

The Bidirectional Association Between English Learning Motivation and Foreign Language Anxiety Among Secondary Students: Classroom Intervention Strategies

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Abstract

This study aims to investigate the interaction between motivation and anxiety among secondary school students in second language acquisition (SLA), with the intervention strategies that teachers can adopt accordingly. Research on motivation and anxiety in second language acquisition (SLA) has attracted considerable attention from scholars. However, existing studies have primarily focused on university students, while research involving secondary school students remains limited and requires further exploration. Moreover, current research tends to emphasize the underlying mechanisms of the interplay between motivation and anxiety, leaving a gap in effective practical interventions that need to be further investigated. This paper systematically reviews the historical and recent developments in domestic and international research on motivation and anxiety in second language acquisition (SLA), categorizing key research directions and theoretical frameworks in the field. By integrating existing emotional research across all age groups with the unique characteristics of secondary school students, this study proposes targeted intervention measures specifically for this student population. Grounded in solid theoretical foundations, this paper integrates insights from SLA and educational psychology, summarizing the evolution of research on affective factors in second language learning and reviewing established intervention strategies. It also identifies potential future research directions and unresolved issues requiring further investigation. The goal is to provide future researchers with a comprehensive reference and deeper theoretical support regarding SLA among secondary school students.

Keywords

SLA, secondary school, language anxiety, learning motivation, teaching intervention

1. Introduction

In second language acquisition (SLA), affective factors play an irreplaceable role, with motivation and language anxiety directly influencing the efficiency of language learning. During secondary education, a second language is often taught as a core subject, exposing students to prolonged academic pressure and standardized testing across all four language skills, listening, speaking, reading, and writing. Adolescents' heightened self-awareness makes them fear mistakes and negative evaluations from others, which undermine their motivation and intensify their anxiety during second language learning. Most secondary school teachers currently lack a comprehensive approach, often treating emotional guidance and motivational strategies separately, resulting in unsatisfactory outcomes. In academia, there is a notable scarcity of review literature

specifically addressing the interaction between learning motivation and language anxiety among secondary school students in second language classrooms, with existing studies generally focusing on motivation and anxiety across all subjects and educational stages in a fragmented manner [1]. To address this research gap, this paper clarifies the core theoretical foundations in educational psychology that underpin secondary students' motivation and language anxiety in second language learning, and further explains how relevant theories interpret the intrinsic relationship and bidirectional influence between these two constructs based on the characteristics of English learning among secondary school students. This study also explores whether individual variables such as English proficiency level and classroom learning environment affect the interaction between English learning motivation and language anxiety of secondary school students, and sorts out effective classroom intervention strategies summarized by existing research to enhance students' learning motivation and alleviate their language anxiety in secondary English classrooms. In addition, the paper analyzes the current limitations of affective research on secondary students' second language learning in terms of research design, measurement methods and intervention experiments, and explores new research directions aligned with educational psychology theories to better suit secondary English teaching. Thus, this study will fill the gap in research on emotional interaction in second language learning among secondary school students, grounded in Self-Determination theory and Social Cognitive theory and enriching their interpretation and application within the context of secondary education. Based on the unique psychological characteristics of adolescents and the exam-oriented teaching environment, it proposes practical classroom intervention strategies for secondary school teachers. This paper first introduces the theoretical foundation of the study, clearly establishing the research base by distinguishing between educational psychology and SLA theories and focusing specifically on the population of secondary school students. Secondly, it reviews existing literature, synthesizing previous research on anxiety and motivation among secondary students as well as their current status in second language learning to form mutually supportive research evidence. Finally, based on prior studies and the specific characteristics of secondary school students, a set of implementable teacher response strategies will be developed.

2. Theoretical Background

This study integrates research perspectives from linguistics and educational psychology, drawing on four classic frameworks as an analytical basis: two linguistic theories (Krashen's Affective Filter Hypothesis and the Second Language Motivation Self-System Theory) and two educational psychology theories (Self-Determination Theory and Bandura's Social Cognitive Theory).

