QuantCrit: A Burgeoning Methodology for Our Ever-Evolving Times

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Agenda

- Participant introductions and exploration of prior knowledge
- Foundations of quantitative (and qualitative) research
- History of quantitative research
- What is QuantCrit?
- Why QuantCrit?
- Practical applications and examples
- Questions, answers and discussion
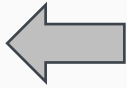
Introduction

Please introduce yourself in the chat with your name and affiliation.

Please list one thing you know or have heard about QuantCrit, and one thing you are curious about.

Quantitative Research

← *Considered by some scholars as the highest, most rigorous methodology in research.*

Researcher stance: Objective

Inquiry aim: Hypothesizing and substantiating through scientific experiments

Measures of quality: Validity, reliability and generalizability

Values: Objectivity

Researcher voice: Detached

Sampling: Little or no engagement with participants; experiences not considered; random

Qualitative Research

Researcher stance: Immersed in the research

Inquiry aim: Exploring experiences

Measures of quality: True to the experience of the participant

Values: Making change

Researcher voice: Advocating

Sampling: Varies; engagement with participants and selecting specific participants acceptable

Historical views of qualitative and quantitative research

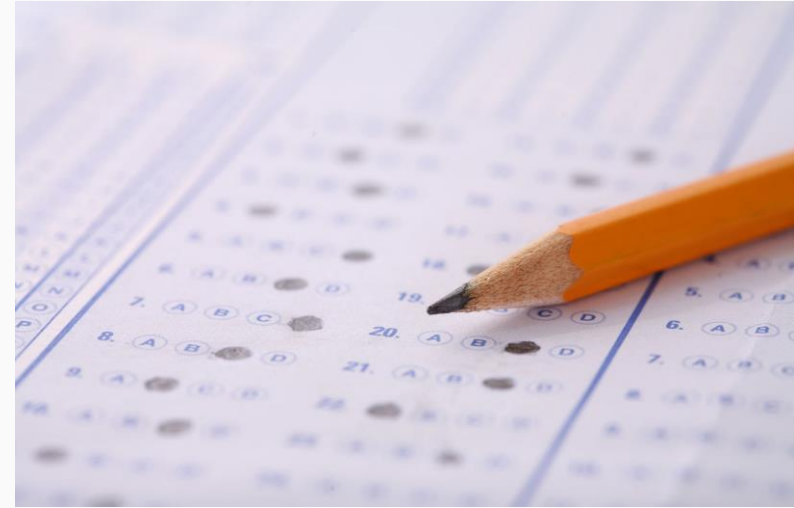(Denzin & Lincoln, 2018; Guba & Lincoln, 2005)

IS QUANTITATIVE RESEARCH TRULY *THAT* OBJECTIVE?

Ways Statistics Can Impact Historically Marginalized Communities

Educational Statistics:

- Standardized test scores have historically been used to "track" students.

- Behavior statistics have been linked to disproportionate referrals to special education.

Data Aggregation:

- Combining categories can lead to inadvertently misleading results/findings. *Example: "Other" demographic categories.*

History of Research and Historically Marginalized Communities

- **Research institutions have a history of doing harm in marginalized communities.** *Examples: Tuskegee Experiment; Henrietta Lacks*

- **The foundational and seminal research in some of the disciplines we use today are grounded in Western-centered beliefs.** *Examples: Bronfenbrenner's Ecological Systems Theory; Freudian Theory*

- **This has led to the weaponization of statistics.**

- **This has created mistrust of research within communities.** *Note: This is important to consider with "random" sampling*

CONTEXT MATTERS

Particularly historical context!

Why does context matter?

"OBJECTIVE" DATA POINTS

- A higher education administrator writes up an adjunct professor for poor student evaluations.

- An elementary school loses federal funding due to poor standardized test scores.

- A women assistant professor is denied tenure because her dossier lacks publications and academic service.

- A child gets suspended due to a "three strike" behavior rule.

ADDITIONAL CONTEXT

- An adjunct professor at a conservative leaning university insists that the class use a student's proper pronouns, regardless of agreement.

- A chronically underfunded elementary school with high teacher turnover, loses funding due to poor standardized test scores on exams that are not relevant to their experiences.

- A woman assistant professor, who has three children under eight, is denied tenure because her dossier lacks publications and service.

- A neurodivergent student gets suspended for spinning their ruler and putting their head down on their desk when the teacher asked them not to.

How can we, as educators, practitioners and researchers ensure that our quantitative research considers important context?

QuantCrit has entered the chat!

Critical Quantitative (QuantCrit) Research

❑ Acknowledges that quantitative data is a valuable way to gather information on a phenomenon.

  ▪ Methods are not inherently "good" or "bad;" QuantCrit focuses on the way quantitative methods are used.

