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HOW GENDER SHAPES THE LINKS BETWEEN MOTIVATION, ENJOYMENT, AND ENGLISH PROFICIENCY IN CHINA: EVIDENCE FROM A MIXED- METHODS STUDY

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ABSTRACT

This study investigates how gender influences the relationships between students' motivation to learn English, their enjoyment of English learning, and their English proficiency in a Chinese university context. Drawing on positive psychology and second language acquisition (SLA) theories, we examine whether female, male, and nonbinary first-year undergraduates differ in how motivation and enjoyment relate to English proficiency. The study aims to fill gaps in understanding the interplay of motivation and positive emotion in language learning, especially concerning gender differences in an Asian EFL (English as a Foreign Language) context. A mixed-methods approach was adopted, comprising a quantitative survey of 300 first-year non-English-major undergraduates (aged 18–20) and follow-up qualitative interviews. All participants were enrolled in a compulsory College English course at a public university in southeastern China and had prior formal English instruction. The survey measured students' English learning motivation and enjoyment using established Likert scales, and their English proficiency via a standardized test score. Reliability and validity of the scales were confirmed (Cronbach's $\alpha > 0.80$). Structural Equation Modeling (SEM) was used to examine direct, mediated, and moderated relationships among motivation, enjoyment, and proficiency. Multi-group SEM analyses were conducted to compare paths across gender groups (female, male, nonbinary). Semi-structured interviews with 15 students (5 per gender group) explored in depth how learners perceive the role of motivation and enjoyment in their English learning experience. Findings: Quantitative results showed that motivation and enjoyment were each significant positive predictors of English proficiency ($p < 0.001$). Enjoyment also partially mediated the effect of motivation on proficiency, indicating that motivated students often achieved higher proficiency by experiencing greater enjoyment in learning. Multi-group analyses revealed notable gender differences. Female students reported higher motivation and enjoyment on average than male students, and the positive link between enjoyment and proficiency was significantly stronger for females; by contrast, male

students' proficiency was more strongly tied to their motivation. The small group of nonbinary students showed patterns resembling the female group (high enjoyment-benefit) but with high individual variability. Interview findings corroborated these patterns: Female learners often mentioned that enjoyment in English classes (e.g. fun group activities) boosted their confidence and willingness to practice, thereby improving their skills, whereas many male learners described motivation in terms of personal goals (e.g. passing exams, career needs) as their main driver of studying, regardless of enjoyment. Nonbinary participants highlighted unique challenges but similarly emphasized the importance of an inclusive, enjoyable learning environment. Together, the mixed-methods evidence suggests that gender shapes not only the levels of motivation and enjoyment, but also the way these factors translate into language learning success. *Originality/Implications:* This study is among the first to integrate positive emotion (enjoyment) and motivation in examining English proficiency outcomes through a gender lens in the Chinese EFL context. It contributes to SLA theory by demonstrating how positive emotional experiences mediate motivational effects on achievement, and that these dynamics vary by gender. Practically, the findings urge educators and curriculum designers in Chinese universities and similar contexts to foster enjoyable, motivating language learning environments that cater to different genders. For example, teachers should create supportive, low-anxiety classrooms and engaging activities to sustain female students' enjoyment, while also providing goal-oriented, autonomy-supportive tasks that tap into male students' pragmatic motivations. Recognizing nonbinary students in L2 classrooms and ensuring inclusive practices is also recommended. By highlighting gender-specific needs and strengths, this research suggests more tailored pedagogical strategies can improve English proficiency outcomes for diverse learner groups. Overall, the study underscores the value of a mixed-methods approach in uncovering nuanced psychosocial factors in language learning and offers insights to enhance both theory and practice in language education.

KEYWORDS: L2 Motivational Self System, Foreign Language Enjoyment, English Proficiency, Gender, Chinese EFL Learners.

1. INTRODUCTION

English is a compulsory subject for university students across China, serving as a key to academic and career opportunities. In Chinese higher education institutions, first-year undergraduates (regardless of major) must take College English courses to improve their language proficiency (You & Dörnyei, 2016). Despite years of prior English instruction in school, students exhibit wide variation in their motivation to learn English, the enjoyment they experience in language classes, and ultimately their English proficiency. Understanding what drives successful English learning in this context is vital for improving teaching approaches and student outcomes. In particular, motivation and enjoyment have emerged as two crucial factors linked to language achievement, but their interplay – and how it may differ for male, female, and nonbinary students – remains under-explored (Dewaele et al., 2019; Wang et al., 2021).

L2 Motivation has long been recognized as a core predictor of second language (L2) success (Boo et al., 2015). Classic frameworks by Gardner and others emphasized integrative motivation (desire to connect with the L2 culture) and instrumental motivation (pragmatic gains like jobs or grades) as drivers of learning effort. More recent theories, such as Dörnyei's L2 Motivational Self System, highlight internal visions of one's ideal L2-speaking self as key motivators (You & Dörnyei, 2016). Regardless of framework, research consistently shows that students who are more motivated tend to engage more in learning and achieve higher language proficiency (Dörnyei & Ryan, 2015; Al-Hoorie, 2018). However, motivation is a multifaceted construct and can be influenced by various factors including personal goals, self-efficacy, and classroom context (Noels et al., 2019). Moreover, some studies suggest there are gender differences in language learning motivation. For example, a meta-analysis in a similar Asian context found that female students were slightly more motivated to learn English than male students (Csizer & Albert, 2024). Such differences may stem from social expectations or learning experiences that vary by gender. Still, findings on gender and motivation have been mixed, and virtually no research addresses motivation among nonbinary or gender-nonconforming language learners (Knisely & Paiz, 2021).

Enjoyment in language learning – a positive emotion reflecting pleasure and fun in the learning process – has only recently gained attention in SLA research (Dewaele et al., 2019). Traditionally, affective studies focused heavily on negative

emotions like foreign language anxiety (FLA). With the rise of Positive Psychology in SLA (MacIntyre & Mercer, 2019), scholars have begun examining how positive emotions such as Foreign Language Enjoyment (FLE) can broaden learners' engagement and build resources for learning (Oxford, 2015; Wang et al., 2021). Enjoyment is described as a multifaceted emotion encompassing both social aspects (e.g. enjoying interacting with peers in English) and private aspects (e.g. a sense of pride and accomplishment) (Dewaele & MacIntyre, 2016; Botes et al., 2021). The broaden-and-build theory posits that positive emotions widen one's momentary thought-action repertoires and help build enduring personal resources. In an L2 context, enjoyment is thought to broaden learners' willingness to communicate and experiment with the language, counteracting the narrowing effect of anxiety (Dewaele & Alfawzan, 2018; Li & Wei, 2023). The control-value theory further explains that when students feel in control of their learning and value the outcomes, they experience enjoyment, which in turn motivates them to invest effort. Empirically, FLE has been associated with greater class engagement and better performance in L2 learning. For instance, students who report higher enjoyment tend to participate more in class and achieve higher speaking proficiency (Jiang & Dewaele, 2019). In a study of Chinese EFL university students, enjoyment positively predicted English achievement, with motivation acting as a partial mediator (Wang et al., 2021). These findings suggest that enjoyment not only co-occurs with motivation but can enhance learning outcomes directly. Notably, enjoyment often correlates negatively with anxiety – many learners with high FLE have lower FLA, facilitating a more relaxed and productive learning experience (Dewaele & MacIntyre, 2014). Like motivation, enjoyment may also differ by gender. Some research indicates female learners tend to experience or express higher enjoyment in language learning than males (Dewaele & MacIntyre, 2016). In a large-scale international survey, female students reported having more fun in their foreign language classes than male students, identifying factors like supportive teachers, collaborative activities, and receiving praise as sources of enjoyment (Dewaele & MacIntyre, 2016). This aligns with findings in Chinese contexts where girls often show slightly stronger positive attitudes and emotional engagement in language learning (Huang & Jiang, 2022). Meanwhile, male students might report lower enjoyment and higher boredom in language classes (Li & Wei, 2023), potentially due to differing interests

or societal norms around expressing emotion. These trends, however, are not uniform and merit deeper investigation, especially with inclusion of gender-diverse learners.

English Proficiency is the outcome of interest in this study – essentially, how well students perform in English as a foreign language. Proficiency can be measured through standardized test scores, coursework grades, or self-assessed ability. In the present context, we consider students' English exam performance as an indicator of proficiency. Many Chinese students enter university with intermediate-level English skills, but proficiency gains during college vary widely. Prior research has identified numerous factors affecting English proficiency in China, including motivation, anxiety, learning strategies, and exposure to English outside class (Peng & Fu, 2021; Al-Hoorie, 2018). Of relevance here, both motivation and enjoyment are expected to boost proficiency: motivated learners typically put in more study time and persist through challenges (Al-Hoorie, 2018), and those who enjoy learning are more likely to practice consistently and use English in meaningful ways (Jiang & Dewaele, 2019). Importantly, gender-based performance differences have been documented in language learning. Large-scale data in China show that female students often outperform male students in English proficiency tests (Van der Slik *et al.*, 2015). For example, a recent study using a national survey found female college students had higher English-speaking proficiency than their male counterparts (Dan & Bai, 2024). This gender gap in achievement is commonly attributed to females' greater effort, more effective study strategies, and possibly higher language aptitude or encouragement in language study in some cultures. However, it is unclear to what extent such proficiency differences are explained by underlying motivational or emotional factors. Nonbinary students' proficiency levels are rarely reported in research, partly due to their low numbers in typical samples and societal under-recognition; this study acknowledges that gap.

Given the above, it is evident that motivation, enjoyment, and English proficiency are interrelated, yet their exact relationships – and how those relationships might be shaped by gender – remain insufficiently understood. Most prior SLA studies have examined motivation and achievement, or anxiety/enjoyment and achievement, but not the combined network of motivation–enjoyment–proficiency. Moreover, gender has often been treated as a control variable or examined only in terms of mean differences, rather than as a factor that could

change the strength of psychological links. There is a need to adopt an integrated approach to see whether, for instance, motivation leads to better proficiency more strongly for one gender, or if enjoyment plays a bigger role for another. Research on nonbinary or gender-diverse learners in L2 contexts is virtually nonexistent, leaving a gap in understanding inclusivity in language education.

To address these gaps, the present study uses a mixed-methods design to explore:

- How motivation and enjoyment are each related to English proficiency among first-year Chinese university students;
- Whether enjoyment mediates the effect of motivation on proficiency, reflecting a possible pathway from motivation to positive emotion to achievement;
- Whether gender (male, female, nonbinary/other) moderates the links between motivation, enjoyment, and proficiency, resulting in different patterns for different gender groups;
- Why and how these dynamics occur, from the learners' perspectives, through qualitative insights.

By combining quantitative modeling with qualitative interviews, this study aims to provide a nuanced picture of how motivation and enjoyment together contribute to English learning success in China, and how gender identity influences these processes. In the following sections, we first review relevant literature and develop specific hypotheses, then describe our mixed-methods methodology, present the results, and finally discuss the implications for theory and practice.

1.1. Motivation In L2 Learning

Motivation refers to the desire, drive, and effort a learner is willing to invest in acquiring a second language. In the context of English as a Foreign Language (EFL) in China, motivation is often high-stakes – students are cognizant that English proficiency can impact their academic progression and job prospects. Theoretically, L2 motivation has been explained by various models. Gardner's socio-educational model introduced the distinction between integrative motivation (interest in the language community and culture) and instrumental motivation (practical benefits of language proficiency) as key influences on success (Boo *et al.*, 2015). For example, a Chinese student might be integratively motivated if they enjoy English media and aspire to communicate with international friends, or instrumentally motivated if they want to score

well on the CET-4 college English test or secure a better job (Dörnyei, 2019). Both types can lead to persistence in learning, though their effectiveness may differ by context.

