

Research Methodology S2 Exam Key Answers

Question I

A qualitative proposal omits reflexivity, ignoring the researcher's influence.	Proposal is weak; bias is unaddressed.
A student proposes a mixed-methods study but does not explain the integration of quantitative and qualitative findings.	The design lacks a rationale for combining methods.
Which of the following best describes the role of data analysis in a quantitative research proposal?	It outlines statistical procedures that will test the hypothesis.
Which of the following best distinguishes reliability from validity in qualitative research?	Reliability ensures repeatability; validity ensures trustworthiness of interpretations.
In a quantitative study on anxiety and test performance, the researcher finds a strong negative correlation.	Lower anxiety levels are associated with higher test performance.
Which of the following best differentiates triangulation in qualitative research from inter-rater reliability in quantitative studies?	Triangulation uses multiple perspectives to enhance trustworthiness.
A student proposes to use a focus group to "measure satisfaction levels" with a new teaching method.	Focus groups are not designed to measure but to explore perceptions.
A qualitative proposal lacks a clear research question, focusing only on the topic.	Proposal is weak; clarity is essential.

Question II

Weaknesses + explanation	Improvements
Researcher-developed survey without validation: The survey was developed by the researcher, but there is no mention of piloting, validating, or testing its reliability (e.g., through Cronbach's alpha).	Pilot the survey with a small group of students before full implementation to test clarity and relevance. Conduct reliability (e.g., Cronbach's alpha) and validity checks (e.g., content validity with expert review) to ensure the instrument accurately measures the intended constructs.
Limited interview duration: The semi-structured interviews lasted only 10 minutes each, which is too short to explore complex constructs like belonging and relatedness in depth. This brevity likely restricted the ability to probe deeper into students' experiences, limiting the richness of the qualitative data.	Extend interview duration to 20–30 minutes to allow for more in-depth exploration of students' experiences. Prepare a flexible interview guide with open-ended questions and probes to encourage detailed responses, ensuring richer qualitative data.

Single survey administration: The survey was distributed only once at the end of the semester, capturing a single point in time. This limits the ability to track changes in students' sense of belonging and relatedness over the course of the semester, potentially missing dynamic shifts in perceptions.	Administer the survey at multiple points (e.g., beginning, mid-semester, and end of semester) to capture changes in students' perceptions over time. This longitudinal approach would provide a more comprehensive understanding of how belonging and engagement evolve during the course.
Small and unbalanced qualitative sample: Only three students were interviewed, which limits the depth and diversity of perspectives. This very small subset (3 out of 18) may not adequately represent the range of experiences in the class.	Increase the number of interview participants to at least 6 to 8 students to capture more diverse experiences.
Limited participant diversity: All participants were from a single course in one department, potentially limiting the transferability of findings.	Expand the sample to include students from other English communication courses or other departments to increase diversity and potential generalizability of findings.
Lack of inferential statistical analysis: Only descriptive statistics were used for the survey, which limits insights into relationships between variables (e.g., between teacher support and sense of belonging).	Include correlational or regression analysis to explore relationships among variables measured by the survey.
Language of analysis not mentioned: The interviews were conducted in Arabic, but there's no mention of how translation or transcription was handled, which can affect interpretive accuracy and transparency.	Clearly state the translation procedures used (e.g., researcher-translated, back-translation, professional assistance) and ensure consistency in coding to enhance the trustworthiness of qualitative analysis.
Small sample size for the survey (n = 18): The limited number of participants reduces the statistical power and generalizability of the findings. With such a small sample, even basic descriptive patterns may not reflect broader trends among students.	Increase the sample size. Aim for at least 30–50 participants to improve the reliability of descriptive statistics and enable basic inferential analysis.

Strengths:

1. **Use of mixed methods (survey and interviews)** to collect data on students' sense of belonging and relatedness. This approach allows for both breadth (quantitative survey data) and depth (qualitative interview data), providing a more comprehensive understanding of the phenomenon.

2. **Context-appropriate language use:** Conducting interviews in Arabic likely helped participants express themselves more freely and authentically, increasing the validity and richness of the qualitative data.