A Review of Research on Emotions in Foreign Language Learning

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Abstract: With the positive turn in the field of foreign language learning, researchers have gradually noticed the role of foreign language learners’ emotions, especially positive emotions, in promoting language learning. The present study reviewed theoretical and empirical research on emotions in foreign language classes at home and abroad. The results showed that the research on emotions in foreign language learning can be divided into three stages. The first stage primarily focused on negative emotions, especially on foreign language anxiety. The second stage laid emphasis on the interrelationship between foreign language enjoyment and foreign language anxiety, and the third explored multiple emotions, in addition to enjoyment and anxiety. The study offered insights into future research directions and provided recommendations to enhance the study of emotions in foreign language learning.

1. Introduction

Since the 19th century, traditional foreign language teaching methods, such as grammar-translation and audio-lingual methods, emphasized the impacting role of EFL learners’ cognitive factors on second language acquisition (SLA), while neglecting the impact of learners’ affective factors on language learning. With the emergence of teaching methods like suggestopedia and communicative language teaching in the 20th century, the significant role of the affective contributors in foreign language learning has gradually received attention. In the late 1970s, the Affective Filter Hypothesis proposed by Krashen (1985)[13] revealed the relationship between learners’ emotions in language learning and the efficiency of second language acquisition. It was suggested that the affective factors can either hinder or facilitate learners’ intake of language input, thereby positioning emotions as a crucial element in language acquisition. The Affective Filter Hypothesis affirmed the significant role of affective factors on learners’ proficiency in acquiring a second language, laying the foundation for academic research on learners’ emotions. In 2001, it was required that curriculum goals should incorporate learners’ affective attitudes and values, and educators pay more attention to developing learners’ affects and emotions in addition to language knowledge and language skills in the new round of Curriculum Reform of Basic Education in China.

With the increasing recognition of the importance of affective factors in language acquisition, more and more researchers have begun to focus on the affects and emotions of learners in the
process of second language learning, yielding increasingly rich results.

2. Review of Theoretical Studies

2.1 The Affective Filter Hypothesis

It was suggested in the Affective Filter Hypothesis that emotions are crucial in impacting language learners’ full internalization of comprehensible input. It was regarded that emotions played as adjustable filters that can either facilitate or hinder language input. Only if the language inputs pass through the filter, reach the language acquisition mechanism in the brain and further are absorbed by it, learners were ultimately able to acquire language.

It was explained in the Affective Filter Hypothesis that learners’ emotions played a significant role in second language learning, suggesting that the affective factors affecting language learning include learners’ motivation, confidence, and anxiety levels. Among them, anxiety is the most influential factor that determines the success or failure of language learning activities. As a result, the focus on foreign language learning anxiety has been embarked on.

2.2 Well-Being Theory

The Authentic Happiness Theory proposed by Seligman (2002)[21] indicated that happiness consisted of three dimensions: Positive emotion, Engagement, and Meaning (PEM). Subsequently, Seligman (2011)[22] further developed the Well-being Theory, which posited the PERMA model, meaning well-being comprised five dimensions. Building upon the Authentic Happiness Theory (2002)[21], the Well-being Theory added Positive Relationships and Achievement as two additional dimensions.

In the foreign language learning, learners’ positively affective factors were took into consideration in the Well-being Theory, which were regarded as core indicators of individual well-being. The theory shifts the focus from past language teaching approach, which solely emphasized learners’ cognitive aspects, to a more humanistic approach in language education, which stressed learners’ positive emotions during the foreign language learning process.

2.3 Broaden-and-Build Theory

The Broaden-and-Build Theory (Fredrickson, 2001)[9] distinguishes between the different impacts of positive and negative emotions, which posited that positive emotions served two functions: broaden function and build function. The former refers to that positive emotions could expand an individual’s immediate thought-action repertoire, encompassing actions, cognition, attention, and so forth. Over time, the transient resources expanded by positive emotions would be built into individuals’ enduring resources, such as cognitive, psychological, and social resources. Conversely, negative emotions exhibited a contracting function, which means negative emotions could contract individuals’ cognitive and behavioral array and further hinder the accumulation of resources.