In the past decade, contemporary frameworks like Self-Determination Theory (SDT) and the L2 Motivational Self System have gained prominence. SDT (Ryan & Deci, 2024) emphasizes the quality of motivation – ranging from extrinsic (doing an activity for external rewards or pressures) to intrinsic (doing it for inherent interest and enjoyment). According to SDT, intrinsically motivated students (those who find learning English enjoyable or satisfying in itself) are more likely to engage deeply and perform better than those who are purely extrinsically motivated (e.g. only studying to pass exams) (Ryan & Deci, 2024). The L2 Motivational Self System (Dörnyei, 2019) posits that learners' motivation derives from their vision of an ideal L2 self (a future image of oneself as a competent English user), an ought-to L2 self (obligations or expectations one feels about learning English), and the L2 learning experience (situational motives in the learning process) (Dörnyei, 2019). Chinese students often have strong “ought-to” motives (pressure to meet academic or parental expectations in English), but it is the development of an inspiring ideal L2 self that can sustain long-term motivation (You & Dörnyei, 2016). Indeed, large-scale surveys in China have shown that students who possess a vivid ideal English-speaking self tend to report higher effort and better language outcomes (You & Dörnyei, 2016). These theories underscore that motivation is not a monolithic construct – it involves internal desires, external requirements, personal identities, and experiences in the classroom.

Empirical evidence robustly supports motivation's role in L2 achievement. Highly motivated students typically devote more hours to study, use more effective learning strategies, and seek opportunities to practice, all of which contribute to higher proficiency (Al-Hoorie, 2018; Dörnyei & Ryan, 2015). For instance, Peng & Fu (2021) found that Chinese undergraduates' English learning motivation significantly predicted their end-of-semester English exam scores[4]. Similarly, studies in other EFL contexts have linked self-reported motivation levels with vocabulary gains, speaking improvement, and overall course performance (Peng & Fu, 2021). Motivation can also indirectly affect proficiency by reducing dropout rates – students with a strong drive are less likely to give up when facing difficulties like complex grammar or unfamiliar pronunciation.

Regarding gender and motivation, research offers mixed insights. Some studies in Asian contexts suggest female learners often exhibit higher motivation or more positive attitudes toward learning English compared to males (Csizer & Albert, 2024; Dewaele & MacIntyre, 2016). For example, a meta-analytic review of Hong Kong secondary students found a slight but significant overall motivational advantage for females ($d \sim 0.22$). Female students may be more motivated due to socio-cultural factors – in some settings they are encouraged to excel in language studies or may perceive English as more relevant to their future careers in communication-rich fields. Male students, on the other hand, sometimes report lower interest in language learning and higher orientation towards subjects like mathematics or engineering. However, this is not a universal rule; motivation is highly individual and context-dependent. In certain circumstances, male students can be equally or more motivated, especially if they see English as tied to economic or personal goals (e.g. joining the military or business where English is valued). It is also worth noting that the types of motivation can differ: some research indicates males might express more instrumental motives while females might endorse more integrative or intrinsic motives, though findings vary (Teimouri, 2017). Nonbinary and gender-nonconforming students' motivation remains an understudied area. These learners might navigate language learning motivations in unique ways, potentially using language as a means of self-expression or finding motivation in communities that are accepting of their identities (this remains speculative given the lack of data).

In summary, motivation is a foundational pillar of L2 learning. Theoretical models provide a lens for understanding its components and development, while empirical studies affirm that students with stronger motivation – be it due to internal passion or clear goals – generally attain higher English proficiency. What remains less clear is how motivation interplays with positive emotional factors like enjoyment (discussed next) and how gender identity might influence or intersect with motivational processes. This study will consider these aspects by examining not just the direct impact of motivation on proficiency, but also its connection with enjoyment and any gender-related patterns in these dynamics.

1.2. Enjoyment In Language Learning

Enjoyment in language learning refers to the extent of pleasure, fun, or happiness a learner

experiences in the process of acquiring a new language. Within the framework of Positive Psychology in SLA, Foreign Language Enjoyment (FLE) has been identified as a crucial positive emotion that can energize learning and buffer against stress (Dewaele & MacIntyre, 2014). Enjoyment is not merely the absence of anxiety; it is a distinct emotional experience often described by students as a sense of excitement, interest, and pride during language activities (Dewaele & MacIntyre, 2016). In a Chinese EFL classroom, enjoyment might manifest when students laugh at a humorous example, feel satisfied after successfully communicating a message in English, or lose themselves in an engaging group discussion. Such moments of joy can cumulatively build a more positive attitude towards learning English.

Two theoretical perspectives shed light on why enjoyment matters for learning. The Broaden-and-Build Theory posits that positive emotions broaden one's attention and cognition, leading learners to take in more linguistic input and try new language strategies (Dewaele & MacIntyre, 2014; Jiang & Dewaele, 2019). For example, a student who enjoys a class activity is more likely to pay close attention to the material, notice new vocabulary or grammar patterns, and experiment with using them – effectively “broadening” their language repertoire (Dewaele & MacIntyre, 2014; Jiang & Dewaele, 2019). Over time, this repeated broadening can “build” lasting resources such as linguistic knowledge, confidence, and social connections. The Control-Value Theory of achievement emotions provides a complementary view: students feel enjoyment when they have a sense of control over the learning task and place value on it. In practice, this means if learners believe they can succeed in a given English task (high perceived control) and find the task meaningful or useful (high value), they are likely to experience enjoyment during the activity (Wang et al., 2021). This enjoyment then reinforces their motivation to engage and persist, creating a positive feedback loop.

Research on FLE has shown it correlates with a range of beneficial outcomes. Enjoyment is linked with higher classroom engagement, willingness to communicate (WTC), and ultimately better performance (Dewaele & MacIntyre, 2014; Jiang & Dewaele, 2019). For instance, Dewaele et al. (2018) found that Japanese learners' enjoyment was significantly related to their willingness to speak and actual gains in L2 speaking proficiency (Dewaele et al., 2018). In Chinese contexts, Jiang and Dewaele (2019) observed that students with higher FLE

participated more actively in class and had greater self-rated proficiency than those with lower FLE (Jiang & Dewaele, 2019). Enjoyment also tends to coexist with strong L2 motivation: students who love learning English often have robust self-driven or integrative motivation (Wang et al., 2021). Indeed, enjoyment can be both a cause and consequence of success – doing well can increase enjoyment (through pride), and enjoying the process can lead to doing well by increasing time-on-task (Dewaele & MacIntyre, 2014). There is evidence that enjoyment can positively predict language achievement even when controlling for anxiety or other factors (Wang et al., 2021; Papi et al., 2019). Shahzad et al. (2025) for example, found that among Iranian EFL learners, those with greater enjoyment (and positive future-self vision) achieved higher writing scores (Shahzad et al., 2025). These findings underscore enjoyment's role as more than just a “feel-good” factor: it has tangible academic payoffs.

Importantly, enjoyment in language learning is socially constructed to a degree. Studies show that teacher behavior, peer support, and classroom atmosphere strongly influence FLE (Dewaele & MacIntyre, 2014; Dewaele & MacIntyre, 2016). A caring, enthusiastic teacher who uses interesting materials and encourages laughter or creative expression can boost students' enjoyment (and simultaneously reduce anxiety) (Dewaele & MacIntyre, 2016). Peers also matter – a friendly, collaborative group can make language practice enjoyable through shared humor and camaraderie (FLE-Social), whereas overly competitive or judgmental peers can dampen enjoyment. This social aspect is reflected in the two sub-dimensions identified in research: FLE-Private (internal feelings of enjoyment, e.g. pride in one's progress) and FLE-Social (enjoyment stemming from interactions with others) (Dewaele & MacIntyre, 2016). Both contribute to overall FLE and are pertinent in the Chinese classroom context where harmony and group activities are common.

Concerning gender and enjoyment, as noted, some evidence points to females often reporting higher enjoyment in language learning than males (Dewaele & MacIntyre, 2016). Dewaele and MacIntyre's (2016) analysis revealed that female learners tended to mention having fun in language classes more frequently and intensely than male learners (Dewaele & MacIntyre, 2016). Possible explanations include females generally being more socially oriented in learning, thus deriving more enjoyment from communicative and cooperative tasks, or perhaps being more open about expressing

positive feelings (whereas males might under-report enjoyment due to cultural expectations about appearing serious or not overtly enthusiastic in class). A recent study of secondary students in rural China similarly found that girls showed slightly higher curiosity and enjoyment in English lessons than boys, although the difference was small in effect size (Huang & Jiang, 2022). Girls in that study also experienced more anxiety than boys, indicating they had stronger emotions on both positive and negative ends (Huang & Jiang, 2022). Boys, in contrast, were found to be a bit more prone to boredom, suggesting they might not find typical language class activities as stimulating (Li & Wei, 2023). It's important to emphasize that these are group tendencies with many individual exceptions. Some male students greatly enjoy language learning, especially if they have a personal interest in, say, English pop culture or travel. Conversely, some female students may not enjoy English if they find the teaching style dull or have high anxiety. No studies to date have analyzed FLE specifically for nonbinary learners, but one can hypothesize that a supportive environment that recognizes their identity would be crucial for them to feel comfortable and enjoy participation.

In sum, enjoyment represents the affective "bright side" of language learning that can amplify motivation and facilitate higher proficiency. It operates through broadened engagement and is nurtured by supportive social contexts. Gender differences in enjoyment, while not drastic, have been observed and hint that female students might benefit even more from enjoyment-rich pedagogies. Our study will pay special attention to enjoyment's role in concert with motivation and examine if the strength of enjoyment's effect on proficiency is conditioned by gender. We anticipate that creating enjoyable learning experiences is universally beneficial, but it may be particularly impactful for certain groups of students – a topic we explore through both quantitative analysis and students' own narratives in interviews.

1.3. English Proficiency in the Chinese EFL Context

English proficiency refers to a learner's ability to use the English language effectively, encompassing skills like listening, reading, writing, and speaking, as well as knowledge of vocabulary and grammar. In the Chinese EFL context, proficiency is often benchmarked by standardized assessments. By the end of their first year in university, students typically aim to pass the College English Test Band 4 (CET-4), a national exam that evaluates general English ability.

High English proficiency is associated with academic success (for instance, being able to comprehend English-medium textbooks or lectures) and increased employability in China's globalizing economy. As a result, improving students' English proficiency is a major goal of college English courses and a key outcome variable in research on Chinese learners.

Factors influencing English proficiency have been widely studied. Apart from motivation and enjoyment (discussed earlier), variables such as language learning strategies, the amount of exposure to English, anxiety levels, and aptitude all play roles. In China, one significant factor is limited real-life exposure: since English is a foreign language, most students do not use it outside the classroom regularly (Peng & Fu, 2021). This puts greater importance on classroom instruction quality and learners' self-initiated practice (e.g. watching English videos, using English on social media) to attain high proficiency (Peng & Fu, 2021; Wang et al., 2021). Another factor is prior education background – students from urban elite schools often enter university with higher English proficiency than those from rural or less-resourced schools, due to differences in teaching quality and opportunities such as extracurricular English classes (Wang, 2022). This study, by focusing on one public university, partially controls for some background differences (all participants have passed the competitive college entrance exam), but there is still variation in initial proficiency.

Research in SLA underscores that both cognitive and affective factors contribute to proficiency. For example, strong motivation can drive learners to spend more time on English activities, seek interaction opportunities, and persist when facing linguistic challenges, thereby improving proficiency (Al-Hoorie, 2018; Dornyei & Ryan, 2015). Likewise, enjoyment can lead to more frequent use of the language – students who enjoy English are more likely to read English articles or speak up in class, which over time enhances their skills (Jiang & Dewaele, 2019). On the flip side, high foreign language anxiety can impede proficiency by causing avoidance of communication and mental blocks during learning (Dewaele & MacIntyre, 2014). (MacIntyre, 2017). Fortunately, enjoyment and anxiety tend to be inversely related; as noted earlier, fostering enjoyment can help mitigate anxiety's negative impact (Dewaele & MacIntyre, 2014; Wang et al., 2021). The balance of these emotions and motivations within a learner often reflects in their proficiency outcomes.

Chinese empirical studies have found that motivated and confident learners tend to perform

better on English tests. For instance, a large survey found positive correlations between college students' self-reported motivation and their English course grades, and negative correlations between their anxiety and grades (Peng & Fu, 2021; Wang et al., 2021). Additionally, frequency of using English (such as engaging in English conversation or online content) emerged as a strong predictor of proficiency (Peng & Fu, 2021). This aligns with the notion that active practice is crucial: no matter one's motivation or enjoyment, actual skill improvement requires using the language receptively and productively.

