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EDITED BY Eduardo Encabo-Fernández, University of Murcia, Spain

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Victoria Bamicha,
National Centre of Scientific Research
Demokritos, Greece
Tijana Gajic,
Singldunum University, Serbia

*CORRESPONDENCE Hui Lv ☑ edward.lvhui@gmail.com

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Analysis of factors influencing the use of new forms of foreign language textbooks from the perspective of sociocultural theory

Jingjing He¹ and Hui Lv²*

¹Research Office of Chengdu International Studies University, Chengdu, Sichuan, China, ²International Business School of Chengdu International Studies University, Chengdu, Sichuan, China

Few attempts have been made to explore the use of new-form foreign language textbooks. Adopting an empirical research method from the perspective of sociocultural theory, this research generalizes and describes five dimensions in the use of new-form foreign language textbooks and nine factors contained therein, and constructs structural equation model to summarize the relationships and interactive effects among the dimensions. Results of statistical analyses show that textbook design, teacher factors, student factors, teaching resources and teaching environment constitute the use of new-form foreign language textbooks, among which digital tools and technological support have direct effect on textbook design and teaching environment. Moreover, cross-cultural competence and digital literacy produce a significant effect on teacher and student factors. Results also indicate that authentic language materials and collaborative learning have a direct and significant effect on teaching resources. In short, this research integrates Al tools and learner-centered goal in the use of new-form foreign language textbooks, promoting students' cross-cultural communication in a highly interactive learning environment.

KEYWORDS

sociocultural theory, new-form foreign language textbooks, artificial intelligence, textbook usage, influence factor, cross-cultural communication

1 Introduction

In the digital age, AI empowers the transformation of foreign language teaching materials, which has garnered growing interest in recent years. New-form foreign language textbooks are defined as a type of multi-medium instructional material that integrates printed materials, digital resources and digital tools (Yang, 2024), demonstrating features such as hypertext links, multimedia objects, interactive tools, as well as search and cross-reference functions (Brueck and Lenhart, 2015). However, research on foreign language textbooks has predominantly focused on content analysis, while empirical studies on textbook use remain significantly underrepresented (Harwood, 2021). Sociocultural Theory situates learning within complex systems of society, culture, and history, emphasizing the central role of sociocultural factors in the development of higher-order psychological functions (Vygotsky, 1978). This aligns closely with the interpersonal and dynamic characteristics of new-form textbooks. Therefore, this study adopts the perspective of Sociocultural Theory, analyzes the factors influencing the use of new-form foreign language textbooks, and explores the textbook users' collaborative process. The findings not only reveal the importance of AI and cross-cultural communication