The Routledge Handbook of Research Methods in Applied Linguistics edited by Jim McKinley and Heath Rose, Routledge Taylor & Francis Group, 2020. XXII + 529, ISBN: 978-0-367-82447-1 (eBook).

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This state-of-the-art masterpiece edited by Jim McKinley and Heath Rose is the fruit of contributions by prominent scholars, and provides a comprehensive coverage of key research-related constructs and methodological issues. Being organized into four parts and 41 chapters, it overviews some key concepts, considerations, designs, approaches to research, and data collection/analysis procedures. The Introduction scrutinizes and reconceptualizes traditional research methods in this golden age of technology, multilingualism, and globalization. It also elaborates on key terms in applied linguistics research with an overview of the whole Handbook.

Part I, comprising ten Chapters, covers a vast range of *'Key Concepts and Current Considerations'* bearing invaluable implications for applied linguistics research. Chapter 1 explains the various facets of methodological transparency and its effects on research quality, including accessibility, visibility, rigor, replicability, and systematicity. The second chapter provides insights into multi-perspective research and explains how incorporating multiple perspectives (i.e., theory, methodology, investigator, time, and space) and varied layers of evidence can inform applied linguistics research. Chapter 3, advocating systemic thinking and adopting innovative approaches, describes "the possibilities for broadening the scope of mixed methods inquiry in applied linguistics" (p. 49), drawing upon a set of key dimensions, namely philosophy, theory, methodology, policy, pedagogy, literacy, discourse, and human factor. Chapter 4 focuses on a much-needed discussion on sampling and its strategies and highlights significant issues in making sampling decisions. Moreover, adopting a critical and "more socially informed approach to sampling" (p. 53) is emphasized. Challenging the prevalent translation standards in applied linguistics research, Chapter 5 enumerates types of translation equivalence and techniques, proposing guidelines for multilingual research. Having discussed the key concerns of applied linguistics research regarding the use of multiple languages in various phases of a research project, it offers invaluable resolutions based on five samples of researcher praxis to deal with

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multilingual participants in multilingual frameworks and enrich linguistic aspects of research. Chapter 7 illustrates how applied linguistics research methods are problematic in their approach to non-Western contexts; moreover, some ideological criticisms are levelled against the political and ethical dimensions of Western theories and research methods to identify the reproduction of power relations, lack of solidarity, and recognition of the Others. Centering the discussion around quantitative research methods, several innovations contributing to theory and knowledge in the field are presented in Chapter 8. Besides explaining interdisciplinary research, its similarities to and differences from multidisciplinarity and transdisciplinarity, and its processes and goals, Chapter 9 discusses the integration of applied linguistics and other fields to go beyond disciplinary boundaries and generate implications for individuals and society. Chapter 10 stresses interrogating the logistical aspects of enacting ethical research practices, while illuminating research ethics and elevating the ethical quality and methodological rigor of applied linguistics research.

Part II, including 12 chapters offers a wide array of *'Designs and Approaches to Research'*. Chapter 11 reviews core concepts in experimental and quasi-experimental research and presents five common research designs, highlighting their pros/cons, recommending more efficient utilization methods within applied linguistics research with a view on practicality and feasibility. Chapter 12 clarifies the basic characteristics of case study research design, while offering cutting-edge samples and raising implications for assessing case study research. The ethnography research approach, its origin and development, essential features, and exemplary use in and for applied linguistics are discussed in Chapter 13, while highlighting ethical and accountability issues with some concluding remarks on its research significance. Similarly, Chapter 14 addresses two recent and less-adopted approaches to conducting ethnographies, namely autoethnography and critical ethnography, highlighting their origins, purposes, ethical issues, and mentioning relevant studies. Chapter 15 conceptualizes action research as an interventionist, systematic, and transformative methodology and discusses its core features and ethical underpinnings. Chapter 16 explains five interconnected dimensions reflecting the fundamental features of narrative inquiry and highlights the processes of data collection and analysis in recent narrative research. Chapter 17 focuses on the historical roots of Critical Discourse Studies (CDS) and explains several interrelated methodological CDS approaches, and their issues and critiques. Chapter 18 acknowledges the relevance of mixed methods in corpus-based analysis and inquiries into the role of corpus tools in offering an interesting alternative with several features, while expanding corpus analysis approaches such as content analysis. Chapter 19 examines systematic reviews aiming to "bring together the totality of the research evidence on an emerging phenomenon" (p. 231) and explains inclusion and exclusion criteria, the systematic search for relevant studies, systematic mapping and in-depth review, and dealing with the findings. Chapter 20 discusses meta-analysis in applied linguistics in terms of integrating the findings of empirical quantitative studies, and compares it with other traditional and rather recent approaches to research synthesis, listing its different stages, weaknesses, and strengths. Chapter 21 includes an account of language policy, as a recently evolving area of multidisciplinary inquiry and describes language use and policy practices as regards what, when, why, who, and how approaches at different levels. Part II ends with Chapter 22 which clarifies Grounded Theory Methodology (GTM), as an inappropriately applied methodology in applied linguistics with a significant theoretical contribution to the field, while comparing it with other qualitative research methods, and demystifying purposes, origins, future trends, and practices of GTM.