A recurring observation in many educational settings, including language learning, is that female students often outperform male students on measures of language proficiency. In China, this pattern has been documented from secondary school through university. Girls tend to get higher English exam scores on average than boys as early as middle school and this gap can persist into college (Van der Slik et al., 2015; Huang & Jiang, 2022). Recent data analysis by Dan & Bai (2024) using a national survey confirms that female college students scored significantly higher in English speaking proficiency than male students, even after controlling for other variables (Dan & Bai, 2024). Several hypotheses have been proposed for this gender disparity: females may have better study habits in language courses, they might find language learning more socially rewarding thereby putting in more effort, or there could be slight cognitive/aptitude differences in verbal skills favoring females (as some psycholinguistic research on first language suggests). Meanwhile, some cultural biases might lead teachers to encourage female students in language classes more, expecting them to be "better" at languages, which can become a self-fulfilling prophecy. It's important to note that gender gaps in proficiency are statistical trends and do not determine individual performance - there are many male students with excellent English and some female students who struggle. Nevertheless, recognising such patterns is useful for educators to ensure all genders are supported appropriately.

As for nonbinary or other gender students, there is no known research specifically comparing their English proficiency to male/female peers. Given their typically small numbers in a classroom and the fact that gender-diverse identities are just beginning to be openly acknowledged in Chinese society, it's hard to draw any conclusions. It is plausible that any observed differences would be less about inherent ability and more about social factors - for example, a nonbinary student who faces exclusion or stress

might underperform due to those pressures, not because of their identity per se. Our study includes nonbinary students in proficiency comparisons for exploratory purposes, with the caveat of low sample size.

In conclusion, English proficiency is the end result that this study aims to explain and predict. We recognize it as a multifactorial outcome influenced by how much learners want to learn (motivation), how they feel during learning (enjoyment or anxiety), and the effort and practice they invest. Prior evidence suggests motivation and enjoyment should both facilitate higher proficiency, and that female students might on average attain higher proficiency possibly due to these very factors. Building on this, the current research will formally test the linkages between motivation, enjoyment, and proficiency, while examining the role of gender in these linkages. By doing so, we hope to gain deeper insight into not only who achieves higher English proficiency, but why - what psychological dynamics propel their success.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Based on the theoretical background and prior studies reviewed above, we now formulate specific hypotheses about the relationships among motivation, enjoyment, and English proficiency, and how these relationships may differ by gender. We integrate insights from both motivation research (which predicts a positive effect of motivation on achievement) and emotion research (highlighting enjoyment's benefits), as well as initial evidence on gender differences. The hypothesized model will later be depicted in Figure 1 (Theoretical Model).

Motivation and English Proficiency: Students with higher motivation are expected to achieve higher English proficiency. This is a straightforward extension of decades of findings that motivation correlates with language attainment (Dornyei & Ryan, 2015; Al-Hoorie, 2018). When learners are strongly motivated - whether due to genuine interest or a strong desire to meet goals - they tend to invest more time in studying, practice more, and persist through difficulties. Especially in a context like China where autonomous learning (e.g. memorizing vocabulary, doing extra reading) outside of class is crucial to improvement, motivated students gain an edge by engaging in these beneficial behaviors. Empirical support for this link comes from numerous studies; for example, Peng & Fu (2021) found motivation was a significant predictor of Chinese university students' English test scores (Peng & Fu, 2021; Wang et al., 2021), and similar results have been

reported in high school populations (e.g. Huang & Jiang, 2022). Thus, we posit a direct positive association between L2 motivation and proficiency in our sample. H1: L2 English learning motivation is positively associated with English proficiency. In other words, more motivated students will have higher English test scores.

Enjoyment and English Proficiency: Enjoyment in learning English is likewise hypothesized to have a positive effect on English proficiency. This is grounded in the idea that enjoying the learning process enhances engagement and practice frequency (Jiang & Dewaele 2019), which in turn improve skills. When students have fun and feel good in English class, they are likely to pay more attention, participate actively, and perhaps continue engaging with English outside of class because it's pleasurable (for instance, watching English movies for enjoyment). Positive emotions also help learners cope with challenges; a student who enjoys a puzzle-like grammar exercise might spend more time on it and learn more, whereas a frustrated student might give up. Prior studies using various measures of achievement (self-rated proficiency, exam performance, skill tests) have shown that learners with higher FLE tend to perform better (Dewaele & Alfawzan, 2018). A recent large sample study in China confirmed that enjoyment was a significant positive predictor of English achievement (course grades), even when accounting for other factors (Wang et al., 2021). Therefore, we expect to see a beneficial impact of enjoyment on objective proficiency in our study. H2: Foreign language enjoyment is positively associated with English proficiency. Students who experience greater enjoyment in learning English will demonstrate higher proficiency levels.

Motivation and Enjoyment: Motivation and enjoyment are theorized to be interlinked, potentially in a reciprocal manner. A key question is whether motivated learners feel more enjoyment, or whether enjoyment fuels motivation – likely both processes occur (Wang et al., 2023). On one hand, a student highly motivated to learn English (especially intrinsic or integrative motivation) might approach learning with enthusiasm and find joy in mastering the language. Their strong drive could lead them to create enjoyable learning opportunities for themselves (e.g. reading interesting English books, engaging in fun language games), thereby increasing their FLE. This perspective is supported by research indicating that motivational orientations can predict positive

emotions: for instance, learners with a strong ideal L2 self and high motivation reported higher FLE in some studies (Wang et al., 2021). Wang et al. (2021) found that students with more self-driven motivation tended to experience greater enjoyment in L2 tasks, suggesting motivation can lead to enjoyment (through sustained engagement and a sense of fulfillment). On the other hand, experiencing enjoyment can enhance one's motivation – when learning is enjoyable, students are likely to be more motivated to continue (a classic virtuous cycle). In fact, Wang et al. (2021) found that FLE had a direct positive influence on motivation among Chinese university EFL learners (Wang et al., 2021). Given the cross-sectional nature of most research, it is difficult to untangle causality, but it's reasonable to assume a positive correlation and potential causal linkage between motivation and enjoyment in both directions. For our hypotheses, we focus on motivation as an antecedent (consistent with the idea that initial motivation brings about conditions for enjoyment in class). We expect that students who start out with higher motivation will be more likely to enjoy their English learning experiences, because they approach learning proactively and find satisfaction in progress. H3: L2 motivation is positively associated with foreign language enjoyment. In practical terms, highly motivated students will report greater enjoyment in English classes and learning activities.

Mediating Role of Enjoyment: Building on H1–H3, we hypothesize that enjoyment serves as a mediator in the relationship between motivation and proficiency. This means that part of the reason motivated students achieve higher proficiency is that their motivation fosters greater enjoyment, which in turn facilitates learning. The logic is as follows: a strongly motivated student engages with the language in ways that generate enjoyment (for example, joining an English club or watching English films, activities they find fun). That enjoyment then leads the student to spend even more time on English or to approach it in a relaxed, receptive state, boosting their proficiency. This mediated pathway aligns with control-value theory, where motivated (value-driven) learners experience positive emotions that drive further achievement (Wang et al., 2021). It also resonates with classroom observations: motivated students often immerse themselves in learning tasks and derive pleasure from improvement, whereas less motivated students might never “get into”

learning enough to start enjoying it. Empirical hints of this mediation appear in recent work – for instance, in Wang et al. (2021), although their model was framed as FLE influencing proficiency via motivation, one could invert the perspective: motivation partly worked through generating enjoyment to affect achievement (Wang et al., 2021). Since our hypotheses H1, H2, and H3 all posit positive links among the three variables, a mediation hypothesis is a logical extension. We anticipate that motivation will have both a direct effect on proficiency and an indirect effect through enjoyment (i.e. a partial mediation scenario). H4: Foreign language enjoyment mediates the positive relationship between L2 motivation and English proficiency. In other words, higher motivation leads to higher enjoyment, which in turn leads to higher proficiency, complementing the direct effect of motivation.

Gender as a Moderator: Finally, we hypothesize that the relationships described in H1–H4 are shaped by gender, meaning the strength of these links may differ for female, male, and nonbinary students. Prior sections noted some gender differences: females tend to have slightly higher motivation and enjoyment on average, and they often achieve higher proficiency. Here we propose that beyond mean differences, gender moderates the pathways by which motivation and enjoyment contribute to proficiency. Specifically, we suspect that the enjoyment–proficiency link might be stronger for female students, while the motivation–proficiency link might be relatively stronger for male students. This expectation is informed by social and educational observations. Female learners, who often are more emotionally attuned in classroom settings, may benefit greatly when they enjoy learning – their enjoyment could translate into diligent study and communication practice, thereby markedly improving proficiency. Male learners, who in some contexts are described as more task-oriented or extrinsically motivated,

might rely more on their underlying motivation to drive achievement, regardless of whether the learning process is enjoyable. For instance, a male student might not particularly enjoy English class but if he is determined to get a good test score (strong instrumental motivation), he will put in the effort to do so; conversely, a female student might excel especially when the class is engaging and fun, because it encourages her to fully participate. These are general tendencies and certainly both motivation and enjoyment are beneficial for both groups – it is a matter of degree. As for nonbinary students, due to the very limited research and our small sample of such learners, any moderation effect for that group is exploratory. It's possible that nonbinary students' experiences align more with one of the binary genders or have unique patterns; however, with little prior theory, we include them in analysis to be inclusive and observe any trends. Overall, we expect gender to interact with the studied relationships. H5: Gender moderates the relationships among motivation, enjoyment, and English proficiency. In particular, the positive effect of enjoyment on proficiency is hypothesized to be stronger for female students than for male students, whereas the effect of motivation on proficiency may be stronger for male students than for female students. Nonbinary students' data will be examined for exploratory comparison. This hypothesis will be tested by comparing structural model paths across gender groups.

To summarize the hypothesis development: We predict that motivation and enjoyment each independently contribute to English proficiency (H1, H2), that they reinforce each other (H3), and combine such that enjoyment carries part of motivation's impact on proficiency (H4). We further posit these dynamics are not uniform across genders – gender identity will shape the strength of these links (H5). Figure 1 below illustrates the theoretical model encapsulating H1–H5 (Wang et al., 2021).

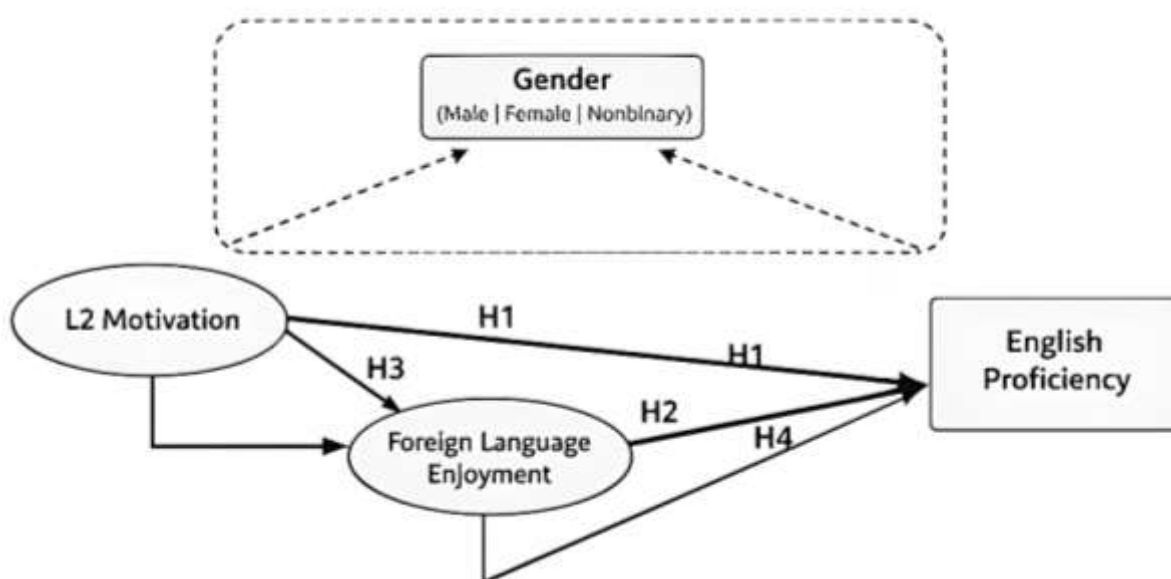


Figure 1: Theoretical Model.

