Review: Experimental Research Methods in Language Learning

Chanisara Tangkijmongkol

English as an International Language Program Chulalongkorn University

Phakiti, A. (2014). Experimental Research Methods in Language Learning. London: Bloomsbury Academic

Experimental Research Methods in Language Learning was written by Aek Phakitti as one of the titles in the Research Methods in Linguistics Series, with four more titles in this series: Quantitative Research in Linguistics, Research Methods in Applied Linguistics, Research Methods in Interpreting, and Research Methods in Linguistics.

The organization of Experimental Research Methods in Language Learning allows the reader to easily follow what the author intends to share in a step-by-step manner, with the entire book divided into 16 chapters. The book provides the reader with some background information starting from basic ideas to deeper and more complex concepts related to research in the introduction. The style of writing makes it an informative source of reference for those who wish to conduct research, particularly novice researchers and graduate students whose lack of research experience may make the idea of conducting research, particularly experimental research, rather intimidating for them.

The first eight chapters of the book deal with the basic concepts necessary for researchers. Chapter 1 aims to introduce

experimental research in language learning. It is an introduction and overview on how experimental research can be conducted in language learning research, with presentation of the key concepts related to educational and language learning research. Chapter 2 presents the crucial aspects and terminology related to experimental research that influence the research outcomes. Chapter 3 illustrates the research paradigm and its processes that influence the experimental research. Chapter 4 discusses various types of experimental research design for language learning research. Chapter 5 highlights the significance of both internal and external validity in experimental research, while Chapter 6 emphasizes the importance of research ethics in experimental research in language learning, both being crucial elements of any well-designed research study. Chapter 7 explores a range of research instruments and data elicitation techniques suitable and effective for different research objectives, questions, and hypotheses, particularly those common in quantitative methodology, and Chapter 8 explains the concepts of a hybrid approach of combining quantitative research instruments with qualitative data collection techniques in experimental research design, with an emphasis being placed on certain important limitations in combining various methods in one study that researchers should consider.

Chapter 9 to Chapter 15 shift their focus to statistical measures popularly employed in experimental research in language learning. Chapter 9 introduces the readers to descriptive statistics generally used to describe the characteristics of quantitative data, with the introduction of IBM® SPSS® that can be resourceful in the analysis, and Chapter 10 highlights a number of concepts of inferential statistics in experimental research. Chapter 11 moves on to various types of correlational analyses through the use of SPSS, Chapter 12 explains the importance of reliability analysis for experimental research as well as important criteria to assess reliability, and Chapter 13 discusses different types of *t*-test for analyzing experimental research data. Chapter 14 goes into more in-depth statistical

concepts with three types of analysis of variance (ANOVAs), including a one-way analysis of variance (ANOVA), an analysis of covariance (ANCOVA), and a repeated-measures analysis of variance (ANOVA). Chapter 15 presents the four non-parametric tests for experimental research: the Wilcoxon signed ranks test, the Mann-Whitney U test, the Krusal-Wallis H test, and the Friedman test. The book ends with Chapter 16 which is the conclusion of the book, taking into account how to develop an experimental research proposal in language learning.

Like other research handbooks that can be found in the market, Experimental Research Methods in Language Learning introduces the concepts of research methods and basic statistics necessary for researchers, especially those who are in the field of language teaching and learning. What makes this book of particular interest is its style of writing. The author should be commended for presenting what may be perceived by some as difficult or complicated concepts in a very user-friendly manner, with clear and simple explanations that are easy to follow and comprehend, that can gradually enable readers to overcome their prior intimidation and begin to feel that research is not somehow beyond their reach after all while reading this book. Discussion questions at the end of each chapter make this book more comprehensible for readers, and a list of additional resources also included in all chapters further stimulate readers to deepen their understanding.

In addition, it could also be said that both theoretical and practical concepts described in the book also make it suitable as a textbook for a fundamental course in research methodology at a graduate level. This goes well with another distinctive feature of the book that is worth mentioning—its companion website that provides a plethora of online materials, resources, lecture notes, data files, and useful activities. Instructors can readily make use of exercises and PowerPoint slides on the website in their class, while learners can take advantage of the technology to ensure mastery of the research concepts.

In summary, with its comprehensive coverage of experimental research concepts, comprehensible use of language, accompanying online resources, and other aforementioned distinctive features, Ake Phakiti has been true to his words "to make the subject of the experimental research in language learning accessible and meaningful to readers without a background in this particular area."

The Reviewer

Chanisara Tangkijmongkol is a Ph.D. student in the English as an International Language Program at Chulalongkorn University. Her areas of research interest include English for Specific Purposes, particularly English language learning and teaching of underprivileged children, and Language Assessment and Evaluation.