DRAFT

Cultivating Researcher Identity and Importance of Positionality among Students in Quantitative Psychology Research Methods



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Case Study

Context: course and assignment

Research Question and Mixed Methods: quantitative → qualitative

Qualitative results highlights

Conclusions and future directions

"Research Methods" Course Context

- Required for all psychology major programs (in NA)
- Alongside required introductory statistics course

At UBC Vancouver (Canada)

- ~1000-1200 students annually
 - ~11 sections of 96 (4 TA-led clusters of 24 students)
 - 5-7 different course instructors
- Common group research project (25%)
 - Design experiment, collect data on peers
 - Write individual APA-style paper, present group poster



"Important topics" in Ubiquitous Undergraduate Psychology Research Methods Course



Post-Positivist Quantitative

- Factorial experimental designs
- Correlational approach /
- Quasi-experiments

• Case studies

- Replicability
- Scales of measurement
- Nsing observational methods
- Analysing data

• Statistics

Analysis

Using a statistics program

What else is missing?

Researcher Positionality
Identity, personal growth
Philosophical alternatives to Post-Positivism

•...

As identified by Gurung & Soa (2020) by analyzing textbooks, all endorsed by instructors.

My relationship to this course changed because who I am and how I see the world changed

2008-2022

26 times in 15 semesters (2142 Ss)

"come join us!"

Me Psych Research Methods Me Psych Research Me Students Students

2023 and 2024 (Current) 4 times in 2 semesters (372 Ss)

"come join me in critically examining this!"

Key term* <u>Positionality</u>

- Identifying the social roles and lived experiences that shape the perspective you uniquely bring to any act of learning, teaching, or research – syllabus p 3
- Where the researcher/learner/teacher is <u>coming</u> <u>from</u>, relative to the topic, the other people involved (e.g., participants), the research process
- Some examples: gender identity, race, skin tone, nationality, age, job, political view, life history, family experience...

* That you won't find in a quantitative research methods textbook

I invite you to reflect on your own positionality in relation to your own course(s) and students.

How might you (deepen) your support of students' self-reflection in a way that promotes valuing diversity?

Pause to begin personal reflection

Adjusted course goals, adding #4 and #8

1. Identify, discuss, and critically examine the typical ways knowledge is made and reported in psychology from its (post-)positivist traditions.	5. Independently write a scholarly article using the traditions of APA style to summarize your group research project, situated in the context of some relevant published scholarship.
2. Critically examine the positions of researchers and participants in the ways psychological research is conducted and reported, including drawing on your own experiences and identities.	6. Critically discuss issues of inclusion and diversity from a psychological perspective, including in how knowledge is made in psychology.
3. Discuss and demonstrate ways to act ethically in all aspects of scholarly work (e.g., literature search, design, data collection, analysis, interpretation, reporting).	7. Contribute effectively in a team to (a) design and conduct a basic experiment with human participants to address a research question in psychology, (b) create a poster to summarize this knowledge-making work.
4. Engage with a variety of published journal articles to discuss examples of concepts (e.g., hypothesis, experimental design, validity, reliability, operational definitions), practices, and values core to conducting and writing about psychological research.	8. Reflect on your own positionality, your values and perspectives, and how they might influence how you engage with psychology's research processes. Discuss what skills, methods, values, perspectives you want to take with you beyond this course, which to leave behind, and which you might continue to try out or perhaps continue to question.

Low Stakes Assessment: in class "Researcher Notes"

- 10 minutes, in class by hand
- 6 times throughout term
- For everyone (participation point)



Optional End-of-term Researcher Identity Integration Paper

- Summarize and reflect on your personalized Researcher Notes. Draw quotes.
- Analyze Researcher Notes for evidence of "selfconfidence" as defined in the <u>Researcher</u> <u>Development Framework</u>

4. Self-confidence

Aware of some personal abilities Aw and willing to demonstrate them.

Recognises boundaries of own knowledge, skills and expertise and draws upon and uses sources of support, as appropriate. (D6)* Aware of range of own skills and enjoys demonstrating them.

Able to defend ideas in the face of reasonable challenge both from colleagues and others.

Self-reliant; (D7)* capable of directing others. Is confident of own skills and ideas in the face of strong challenge – seeks challenges.

Builds a range and variety of support structures.

Contributes to others' support; recognises need for collegiality.

Comfortable that own ideas are likely to be radical/unusual; has self-confidence to initiate challenge and engage with others.

Maintains a variety of support structures.

Develops confidence in others.

Seeks out sophisticated challenges to any new/unusual/radical ideas.

Inspires confident behaviour in others.

 Incorporate and image to represent your growth this term

Revisit and respond thoroughly to Course Goal 8

Research Question

- Inspired by conference theme (Transformative Learning) and evaluating evidence of course goal 8
- (How) do students' Researcher Identity Integration papers show evidence of
 - identifying own values, strengths, confidence;
 - articulating positionality;
 - critically engaging with post-positivist way of knowing;
 - respecting diverse perspectives?