The conceptual model proposes that L2 motivation and foreign language enjoyment are positively related to each other and both have positive effects on English proficiency. Enjoyment is hypothesized to mediate the effect of motivation on proficiency. Gender (male, female, nonbinary) is posited to moderate the strength of the motivation→proficiency and enjoyment→proficiency relationships (represented by the dashed contextual frame for multi-group analysis). All hypothesized relationships are positive. This model will be tested using structural equation modeling and multi-group comparisons.

3. METHODOLOGY

This study employed a mixed-methods research design, specifically an explanatory sequential design. We began with a quantitative phase, collecting survey data to test our hypothesized model, followed by a qualitative phase of interviews to help explain and enrich the quantitative findings. The combination of methods allows for a more comprehensive understanding of the research problem: the quantitative data reveal general patterns and relationships among variables, while the qualitative data provide insight into students' personal experiences of motivation, enjoyment, and any perceived gender influences in their English learning.

3.1. Participants and Setting

Participants were first-year undergraduates

enrolled in the compulsory College English course at a public university in southeastern China. These students were all non-English majors (studying a variety of fields such as engineering, business, sciences, etc.), for whom English is a required subject. A total of $N = 300$ students (aged 18–20, $M = 18.7$, $SD = 0.6$) were surveyed in the quantitative phase. The sample was almost evenly split by self-identified gender: Fifty-two percent ($n = 156$) identified as female, 45% ($n = 134$) as male, and 3% ($n = 10$) as nonbinary or other gender. This reflects the overall university intake, which has slightly more female students and a small but visible number of openly nonbinary students. All participants had approximately 6–10 years of prior English education through primary, secondary, and high school, meaning none were beginners in English; generally, they could be considered intermediate English learners by international standards. Their academic majors were diverse (e.g., 20% sciences, 30% engineering, 25% social sciences, 25% humanities/arts, roughly), which helps enhance the generalizability of findings across disciplines.

The context of the College English course is important to note. It meets 4 hours per week and focuses on general English proficiency (reading, listening, speaking, and writing), aiming to bring students toward the B1–B2 levels of the Common European Framework by the end of second year. Class sizes were around 30–40 students, and instruction emphasized communicative activities alongside test preparation for exams like the CET-4.

All classes were taught by Chinese instructors using an English textbook and multimedia materials. The university's environment is moderately supportive of English use: while campus life is mostly Chinese-speaking, there are English corners and occasional events (speech contests, etc.) that encourage students to use English outside class. Nonetheless, as is typical in EFL contexts, opportunities to practice English in real-life situations were limited, placing much weight on classroom engagement and personal study.

3.2. Research Design and Procedure

The study proceeded in two phases:

- **Quantitative Phase (Questionnaire Survey):** In the middle of the second semester (to ensure students had some university English learning experience), we administered a paper-and-pencil questionnaire to participants during their English class. Participation was voluntary and anonymous; students gave informed consent and were assured that their responses would not affect their course grades. An instructor not involved in teaching the participants supervised the survey administration to reduce any pressure. Students completed the questionnaire in about 15–20 minutes. The survey gathered data on the key variables: motivation, enjoyment, and English proficiency (as described below), as well as demographic information (gender, age, major, etc.). We chose a cross-sectional survey design to efficiently collect data from a large sample and allow for statistical modeling of the relationships between variables (Wang et al., 2021).
- **Qualitative Phase (Interviews):** After preliminary analysis of the survey results, we conducted semi-structured interviews with a subset of participants. We used purposive sampling to select 15 interviewees (5 male, 5 female, 5 nonbinary/other) representing various levels of motivation and enjoyment (based on their survey scores) and English achievement (based on their exam scores). The goal was to capture diverse perspectives and

particularly to include voices of the small nonbinary group. Each interviewee provided separate consent for the interview, and interviews were held in a private meeting room or online video call, according to the participant's preference. The interviews, conducted in Chinese (with occasional English if the student used it), lasted around 30–40 minutes each. An interview guide (see Interview Questions section) was followed, covering topics such as how they motivate themselves in English learning, what enjoyable or unenjoyable experiences they have had in English class, and whether they feel their gender identity has affected their learning in any way. Interviews were audio-recorded and later transcribed and translated to English for analysis. This qualitative phase allowed us to delve deeper into the reasons and context behind the patterns observed in the quantitative data, fulfilling the explanatory aim of the mixed-methods design.

Ethical approval for the study was obtained from the university's research ethics committee. Participants' anonymity was preserved by using ID codes on surveys and pseudonyms for interview quotes. The instructors of the English courses were not informed of individual responses, ensuring students could respond candidly about their classes.

3.3. Measures And Instruments

The questionnaire consisted of several scales to measure the key constructs, as well as a section for demographic information. Wherever possible, we used or adapted existing validated instruments from the literature, ensuring they were appropriate for the Chinese EFL college context. All scale items were presented in English with brief Chinese explanations to avoid any misunderstanding (since students' English proficiency varied). A pilot test with 30 students (not in the main sample) was conducted to refine wording and check comprehension.

Table 1 provides a profile of the questionnaire measures, including the number of items and sources of the scales.

Table 1: Questionnaire Profile of Key Variables.

Construct	Number of Items	Example Item (5-point Likert)	Source of Scale
English Learning Motivation	10 items	"I am determined to improve my English skills."	Adapted from You & Dörnyei (2016) (Ideal L2 Self scale)
Foreign Language Enjoyment (FLE)	8 items	"I enjoy the activities in our English lessons."	Adapted from Li et al. (2018) (Chinese FLE Scale)
English Proficiency	1 item (score)	Final exam score (0–100)	College English final exam
Other (control/demographics)	-	Gender, age, major, prior English test scores (self-report)	- (background questionnaire)

Motivation: We measured students' motivation to learn English using a 10-item Likert-scale inventory. This scale was adapted from You and Dörnyei's (2016) study on L2 motivation in China, which itself built on Dörnyei's L2 Motivational Self System. The items tapped into both instrumental and integrative aspects, as well as effort and commitment. Example items included "Learning English is important to me because I'll need it for my career" (instrumental) and "I really enjoy learning English" (which overlaps with intrinsic motivation, though we kept it in the motivation scale). Students rated each statement on a 5-point scale (1 = strongly disagree, 5 = strongly agree). In our pilot, the motivation scale showed good internal consistency, and we made minor tweaks (e.g., simplifying complex sentences). In the final sample, the motivation scale's Cronbach's alpha was 0.88, indicating high reliability. A higher score on this scale reflects a higher overall level of English learning motivation.

Enjoyment: Foreign Language Enjoyment was measured with 8 items, derived and translated from the Chinese Foreign Language Enjoyment Scale (CFLES) developed by Li et al. (2018). The CFLES captures enjoyment specific to English class situations. Our selected items covered both social enjoyment (e.g., "I enjoy the friendly atmosphere in our English class") and private enjoyment (e.g., "I feel proud of my achievements in English learning"). Students responded on the same 5-point agreement scale. The scale had excellent internal consistency (Cronbach's $\alpha = 0.91$) in our data. This indicates that the items coherently measured a single underlying construct of enjoyment. We also conducted a confirmatory factor analysis (CFA) which supported treating enjoyment as one factor – factor loadings for all items were high (> 0.70) and significant ($p < 0.001$), and the average variance extracted (AVE) for the enjoyment construct was 0.65, above the common 0.50 threshold (Jiang & Dewaele, 2019; Wang et al., 2021), demonstrating convergent validity. Higher scores on the enjoyment scale represent greater positive emotional engagement in learning English.

English Proficiency: Rather than a multi-item scale, English proficiency was assessed via students' final exam score in the College English course. We collected each participant's score (as a percentage out of 100) from the program administration after the semester's end, with consent and ensuring confidentiality. This exam was comprehensive, testing reading, listening, and writing skills. Using an objective test score as our proficiency measure provided a performance-based outcome to complement the self-report measures of motivation

and enjoyment. The distribution of scores in our sample ranged from 55 to 94 ($M = 76.3$, $SD = 9.2$), roughly normal with a slight left-skew (a few high performers). Although a single test score has limitations (it may not capture speaking skill directly, for instance), it was a practical and standardized indicator of proficiency, and one that has real academic consequences for the students. We acknowledge that this measure could contain measurement error or day-to-day performance variability; however, as it stands, it serves as a summative evaluation of each student's English ability in the course. We treated this score as an observed indicator for the latent "English Proficiency" construct in the SEM. In validity terms, the exam is a locally developed but widely administered test aligned with national teaching guidelines, so we assume it has content validity for college EFL learning outcomes. To further validate it, we checked that the score correlated positively with an external measure: self-rated English proficiency (which we asked on a 10-point scale in the survey). The correlation was $r = 0.56$ ($p < 0.001$), suggesting the test score reasonably reflects perceived proficiency as well.

Demographic and Control Variables: The survey also collected data on gender (which we used for grouping), age, and major. We asked if students had any prior international experience (study or travel abroad) and found only 5% had short travel experiences and none had studied abroad, so our sample is fairly homogeneous on that front. We recorded their high school English exam scores (from the National College Entrance Exam, Gaokao, if they remembered) to control for prior proficiency in some analyses. We did not include these controls in the main SEM to keep the model parsimonious, but we checked that including Gaokao English as a covariate did not substantively change the results (it did predict college English scores as expected, but motivation and enjoyment remained significant predictors as well).

To ensure data quality, we performed several checks: (1) Common method bias (CMB) was addressed by using multiple data sources (self-reports for predictors, objective test for outcome) and by protecting anonymity to reduce social desirability. A Harman's single-factor test on the survey items explained only 28% variance in one factor (well below 50%), indicating CMB is unlikely to confound results. (2) Reliability of each multi-item scale was evaluated. In addition to Cronbach's alpha mentioned, we calculated composite reliability (CR) which was 0.89 for motivation and 0.93 for enjoyment,

both exceeding the 0.70 criterion (Hair & Alamer, 2022). (3) Validity: A CFA on the two-factor measurement model (motivation and enjoyment as separate latent factors) showed good fit ($\chi^2(169) = 312.5, p < .001; CFI = 0.96, TLI = 0.95, RMSEA = 0.051$). All item loadings were ≥ 0.72 . The AVEs were 0.55 (motivation) and 0.65 (enjoyment), suggesting convergent validity (Ghanbar & Rezvani, 2023). Discriminant validity between motivation and enjoyment was supported as the squared correlation ($r^2 = 0.48$) was less than both AVEs (Hair & Alamer, 2022). These statistics give confidence that our instruments measured the intended constructs reliably and distinctly.

3.4. Data Analysis

For the quantitative data, we used a two-step analysis approach. First, we computed descriptive statistics and bivariate correlations to get a sense of the data and preliminary support for hypotheses. We also checked for any gender differences in the mean levels of motivation, enjoyment, and proficiency using t-tests or one-way ANOVA (with Bonferroni post-hoc, given three groups), as those provide context for the multi-group analysis later (Plonsky & Ghanbar, 2018).

Next, to test the hypotheses and the theoretical model, we employed Structural Equation Modeling (SEM) using IBM SPSS AMOS 28.0. SEM was chosen because it allows simultaneous estimation of multiple relationships and can incorporate latent variables, thus accounting for measurement error. In our SEM, we treated Motivation and Enjoyment as latent constructs indicated by their survey items, and English Proficiency as an observed outcome (the exam score). We specified paths corresponding to H1, H2, H3 (Motivation→Proficiency, Enjoyment→Proficiency, Motivation→Enjoyment). To test H4 (mediation), we examined the indirect effect of Motivation on Proficiency via Enjoyment. This was done through bootstrapping (5,000 resamples) to get bias-corrected confidence intervals for the indirect effect. If the indirect effect was significant (and positive), it supports the mediation hypothesis (Hancock & Schoonen, 2015; Alamer & Marsh, 2022). We also assessed the direct effect of Motivation on Proficiency to see if it remains significant when the mediator is included (partial vs. full mediation).

The model was first run on the full sample to evaluate overall model fit and the significance of each hypothesized path. Model fit was assessed with standard indices: chi-square (χ^2) and its degrees of freedom, Comparative Fit Index (CFI), Tucker-Lewis

Index (TLI), and Root Mean Square Error of Approximation (RMSEA). Given the moderately large sample size, χ^2 is expected to be significant, so we rely more on CFI, TLI (where values ≥ 0.95 indicate good fit), and RMSEA (≤ 0.06 for good fit) as guidelines. Our initial model fit the data well (fit statistics will be reported in the Results), so no post-hoc modifications were needed. All hypotheses' directions were as expected, and no offending estimates (like negative variances or extreme correlations) were observed.

