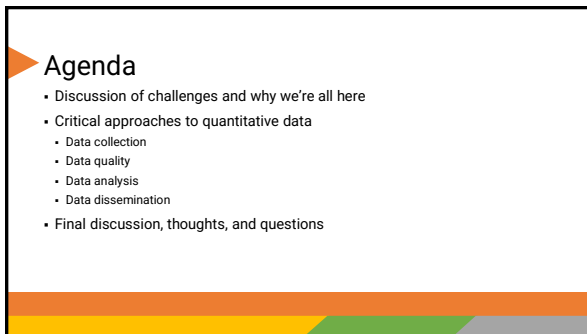
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a brief human pause

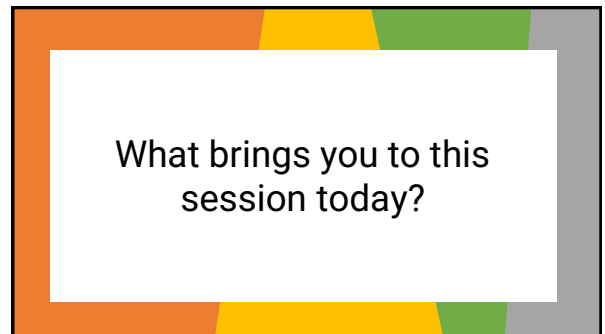
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Agenda

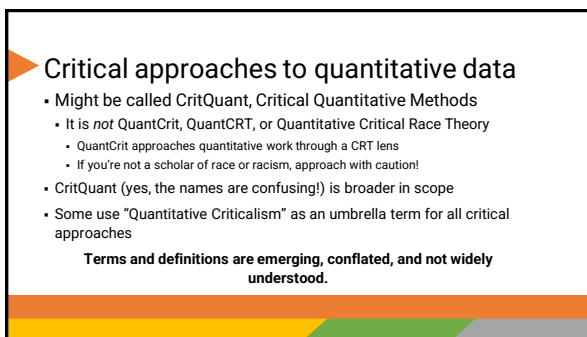
- Discussion of challenges and why we're all here
- Critical approaches to quantitative data
 - Data collection
 - Data quality
 - Data analysis
 - Data dissemination
- Final discussion, thoughts, and questions

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What brings you to this session today?

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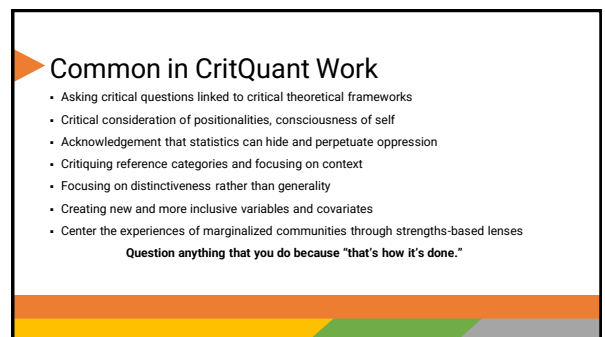


Critical approaches to quantitative data

- Might be called CritQuant, Critical Quantitative Methods
- It is *not* QuantCrit, QuantCRT, or Quantitative Critical Race Theory
 - QuantCrit approaches quantitative work through a CRT lens
 - If you're not a scholar of race or racism, approach with caution!
- CritQuant (yes, the names are confusing!) is broader in scope
- Some use "Quantitative Criticalism" as an umbrella term for all critical approaches

Terms and definitions are emerging, conflated, and not widely understood.

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Common in CritQuant Work

- Asking critical questions linked to critical theoretical frameworks
- Critical consideration of positionalities, consciousness of self
- Acknowledgement that statistics can hide and perpetuate oppression
- Critiquing reference categories and focusing on context
- Focusing on distinctiveness rather than generality
- Creating new and more inclusive variables and covariates
- Center the experiences of marginalized communities through strengths-based lenses

Question anything that you do because "that's how it's done."

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CritQuant: Data Collection

- Consider cultural biases in assessment instruments and practices
 - Think about who is making the decisions about what is and how it is being assessed
 - Gaining an understanding of marginalized groups requires asking questions that are relevant to that group
- Go above and beyond to collect data from marginalized or underrepresented populations
 - Reach out and make connections to the communities you want to hear from
- Ask inclusive demographics
 - Use the language of marginalized groups
 - Allow for complexity in identity
- You might have to give up stability for more flexibility

**A lot of data collection decisions are outside of our control (IPEDS, anyone?)
But what are other ways we can be critical in our data collection?**