2.1 Linguistics Core Theories

2.1.1 Affective Filter Hypothesis

The affective filter hypothesis was first proposed by Dulay and Burt, and later Krashen integrated and refined it into one of his five input hypotheses in SLA [2]. According to Krashen's view, comprehensible input is a prerequisite for language acquisition [3]. Language learners typically possess a psychological barrier that prevents them from fully absorbing input, this is known as the affective filter [2]. Only assimilable intake can enter the language acquisition mechanism and ultimately result in successful second language learning [3]. Four main factors primarily influence the level of this filter: motivation, attitude, anxiety, and self-confidence. Thus, when learners experience high anxiety, low motivation, and weak self-confidence, the filter becomes highly active, blocking input from reaching the acquisition process. Conversely, when learners are highly motivated, confident, and experience low levels of anxiety, the filter is lowered, allowing input to be deeply absorbed [2]. This theory places motivation and anxiety within the same dimension of SLA research, laying the foundation for the present study. As Gardner and Krashen proposed, a bidirectional cycle: motivation directly affects students' focus, while high levels of anxiety distract learners and diminish their willingness and motivation to learn [3].

2.1.2 L2 Motivational Self System

The Second Language Motivation Self System (L2MSS) was proposed by Csizér and Dörnyei based on empirical research conducted in Hungary, drawing partly from advances in applied linguistics and psychology [4]. Building upon the possible selves theory and self-discrepancy theory, Dörnyei divided the future self into two dimensions, ideal and ought-to, and integrated contextualized English learning experiences to reconstruct

the concept of L2 motivation [5]. This theory integrates motivation into three interrelated dimensions: Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience. Specifically, the Ideal L2 Self represents intrinsic motivation, which is the most stable and enduring one; it refers to the future vision of being able to use a second language fluently. The Ought-to L2 Self refers to traits learners believe they must possess to meet others' expectations, associated with avoiding negative evaluation [6], and is driven by external obligations. The L2 Learning Experience reflects current affective states during learning and constitutes an internal motivator shaped by situational factors such as teachers, curriculum design, and peer success [5]. Dörnyei validated its internal logic: the Ideal L2 Self positively influences the L2 Learning Experience, which in turn strongly predicts intention to exert effort. Apart from internal motivation transmission, the three dimensions also generate disparate anxiety levels. Regarding emotional pathways, the Ought-to L2 Self significantly increases anxiety, whereas the Ideal L2 Self and positive L2 Learning Experience are effective in reducing anxiety [5]. This theory abandons the single logic of explaining motivation merely through external group acceptance, and instead introduces a new paradigm centered on internal self-visions, the L2MSS model, integrating motivation and anxiety research in a coherent framework.

2.2 Educational Psychology Core Theories

2.2.1 Self-Determination Theory

The Self-Determination Theory was proposed by Deci and Ryan. It broke the binary opposition theory of internal and external motivations and proposed a continuous spectrum model, which refined the classification of motivations. It is not limited to linguistics but can also be applied to research in education and psychology [7]. The underlying logic of SDT is that for individuals to generate high-quality motivation, they must first satisfy three innate and universal basic psychological needs: autonomy, competence, and relatedness [8]. Specifically, autonomy means that learners have a sense of choice and their behaviors stem from self-identity rather than external coercion; competence means that individuals perceive that they have the ability to complete learning tasks and receive positive feedback and a sense of achievement; relatedness refers to safe interpersonal relationships, establishing safe and positive interpersonal connections with teachers and classmates. Noels pioneered a systematic presentation of the correspondence between the four learning orientations proposed by Clément and Kruidenier and the SDT motivation continuum. The core framework forms a continuous system based on the degree of self-determination, namely the motivation continuum ranging from no motivation and multi-level extrinsic motivation to intrinsic motivation. Among them, identified and intrinsic motivation is positively correlated with the willingness to continue learning, and negatively correlated with the anxiety level; external regulation has a relatively weak relationship with the maintenance of learning intention [7]. To date, SDT has gained widespread recognition in the field of language education. It overcomes the shortcomings of traditional orientation theories and differs from traditional theories that only focus on and describe learning goals. SDT focuses on how psychological mechanisms predict variables such as motivation level, learning persistence, and classroom anxiety, and possesses verifiable causal logic [7].