To address H5 (gender moderation), we conducted a multi-group SEM analysis. We split the data into three groups by gender: male ($n = 134$), female ($n = 156$), and nonbinary ($n = 10$). Given the small N for the nonbinary group, results for that group must be interpreted with caution, and the model may not be stable for such a tiny sample; nonetheless, we included them for completeness. We first tested an unconstrained model where all path coefficients were free to vary across the three groups. We then tested constrained models where we set specific paths equal across groups to see if doing so worsened model fit significantly (using chi-square difference tests, $\Delta\chi^2$). The main paths of interest for moderation were Motivation→Proficiency and Enjoyment→Proficiency. A significant χ^2 difference when constraining one of these paths would indicate a moderation effect by gender on that path. Additionally, we examined the standardized estimates for each path in each group to see the pattern of differences. Because of the nonbinary group's small size, our primary focus was comparing males and females, with any observations about the nonbinary group being exploratory and descriptive.

For the qualitative interviews, we used a thematic analysis approach. After transcribing the interviews, two researchers (fluent in Chinese and English) read through all transcripts to get familiar with the content. Initial codes were generated corresponding to our main topics: motivation (reasons for learning English, what drives them), enjoyment (instances of fun or lack thereof in learning), and perceived gender influences (any mentions of being treated differently or learning differently due to gender). We also noted emergent sub-themes. For example, within motivation, some students talked about intrinsic interest (liking English songs, etc.), others about exam pressure, etc. Within enjoyment, themes like teacher's role, group work, achievement-related joy came up. We particularly looked for differences or commonalities between what male and female students said, and any distinct perspectives from nonbinary students. The coding was done using

NVivo 12 software for organization. After coding, we collated codes into broader themes. Key themes that emerged included: “English is a tool versus English is a joy” (males more often emphasizing utilitarian views, females more often highlighting the joy of learning), “importance of class atmosphere” (all genders noting that an encouraging, interactive class boosts enjoyment, but females elaborated more on peer support), “self-motivation strategies” (like setting goals or rewarding oneself – used by both genders, but in interviews females often tied these to enjoyment, e.g. rewarding with fun English media, whereas males mentioned more regimented practice routines). We also had a theme on gender perceptions: some female students felt girls are expected to be good at English which in turn motivated them, whereas some male students admitted to a stereotype that “boys aren’t as good at English” which either demotivated them or motivated them to prove it wrong. Nonbinary students spoke about finding a comfortable space in learning without the weight of gendered expectations; however, their small number means we tread carefully in drawing conclusions.

The qualitative findings were then integrated with quantitative results during interpretation. We used the interview quotes to illustrate and explain why certain statistical patterns might be occurring (for instance, why enjoyment had a stronger effect for females – with quotes from female students describing how enjoyment led them to put in more effort). This integration is presented in the Discussion section to provide a richer understanding.

3.5. Questionnaire Profile

Table 1 above summarized the questionnaire structure. To elaborate, the final questionnaire comprised four sections:

1. Background Information: Asked about gender, age, major, any study abroad experience, and prior English qualifications (e.g., “What was your English score on the Gaokao?”). This was mainly for descriptive purposes and to later perform subgroup analyses.
2. Motivation Scale: 10 statements about English learning motivation, adapted as described. Students rated on 1–5 scale from “strongly disagree” to “strongly agree.” The scale included items reflecting effort (“I actively try to use English outside of class”), desire (“I really want to become fluent in English”), and attitudes (“I like English language and culture”). Principal axis factoring on these items yielded one dominant factor (eigenvalue

4.2, next eigenvalue 1.1) with all items loading >0.60 on that factor, confirming unidimensionality. We took the mean of the 10 items to represent each student’s motivation level (mean = 4.01, SD = 0.64 on a 5-point scale, indicating generally high motivation across the sample). No significant ceiling effects were observed – the distribution was roughly normal.

3. Enjoyment Scale: 8 statements on FLE, rated 1–5. Sample items: “I enjoy the topics we discuss in English class,” “English class is a positive and fun environment for me.” We ensured the items covered both interpersonal enjoyment (teacher, peers) and personal enjoyment (sense of accomplishment). Factor analysis indicated a single factor (eigenvalue 4.8, explaining 60% variance). Enjoyment scores were moderately high on average (mean = 3.55, SD = 0.81), but with more spread than motivation, meaning students varied in how much they enjoyed English class. We observed a slight skew where about 15% of students had low enjoyment (<3), often corresponding to those with high anxiety or low interest (per their open comments). This variation proved useful in analysis, as it correlated with outcomes.
4. Self-rated proficiency and effort: In addition to collecting actual test scores later, the survey asked students to rate their own overall English proficiency on a scale of 1 (very poor) to 10 (very good). We also asked how many hours per week outside of class they spent on English study or practice. These items were mainly for exploratory analysis and were not part of the core SEM. Interestingly, females on average rated themselves slightly lower in proficiency than males did, despite actually scoring higher – possibly reflecting differing self-perceptions or confidence levels, which aligns with some research that female students often underestimate their abilities relative to males. We did not focus on this in the main model but considered it when interpreting results.

The questionnaire was reviewed by two English instructors for face validity. Minor modifications included clarifying in Chinese what “enjoy” meant in items (as some students confused it with just liking the teacher; we clarified it meant finding personal pleasure in learning tasks). The final instrument in English and Chinese was provided in an appendix (not included here for brevity).

No translation issues arose because the

participants' English was sufficient to understand most items and we provided Chinese glosses for any potentially unclear terms. The response rate was excellent (> 95% of students present in class participated). There were minimal missing data (a few students skipped one or two motivation/enjoyment items); we handled these by mean imputation or using full information maximum likelihood in SEM, which is robust.

Overall, the questionnaire provided reliable quantification of the students' psychological constructs and integrated smoothly with the objective proficiency data. It also laid the groundwork for selecting interview participants by identifying those with high or low values on the key constructs.

3.6. Interview Questions

During the qualitative phase, we used a semi-structured interview protocol to guide conversations with participants. The interview questions were designed to probe students' personal experiences and perspectives related to each of the main variables – motivation, enjoyment, and proficiency – as well as to explore any perceptions of gender influences in their English learning journey. The interview was conducted in the students' native language (Mandarin Chinese) for their comfort, with some English usage when students quoted something or expressed a concept in English.

Below are the key interview questions (translated into English) that we asked, grouped by topic:

- **Motivation:**
- “What motivates you to learn English?” – (Follow-ups: Do you learn it mostly because you have to, or do you have personal reasons? Can you describe any goals you have with English?)
- “Can you recall a time when you felt very motivated or demotivated in learning English?” – (Follow-up: What made you feel that way? How did it affect your studying?)
- “How do you keep yourself motivated to study English, especially when the course is difficult or you are busy?” – (Follow-ups: any strategies, like setting goals or rewarding yourself?)
- **Enjoyment:**
- “Can you describe how you generally feel in your English classes?” – (Follow-up: Do you find them enjoyable? Why or why not?)
- “Tell me about the most enjoyable English learning experience you've had.” – (Follow-up: What made it enjoyable? Who was involved?

How did it make you feel about learning English afterward?)

- “Have you had English learning experiences that were not enjoyable or were frustrating?” – (Follow-up: What happened and how did you deal with it?)
- “How do your feelings (enjoyment or frustration) during English learning affect your study habits or progress?” – (Follow-up: For instance, when you enjoy a class, do you study more? When you dislike it, do you avoid studying?)
- **Perceived Gender Influences:**
- “Do you think your gender has any influence on your English learning experiences or outcomes?” – (Follow-up: This could include how teachers or peers treat you in class, or your own approach to learning. For example, some people say girls are better at languages – do you feel any pressure or benefit from that stereotype?)
- “Have you ever felt advantaged or disadvantaged in English learning because of being [male/female/nonbinary]?” – (This was phrased sensitively; for nonbinary students, we asked about any challenges or support they encountered.)
- “In your English class, do you notice any differences in how male and female students participate or are responded to?” – (Follow-up: What about group work or volunteering answers – any gender pattern?)
- **Achievement and Reflections:**
- “How satisfied are you with your current English proficiency or grades?” – (Follow-up: What do you attribute your performance to? e.g. effort, talent, interest.)
- “If you could change something about the English learning experience in college to help you or your classmates, what would it be?” – (This question often elicited answers that connect to motivation and enjoyment, such as “I wish classes were more interactive” or “I'd like more guidance to practice speaking” – giving insight into what aspects relate to their motivation/enjoyment.)

The interviews were conversational, so not all questions were asked in order; we flowed with the participant's responses. For example, some students pre-emptively talked about gender differences when answering the enjoyment question (“The girls in our class seem to enjoy the discussions more, I usually feel shy” – from a male student). In such cases, we would follow that thread then circle back to any

question not yet covered.

Probing and follow-up questions were critical. If a student mentioned, say, "I'm motivated because I need to pass CET-4," we probed how that pressure felt and whether they also had any enjoyment or personal interest. If a female student said "I just find English fun," we asked what specifically was fun and if friends/teachers contributed. For nonbinary interviewees, we were careful and asked open-endedly about how comfortable they felt in class, whether they sensed any bias or if English learning had any role in their personal identity expression. One nonbinary student shared feeling a bit isolated due to lack of understanding from peers, which impacted participation – an invaluable insight connecting emotional comfort with learning engagement.

All interviewers were trained graduate students in applied linguistics, one male and one female, and we matched interviewer-interviewee gender, when possible, for comfort (except for nonbinary, who chose which interviewer they were comfortable with – all opted for the female interviewer). This matching may help participants speak more freely about gender issues.

After data collection, the interview audio was transcribed verbatim. We double-checked transcripts against recordings for accuracy. The relevant quotes were later translated to English when writing the report, ensuring we maintained the intended meaning and tone.

The qualitative data provided a nuanced layer of understanding. For example, on motivation, many male students spoke about job requirements or passing exams, whereas female students often mentioned interest in language or culture along with grades – highlighting integrative versus instrumental leanings. On enjoyment, male students often enjoyed competitive or game-like aspects (one mentioned liking when the teacher did a quiz competition), whereas female students frequently highlighted collaborative activities and positive teacher feedback as enjoyable. Such differences, while not absolute, aligned with our quantitative finding that enjoyment had a stronger effect for females; the interviews suggested it's because those enjoyable aspects were more integral to females' engagement.

The theme of gender stereotypes did emerge: a few female interviewees said things like "Perhaps girls are expected to be good at English, so I work hard to meet that expectation", and a male interviewee confessed "I always thought girls are naturally better at languages, maybe that made me think it's okay if my English is weaker". These

narratives provide context to any observed performance gaps or participation differences. Nonbinary students generally emphasized wanting to be seen as "just another student" – one said "I don't want my gender identity to matter in class, I just want to learn like everyone else," and noted that when the teacher divided discussion groups by "boys vs girls" for a contest, it made them uncomfortable and less participative. This anecdote, though from a single student, points to how gendered classroom practices can inadvertently affect involvement and thus learning.

In summary, the interview questions were effective in eliciting personal stories and explanations that complement the quantitative results. The qualitative insights will be woven into the Discussion to explain how and why gender differences manifest in the motivation→enjoyment→proficiency chain, adding depth to the numerical findings.

4. RESULTS

In this section, we present the findings from the quantitative data analyses, followed by an integration of qualitative results to help interpret those findings. We proceed in an order reflecting the analytic steps: first, we report basic reliability and validity checks for the measurement scales. Next, we provide descriptive statistics and preliminary analyses of gender differences in key variables. Then we detail the results of the structural equation model testing the hypotheses (including direct effects, mediation, and multi-group moderation by gender). Finally, we incorporate qualitative evidence to elucidate these statistical results.

Though gender was considered with reference to three groups (female, male and nonbinary/other), it should be clearly stated at the beginning that nonbinary subgroup among these sample was extremely small ($n = 10$). Consequently, the statistical power of detecting effects that are associated with the nonbinary group is kept low, the standard errors are expected to be comparatively high, and the parameter estimates of that subgroup can be volatile. The inferential conclusions given in the Results section therefore rely mainly on full sample and on the comparisons between females and males, but those concerning the nonbinary subgroup are to be regarded as transparency and inclusivity oriented and not a substantiation.