❑ Infuses critical theories and a more inclusive positionality into quantitative research.

  ▪ QuantCrit is open to the notion that experiences can shape a reality, sees truth as opposed to Truth, accepts multiple perspectives and societal influence.

(Garcia et al., 2018; Gillborn et al., 2018)
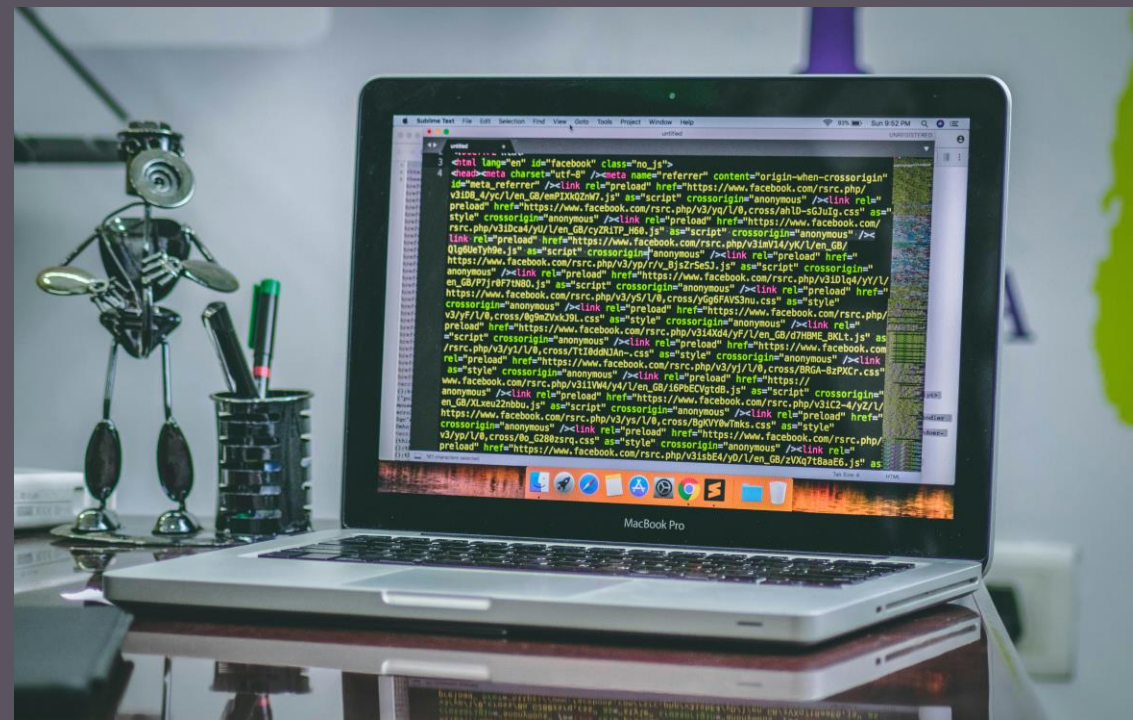
The Tenets of QuantCrit

(Garcia et al., 2018 Gillborn et al., 2018)

Similar to Critical Race Theory, QuantCrit has several tenets which guide the framework:

- ❑ Inequity (racism, sexism, etc.) is ever present and built into the fabric of U.S. society.

- ❑ Research methods and the information derived from them are not neutral.

- ❑ Data does not, and cannot, speak for itself.

The Tenets of QuantCrit

(Garcia et al., 2018 Gillborn et al., 2018)

Similar to Critical Race Theory, QuantCrit has several tenets which guide the framework:

❑ **Categories and variables have meaning given by society.**

❑ **Intersectionality is critical.**

❑ **There is more than one narrative or story that needs to be told (counter-storytelling).**

WHAT ARE SOME PRACTICAL WAYS EDUCATION RESEARCHERS AND PRACTITIONERS CAN APPLY THE TENETS OF QUANTCRIT INTO THEIR INQUIRY?

1. Inequity (racism, sexism, etc.) is ever present and built into the fabric of society.

- ❑ **Acknowledge societal and political influences like racism and sexism when forming research questions.**

- ❑ **Continue to acknowledge throughout the research process.**

- ❑ **Acknowledge researcher bias – we have all been influenced by society and culture.**

    Memo writing is a great tool to support researcher reflexivity, though not often used in quantitative research.

2. There is no research methodology or method that is inherently unbiased or objective.

❑ **Challenge the belief that quantitative methods are the most rigorous – research accordingly.**

❑ **QuantCrit is a growing methodology – find ways to add to the discourse.**

This is especially important for educators-as-researchers. The field needs your insight!