2.2.2 Social Cognitive Theory

Bandura proposed a dynamic conceptual framework of triadic reciprocity, presenting the interaction among the three influencing factors of behavior, environment, and individual [9], and centered on human subjectivity. Specifically, personal processes are the core carrier of motivation, associated with seven concepts including goals and self-evaluation of progress, self-efficacy as the core hub, social comparisons, values, outcome expectations, attribution and self-regulation, while behavioral processes belong to the result of motivation, generally pointing to factors such as activity selection, effort investment, and persistence, and environmental processes are related to role models, teaching guidance, and rewards. In this model, the three domains have a mutual dual influence: thoughts shape behavior and the surrounding environment; behavior changes thoughts and the environment; the environment reshapes cognition and behavior. The motivational process is completely within the influence scope of personal factors. After 2000, Bandura's triadic reciprocity framework was widely applied in the research of SLA, using self-efficacy as a mediating personal factor connecting the classroom environment, learning behavior, and language achievement [10]. Raoofi transferred the SCT framework to foreign language learning, constructing a complete influence path covering classroom behavior, personal psychological factors, learning practice and final language scores. The final results confirmed that the strongest predictor of language scores was self-efficacy, while factors such as strategy training, peer guidance,

and virtual learning environments, as auxiliary factors to enhance second language self-efficacy, also play important regulatory roles in foreign language learning [9].

3. Literature Review

3.1 Developmental Trajectory of Research on Motivation and Language Anxiety

This section chronologically reviews prior studies to clarify the evolving bidirectional relationship between L2 motivation and language anxiety, along with key academic debates. Early anxiety research yielded inconsistent conclusions. Chastain's foundational work found positive, negative, and negligible correlations between anxiety and SLA outcomes, while most early studies examined anxiety independently without exploring its interactive mechanisms with motivation [11]. 1986 represented a pivotal milestone in theoretical and methodological advancement. Horwitz et al. [12] systematically defined foreign language classroom anxiety as a context-specific, independent psychological construct encompassing learners' self-perceptions, beliefs, emotions, and behavioral responses, which differs from general or test anxiety. The team also developed the 33-item Foreign Language Anxiety Scale (FLAS) targeting speaking anxiety, test anxiety, and fear of negative evaluation, enabling quantitative assessment of classroom anxiety; nevertheless, the scale overlooks listening, reading, and writing anxiety dimensions. Since the 1990s, research has deepened understanding of language anxiety. MacIntyre and Gardner [13] adopted Tobias's three-stage cognitive model, demonstrating that anxiety affects the entire input, processing, and output stages of language learning rather than only oral production, sparking sustained scholarly debate regarding the causal link between anxiety and learning performance [11,14]. Longitudinal research by Sparks et al. [15] validated that first-language learning difficulties predict subsequent L2 anxiety. MacIntyre and Gardner [13] further experimentally confirmed that anxiety significantly impairs learners' performance across all learning stages. Collectively, existing evidence supports a cyclical mechanism wherein language anxiety concurrently acts as both a cause and outcome of suboptimal learning performance [11]. Recent scholarship has broadened research scope beyond oral anxiety to other language skills. Cheng et al. [16] investigated the association between general classroom anxiety and L2 writing anxiety, and Cheng [17] established the SLWAT scale for targeted writing anxiety measurement. Meanwhile, Elkhafaifi [18] developed the FLLAS scale to assess listening anxiety, complementing qualitative inquiries into listening-related affective stress. Methodologically, conventional studies rely heavily on static, retrospective quantitative designs [11]. To address this limitation, MacIntyre and Legatto [19] proposed a dynamic real-time measurement approach combining self-reports, observer ratings, and video analysis, which effectively captures the fluctuating nature of language anxiety and overcomes the constraints of traditional static research paradigms.

