A Bibliometric Analysis of Research on Emotions in Second Language Learning in China (2000-2025)

Shun Li

School of Foreign Languages and Cultures, Ningxia University, Yinchuan, Ningxia, 750021, China

Abstract: As pivotal yet underexplored determinants of second language learning, learner emotions have gained increasing scholarly attention in China. This study takes the research articles on emotions in second language learning published in authoritative journals from 2000 to 2025 in CNKI as the data source, and uses CiteSpace to conduct a bibliometric analysis to explore the current research status in this research area. Results reveal three dominant strands: the conceptualization and measurement of emotions research showing evolution from anxiety-dominant studies toward foreign language enjoyment and boredom, with validation of emotion scales; emotion-individual difference factors interrelationships demonstrating significant links between learner emotions and motivation, engagement, emotional intelligence, along with emotion-achievement correlations indicating the role of learner emotions on academic performance; pedagogical evidence confirming teacher factors and instructional models modulate emotional experiences. Critical limitations include little focus on positive emotions, overreliance on cross-sectional designs, neglect of discipline-specific contexts beyond university settings, and unidirectional frameworks overlooking teacher-learner emotional reciprocity. Future research should overcome these limitations and conduct extensive research on emotions in second language learning.

Keywords: l2 learning, emotions, citespace

1. Introduction

Emotions represent the subjective affective experiences of second or foreign language learners during their learning process. They permeate the entire learning journey of learners and are closely linked to their learning performance, cognitive abilities, and other factors. Currently, there are literatures that review research related to second language (L2) emotions. Jie Zhou conducted a bibliometric analysis with CiteSpace on international L2 writing emotion research, exploring the overall trends and hot topics in this field[1]. However, previous literature reviews lack a systematic synthesis of L2 learning emotion research in China based on scientific bibliometric tools. Therefore, this study employs two software tools, Excel and CiteSpace (6.3.R1), to review the literature on L2 emotion research from 2000 to 2025, aiming to reveal the current strands of L2 learning emotion research in China.

2. Research methodology

This study utilizes CiteSpace (6.3.R1), a visualization software developed by Professor Chaomei Chen for constructing mapping knowledge domains, which can reveal research hotspots and evolutionary trends within a specific academic domain. The literature data of the study were sourced from the CNKI (China National Knowledge Infrastructure) database. With the time frame set to 2000–2025, the literature sources were limited to PKU and CSSCI journals with the topic keywords: ("L2 learning" OR "foreign language learning" AND "emotion" OR "affect"). After manual screening to exclude irrelevant or low-relevance publications, 236 articles were ultimately selected for analysis.

3. Results and analysis

The cluster mapping of keywords for L2 learning emotion research from 2000 to 2025 reveals seven major clusters:#0

Foreign Language Learning,#1 English Learning,#2 Foreign Language Enjoyment,#3 Affective Factors,#4 Learning Motivation,#5 Classroom Teaching,#6 Foreign Language Teaching. The cluster mapping demonstrates high reliability with Modularity Q of 0.6988 (Q>0.3) and Mean Silhouette of 0.8889 (S>0.5), indicating statistically significant and referential results. Through inductive classification, there are three core research strands: the conceptualization and measurement of emotions (#2 and #3), relationships between emotions and other learner individual difference factors as well as academic achievement (#0,#1,#4), and connections between emotions and pedagogy (#5 and #6).

The first research strand is the conceptualization and measurement of emotions. To explore learners' emotions during the learning process, researchers conducted empirical studies focusing on the concept, manifestation, and measurement of emotions, developing corresponding emotion scales. Foreign language anxiety has remained a central research focus. However, influenced by the introduction of positive psychology to L2 acquisition, Chinese scholars represented by Chengchen Li began investigating positive emotions beyond anxiety, particularly foreign language enjoyment. To advance research on Chinese students' foreign language enjoyment, developing context-appropriate emotion scales became foundational. Li et al. adapted Dewaele and MacIntyre's Foreign Language Enjoyment Scale into the Chinese Version. Based on the scale, Li and Han examined L2 emotion characteristics among Chinese university students in online learning environments, finding moderately high levels of foreign language enjoyment with no significant difference compared to traditional classroom learners[2]. Beyond enjoyment, boredom has also gained scholarly attention. Through interviews with Chinese students and teachers, Li et al. confirmed the pervasiveness of boredom in classrooms[3].