Part III, comprises 9 chapters on a wide range of issues in qualitative *'Data Collection Methods'*. Chapter 23 flashlights symmetric interview ethics in multilingual situations and interviewer-interviewee power balance besides affective/intellectual considerations in collecting reliable qualitative data. Chapter 24 shifts to focus groups and topic-oriented group discussions*,* their origins, strengths (being economical, comfortable, flexible, and symmetric), and tips for their use (aims, data type, and practicalities). Chapter 25 describes the interdisciplinary psycholinguistic

technique of Think-Aloud Protocols (TAPs) for eliciting deep, valid, reactive, and veridical data, picturing cognitive activities/processes in mind, especially when triangulated with modern digital data collection techniques. After portraying a critical review of theoretical/empirical research on stimulated recall, Chapter 26 highlights its diverse applications despite numerous practical and epistemological constraints. The next chapter elaborates on the most ubiquitous qualitative data collection instrument, questionnaires, including online ones, while presenting the rationale and useful tips for developing effective questionnaires and observing relevant ethical considerations. Observation, as an ethnographic qualitative instrument reflecting lived-experiences, its classifications, purposes, applications, and observation-based thick field notes are discussed in Chapter 28, while enumerating their merits/demerits, respectively. Chapter 29 defines diary methods, research-friendly tools in applied linguistics research and highlights the strengths and applications of 'solicited journals' (research-wise diaries elicited from learners). Chapter 30 discusses research-focused language elicitation tasks, especially oral and standardized ones. In the final chapter, the significance of eye tracking technology for collecting real-time high-quality data and a transparent view into the learners' internal processing mechanism is highlighted.

Chapters 32 to 41 in Part IV deal with diverse '*Data Analysis'* issues. Chapter 32 recommends 'R' analysis over 'SPSS' for its versatile applications, free and wide accessibility, code-based operation in windows, transparency, and reproducibility/replicability of analysis. Chapter 33 explicates 'What', 'Why' and 'How' of rather-ignored, necessary, yet not sufficient descriptive statistics, as the prerequisite for inferential analysis, while listing its pros/cons and display modes. Chapter 34 focuses on generalized (mixed-effects regression framework), Generalized/Additive (Mixed) Models (GAM[M]s), and multinomial logistic regression in inferential statistics, including their merits and demerits. Chapter 35 explains Exploratory and Confirmatory Factor Analysis (EFA & CFA) in instrument validation and the significance of Structural Equation Modeling (SEM) in decade-long articles of three main applied linguistics journals, highlighting future research prospect. Chapter 36 is allocated to the merits and steps of inductive/deductive mixed-method content analysis, its systematicity, flexibility, context sensitivity, language-orientedness, and real-life applicability in traditional and digital data analysis, calling for in-depth changes in modern Qualitative Data Analysis (QDA). Chapter 37 reviews approaches to written text analysis, as the showcase of learners' lexico-grammatical features and cognitive/intentional states, irrespective of its sociocultural setting, while differentiating it from discourse analysis. Chapter 38 defines 'corpora' and underlines methodological considerations in corpora analysis for vocabulary research, while spotlighting basic decisions in corpus analysis and listing some corpora analysis programs (Antlab, AntCon, Range Program, Sketch Engine, WordSmith, etc.). Chapter 39 focuses on discursive psychology, attending to its history and "sequential and locally built nature of social actions and their relevance in real time" (p. 474). This chapter also draws upon conversation analysis and membership categorization analysis tools while referring to the dilemmas involved. Theoretical and analytical insights of rather-flexible multimodal (inter)action analysis are explicated in Chapter 40, being a breakthrough in qualitative analysis of real-time social interactions with its complex array of variables. Finally, Chapter 41 offers renewed modern theoretically-laden tips on interaction analysis and unravels its ambiguous dimensions using expansive interaction analysis, going beyond 'here-and-now' issues. Despite the diversity of data analysis approaches in Part IV and its rather detailed explication of quantitative/qualitative research methods, due to relatively obscure research terminology the volume seems to suit rather experienced researchers than the novice (Chang, 2021).

All in all, this precious Handbook provides a wide coverage of research concepts in applied linguistics, investigating their challenges and suggestions for future trends. This comprehensive Handbook, with its coherent, well-organized, and straightforward outline, provides a transparent account of diverse research approaches besides practical examples of data collection and analysis methods for researchers. Furthermore, despite being lengthy, it offers a valuable resource with workable implications for practicing and prospective researchers, university lecturers, and

undergraduate and postgraduate students. In addition, applied linguistics practitioners can, to a great extent, benefit from recent insights into traditional research approaches for effective data elicitation in novel research domains.

Dörnyei (2007) putting a practical focus on an integrated coverage of qualitative/quantitative research, seems to adopt a rather vivid style in describing statistical methods and presenting sample research reports for each category. Paltridge and Phakiti (2015), in their voluminous Handbook similarly cover a range of methodological issues with a significant investigation of a plethora of applied linguistics areas in practical research, including language and identity, language learning strategies, learners' motivation, teachers' attitudes, language and identity, syntax, semantics, and pragmatics. The present Handbook, however, mainly encompasses contextual examples of evolving and newly-emerging designs and methodologies in recent digitally-oriented research practice.

Notwithstanding, the absence of concluding and introductory chapters in each part as well as final remarks in some chapters is among the most serious shortcomings of the Handbook. Also, more effective visual representations could be applied to enhance its reader-friendliness. Besides, introducing further relevant resources could add to the wealth and efficacy of the Handbook.

References

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