It was introduced into the field of foreign language learning by MacIntyre and Gregersen (2012)[14], who advocated for scholars to focus not only on negative emotions with contracting functions in language classrooms but also on positive emotions with broadening and building functions. Consequently, an increasing number of scholars in the field of foreign language learning have begun to pay attention to EFL learners’ positive emotions. For instance, based on the Broaden-and-Build Theory, Dewaele and MacIntyre (2014)[41] pioneered the examination of foreign language enjoyment and anxiety among international second language learners, providing an
2.4 Control-Value Theory

The Control-Value Theory (Pekrun, 2006) laid emphasis on academic emotions, deeming that academic emotions are primarily influenced by two major factors, which are learners’ subjective control appraisal and value appraisal. Control appraisal refers to learners’ cognitive appraisal of the “controllability” of past, current, and future academic activities or outcomes. Value appraisal is further divided into intrinsic value appraisal and extrinsic value appraisal. The former represents learners’ judgment of the inherent value brought by academic activities or outcomes, such as self-satisfaction, while the latter stands for learners’ judgment of the practical value brought by academic activities or outcomes, such as academic achievement.

The Control-Value Theory systematically describes the complex, bidirectional, and dynamic relationships between academic emotions and their antecedents and consequences, providing more comprehensive and robust support for empirical research on the causes of foreign language learners’ emotions in the field of foreign language learning (Xia & Chen, 2022; Dong, 2022). For example, Dong (2022) investigated the predictive relationships between EFL learners’ control-value appraisals and their classroom anxiety and enjoyment, concluding that learners’ control appraisal and intrinsic value appraisal in foreign language learning negatively predicted foreign language anxiety and positively predicted foreign language enjoyment. Moreover, the extrinsic value appraisal positively predicted both foreign language anxiety and foreign language enjoyment.

2.5 Flow Theory

Proposed firstly by Csikszentmihalyi (1975), flow refers to a state of complete immersion in an activity, characterized by loss of self-consciousness, time distortion, integration of consciousness and action and so forth. Flow is a positively affective experience that brings about a high level of excitement and fulfillment. Individuals in the state of flow are highly focused on the task at hand, feel completely in control of their actions, lose self-awareness during the activity, and achieve high levels of task performance. The sub-dimensions necessary for experiencing flow were identified, namely, (1) clear goals, (2) a balance between challenge and skill, (3) immediate feedback, (4) high concentration, (5) a sense of control over the activity, (6) freedom from distractions, (7) loss of self-consciousness, (8) altered sense of time, and (9) intrinsic motivation. Among these components, the match between challenge faced and skill possessed is the top of the list. When the challenge of the task matches individuals’ skill level, it would lead to entering the state of flow. If the skill level is lower than the task challenge, individuals would experience anxiety, whereas the skill exceeding the challenge level would result in individuals feeling bored. Later, the four-channel model was refined, suggesting that individuals experience flow only when the levels of challenge and skill levels are both high. A skill level lower than the challenge level leads to anxiety, while a skill level higher than the challenge level leads to boredom, and both at lower levels result in apathy.

Being one of pioneers introducing flow theory into the field of foreign language learning, Egbert (2003) argued that the optimal experience in language teaching was flow experience, which can be influenced by both environmental and individual factors. Through conducting a study, Egbert (2003) found that flow experiences existed in foreign language classrooms and that when learners experienced flow, they were in the state of learning. The state of flow itself directly exerted a positive impact on academic performance in foreign language learning, which in turn affects learners’ affective states.
3. Review of Empirical Studies

3.1 Review of Research on Foreign Language Anxiety

In the 20th century, researchers in psychology primarily focused on exploring human flaws and weaknesses, leading to an initial emphasis on learners’ negative emotions in academia. Related studies centered around learners’ anxiety, including the causes of anxiety (Gu & Li, 2010[27]; Ren et al., 2011[35]), strategies for dealing with anxiety (Gu & Li, 2010[27]; Ren et al., 2011[35]), and the relationships between anxiety and other variables (Li & Liu, 2013[28]).