The second research strand focuses on relationships between emotions and other learner individual difference factors as well as academic achievement. First, the research on emotions and individual factors primarily addressed connections with learning motivation, engagement, emotional intelligence, and critical thinking disposition. Concerning emotional intelligence, Wenhua Huo's survey revealed a negative correlation between emotional intelligence and foreign language anxiety of university students, demonstrating that emotional intelligence effectively reduces anxiety[4]. Second, scholars have examined emotion-academic achievement relationships through studies on learning effectiveness and performance outcomes. Jiaxin Xing et al. explored relationships between task emotions with oral performance[5]. In simple tasks, task enjoyment positively correlated with oral fluency while task anxiety showed negative correlation. In complex tasks, task anxiety showed no significant correlation with oral performance, but task enjoyment maintained a positive correlation with fluency.

The third research strand is regarding connections between emotions and pedagogy. As teaching involves both students and instructors, external factors like teacher factors become intrinsically linked to students' learning emotions. Scholar Yan Jiang examined teacher-related factors influencing university students' foreign language enjoyment through focused writing, identifying that classroom activity organization, teacher characteristics, teacher skills, teaching content, and teacher support collectively impact students' foreign language enjoyment[6].

4. Discussion

Research on emotions in L2 learning has predominantly focused on foreign language anxiety, while studies on other emotions such as foreign language enjoyment and boredom are limited, requiring substantial empirical investigation. Additionally, current classifications of learning emotions based on instructional settings also appear overly generalized, overlooking emotion-specific experiences in particular contexts. Methodologically, while emotional experiences are inherently dynamic, most studies rely on cross-sectional designs with insufficient longitudinal tracking of L2 learning emotions. Regarding emotion-academic achievement correlations, while most scholars have examined outcomes of emotions on learning performance, few have investigated specific mediating pathways. Although numerous studies confirm close links between foreign language emotions and pedagogy, there are two limitations. The first is that research populations are overwhelmingly confined to university students, lacking examination of discipline-specific differences. The second limitation is that studies on teacher-student interactions only address unidirectional effects on student emotions, neglecting the bidirectional nature of emotional exchanges between teachers and learners.

5. Conclusion

This bibliometric analysis of emotions in L2 learning studies in China reveals three core strands: the conceptualization and measurement of emotions research showing a shift from anxiety-dominant studies toward foreign language enjoyment

and boredom; demonstrations of emotion-individual difference factors interrelationships and emotion-achievement correlations; and pedagogical evidence that teacher factors and instructional models modulate emotional experiences. Critical limitations include little attention on positive emotions, overreliance on cross-sectional designs, neglect of discipline-specific contexts beyond university settings, and unidirectional frameworks overlooking teacher-learner emotional reciprocity. Future research could prioritize longitudinal designs across diverse educational contexts to establish bidirectional emotion-pedagogy models.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

[1] Zhou Jie, Wang Junju. Tracking the frontiers of international research on L2 writing emotion. Technology Enhanced Foreign Language Education, 2022(6): 65-73.

[2] Li Chengchen, Han Ye. The predictive effects of foreign language enjoyment, anxiety, and boredom on learning outcomes in online English classrooms. Modern Foreign Languages, 2022, 45(2): 207-219.

[3] Li Chengchen, DEWAELE J M, HU Y. Foreign language learning boredom: conceptualization and measurement. Applied Linguistics Review, 2023, 14(2): 223-249.

[4] Huo Wenhua. A study of effect of emotional intelligence on foreign language learning anxiety of college students. Theory and Practice of Education, 2011, 31(21): 43-45.

[5] Xing Jiaxin, Zhao Haiyong, Luo Shaoqian, et al. Task complexity, working memory, task emotions, and oral performance of university students. Modern Foreign Languages, 2024, 47(1): 63-75.

[6] Jiang Yan. An investigation of the effect of teacher on Chinese university students' foreign language enjoyment. Foreign Language World, 2020(1): 60-68.