3.2 Internal and External Variables Moderating the Interaction Effect

Motivation and anxiety represent two opposing psychological states in second language learning. Positive learning motivation encourages students to engage actively in learning tasks and tackle academic difficulties, whereas language anxiety originates from concerns over negative evaluation and poor academic performance, leading students to resist knowledge input and avoid learning challenges [20]. At the individual level, secondary school students' L2 learning emotions change dynamically with grade progression. MacIntyre and Baker [21] found gradual reductions in L2 anxiety and improvements in perceived communicative competence among Grade 7 to 9 students, alongside steady growth in learning motivation and willingness to use English. Xu [22] further illustrated that seventh-grade students experience greater adaptive and test anxiety than eighth graders, primarily due to the primary-to-secondary school transition; such adaptive anxiety naturally declines as students acclimate to new learning rhythms and instructional modes. Language proficiency also moderates the motivation–anxiety relationship. Students with weak linguistic foundations frequently encounter learning frustration, which undermines sustained learning motivation [23]. Difficulties in grammar comprehension, pronunciation imitation, and vocabulary acquisition similarly trigger negative emotions and low learning engagement [24]. Consistently, low-anxiety learners demonstrate stronger overall language competence, adaptive capacity, reading comprehension, and linguistic memory. Gender constitutes another influential individual variable. Longitudinal evidence confirms stable gender disparities in adolescent L2 learning: females possess stronger intrinsic motivation and more positive learning attitudes yet exhibit higher classroom anxiety regarding oral mistakes and linguistic deficiencies, while males show relatively lower motivation but milder anxiety symptoms [25,26,27]. At the environmental level, teacher support serves as the primary external

factor moderating the motivation–anxiety interplay, mainly through standardized classroom management and targeted motivational guidance [28]. Fair classroom evaluation and supportive instructional practices effectively reduce students’ test anxiety and enhance class-wide learning self-efficacy and self-regulation [29]. In contrast, teacher-centered lecturing, threatening classroom cues, and frequent public error correction create a restrictive atmosphere that suppresses learning initiative and exacerbates anxiety [30]. Mismatched teaching and assessment systems, such as communicative instruction paired with exam-oriented evaluation and impromptu oral quizzes, further heighten anxiety and demotivate students [30]. Diversified instructional approaches, including cooperative learning, layered tasks, low-pressure communication activities, and graded oral training, effectively alleviate the anxiety–demotivation cycle and sustain long-term learning engagement [30,31]. Additionally, immersive L2 classroom environments narrow the perceived gap between L1 and L2 learning, reduce foreign language anxiety, and continuously boost students’ learning motivation [32].

3.3 Empirical Studies on Collaborative Interventions in Secondary English Classrooms

Current classroom interventions targeting secondary students’ L2 motivation-anxiety interaction are predominantly developed based on the three dimensions of the L2 Motivational Self System (L2MSS), covering ideal self cultivation, ought-to-self regulation, and learning experience optimization. Cultivating students’ Ideal L2 Self constitutes the core of affective intervention. Teachers can foster sustainable internal motivation by assigning attainable, stage-specific learning goals tailored to students’ abilities, which prevents learning frustration and unnecessary anxiety. For adolescent learners, teachers can build positive L2 self-perceptions by setting classroom role models and incorporating cultural resources such as English songs and films. Such immersive classroom environments effectively mitigate anxiety and stimulate intrinsic learning interest. By contrast, the guiding role of the Ought-to L2 Self should be appropriately downplayed in teaching practice. Rooted in external pressures including parental expectations and exam demands, over-reliance on this extrinsic motivation leads to passive learning, intensified classroom anxiety, and diminished long-term learning enthusiasm [5,33]. Teachers are thus advised to reduce rigid mandatory requirements, minimize exam-oriented learning pressure, and help students internalize external learning demands into personal learning goals [34]. Optimizing the L2 learning experience is critical for simultaneous motivation enhancement and anxiety reduction. Differentiated teaching and personalized tasks enable students at all proficiency levels to gain a sense of achievement. Diversified activities including situational teaching, thematic salons and language contests replace repetitive drills, reducing learning burnout and creating a low-anxiety classroom atmosphere. Task-based teaching further shifts students’ focus from error avoidance to practical language application, improving learning efficiency and alleviating situational anxiety. Based on Horwitz’s three-component framework of foreign language anxiety [12], hierarchical interventions can target distinct anxiety types. Considering adolescents’ high self-esteem and emotional sensitivity, teachers should adopt an error-tolerant approach in oral instruction, reducing public error correction and organizing low-pressure pair or group dialogues to relieve communication anxiety. To reduce the prevalent fear of negative evaluation, class ranking should be abandoned in favor of personalized, progress-focused feedback. For pervasive test anxiety, differentiated teaching designs are required to balance motivation cultivation and anxiety relief across student proficiency levels. Guided by Bandura’s self-efficacy theory, targeted strategies can further reduce anxiety and strengthen learners’ confidence. Layered learning tasks help students accumulate small learning achievements, fostering stable self-efficacy and transforming extrinsic motivation into enduring intrinsic drive. Process-oriented praise, rather than score-based evaluation, consolidates students’ learning confidence and engagement. Teachers should offer more presentation opportunities and positive feedback for female students who tend toward self-denial to compensate for motivational deficiencies. Considering grade-based anxiety disparities, graded psychological intervention is recommended: seventh graders with higher adaptive anxiety require targeted emotional guidance, including in-class emotional regulation training, a non-competitive classroom atmosphere, regular psychological counseling, and one-on-one support for students with severe language anxiety.