As regards studies on the causes and coping strategies of anxiety, Gu and Li (2010)[27] analyzed the antecedents of anxiety from a broader perspective, identifying multiple factors contributing to foreign language learning anxiety, including peer evaluation, competitive relationships, learners’ cognitive perceptions of language learning, classroom atmosphere and activities, and foreign language examinations, all of which could lead to negative impacts on the foreign language learning process and outcomes to some extent. Subsequently, they proposed strategies to address EFL learners’ anxiety from the perspective of teaching methods and assessment approaches. Focusing on high school students, Ren et al. (2011)[35] conducted questionnaire surveys and interviews with second-year high school students and then found that the level of anxiety in foreign language classrooms was affected by students’ self-evaluation, with higher self-evaluation correlating with lower learning anxiety. Moreover, it was suggested that teachers should guide students to maintain moderate levels of anxiety through adopting appropriate evaluation and communication methods. In addition, targeting students majoring in Japanese, Yang (2014)[39] found that factors influencing learning anxiety included self-esteem and learning motivation. Additionally, learning anxiety comprised three factors: anxiety arising from comprehension difficulties, anxiety coming from inadequate oral proficiency, and anxiety stemming from comparisons with others.

Relevant studies on the relationship between anxiety and other variables have focused on such variables as academic performance and learning strategies. For example, Gulmez (2012)[11] explored the effects of foreign language anxiety on Turkish learners whose third language was French, concluding that learners’ language anxiety hindered their language performance. Focusing on a more specific dimension of foreign language learning, that is, foreign language writing, Zhou and Tang (2010)[40] found a negative correlation pattern between foreign language writing anxiety and writing scores by recording the dynamic thinking process of 15 high-anxiety learners and 15 low-anxiety learners in writing and examining their compositions scores. Besides, it was pointed out that the negative correlation was related to the intervention of learners’ first language. Similar to the above study, Li and Liu (2013)[28] investigated the relationship between foreign language writing anxiety and foreign language writing performance, with the difference being that the study added the cognitive variable of foreign language writing self-efficacy. Through a survey of 294 non-English majors, they came up with similar findings as Zhou and Tang (2010)[40], that is, learners’ foreign language writing anxiety was significantly and negatively correlated with writing self-efficacy and final writing grades. Furthermore, foreign language writing self-efficacy was significantly and positively correlated with final writing grades. In addition, gender, major, and overall writing self-efficacy significantly predicted final writing grades. In terms of English speaking, Hewitt and Stephenson (2012)[12] studied the anxiety level and speaking performance of 40 learners and found that the high level anxiety group had the lowest scores and the low level anxiety group got the highest scores.

In addition to academic performance, Wei (2014)[36] studied the interrelationships between learning anxiety and learning strategies such as foreign language learning goal orientation and autonomous learning behaviors by taking 693 non-English majors as the research subjects. The
results revealed that the mastery goal orientation and achievement-approach goal orientation were positively correlated with the students’ autonomous learning behaviors of a foreign language and negatively correlated with their foreign language learning anxieties. On the contrary, achievement avoidance goal orientation was positively correlated with foreign language learning anxiety.

3.2 Review of Research on Foreign Language Enjoyment and Anxiety

It was found that under the influence of traditional psychology, research on foreign language anxiety was on the rise before 2012. After 2012, positive psychology was introduced in the field of foreign language learning, leading to a positive turn in research on foreign language learning, and research on anxiety declined gradually. In addition to anxiety, more and more researchers are focusing on other negative emotions, such as boredom and burnout, and on the strategies coping with the negative effects brought by negative emotions to realize the positive significance of negative emotions in second language learning. Besides, researchers have also shifted their focus to positive emotions such as enjoyment, happiness, pride, etc. and the positive effects accompanying with these positive emotions.

Through literature review, it was revealed that previous studies primarily explored foreign language anxiety and foreign language enjoyment at the same time, encompassing the relationship between these two emotions, as well as their antecedents and outcomes.