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CritQuant: Data Quality

- None of your data belongs in the trash. Let me type that again: None of your data belongs in the trash.
 - Important corollary: the data of small populations do not belong in the trash. *Every voice (i.e., data point) matters.*
- Think about the "powers" of statistics: the ability to predict, the confidence to generalize, assurance that effects are meaningful,...the capability to distill a person down to a series of checkboxes and binaries (slight sarcasm alert).
 - Math is so cool!
 - But let's think about some of these superpowers....
 - What does generalizability say about non-majority experiences?
 - Do we truly believe that the experiences of subpopulations are monolithic?
 - "Surely, God loves the 0.06 as much as the 0.05." Rosnow & Rosenthal

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CritQuant: Data Quality

- To see inequity, we need to lighten up on notions of the "power" of statistics
 - Inequities and marginalization happen to our smallest, most vulnerable populations—groups that traditional ideas of statistics are created to ignore
 - Focus on the value of descriptives, effect sizes, and percentage differences as well as predetermined benchmarks for success
- Please stop using response rate as your sole indicator of data quality
 - Instead of focusing on the data you don't have, put the data you do have into context
 - Carefully examine the ways in which the data you have might be biased or not; limitations are not dead ends, they're context for understanding what you find
 - If anyone knocks data as being "not valid"...valid for whom?
 - Valid for the majority population?
 - Valid for a generalization you don't believe in?

Let's return to data quality when we discuss data dissemination.

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CritQuant: Data Analysis

- Don't get discouraged, but there isn't a CritQuant adjustment button in our stats programs. Having a critical data analysis lens doesn't mean you used methods X, Y, or Z.
- Disaggregate, disaggregate, disaggregate
 - Averages are dangerous
 - Talking about often silenced students can provide a sense of care and support
- Aggregate responsibly
 - Avoid fruit basket "other" categories
 - Avoid multi-identity (multi-racial, multi-gender, etc.) categories
 - Question "standard" minority groupings (students of color, LGBTQ+, etc.)
 - Asian + Pacific Islander: whyyyyyyy??
- Acknowledge the limitations of your groupings; say what you can about groups before dropping or aggregating

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CritQuant: Data Analysis

- Rethink comparisons
 - Push back against what's "normal," question your reference groups
 - Try pre-determined benchmarks for what you want *all* students to achieve
 - Question comparisons between and think about comparisons within
 - Effect coding is not the answer (but it can be useful!)
- Get comfortable using both variable- and person-centered approaches
 - Variable centered: Comparisons focus on looking at relationships between variables; putting people into groups and examining results by group
 - Person centered: Comparisons focus on identifying groups of people based on their similarities in experience

What are other ways we can be critical in our analyses of data and review of results?

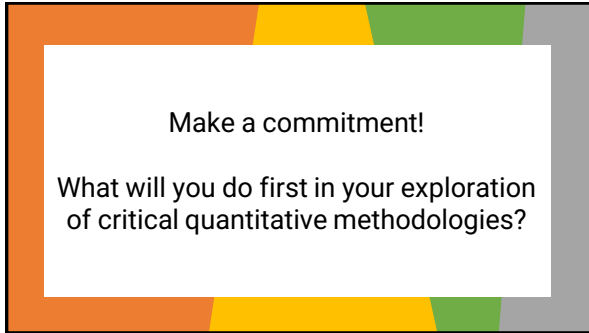
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CritQuant: Data Dissemination

- You may need to do a lot to reset expectations before presenting anything with a critical lens, especially to audiences used to traditional statistics or used to picking on data when they don't want to hear the results (I'm looking at some of you, faculty!)
- Maybe start with educating your audiences about critical perspectives and set a tone for your purpose and results
 - Critical perspectives don't change the math, just the way you think about the numbers
 - Allison thinks of it as having a quantitative brain, and a qualitative heart
- It might help to give a quick reminder that we're all educators...
- In Allison's experience, the questions and assumptions people have about data quality are key, this will be the largest hurdle you face on this voyage

What are other ideas for how we can get people to join us on our critical journey?

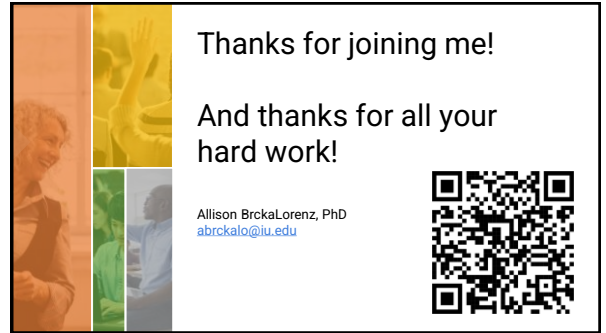
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Make a commitment!

What will you do first in your exploration of critical quantitative methodologies?


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Thanks for joining me!

And thanks for all your hard work!

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