4. Discussion

4.1 Consensus and Controversies in Existing Studies

From the perspective of affective factors in language learning, scholars have reached consistent conclusions that foreign language anxiety of secondary school students has a significant negative correlation with academic

performance, and higher anxiety will weaken learning motivation and reduce second language academic results, making anxiety a powerful negative predictor of language learning achievement, as anxious emotion directly damages learners' classroom output, test performance and internal learning motivation. Researchers also recognize the mediating role of self-efficacy in the emotional path of SLA. L2 anxiety acts as a core mediator variable between self-efficacy and academic achievement. L2 self-efficacy is negatively correlated with anxiety and positively correlated with learning performance, and its core mechanism is that self-efficacy improves academic results by lowering anxiety levels. This conclusion is supported by Bandura's self-efficacy theory, which states that learning achievement is regulated by self-perceived learning ability through intermediate emotional variables [9]. Under the framework of social cognitive theory, scholars agree on the bidirectional correlation characteristics of self-efficacy. Higher self-efficacy restrains anxious emotions and promotes better learning outcomes, which explains the interactive linkage among language emotion, self-cognition and learning effects. Research based on L2MSS theory also forms a stable consensus targeting secondary school samples. Domestic and foreign studies all show that Ideal L2 Self ranks first among the three dimensions, while Ought-to L2 Self ranks last [5]. In terms of anxiety classification, students report the highest fear of negative evaluation, followed by communication anxiety and public test anxiety [12]. In addition, Ideal L2 Self and L2 Learning Experience show a moderate positive correlation with language proficiency, while Ought-to L2 Self has no obvious connection with academic performance [5]. Such stable mediating mechanisms provide a solid theoretical basis for classroom intervention centered on improving self-efficacy [9]. There are still theoretical conflicts in existing research on secondary students' SLA emotional interaction due to differences in research samples, age ranges and regional backgrounds. First of all, scholars hold conflicting views on the changing trend of anxiety with age. Some longitudinal studies covering junior and senior high school students argue that anxiety rises along with growing academic pressure, while field research focusing on local Chinese secondary schools proves that Grade 7 students have significantly higher anxiety than Grade 8 students [22]. Such inconsistent results originate from insufficient grade-segmented longitudinal tracking research, which also explains why most existing intervention strategies lack a differentiated grade-specific design. Secondly, international research proposes that moderate anxiety may generate facilitating effects on language learning, while empirical research based on Chinese secondary school samples only confirms the inhibitory impact of anxiety, without valid evidence to support the promotion effect of mild anxiety [22,33], so the functional influence of moderate anxiety remains inconclusive. Most mainstream relevant research takes university students as research objects and verifies that the Ideal L2 Self can effectively predict low anxiety [4,5], while targeted experiments on secondary school students fail to obtain the same significant correlation [33]. This difference comes from the developmental uniqueness of adolescent samples, whose self-concept is not fully mature, so the internal driving force of Ideal L2 Self cannot completely offset the pressure from examinations and further education.