In investigating the relationship between foreign language anxiety and foreign language enjoyment, the finding of Dewaele and MacIntyre’s (2016) study yielded that anxiety and enjoyment did not exhibit a dichotomous or mutually exclusive relationship but rather coexisted in learners at various proficiency levels. Moreover, female foreign language learners tended to experience higher levels of both anxiety and enjoyment compared to male learners. Drawing upon dynamic development theory, Elahi Shirvan and Taherian (2021) conducted a longitudinal study lasting a semester to track the developmental trajectories of foreign language enjoyment and anxiety among 367 university students. Qualitative interviews with four learners were also adopted to triangulation with quantitative data. The quantitative and qualitative findings showed a negative correlation between changes in foreign language enjoyment and anxiety over time, indicating that as enjoyment increased over time, anxiety presented a downward trend. Additionally, Boudreau et al. (2018) analyzed dynamic data on 10 Canadian French learners’ enjoyment and anxiety changes through their performance in an oral task. The data revealed a complex relationship between the two emotions, characterized by both negative and positive correlations.

In studies investigating antecedents and influencing factors of emotions, Dewaele et al. (2017) targeted at 189 secondary school foreign language learners and explored the impact of internal and external factors on their foreign language anxiety and enjoyment. The results indicated that learners’ age had no effect on anxiety but was positively correlated with enjoyment. Gender also emerged as a significant factor influencing emotions, with females scoring higher in both anxiety and enjoyment compared to males. Furthermore, the study found that foreign language anxiety was unrelated to external factors such as teachers. It was advocated, therefore, that teachers should focus on enhancing students’ enjoyment rather than excessively addressing learners’ anxiety. Adopting questionnaires and tests, Li (2020) investigated the relationship among emotional intelligence, emotions (including enjoyment, anxiety, and burnout), and academic performance of 1307 senior high school students. The results revealed that emotional intelligence influenced the formation of learners’ emotions during the learning process, with emotional intelligence positively predicting foreign language enjoyment and negatively predicting foreign language anxiety and burnout. Additionally, Dong (2022) found that learners’ control appraisals and positive value appraisals in foreign language learning jointly predicted foreign language enjoyment and anxiety significantly.
Furthermore, some studies have explored the outcomes of foreign language enjoyment and anxiety, particularly focusing on the influence on academic performance (Li, 2020[29]; Saito et al., 2018[23]). For instance, Li (2020)[29] indicated a significant negative correlation between foreign language anxiety and fatigue and academic performance, while no significant influence was found between foreign language enjoyment and academic performance. This conclusion went similar to that of Li and Han (2022)[31], who examined the predictive effects of different emotions on language learning effectiveness under the context of online language learning. To be more specific, they investigated the relationship between enjoyment, anxiety, boredom, and language learning effectiveness among 348 first-year non-English major students through a questionnaire survey. The results unveiled that enjoyment significantly and positively predicted test scores and the effectiveness of self-rated online course learning, while boredom and anxiety had negative predictive effects. Similarly, Saito et al. (2018)[23] examined the impact of foreign language enjoyment and anxiety on learners’ oral proficiency. The study found that foreign language enjoyment and anxiety respectively had positive and negative predictive effects on their oral proficiency.

3.3 Review of Research on Foreign Language Boredom

The exploration of foreign language boredom in the field of applied linguistics began with Chapman’s (2013)[2] study on boredom among German language learners. However, it was until 2020 that investigations into boredom among foreign language learners in China have gained attention (Liu & Li, 2021)[34]. Research on foreign language boredom is mainly divided into the its impact and correlation with other variables, contributors and causes, and the dynamic change patterns.