Quantitative Analyses of Grades

- Mixed Methods Explanatory Sequential Design, from a Pragmatic Interpretive methodological approach
 - Research Ethics Board Approval

Quantitative Analysis Purposes

- To understand context and these students better before approaching Research Question
- How I graded these papers
- Comparing students who opted in/out of this paper
- Enable purposeful sampling for qualitative stage

Key Insights

- Grade boost: This paper appears to offer an opportunity for students who struggle more on tests.
- Suggests students are taking this opportunity to customize their learning of research methods to lean into their strengths.

Quantitative Grades Analysis enabled Purposeful Sampling for Qualitative

	2023	2024
Number who submitted	79	49
Average (SD) paper grade	74.27% (11.44%)	69.76% (17.87%)
90-94% (A+)	4 students (5.06%)	3 students (6.12%)
80-89%	22 students (27.85%)	13 students (26.53%)
70-79%	31 students (39.24%)	12 students (24.49%)
60-69%	13 students (16.46%)	12 students (24.49%)
50-59%	7 students (8.86%)	5 students (10.20%)
<50% (F)	2 students (2.53%)	4 students (8.16%)

2 papers randomly selected from each of the grade categories (60% and higher) from each of the years = 16 papers. Qualitative Analyses of Sampled Papers

Qualitative Method

Research Question	Procedure (Deductive)
 (How) do students' Researcher	 Read all 16 papers,
Identity Integration papers show	highlighting instances of each
evidence of identifying own values,	of four categories (if
strengths, confidence; articulating positionality; critically engaging with post-	applicable) Copied quotes to cluster by
positivist way of knowing; respecting diverse	category Read each category of quotes Drew mind map of each Wrote summary Identified illustrative and
perspectives?	distinctive quotes

(How) do students' Researcher Identity Integration papers show evidence of... *Key Quotes*

Identifying values, strengths, confidence

- "self-confidence as a researcher has evolved significantly, transitioning from a focus on individual achievements to fostering collaboration and resilience. By embracing intellectual humility and building supportive environments, I've developed a deeper belief in my ability to contribute meaningfully to research while empowering others."
- "I've always thought I was an imposter or that I was fairly incompetent... However, my reflections... have actively shown me that my introspection is a strength of mine and has proved it is something to be utilized for growth..."
- "fundamental shift in attitude towards learning new skills. The realization hit me halfway through the course as seen in the reflections that I was shelving so many things without even trying them and labelling them as something I absolutely would not be able to do. Initially hesitant about data and analysis, we see a visible transformation to embrace a challenge, overcoming it, and acknowledging the achievement. This shows the evolving confidence and the keenness to acquire new skills in the future."

Articulating positionality

- "My experiences as a first-generation immigrant, and as a woman of color shape my perspectives and my identity, not only as a researcher, but as a human in general.. These facets of my identity are very important to me, and I understand the importance of inclusivity in research."
- "I grew up in an environment where I was encouraged to downplay the confidence I had in my skills... my fear of appearing 'too confident' was becoming maladaptive and inhibited me from fully sharing my skill set... This helped me get comfortable with expressing my skill set, as I realized it was helpful to the group as opposed to a negative reflection of my personality."

(How) do students' Researcher Identity Integration papers show evidence of... *Key Quotes*

Critically engaging post-positivism

- "plan to keep questioning how research can better address diversity and inclusivity, ensuring that psychological studies remain both rigorous and relevant"
- "the perspectives I wish to leave behind are any pre-existing ideas I had about what constitutes a 'good experiment' because these ideas were primarily founded upon limited knowledge, and didn't include incorporating the perspectives of historically silenced voices"
- "I found a post-positivist lens works in some situations, but not others."

Respecting diverse perspectives

- "By leveraging each team members' unique strengths and perspectives, we created something far more impactful than any individual effort could achieve."
- "The most valuable support I can provide to my group members is staying open to their ideas, offering encouragement, and treating them with respect. ... My group mates have shown me respect by allowing me the freedom to express my ideas without judgment."

Alignment with scholarship

Strengths-Based Approaches within Psychology

- Deliberate focus on strengths
- Some evidence of all three approaches in student writing



Figure 1. Overarching Summary of Similarities and Differences Between Each Strength-Based Approach Within Personality and Social Psychology.

Self-Authorship Development within Education

- Recommendation to create experiences that support students at different stages toward self-authorship
- RII paper creates space for students to evaluate their own reflections and growth, at any level
- King, Baxter Magolda, et al. (2009)

Conclusions

- Overall, this course-wide approach aligns with strategies for creating developmentally effective experiences for students striving toward selfauthorship (King et al., 2009), and with cultivating identity-specific strengths (Silverman et al., 2023).
- Student papers offer evidence that this approach has indeed created space for students to affirm strengths in their own identities and build confidence, to find value in others' diverse perspectives, and to critically consider their alignment with post-positivism.

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