4.2 Evaluation of Existing Intervention Strategies

Considering adolescents' mindset, relevant research promotes the formation of the self-images of cultural messengers and responsible learners under the L2MSS framework, which can cultivate students' Ideal L2 Self-image [35]. This spontaneously motivates students rather than passively preparing for exams. The commonly advocated stratified teaching methods and gender-differentiated guidance intervention, based on collective intervention, are further subdivided. Even if they cannot achieve personalized effects, they significantly enhance the intervention's effectiveness. Based on students' differences in second language motivation, anxiety levels, and second language performance, stratified tasks and differentiated emotional guidance are designed. This can simultaneously cater to students with weak foundations and top students, avoiding the frustration that students may experience due to uniform classroom standards [33,34]. At the same time, under such individualized teaching arrangements, students can reduce language anxiety and enhance motivation, while top students can also strengthen their confidence and motivation, thereby reducing the degree of academic polarization [33,34]. From relying on multimedia, enriching the classroom with foreign culture materials and establishing regular English interaction in the classroom to Chinese and foreign culture English classroom activities, such as oral interaction and cultural expansion strategies are easily implemented in the classroom, and easy to integrate into regular daily teaching. Teachers do not need to significantly adjust class hours and teaching plans, which is easy for front-line teachers to learn, operate, and promote [34]. Intervention strategies proposed by scholars are generally tailored to specific groups studied, so the sample lacks generalizability [22,33,34]. Wu's research and intervention were conducted exclusively with eighth-grade students from a

single secondary school in Yulin, Shaanxi Province, making the sample overly narrow in terms of region and school type [33]. Xu's intervention targeted only students from one secondary school in Shenzhen, and his approach was heavily influenced by the unique socioeconomic backgrounds and educational environments of these students, making it difficult to apply nationwide or even across rural secondary schools in Shenzhen [22]. All existing intervention experiments rely on single-school localized samples, which cannot reflect regional and urban-rural disparities [32]. Currently, the longest intervention cycles last no more than two months. Interventions such as classroom optimization and goal-oriented guidance remain short-term in implementation, yielding only temporary effects and posing risks related to sustainability [22,33]. So it is impossible to determine whether the regulation of motivation and anxiety is enduring and effective over time. In practice, teachers typically conduct instruction in whole-class settings, so interventions must be designed for entire classes. Even differentiated instruction struggles to achieve one-on-one effectiveness, limiting overall intervention outcomes. For students experiencing severe language learning anxiety or low motivation, individualized psychological counseling remains essential [33,34]. Implementing these strategies requires second-language teachers to possess both strong language teaching skills and basic psychological counseling abilities. However, most secondary school foreign language teachers have not received systematic or professional training in psychological support. They lack expertise in attribution retraining and emotional regulation techniques, and developing personalized intervention plans based on class-specific student conditions presents an additional challenge. Generalized teacher training often leads to superficial, formulaic practices that fail to deeply address students' emotional states in second language learning. Moreover, existing intervention strategies merely suggest general activity directions without establishing standardized procedures, frequency, or evaluation criteria. Reliance on teachers' subjective judgment makes it difficult to ensure consistent outcomes and evaluate the quality of interventions effectively [22,33].

4.3 Research Directions for Secondary School Students in the Future

To make the research more comprehensive, there are several directions that can be further explored in the secondary school students' interaction research on motivation and anxiety. Firstly, the sample of students can be further classified in a more detailed manner, with more in-depth research on their characteristics. Students can be classified according to their learning conditions, dividing students into struggling students, average students, and outstanding students, which can be a possible way, and can help the "graded teaching" be more targeted. Moreover, the types and regional scope of the sample can also be expanded. For instance, comparing urban and rural areas, students from key secondary schools and ordinary secondary schools regarding the motivation and anxiety for learning a second language will be valuable research directions [22,33]. Secondly, a single research method should be replaced by mixed methods. Classroom observations, student diaries, and teacher-student interviews can be adopted, as they can present some deep psychological causes that cannot be reflected by questionnaires [11,20]. If conditions allow, long-term longitudinal tracking studies would be more ideal to make the conclusions more convincing [21,22]. Finally, structural equation models and chain mediation models can be used to make the research more logically and theoretically supported. With this help, the complex chain influence paths of the interaction between motivation and anxiety in the process of second language learning can be clarified more easily [4,9].