Research on the relationship between boredom and other variables mainly exists in the association with foreign language learning outcomes. For example, Li et al. (2022)[31] explored the relationship between boredom and foreign language performance among urban and rural elementary school students, finding that regardless of urban or rural settings, foreign language boredom significantly and negatively predicted students’ learning performance. Wang and Li (2022)[24] investigated the relationship between foreign language enjoyment, anxiety, boredom, and performance in specific English learning modules online among college students. The negative correlations between anxiety/boredom and foreign language performance in reading and writing modules were found. In contrast, enjoyment correlated positively with academic performance. This finding aligned with results reported by Li and Han (2022)[32], which explored the predictive roles of the above three kinds of emotions on online learning outcomes at a broader level. Nevertheless, the difference lied in that Wang and Li (2022)[24] argued that all three emotions could predict self-perceived performance, whereas only enjoyment and anxiety significantly predicted learners’ actual performance. Li and Han (2022)[32], on the other hand, found that only anxiety played a predictive role on learners’ academic performance significantly, and only enjoyment and boredom significantly predicted self-rated online course learning effectiveness. Additionally, both studies mentioned above arrived at consistent conclusions regarding the interrelationships among the three emotions. They found a low to moderate negative correlation between enjoyment and anxiety, a moderate to high negative correlation between enjoyment and boredom, and a low to moderate positive correlation between anxiety and boredom.

It was mainly attributed to internal and external factors in terms of the occurrence of foreign language boredom (Liu & Li, 2021[34]). Regarding external factors, Pawlak et al. (2020a)[16] studied Polish English majors and found that changes in students’ boredom levels were related to the learning content. For example, students exhibited higher levels of boredom in grammar exercises,
accompanied by lower levels of engagement, while boredom levels were lower in activities such as listening, speaking, reading, and writing exercises and were more engaged. This difference may stem from the repetitive and less challenging nature of grammar exercises compared to skills training courses (Pawlak et al., 2020b)[17]. Similar to this study, Zawodniak et al. (2023)[25] conducted surveys among college students and identified two factors contributing to boredom in foreign language classrooms: the difficulty and repetitiveness of language tasks and the types of classes (e.g., listening classes, grammar classes, etc.). However, it was also found that teachers, classroom organization patterns, and other factors, such as class scheduling and mandatory attendance could also lead to foreign language boredom. Based on the Control-Value Theory, Xia and Chen (2022)[38] examined 819 English majors and found that learners’ control appraisals positively predicted foreign language boredom, while their value appraisals negatively predicted this emotion. In addition to external factors, some studies have found that individual differences were also among the reasons causing boredom. Nakamura et al. (2021)[15] investigated Thai university students and identified internal factors such as insufficient comprehension and lack of intellectual engagement as key factors resulting in boredom.

Based on the factors causing boredom mentioned above, it can be observed that the boredom experienced by foreign language learners in the classroom is influenced by various factors such as individual differences, environmental factors, and course content. Therefore learners’ emotion is a complex dynamic system (Liu & Li, 2021[34]). The dynamic development patterns of foreign language boredom, thus, received lots of attention. Pawlak et al. (2020a)[16] categorized Polish undergraduates majoring in English into low-level boredom and medium-to-high-level boredom groups, and investigated the dynamic development trends of boredom in English classes. The findings indicated that the low-level boredom students showed a stable upward trend, while the medium-to-high-level boredom students exhibited fluctuating fluctuations.

### 3.4 Review of Research on Other Emotions

In addition to the aforementioned emotions, other emotions have also received attention, such as flow (Payant & Zuniga, 2022[18]), shame (Galmiche, 2017[10]), and guilt (Teimouri, 2018[20]). For instance, Dewaele and MacIntyre (2018)[6] investigated the frequency of 232 learners’ flow and anti-flow experience in Spanish FL classrooms and found that learners experienced significantly more flow than anti-flow. Specifically, they spent 60.3% of the time in the state of flow, while 32.1% in anti-flow. Turning attention to the levels of learners’ flow, Teimouri (2018)[20] employed a mixed research method to explore the status of learners’ shame and guilt and their effects on learners’ motivation and achievement in learning. Both qualitative and quantitative analyses revealed that shame and guilt were prevalent in second language learning environments. Furthermore, shame exerted a significant negative impact on foreign language learners’ motivation and achievement, while guilt had a positive influence on their motivation and achievement.