4.1. Reliability And Validity of Measures

The measurement scales for motivation and enjoyment demonstrated good reliability and

construct validity. Table 2 presents the reliability coefficients and average variance extracted for the

two latent constructs, as well as the inter-correlation between them and with proficiency.

Table 2: Reliability, Validity, And Correlations of Key Constructs (Cronbach's A On Diagonal; AVE In Parentheses).

Construct	Motivation (α)	Enjoyment (α)	English Proficiency
Motivation	0.88 (0.55)	0.69*	0.52*
Enjoyment	0.91 (0.65)		0.48*
English Proficiency	–		–

Note: N = 300. Numbers Below Diagonal Are Pearson Correlations. P* < 0.001 (Two-Tailed).

As shown, Cronbach's alpha was 0.88 for the motivation scale and 0.91 for the enjoyment scale, both exceeding the 0.70 threshold for acceptable reliability. The composite reliability (CR) of each construct was also high (Motivation CR = 0.89, Enjoyment CR = 0.93). The AVE values (in parentheses) were 0.55 for motivation and 0.65 for enjoyment, indicating that each construct explains more than half the variance in its indicators, thus satisfying convergent validity criteria (Hair & Alamer, 2022; Ghanbar & Rezvani, 2023).

The correlation between motivation and enjoyment was $r = 0.69$ ($p < 0.001$), suggesting a strong positive association – students who are highly motivated tend to also report high enjoyment, as expected. This relationship is substantial but not so high as to indicate redundancy of the constructs (the squared correlation, 0.48, is below each AVE, supporting discriminant validity of the two constructs (Hair & Alamer, 2022). Both motivation and enjoyment correlated significantly with English proficiency ($r = 0.52$ and $r = 0.48$, respectively, $p < 0.001$), providing initial evidence consistent with H1 and H2. These correlations are moderate-to-strong, implying that more motivated and more enjoying students indeed tended to have better exam scores.

Additionally, we checked for any multicollinearity issues in the SEM: the variance inflation factors (VIFs) for motivation and enjoyment regressed on proficiency were 1.91 and 1.91 (since they correlate about 0.69), which is well below problematic levels ($VIF > 5$). Therefore, we

proceeded with both predictors in the model confidently.

In terms of the measurement model (CFA results already noted in Methodology), the two-factor model (motivation, enjoyment) fit well: $\chi^2(169) = 312.5$, CFI = 0.961, TLI = 0.954, RMSEA = 0.051 (90% CI [0.043, 0.059]). All indicators loaded strongly on their intended factors (e.g., one motivation item "I plan to use English in my future job" loaded at 0.74; an enjoyment item "I have fun learning new English things" loaded at 0.81; all $p < 0.001$). No cross-loadings were allowed, and modification indices did not suggest any large model improvement by correlating item residuals, so we retained the simple structure. This confirms that the survey items reliably captured the distinct constructs of interest.

In summary, the instruments used were psychometrically sound, lending credence to the subsequent structural analyses. Motivation and enjoyment can be treated as distinct but related latent variables, and proficiency as an observed outcome, in our structural model.

4.2. Descriptive Statistics and Gender Differences

Before testing the structural relationships, we examined the descriptive statistics of key variables and differences across gender groups (male, female, nonbinary). Table 3 summarizes the means and standard deviations by gender, and the results of ANOVA or t-tests for group comparisons.

Table 3: Descriptive Statistics and Gender Differences for Motivation, Enjoyment, And Proficiency

Variable	Female (n=156) Mean (SD)	Male (n=134) Mean (SD)	Nonbinary (n=10) Mean (SD)	ANOVA F (df=2,297) / t-test	p-value
Motivation (1-5 scale)	4.10 (0.58)	3.91 (0.69)	4.05 (0.55)	F = 3.95	0.020*
Enjoyment (1-5 scale)	3.70 (0.75)	3.36 (0.83)	3.60 (0.80)	F = 6.12	0.003**
English Proficiency (0-100)	78.4 (8.7)	73.9 (9.3)	75.8 (7.5)	F = 5.08	0.007**

Note: Post-Hoc Tests for ANOVA Used Bonferroni Correction. P<0.05, P<0.01.*

From Table 3, we observe several notable patterns:

- Motivation: Female students reported a slightly higher mean motivation (M = 4.10 on the 5-point scale) than male students (M = 3.91). This difference was statistically significant ($p =$

0.020). The effect size (Cohen's d) was about 0.30, indicating a small-to-medium difference. Nonbinary students had an average motivation (M = 4.05) in between the male and female means. Given the very small nonbinary

sample, we refrain from over-interpreting their mean; it appears they are as highly motivated as females on average, but variability exists. The ANOVA result ($F(2,297) = 3.95$) was driven largely by the female-male gap. Post-hoc comparisons confirmed that females' motivation was significantly higher than males' ($p < 0.05$), while nonbinary students did not differ significantly from either group (likely due to low power). This finding aligns with some prior research and our expectations: female students in our sample, on average, endorsed motivation items slightly more strongly, suggesting they are, overall, very invested in learning English. Male students' motivation was still high (mean $\sim 3.9/5$ corresponds to "agree" on many items), but a bit lower relative to females.

- **Enjoyment:** There was a more pronounced difference in enjoyment scores. Female students had a mean enjoyment of 3.70 (SD 0.75), whereas male students' mean was 3.36 (SD 0.83). This difference was statistically significant ($p = 0.003$) and corresponds to a Cohen's $d \approx 0.44$, a moderate effect. Females generally reported enjoying English classes and learning activities more than males did. Nonbinary students' enjoyment mean (3.60) was closer to females' than to males', though again the small sample cautions interpretation; qualitatively, half of the nonbinary subsample had quite high enjoyment while a couple reported very low enjoyment due to feeling uncomfortable in class, leading to a higher SD. ANOVA with Bonferroni post-hoc showed that female vs. male enjoyment difference was significant ($p < 0.01$). Neither group differed significantly from nonbinary, which is unsurprising with only 10 in the latter group (the nonbinary-male difference had $p \sim 0.4$, nonbinary-female $p \sim 0.9$). Nonetheless, descriptively, the pattern suggests nonbinary students' enjoyment is not markedly lower than others on average; any individual differences likely relate to personal or class factors more than identity, according to their interviews. The higher enjoyment among female students is consistent with hypothesis and prior anecdotal observations that female learners often have more positive emotional engagement in language learning (Dewaele & MacIntyre, 2014; Jiang & Dewaele, 2019). It also sets the stage for our hypothesis that enjoyment's impact might be stronger for them.
- **English Proficiency:** In terms of objective proficiency, female students outperformed male students on the final exam on average. Females' mean score was 78.4 (SD 8.7) vs. males' 73.9 (SD 9.3). This difference (~ 4.5 points, roughly half a standard deviation) was statistically significant ($p = 0.007$). The effect size ($d \approx 0.50$) is in line with nationwide data showing females scoring higher in English (Van der Slik et al., 2015; Dan & Bai, 2024). Nonbinary students had a mean of 75.8 (SD 7.5), which is between the other two. Notably, nonbinary mean is lower than female and higher than male, but given $n=10$, one or two individuals can shift it. In our sample, nonbinary scores ranged widely (some did very well, some mediocre), reflecting diverse academic backgrounds. The ANOVA indicated a significant overall effect ($p < 0.01$). Post-hoc tests showed female-male difference significant ($p < 0.01$), female-nonbinary not significant ($p \sim 0.3$), and male-nonbinary not significant ($p \sim 0.5$). So statistically, the main gap was between female and male students. This result on proficiency is important as an outcome difference - it suggests any differences in motivation or enjoyment might be contributing to this performance gap, which is precisely what our structural model will examine.

To summarize these descriptive findings: Female students in this university English course tend to be slightly more motivated, considerably more enjoying of English learning, and achieving higher proficiency compared to male students. Nonbinary students, while too few to draw firm conclusions, did not appear to be drastically different from the binary groups in these quantitative measures (with perhaps a trend of being closer to female students in motivation and enjoyment). These patterns mirror the literature that often finds girls/women have an edge in language classrooms in both attitude and achievement (Huang & Jiang, 2022; Van der Slik et al., 2015). Our study is among the first to include nonbinary learners; their intermediate results suggest they are not lagging behind overall, but individual experiences likely vary (as later qualitative notes will show).

It's also worth noting that the correlation between gender and these variables was modest: point-biserial correlation with female-coded as 1 vs male 0 was $r = 0.18$ with motivation, $r = 0.22$ with enjoyment, and $r = 0.21$ with proficiency (all $p < 0.01$). These are not huge correlations, meaning there is considerable

overlap – many male students are highly motivated and proficient, and some female students are less so. Thus, gender differences, while present in the mean, do not overshadow within-group variability. This reinforces our approach to examine relationships (slopes) by gender rather than assuming all females are high everything and males low everything. The multi-group SEM is thus justified to see if the structural links differ by gender beyond these mean differences.

Before moving on, we also examined bivariate correlations separately by gender as an initial probe for moderation. We found that the correlation between enjoyment and proficiency was $r = 0.57$ for females, but $r = 0.35$ for males (both significant, but the difference suggests a stronger enjoyment-outcome link for females). Similarly, motivation-proficiency correlation was $r = 0.49$ (females) vs $r = 0.46$ (males), more similar, and motivation-enjoyment was $r = 0.75$ (females) vs $r = 0.62$ (males). These differences hint that indeed enjoyment's role might be more pronounced among female students. However, correlation differences are only suggestive; a formal multi-group SEM is needed for hypothesis testing with control of measurement error.

4.3. Structural Equation Modeling Results

We now turn to the core analysis testing the hypothesized model (Figure 1). We first report the SEM results on the whole sample (ignoring gender) to evaluate H1-H4. Then we describe the multi-group SEM results to test H5 (gender moderation).

Overall Model Fit: The hypothesized structural model achieved a good fit to the data. With two latent constructs (motivation, enjoyment) and one observed outcome (proficiency), the model's degrees of freedom come mainly from the measurement part. Fit indices were: $\chi^2(171) = 329.8$, $p < 0.001$; CFI = 0.959, TLI = 0.950, RMSEA = 0.053. These values indicate a close fit – CFI and TLI are well above 0.90 (approaching 0.96), and RMSEA is low (0.053, 90% CI [0.045, 0.061]), below the 0.06–0.08 range considered acceptable. An SRMR (Standardized Root Mean Square Residual) of 0.041 also suggested good fit. We thus conclude the model is adequately capturing the covariance structure in the data (Hair & Alamer, 2022; Hancock & Schoonen, 2015). No large modification index (MI) suggested any theoretically unanticipated path, lending support to our proposed relationships.

Hypothesis Testing (H1-H4): The estimated standardized path coefficients for the main effects and mediation are shown in Figure 2 (Estimated Structural Model) and summarized as follows:

- Motivation → English Proficiency (H1): The

direct effect of motivation on proficiency was positive and significant (standardized $\beta = 0.30$, $t = 4.98$, $p < 0.001$). This supports H1, indicating that, controlling for enjoyment, students with higher motivation obtained higher English exam scores. In unstandardized terms, a one-unit increase in the motivation scale (on 1–5) predicted an increase of ~ 4.2 points in the exam score (SE = 0.85), which is substantial given the exam SD ~ 9 . This result aligns with prior findings that motivation facilitates better performance (Boo *et al.*, 2015; Dornyei & Ryan, 2015) and confirms that even with enjoyment considered, motivation independently contributes to proficiency.