5. Conclusion

To conclude, adolescent secondary school students exhibit unique emotional interactions in L2 learning due to their psychological sensitivity, developmental transitions, and academic pressures. The shift from primary to secondary education brings more demanding learning methods and increased difficulty, while college entrance examination stress further shapes their learning motivation and anxiety. This study demonstrates that current classroom interventions primarily target motivational enhancement and low-anxiety learning environments. When embedded in daily instruction, these strategies effectively strengthen student self-efficacy, protect adolescent self-esteem, and optimize learners' affective experiences and intrinsic L2 motivation. Accordingly, teachers should establish a sustainable classroom model that integrates anxiety reduction and motivational stimulation. Meanwhile, identified grade-based emotional differences validate the necessity of differentiated teaching. Unlike most existing reviews that focus on university populations, this study centers specifically on secondary students' bidirectional motivation-anxiety interaction and corresponding classroom interventions, filling targeted research gaps and enriching interdisciplinary

connections between SLA and educational psychology. This review also presents several limitations. The analysis mainly concentrates on English as the target L2, with insufficient attention to less commonly studied second languages, leaving room for future expansion. In addition, senior high school students undergoing intense college admission pressure possess more mature psychological traits, which may reshape their L2 emotional interactions. Further specialized research is therefore required to explore developmental differences across secondary grade stages.

References

- [1] Ni, H. (2012). The effects of affective factors in SLA and pedagogical implications. *Theory and Practice in Language Studies*, 2(7), 1508–1513. <https://doi.org/10.4304/tpls.2.7.1508-1513>
- [2] Du, X. (2009). The affective filter in second language teaching. *Asian Social Science*, 5(8). <https://doi.org/10.5539/ass.v5n8p162>
- [3] Arabski, J., Aronin, L., Borg, S., Cap, P., Cieřlicka, A., Dakowska, M., ... & Wysocka, M. *Studies in Second Language Learning and Teaching*.
- [4] Papi, M. (2010). The L2 motivational self system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, 38(3), 467–479. <https://doi.org/10.1016/j.system.2010.06.011>
- [5] Dörnyei, Z., & Ushioda, E. (2009). Motivation, language identity and the L2 self. *Multilingual Matters*.
- [6] Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50(1), 57–85. <https://doi.org/10.1111/0023-8333.00111>
- [7] Dincer, A., & Yesilyurt, S. (2017). Motivation to speak English. *PASAA*, 53, 1–25.
- [8] Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, Article 101832. <https://doi.org/10.1016/j.cedpsych.2019.101832>
- [9] Raoofi, S., Hoon Tan, B., & Heng Chan, S. (2012). Self-efficacy in second/foreign language learning contexts. *English Language Teaching*, 5(11), 60–73. <https://doi.org/10.5539/elt.v5n11p60>
- [10] Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest? *The Modern Language Journal*, 75(4), 426–439. <https://doi.org/10.1111/j.1540-4781.1991.tb05378.x>
- [11] MacIntyre, P., & Gregersen, T. (2012). Affect: The role of language anxiety and other emotions in language learning. In *Psychology for language learning: Insights from research, theory and practice* (pp. 103–118). Palgrave Macmillan UK.
- [12] Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132.
- [13] MacIntyre, P. D., & Gardner, R. C. (1994). The effects of induced anxiety on cognitive processing. *Language Learning*, 44(2), 283–305. <https://doi.org/10.1111/j.1467-1770.1994.tb01103.x>
- [14] MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44(2), 283–305. <https://doi.org/10.1111/j.1467-1770.1994.tb01103.x>
- [15] Sparks, R., Patton, J., Ganschow, L., & Humbach, N. (2009). Long-term relationships among early first language skills, second language aptitude, second language affect, and later second language proficiency. *Applied Psycholinguistics*, 30, 725–755.
- [16] Cheng, Y., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning*, 49, 417–446.
- [17] Cheng, Y. (2002). Factors associated with foreign language writing anxiety. *Foreign Language Annals*, 35, 647–656.