3. Data does not, and cannot, speak for itself.

❑ **Recognize the power and privilege researchers have.**

❑ **Understand that the way data is interpreted tells a story, the lens through which researchers see things dictates the story.**
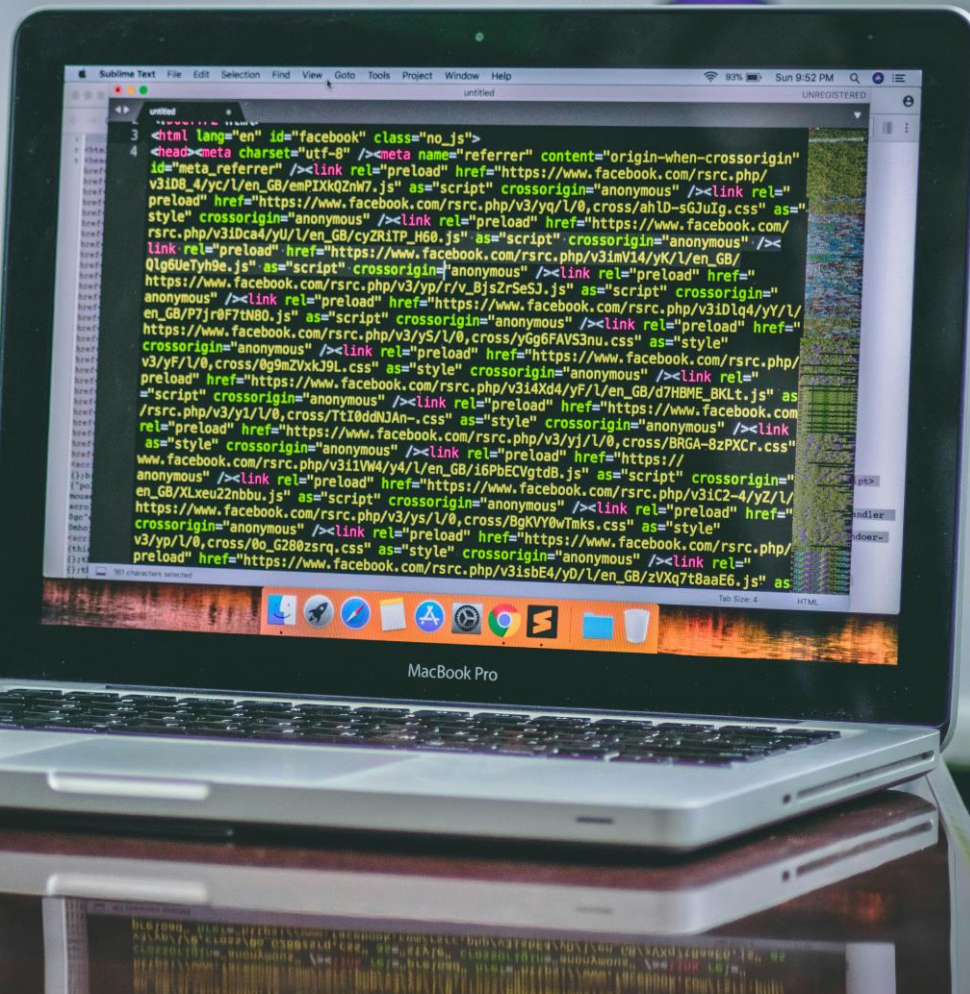
4. Categories and variables have meaning given by society.

❑ **Census demographic categories are not the only way to define groups.**

❑ **Think about whose voices and experiences get obscured when categories are put in place.**
Example: Black/African American – first generation immigrants can have very different experiences; Gender identity – experiences can vary based on culture.

❑ **Be mindful when "collapsing categories" or aggregating data. What information do you lose?**

5. Intersectionality is critical.

❑ **Many times, people experience society differently based on the multiple facets of their identity.** *Example: Black women experience oppression differently than Black men and White women.*

❑ **How do these intersections impact our research?**

❑ **Demographics are more than checking boxes!**

6. There is more than one narrative or story that needs to be told (counter-storytelling).

- ❑ There are multiple perspectives, and society often privileges some over the others. Whose story are you privileging as a researcher? As an educator?

- ❑ How have circumstances contributed to the phenomenon you are researching. *Example: Is there an achievement gap or an opportunity gap?*

- ❑ How does your worldview impact your research?

Examples from Research

(Note: Some examples may be counterintuitive)

- **Recruitment/Sampling:** Recognizing the mistrust of researchers in certain communities, you may add a personal touch to recruitment to get a truly representative sample of participants.

- **Theoretical Frameworks**: Can help ground the work.

- **Demographics:** Allowing participants to self-select demographic categories AND add those categories as a variable.

- **Outliers:** Be mindful of outliers. What might be some reasons someone might not fit into your model? That story is important, too!

- **Statistically Insignificant Findings:** What information can the lack of statistical significance contribute to the phenomenon you are exploring?

For Further Reading...

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QUESTIONS AND DISCUSSION

THANK YOU

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