### 4. Comments

From the perspective of research topics, the study of emotions among foreign language learners focused primarily on negative emotions at the beginning, particularly foreign language anxiety. However, following the introduction of positive psychology into the field of second language acquisition after 2012, scholars began to pay attention to emotions other than anxiety, primarily focusing on foreign language enjoyment and anxiety. As emotional research deepened, a scenario of multiple emotions coexisting emerged, with academia no longer limited to anxiety and enjoyment but gradually incorporating other academic emotions such as boredom. The introduction of positive psychology into the field of second language acquisition aims to enhance learners’ sense of...
well-being during the learning process by studying the regulation and intervention of negative emotions. However, research in this direction is scarce (Li, 2021[30]), with most studies focusing only on the causes and outcomes of negative emotions.

Furthermore, it is believed that positive emotions have a greater impact on foreign language learning than negative emotions and are more predictive to long-term language development (Saito et al., 2018[23]). However, compared to negative emotions, less attention was paid to positive emotions.

Thirdly, foreign language learning is a complex and dynamic process (Liu & Li, 2021[34]). As evident from the above literature, the academic performance is not solely influenced by a single emotion but rather is the result of the comprehensive interaction of multiple emotions and factors. Therefore, the contributors of learners’ academic performance cannot be fully understood by focusing on a single emotion. Consequently, future research can explore more dimensions of positive emotions and the identification, intervention, and regulation of negative emotions (Li & Lu, 2022[33]) to better implement emotional interventions and enhance learners’ sense of well-being during the learning process.

Finally, previous studies have mainly focused on the impact of emotions on academic performance. However, academic performance is not the sole indicator of academic effectiveness, yet other measurement standards have not received attention. Only in the third stage have related studies gradually emerged, such as grit (Wang, 2023[37]) and communication willingness (Wang, 2023[37]). Therefore, future research can explore the impact of emotions on sub-dimensions of academic effectiveness to comprehensively enhance learners’ learning performance.

In terms of research methods, early studies on emotions were primarily theoretical, with relatively low emphasis on empirical research. As research progressed, scholars began to focus on empirical research, with quantitative and mixed-method approaches being more popular. However, literature reviews outweighed empirical studies in proportion in general.

Furthermore, questionnaires and interviews are more employed to collect data in empirical research, with limited methods to triangulate the conclusion. Additionally, due to practical feasibility and other factors, cross-sectional studies are predominant in empirical research, while fewer longitudinal studies are conducted. Given the dynamic nature of emotions and language learning, the credibility of conclusions drawn from cross-sectional studies requires further validation. Moreover, since most studies mainly rely on correlation analysis based on cross-sectional data to investigate the relationships, exploring causal relationships based on longitudinal data and examining whether relationships between variables are bidirectional are key directions for future research (Li, 2021[30]).

As regards research subjects, undergraduate students are predominantly targeted, with a lack of research on students in primary and secondary schools. This may be attributed to the ease of obtaining research data from university students, whereas students in primary and secondary schools have heavier academic loads and are less likely to participate in online questionnaires. To ensure a more comprehensive scope of research, future studies aimed at teachers, international students, postgraduates, and students with disabilities as research subjects. Furthermore, domestic research on foreign language anxiety mostly focuses on undergraduates whose native language is Mandarin and second language English, with fewer studies on learners majoring in Japanese, French, German, Russian, and other languages. Therefore, future research could focus on other second language learners to enhance the applicability and universality of research conclusions in the field of second language acquisition. Additionally, while most existing studies examine the EFL emotions in traditional classroom settings, online teaching has become a mainstream method in the post-pandemic era. Hence, researching the emotions of learners in this teaching environment is also a direction for future research.
5. Conclusion

This article reviewed theoretical and empirical research at home and abroad on foreign language learners’ emotions. It was found there existed two main stages as regards research on emotions: before positive turn and after positive turn. The first stage primarily focused on negative emotions, with a predominant emphasis on foreign language anxiety. The second stage can be further divided into two phases, one incorporating foreign language enjoyment and foreign language anxiety, and the other acknowledging multiple emotions. However, there still exists common issues regardless of the stage, including similarity in research contents, uniformity of research methodology, and narrow coverage of research subjects. Consequently, building on existing literature, this article offered insights into future research directions and provided recommendations to enhance the study of emotions in foreign language learning.

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