- [18] Vogely, A. J. (1998). Listening comprehension anxiety: Students' reported sources and solutions. *Foreign Language Annals*, 31, 67–80.
- [19] Elkhafaifi, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *The Modern Language Journal*, 89, 206–220.
- [20] MacIntyre, P. D., & Legatto, J. J. (2011). A dynamic system approach to willingness to communicate: Developing an idiodynamic method to capture rapidly changing affect. *Applied Linguistics*, 32(2), 149–171.
- [21] Gottfried, A. E. (1985). Academic intrinsic motivation in elementary and junior high school students. *Journal of Educational Psychology*, 77(6), 631–645. <https://doi.org/10.1037/0022-0663.77.6.631>
- [22] MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language Learning*, 52(3), 537–564. <https://doi.org/10.1111/1467-9922.00194>
- [23] Xu, Z. L. (2023). A study on the relationships among secondary school students' English learning self-efficacy, English learning anxiety and English achievement [Master's thesis]. Shenzhen University. <https://doi.org/10.27321/d.cnki.gszdu.2023.002276>
- [24] Ganschow, L., & Sparks, R. L. (2025). Anxiety about foreign language learning among high school women. In *Second Language Anxiety* (pp. 68–80). Channel View Publications. <https://doi.org/10.2307/jj.30412943.10>
- [25] Kruk, M. (2018). Changes in foreign language anxiety: A classroom perspective. *International Journal of Applied Linguistics*, 28(1), 31–57. <https://doi.org/10.1111/ijal.12182>
- [26] MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language Learning*, 52(3), 537–564. <https://doi.org/10.1111/1467-9922.00194>
- [27] Gardner, R. C. (1985). Social psychology and second language learning: The role of attitudes and motivation. Edward Arnold.
- [28] Dewaele, J.-M., Witney, J., Saito, K., & Dewaele, L. (2018). Foreign language enjoyment and anxiety: The effect of teacher and learner variables. *Language Teaching Research*, 22(6), 676–697. <https://doi.org/10.1177/1362168817692161>
- [29] Blumenfeld, P., Puro, P., & Mergendoller, J. (1992). Translating motivation into thoughtfulness. In H. Marshall (Ed.), *Redefining student learning: Roots*.
- [30] Pintrich, P. R. (1994). Continuities and discontinuities: Future directions for research in educational psychology. *Educational Psychologist*, 29(3), 137–148. https://doi.org/10.1207/s15326985ep2903_3
- [31] Kruk, M. (2018). Changes in foreign language anxiety: A classroom perspective. *International Journal of Applied Linguistics*, 28(1), 31–57. <https://doi.org/10.1111/ijal.12182>
- [32] MacIntyre, P. D., Baker, S. C., Clément, R., & Donovan, L. A. (2002). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language Learning*, 52(3), 537–564. <https://doi.org/10.1111/1467-9922.00194>
- [33] Wu, X. Y. (2022). A correlational study on secondary school students' L2 motivational self-system, foreign language anxiety and English academic performance [Master's thesis]. Inner Mongolia Normal University. <https://doi.org/10.27230/d.cnki.gnmsu.2022.000572>
- [34] Guo, Y. J. (2020). Research on the effects of senior high school students' L2 motivational self-system and foreign language learning anxiety on English achievement [Master's thesis]. Soochow University. <https://doi.org/10.27351/d.cnki.gszhu.2020.004154>
- [35] Yang, C. X., & Xuan, Y. Y. (2019). Research on middle school students' English learning motivation based on L2MSS theory. *Journal of Qiannan Normal University for Nationalities*, 39, 72–75.

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Conflicts of Interest

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