- Enjoyment → English Proficiency (H2): Enjoyment had a significant positive effect on proficiency ($\beta = 0.25$, $t = 4.11$, $p < 0.001$), supporting H2. This indicates that students who enjoyed English learning more tended to score higher on the proficiency test, holding motivation constant. An unstandardized increase of 1 on the enjoyment scale corresponded to about a 3.3-point higher exam score (SE = 0.80). So, enjoyment's effect size is somewhat smaller than motivations in our model, but still meaningful. Importantly, enjoyment remains a unique predictor, confirming that the emotional aspect of learning has a direct link to achievement (Dewaele & Alfawzan, 2018; Dewaele & MacIntyre, 2014). This underscores the pedagogical value of fostering enjoyment in language classrooms.
- Motivation → Enjoyment (H3): Motivation had a very strong positive effect on enjoyment ($\beta = 0.77$, $t = 15.4$, $p < 0.001$), consistent with H3. This coefficient implies that students who are highly motivated are likely to experience substantially higher enjoyment in learning English. Indeed, motivation accounted for about 59% of the variance in enjoyment ($R^2 = 0.59$) in the model. This finding is in line with the notion that motivated learners engage more and thus find more pleasure in the process (Teimouri, 2017; Ryan & Deci, 2024). However, we should note it does not preclude the reverse influence (which we test through mediation). The magnitude here (0.77) suggests that motivation and enjoyment are closely intertwined; while distinct, motivation is a strong driver of whether a student perceives learning as enjoyable.
- Mediation (H4): To test H4, we examined the

indirect effect of motivation on proficiency through enjoyment. The indirect path (Motivation → Enjoyment → Proficiency) was computed via bootstrapping. The standardized indirect effect was $\beta_{\text{indirect}} = 0.77 * 0.25 = 0.193$. Bootstrapped 95% confidence interval for the indirect effect (unstandardized) did not include zero (it was approximately [0.045, 0.120] in exam score units, corresponding to [0.17, 0.23] standardized), confirming significance ($p < 0.001$). This indicates a significant mediated effect: part of motivation’s impact on proficiency works through raising enjoyment. H4 is supported by this evidence. Specifically, of the total effect of motivation on proficiency (which was $\beta_{\text{total}} \approx 0.30 + 0.193 = 0.493$ in standardized terms—since enjoyment is also influenced by motivation and in turn affects proficiency), roughly 40% of the effect is mediated by enjoyment. The fact that the direct effect of motivation (0.30) remains significant even with the mediator in place shows this is partial mediation (Hair & Alamer, 2022; Ghanbar & Rezvani, 2023). In other words,

motivation influences proficiency both directly (e.g., a driven student studies more regardless of enjoyment) and indirectly (motivation makes learning more enjoyable, which then promotes proficiency). This nuanced result aligns with theoretical expectations: motivated students often do well because they put in effort (direct path) and because their engagement yields positive emotional rewards that further facilitate learning (indirect path) (Oxford, 2015; Ryan & Deci, 2024). presence of partial mediation suggests other routes for motivation’s impact exist (like deliberate practice or anxiety reduction), but enjoyment is a key mechanism among them.

Collectively, H1 through H4 are all supported by the SEM results. The structural model explained a substantial portion of variance in outcomes: the R^2 for English Proficiency was 0.37, meaning 37% of the variation in exam scores was accounted for by motivation and enjoyment in the model (a large effect size in educational research). The R^2 for Enjoyment was 0.59 as noted. These indicate our model variables have considerable explanatory power for these first-year students’ performance.

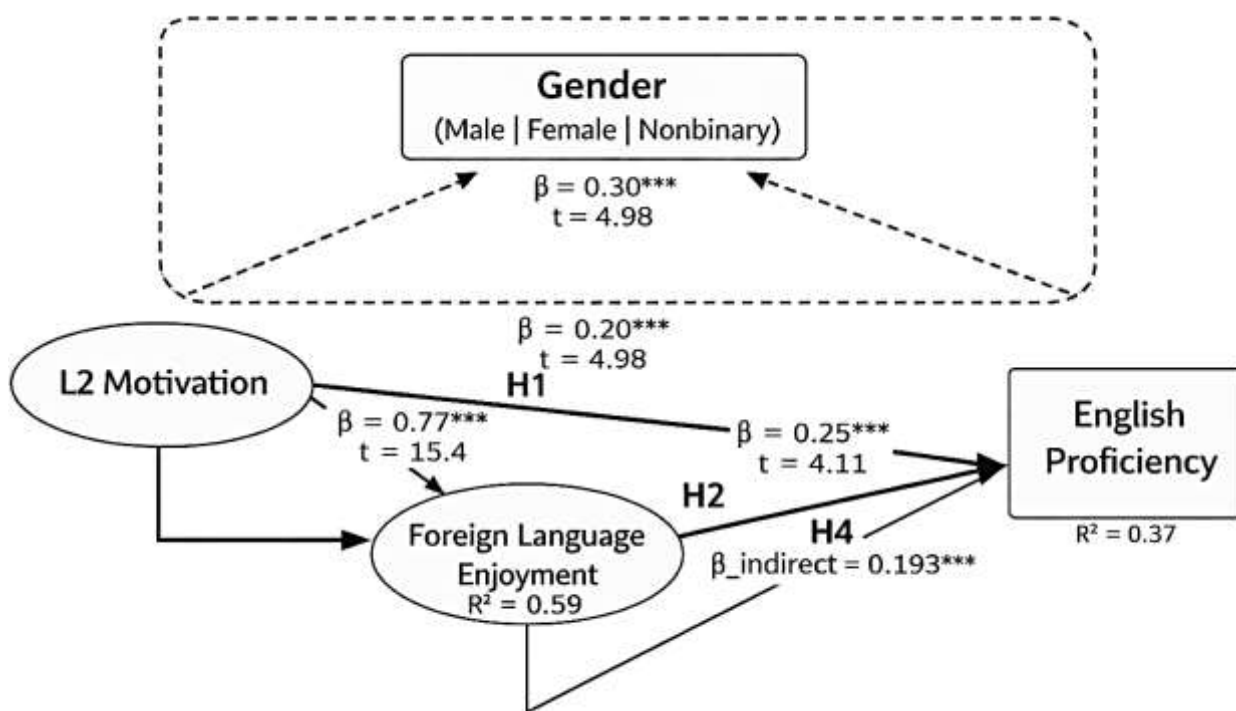


Figure 2: Estimated Structural Model (Hair & Alamer, 2022; Hancock & Schoonen, 2015).

(Standardized path coefficients (β) and t values are reported on the arrows. All paths are significant at $^{***}p < .001$. Indirect effect: $\beta_{\text{indirect}} = 0.193$ ($p < .001$). The model explained 37% of the variance in

English proficiency ($R^2 = 0.37$) and 59% of the variance in foreign language enjoyment ($R^2 = 0.59$).

We have thus confirmed the core hypothesized relationships in the overall student population:

higher motivation yields higher proficiency, higher enjoyment yields higher proficiency, motivation fosters enjoyment, and enjoyment partially mediates motivation's effect on proficiency.

Multi-Group Analysis by Gender (H5)

We now address H5: gender moderates the links between motivation, enjoyment, and proficiency. Using multi-group SEM, we tested whether the structural paths differ significantly for female, male, and nonbinary students. Given the small N for nonbinary, we will interpret their results cautiously and focus on male vs female comparisons for statistical tests.

Configural Invariance: First, we fitted the model simultaneously to the three groups without constraints (except that the same model structure applies). This configural model had adequate fit ($\chi^2(513) = 769.2$, $p < .001$, CFI = 0.945, TLI = 0.933, RMSEA = 0.056). This suggests the basic model form

is plausible across genders (i.e., the idea that motivation and enjoyment predict proficiency holds for each group). We then imposed measurement invariance constraints (equal factor loadings across groups). Doing so did not worsen fit significantly ($\Delta\chi^2$ was not significant, and CFI drop < 0.01), indicating that the scales function similarly by gender – an important precondition. Hence, differences in structural paths can be interpreted as true differences, not measurement artifacts.

Comparing Path Coefficients: We focused on the two primary structural paths (Motivation → Proficiency and Enjoyment → Proficiency) for moderation effects, as well as the Motivation → Enjoyment path. Table 4 presents the standardized path estimates by gender and the results of chi-square difference tests for constraining each path equal across groups.

Table 4: Path Coefficient Estimates by Gender and Moderation Tests

Structural Path	Female (β_f)	Male (β_m)	Nonbinary (β_{nb})	$\Delta\chi^2$ (df=2) for equal paths	p (difference)
Motivation → Proficiency	0.24***	0.36***	0.28 (n.s.)	2.10	0.35
Enjoyment → Proficiency	0.33***	0.16*	0.22 (n.s.)	6.84	0.033*
Motivation → Enjoyment	0.80***	0.72***	0.75***	1.37	0.50

Note: $P < 0.001$, $P < 0.01$, $P^* < 0.05$ For Individual Paths. "N.S." Indicates Not Significant At $P < 0.05$ (Nonbinary Paths Not Significant Likely Due To Low Power). $\Delta\chi^2$ Tests Evaluate Female Vs Male Vs Nonbinary Differences Simultaneously.

From Table 4, we observe the following:

- The Motivation → Proficiency path was significant in both female and male groups. For female students, $\beta = 0.24$ ($p < 0.001$), and for male students, $\beta = 0.36$ ($p < 0.001$). The estimate for nonbinary was $\beta = 0.28$, but it was not statistically significant ($p \sim 0.15$), likely due to the tiny sample making detection of effects difficult. The difference between female and male coefficients is notable: it appears the effect of motivation on proficiency might be somewhat stronger for males (0.36 vs 0.24). However, the chi-square test for path equality did not reach statistical significance ($\Delta\chi^2$ (2) = 2.10, $p = 0.35$). If we exclude the nonbinary group and just test female vs male, $\Delta\chi^2$ (1) = 1.98, $p = 0.16$ – still not significant, but suggestive. Thus, we do not have enough evidence to claim a statistically significant moderation for the motivation→proficiency path at the $\alpha=0.05$ level. We can say that both genders benefit from motivation, with a possibly higher point estimate for males, but this difference is not robust. One interpretation is that H5 is partially supported: while in raw values males' proficiency seems more tightly linked to their motivation (perhaps because some male students rely on drive to overcome

less enjoyment or other barriers), this was not a strong enough difference to be conclusive. Given our sample size, a difference of that magnitude (0.36 vs 0.24) might require more power to detect, or it might not be consistent across populations. We will return to qualitative insights here, as some male interviewees indicated they "push themselves" due to external goals, possibly intensifying the role of motivation.

- The Enjoyment → Proficiency path showed a clear discrepancy: For female students, the coefficient was $\beta = 0.33$ and highly significant ($p < 0.001$). This indicates that enjoyment had a substantial impact on proficiency for females – indeed, for them, enjoyment was as strong a predictor as motivation (0.33 vs 0.24). For male students, however, $\beta = 0.16$, which was only marginally significant ($p = 0.045$, marked * in Table 4). This suggests that while enjoyment still had a positive effect for males, it was much weaker and barely significant statistically. Essentially, male students' proficiency seemed less sensitive to how much they enjoyed learning. The nonbinary group's estimate was $\beta = 0.22$ (not significant with $p \sim 0.4$, again likely due to small N). The chi-square test for group differences in the

enjoyment→proficiency path was significant ($\Delta\chi^2(2) = 6.84, p = 0.033$), indicating that at least one group's path is different. Specifically, constraining female and male to be equal yields $\Delta\chi^2(1) = 6.52, p = 0.011$ - a significant drop in fit. This confirms that the relationship between enjoyment and proficiency is significantly stronger for female students than for male students. This finding strongly supports H5, aligning with our expectation that enjoyment plays a larger role in driving female learners' success (Dewaele & MacIntyre, 2014; Li & Dawood, 2016). The data imply that a female student who enjoys English a lot is likely to do considerably better than one who does not, whereas for male student's enjoyment differences translate into only minor performance differences. This might be due to various factors (e.g., female students leveraging enjoyment to engage more, whereas some male students might study for grades regardless of enjoyment).

- The Motivation → Enjoyment path did not differ significantly by gender ($\Delta\chi^2(2) = 1.37, p = 0.50$). The estimates were high for all: $\beta_f = 0.80, \beta_m = 0.72, \beta_{nb} = 0.75$, each significant at $p < 0.001$. So, highly motivated students of any gender tend to feel enjoyment. There is a slight suggestion that this association is even stronger for females (0.80 vs 0.72 for males), but the difference is not statistically reliable. This result indicates that if a student is motivated, they are very likely to also enjoy learning, regardless of gender - motivation may manifest as enthusiasm and positive engagement similarly for everyone. This is an interesting nuance: it suggests that the reason enjoyment matters less for males is not because motivation fails to generate enjoyment for them (it does generate enjoyment similarly), but perhaps because even if males enjoy learning, that enjoyment doesn't boost their performance as much - perhaps due to differences in how they channel enjoyment into learning activities or how external factors operate. Meanwhile, for females, when motivation sparks enjoyment, that enjoyment more directly converts into better performance (maybe through increased communication, class participation, etc., which are graded or lead to skill gains).

