
Unit 5: Interviews, Survey Methods, and Questionnaire Design

Required Reading

Dawson, C. (2015) Projects in Computing and Information Systems: A Student's Guide. Harlow: Pearson.

- Chapter 2 Section 2.4.4 p 31-37.

Summary

The section discusses questionnaires as a research method. It highlights their usefulness in collecting data from a large number of participants and emphasizes the importance of careful planning to ensure effective responses. The text covers various aspects of questionnaire design, including identifying the target audience, choosing the medium (paper-based, email, or online platforms), and strategies to improve response rates. It also discusses the layout and structure of questions, differentiating between open and closed questions, and considering factors like anonymity and respondent demographics. Additionally, it provides insights on ordering questions logically, avoiding biased phrasing, and testing drafts to refine effectiveness.

Reflection

Reflecting on this section, it becomes clear that designing an effective questionnaire is more complex than it may initially seem. The low response rates highlight the challenge of engaging participants, requiring careful wording, structured layouts, and incentives for completion. The discussion on question types—particularly balancing open and closed formats—also underlines the importance of clarity and focus in obtaining usable data. This section reinforces that while questionnaires can be a powerful tool for data collection, their success largely depends on the researcher's ability to design them thoughtfully, ensuring they elicit meaningful and reliable responses.

Hoepfl, M. C. (1997) Choosing Qualitative Research: A Primer for Technology Education Researchers. *Journal of Technology Education* 9(1): 47-.

Summary

The article discusses the value of qualitative research in the field of technology education. The article contrasts qualitative and quantitative research paradigms, highlighting that qualitative research seeks to understand phenomena in context rather than relying on statistical analysis. Hoepfl outlines the reasons for choosing qualitative methods, such as studying complex, unexplored issues or gaining deeper insights into known topics. The article details the key features of qualitative research, including its naturalistic approach, inductive data analysis, and descriptive reporting style. It also explores the researcher's role, data collection methods like interviews and observations, and strategies for ensuring the trustworthiness of qualitative findings. Ultimately, Hoepfl advocates for a balanced

approach, emphasizing that qualitative research provides unique insights that complement quantitative methods.

Reflection

Reflecting on this article, it becomes evident that qualitative research plays a crucial role in expanding knowledge within technology education. The emphasis on rich, contextual understanding rather than numerical generalization highlights the importance of capturing real-world complexity. The discussion on the researcher's role reinforces the idea that qualitative research demands both skill and self-awareness, as the researcher's perspective influences data interpretation. Additionally, the article challenges the dominance of quantitative research in education, arguing for methodological diversity. This perspective is valuable, as it encourages researchers to select methods based on research needs rather than defaulting to a single paradigm. The article serves as a reminder that while qualitative research may be time-consuming and subjective, it provides a depth of understanding that is essential for addressing nuanced educational issues.

Allsop, D. B. et al. (2022) Qualitative Methods with Nvivo Software: A Practical Guide for Analyzing Qualitative Data. *Psych* 4(2): 142–159.

Summary

The article provides a step-by-step guide for using NVivo software in qualitative research. It emphasizes the importance of systematic, high-rigor analysis and details processes such as transcription, data importing, coding, and maintaining an audit trail. The guide introduces key concepts like open coding, systematic team-based coding, and Numeric Content Analysis (NCA) to enhance the reliability and replicability of qualitative research. The authors highlight the benefits of using NVivo to streamline data management while also addressing concerns about potential detachment from the data. The article ultimately advocates for transparent and methodologically sound reporting to ensure the credibility of qualitative findings.

Reflection

Reflecting on this guide, it becomes evident that qualitative research, while often seen as subjective, can achieve high levels of rigor and reliability when conducted systematically. The discussion on NVivo as a tool rather than a substitute for researcher involvement underscores the need for active engagement in data interpretation. The structured approach presented in the article offers valuable insights for researchers seeking to balance qualitative depth with analytical precision. This reinforces the importance of methodological transparency, particularly in an academic landscape where qualitative research is increasingly recognized but still faces scrutiny. The guide serves as a practical resource for those looking to refine their qualitative analysis techniques and improve the reproducibility of their findings.

Learning for Action. (n.d.) Analyzing Qualitative Data.

Summary

The website provides a comprehensive guide to processing and interpreting qualitative data from interviews, focus groups, and surveys. It outlines a systematic approach to identifying themes, unique perspectives, and patterns within qualitative responses. The document emphasizes the importance of contextualizing qualitative data to create a richer narrative beyond numerical analysis. Key steps include preparing data for analysis by cleaning transcripts, adding contextual comments, identifying emerging themes, and compiling data across participants using tools like Excel or qualitative analysis software. The document also cautions against quantifying qualitative data too rigidly and instead recommends weaving qualitative insights with quantitative data to present a cohesive and meaningful story.

Reflection

Reflecting on this guide, it highlights the nuanced nature of qualitative analysis and the care required to preserve the depth of participant experiences. The emphasis on iterative interpretation and thematic analysis underscores the importance of human judgment in making sense of complex data. Additionally, the recommendations to integrate qualitative findings with quantitative analysis reinforce the idea that data should tell a holistic and accessible story rather than simply presenting figures. This approach is valuable in various research and evaluation contexts, as it ensures that qualitative insights remain authentic and informative rather than being reduced to mere statistics.

Additional Reading

Brace, I. (2013) Questionnaire Design: How to Plan, Structure and Write a Survey. Kogan Page.

- Chapter 1 p 6-16.
- Chapter 3 p 28-30.
- Chapter 4 p 36-47.

Campos, D. (2015) Populations vs Samples.

Dept. Computer Science, Uni Cape Town. (2012) Qualitative Research Methods.

Business Research Methodology (BRM). (2018) Qualitative Data Analysis Methods.

Sage Video. (2018) Designing a Survey.

QuestionPro. (2021) Questionnaire vs Survey: Is there a Difference?

Survey Monkey. (n.d.) Survey vs Questionnaire: What is the difference?

QuestionPro. (2021) Leading Questions: Definitions, Characteristics and Examples.