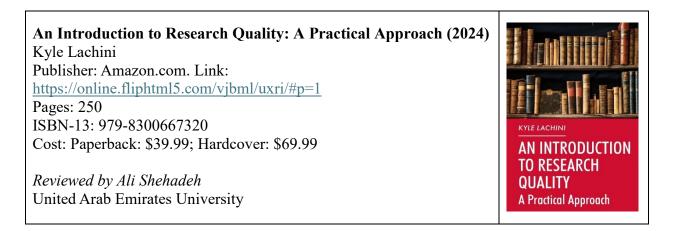
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An Introduction to Research Quality: A Practical Approach addresses two essential requirements of quality research design: reliability and validity. Reliability is defined as "the consistency, stability, and dependability of measurements obtained through research instruments" and validity refers to "the accuracy and appropriateness of inferences drawn from the data (p. 3). Both constructs are vital to qualitative and quantitative research because they determine the precision in any research design. The author's examination of these two constructs transcends disciplinary boundaries while simultaneously resonating with scholars, practitioners, and research students. The author points out that "Ensuring reliability and validity is paramount for drawing meaningful conclusions and informing practices and policies" (p. 10).

The book consists of a short preface, five chapters, a glossary of terms, references, and an index of terms. In the preface, the author states that the book aims to address a gap in academic discourse by emphasizing "the importance of explicitly acknowledging and reporting on the reliability and validity of instruments used in research" (p. 3), arguing for the importance of transparency and precision in research for scholarly excellence.

Chapter 1, "Introduction," traces the evolution of the constructs of reliability and validity. The chapter starts with Spearman's Factor Analysis (Spearman, 1904) and Classical Test Theory (e.g., Louis Guttman, 1945), and then explores how these constructs expanded into various disciplines, their influence on educational policy, the constructs' adoption in social sciences research, and their influence on educational and psychological measurement.

Chapter 2, "Research Methodology", provides a comprehensive overview of research methodology, its significance, key components, and the steps involved in conducting research. The chapter starts by making an important distinction between research methods and research methodology. The former refers to the "techniques, procedures, or processes that researchers employ to collect, analyze, and interpret data in a study" like surveys, experiments, interviews, and case studies (p. 17). The latter refers to the general "framework, strategy, or philosophical approach that guides the entire research process" like the underlying principles, assumptions, and logic behind the choice of specific research methods (p. 18). Armed with this distinction, the chapter moves on to illustrate the various types of research methods researchers use such as

surveys, experiments, interviews, case studies, ethnographic research, and observational research. The chapter also discusses the selection of the research setting and participants.

Chapter 3, "Approaches to Research", discusses the two main paradigms of research methodologies, quantitative research and qualitative research. Quantitative research is described as "structured and systematic, focusing on quantifying and analyzing phenomena through numerical data" (p. 57). Unlike quantitative research, "qualitative research is exploratory and interpretive, focusing on uncovering deep meanings, contexts, and nuances. It captures the richness of human experiences without reducing them to numbers" (p. 58). The chapter thoroughly discusses these two types of research approach methodologies, including the specific research methods used in each approach. It also discusses the similarities and differences between these two research methodology paradigms. The chapter ends with a discussion of how the qualitative and quantitative research techniques can be combined to create mixed-methods research, which aims to gain a "fuller understanding of the research problem, without strict adherence to one research paradigm over another" (p. 89).

The last two chapters present detailed discussions of the two central constructs of the book, reliability and validity, in relation to the research approaches illustrated and discussed in chapter three, namely quantitative research, qualitative research, and mixed-methods research. Chapter 4, "Reliability and Validity in Quantitative Research", discusses reliability and validity in quantitative research. For instance, the chapter discusses how the various aspects of reliability, like test, retest, internal consistency, and inter-rater reliability, are ensured in quantitative research. The author emphasizes that "These measures help researchers assess and enhance the consistency and stability of their measurement instruments over time, ensuring dependable data collection" (p. 98). Chapter 5, "Reliability and Validity in Qualitative and Mixed Methods Research", discusses the constructs of reliability and validity in qualitative research, which encompasses credibility, transferability, dependability, and confirmability, is achieved in qualitative and mixed-methods research.

Each of the five chapters concludes with (a) self-assessment, (b) reflective questions, and (c) activity suggestions. These sections aim to guide the reader to engage with the content, deepening their understanding of the issues discussed in the chapter, and applying the knowledge in real-world research contexts.

An Introduction to Research Quality: A Practical Approach is written in a clear, accessible, and reader-friendly style. The contents of the book are coherently and progressively linked, but at the same time, every chapter is self-contained, ensuring that it can be read independently. This excellent monograph can be used as a coursebook or reference book. It is useful for researchers, practitioners, and students at both undergraduate and graduate levels.

## References

Guttman, L. (1945). A basis for analyzing test-retest reliability. *Psychometrika*, 10(4), 255–282.
Spearman, C. (1904). General intelligence objectively determined and measured. *American Journal of Psychology*, 15(2), 201–293. https://doi.org/10.2307/1412107

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