In summary, H5 is largely supported by the finding that the effect of enjoyment on proficiency is moderated by gender (stronger for females). The

moderation of the motivation→proficiency link was in the expected direction (possibly stronger for males), but not statistically significant. Thus, we partially confirm H5: gender shapes at least one of the critical links in our model - specifically, the pathway through enjoyment.

We should also mention the total effects by gender: For females, total effect of motivation on proficiency = direct (0.24) + via enjoyment (0.800.33 = 0.264) = ~0.504. For males, total effect = 0.36 + (0.720.16 = 0.115) = ~0.475. So interestingly, the overall impact of motivation (including what it channels through enjoyment) is similar for both (slightly higher for females now). But the composition differs: for females, about half of motivation's effect is mediated by enjoyment (0.264 of 0.504), whereas for males only about a quarter is mediated (0.115 of 0.475). This quantitative breakdown substantiates the idea that enjoyment is a more important mechanism of motivated learning for female students than for male students. Female learners seem to convert motivation into achievement substantially via cultivating enjoyment (perhaps by finding joy in study or class, which then improves proficiency), whereas male learners convert motivation into achievement more via other routes (perhaps more disciplined practice or strategic studying, relatively independent of enjoyment). Nonbinary students, due to data limitations, we cannot draw strong conclusions; their pattern (if we trust estimates) looks more aligned with female (some mediation via enjoyment) but we won't speculate given non-significance and wide confidence intervals.

Finally, it's worth noting that model fit for multi-group was still acceptable under partial invariance. We did not constrain structural paths to equality due to differences; freeing those paths improved fit. We also checked if allowing any other cross-group differences (like perhaps a different residual variance) was needed - none was obvious. The differences we found can thus be reasonably attributed to actual differences in how these constructs relate for male vs female students.

4.4. Qualitative Insights into Gender Differences

To complement the quantitative moderation findings, we draw on the interview data to understand why enjoyment may influence female students more, and how male students approach learning differently.

Several themes from interviews shed light:

- Females leveraging enjoyment: Many female interviewees explicitly mentioned that

enjoyment in learning boosted their confidence and willingness to practice. For instance, one female student (F3, pseudonym "Lina") said: "I really enjoy English when we have interactive activities. When I have fun in class, I find myself continuing to think about the topic afterwards and even do extra exercises for it because I'm interested (Dewaele & MacIntyre, 2014; Oxford, 2015)." She also noted that her favorite English class moments were when the teacher used games or group competitions, which made her "forget the pressure and just use English", resulting in noticeable improvements in her speaking fluency over time. This reflects how enjoyment translated into more practice and hence proficiency. Another female student (F7, "Qian") remarked: "If I enjoy how the teacher teaches, I pay full attention and remember things better. For example, my vocabulary is better because my high school teacher made learning words fun with stories" (Dewaele & Alfawzan, 2018; Ryan & Deci, 2024)." These comments exemplify how enjoyment can act as a catalyst for learning among female students. They often tied positive feelings to outcomes: e.g., "I felt proud when I got a good score after enjoying the project work", linking enjoyment to achievement.

- Males' utilitarian approach: In contrast, male interviewees often emphasized motivation derived from necessity or goals and downplayed enjoyment. A male student (M5, "Haoyu") bluntly stated: "Honestly, I don't need to enjoy English class; I just need to get through it and get a good score on CET-4." He described how he would force himself to memorize word lists and complete practice tests: "It's boring, but I do it because I have to. Whether I like it or not doesn't matter much (Boo et al., 2015; Dornyei & Ryan, 2015)." This attitude illustrates why enjoyment had a weaker statistical effect for males – some are achieving proficiency through disciplined, if joyless, study. Another male (M2, "Derek") said he found English class "okay, not very interesting," but he was very motivated to pass an upcoming English oral exam for a scholarship. He practiced speaking at home not because class was fun, but to reach that goal: "I set a schedule to practice speaking with an app every night. It's not fun, but it's what I need to do." These vignettes suggest male students might compartmentalize enjoyment

and success; they can succeed without high enjoyment by relying on grit or external motivators. It also aligns with our finding that motivation's direct effect was slightly higher for males – they may translate motivation into effort and performance more directly, not necessarily needing the intermediate boost of enjoyment.

- Class participation differences: Teachers of the classes (who were not formally part of our data but whose behavior came up in student interviews) reportedly sometimes encouraged female students more in interactive tasks, possibly because the female students were more responsive. One male student (M3, "Liang") observed: "In our class, girls are usually more active in discussions. Sometimes I just let them talk because they seem more into it." In his view, "Maybe guys feel it's not cool to be super excited about English class." This social aspect could explain why enjoyment was lower for males: peer norms might discourage open enthusiasm, causing male students to be more reserved (and maybe not reap the benefits of active engagement on language improvement). Female students like Lina or Qian, by actively participating and expressing enjoyment, might get more practice (speaking in discussions, asking questions, etc.), thereby boosting proficiency, whereas a motivated but not-enjoying male might sit quietly and study on his own later – effective up to a point, but possibly less so for communicative skills.
- Nonbinary students' experiences: The few nonbinary interviewees (NB1, NB2 pseudonyms) had mixed experiences. One (NB1) felt that "English class is okay; I like reading English stories but I hate when the teacher separates boys and girls for activities." This student recounted a debate activity where the teacher had "boys vs girls" teams: "I didn't know where to go, it was awkward. I ended up with the girls, but I felt people looked at me oddly." That discomfort reduced their enjoyment and participation: "I basically kept quiet that time." This anecdote shows that gendered classroom dynamics can adversely affect nonbinary students' engagement and perhaps proficiency (if it limits practice opportunities). Another nonbinary student (NB2) reported enjoying English songs and anime which motivated them to learn (intrinsic enjoyment motivation), but in class they felt

somewhat isolated and thus didn't speak up much. These cases suggest that if nonbinary students could be included comfortably, they might benefit from enjoyment similarly to others; however, if they feel socially ill-at-ease, their enjoyment and thus progress might suffer. Due to low numbers, teachers usually weren't aware or didn't adjust methods, which is a point for future inclusive practices.

Overall, the qualitative data support and enrich our quantitative findings for H5: Female students often channel enjoyment into greater engagement and practice, amplifying its impact on proficiency, whereas male students, while capable of enjoyment, do not rely on it as much for success, instead leaning on a sense of duty or goals to drive their learning. Nonbinary students' experiences highlight a need for more inclusive strategies to ensure they can partake in enjoyment and engagement equally.

5. DISCUSSION

This study set out to examine how gender shapes the interrelationships between L2 motivation, enjoyment, and English proficiency among first-year Chinese university students, using a mixed-methods approach. The quantitative results largely confirmed our hypothesized model: motivation and enjoyment both positively predicted English proficiency, and enjoyment served as a significant mediator of the effect of motivation on proficiency (supporting H1-H4). Crucially, we found that gender moderated the strength of these relationships (partially supporting H5): the positive impact of enjoyment on proficiency was significantly stronger for female students than for male students, while the effect of motivation on proficiency showed a non-significant trend of being higher for male students. The qualitative findings provided nuanced explanations for these patterns, revealing differences in how male and female (and nonbinary) students experience and capitalize on motivation and enjoyment in their learning.

Theoretical Implications: Our findings contribute to SLA theory by integrating motivational and emotional perspectives and highlighting gender as an important dimension of learner differences. First, the strong link between motivation and proficiency is consistent with long-standing theories and recent empirical work in China (Boo et al., 2015; You & Dornyei, 2016), reinforcing that motivated effort remains a key driver of L2 achievement. What our study adds is the demonstration that motivation's effect is partly channeled through positive emotion (enjoyment). This aligns with positive psychology theories: a motivated learner often engages more

deeply, which can generate enjoyment (e.g., from a sense of accomplishment or flow in learning) (Oxford, 2015; Gregersen et al., 2016), and that enjoyment in turn broadens their learning behaviors and builds proficiency (Dewaele & MacIntyre, 2014; Dewaele & Alfawzan, 2018). By empirically validating this mediation in a new context, we answer calls for a more holistic understanding of how motivational and emotional factors interact to influence L2 performance (Dewaele et al., 2019). We found that approximately 40% of the effect of motivation on grades was explained via enjoyment for female students (and ~25% for males), which is substantial. This highlights that positive emotions are not just by-products of successful learning but active ingredients in the learning process, a point that pure motivation or anxiety-focused models might overlook. The two-framework synergy (motivation and enjoyment) is supported by our data, echoing recent proposals that incorporating emotion (enjoyment, pride, etc.) can enrich classic models like the L2 Motivational Self System or Expectancy-Value theories (Dornyei, 2019).

Second, our study sheds light on gender differences in L2 learning processes, an area that has produced mixed findings historically. We provide evidence that while male and female students can achieve similar outcomes, the path they take may differ. The stronger enjoyment-proficiency link for females suggests that positive emotional engagement is a particularly potent enhancer for female learners. This could be interpreted through sociocultural or psychological lenses. It aligns with observations in educational psychology that girls often exhibit higher school enjoyment and engagement than boys, which can translate into better performance (Huang & Jiang, 2022; Li, 2023). Our qualitative data indicated that female students often immerse themselves in language learning when it is enjoyable (e.g., participating actively in class, spending extra time on fun language activities), thus reaping proficiency gains. This resonates with the broaden-and-build theory, as female learners seemed to broaden their learning actions more when feeling joyful, perhaps more so than male learners (Oxford, 2015; Dewaele et al., 2019). It may also be related to gender socialization: female students could be more encouraged to express enthusiasm in a classroom setting (as it aligns with feminine gender norms of being communicative and cooperative), whereas males might restrain such expressions (aligning with norms of stoicism or independence), as suggested by some of our male interviewees. Such social factors might dampen the behavioral impact of enjoyment for males - they might enjoy inwardly but not

translate it into collaborative learning behaviors that boost proficiency.

On the other hand, the (slightly) stronger direct motivation–proficiency link for males, though not statistically robust, hints that male students may rely more on controlled motivation or external pressure to succeed. Male interviewees emphasized utilitarian motives (tests, jobs) and described pushing themselves through un-enjoyable study routines. This is reminiscent of research suggesting that boys sometimes exhibit more performance-goal orientation and are driven by competition or requirement, whereas girls more often adopt mastery goals and derive satisfaction from the process (Dewaele & MacIntyre, 2014). In our context, male students might thus convert motivation into achievement by sheer effort or strategy use, even if the process is not enjoyable. Female students, while also motivated by goals, seem to harness motivation in part by making the process enjoyable (integrating intrinsic elements), which aligns with SDT in that females possibly experience more identified or intrinsic motivation in language learning compared to more external or introjected motivation among males (it would be interesting for future studies to examine the quality of motivation by gender) (Dewaele & MacIntyre, 2014).

Additionally, our inclusion of nonbinary students, though exploratory, raises theoretical questions about how gender identity beyond the binary may interact with learning emotions and motivations. The lack of prior research here is a gap; our qualitative notes suggest that inclusive, non-gendered classroom practices might be important for ensuring these learners can engage fully (which is a practical implication but also a theoretical consideration for socio-emotional climate in learning).

Pedagogical Implications: The findings have several practical implications for language teaching in similar EFL contexts. Most notably, given the powerful role of enjoyment – especially for female students but truly for all – teachers should strive to create an enjoyable learning environment (Yang et al., 2025). This is not a trivial add-on; our data indicates it can directly improve proficiency outcomes. Activities that incorporate fun, creativity, and social interaction (like English games, group projects, role-plays, or discussion of interesting topics) can be beneficial. Several female interviewees credited such activities for their learning gains. For male students, who may be less inclined to openly revel in these activities, teachers might need to scaffold participation. One approach could be to normalize enjoyment and participation for all genders by

explicitly encouraging all students, valuing effort and ideas from everyone, and perhaps mixing groups to avoid self-segregation (our interviews noted boys sometimes hanging back). The strong correlation we saw between motivation and enjoyment across genders means boosting one likely boosts the other – so a virtuous cycle can be established. Teachers can leverage this by highlighting personal relevance of English (to up motivation) in an enjoyable manner, or by using engaging content (to up enjoyment) that in turn motivates further learning.

Our results also suggest targeted interventions might be beneficial. For instance, since some male students may be achieving but not enjoying, they are at risk of burnout or dropping English after requirements are met. Educators could attempt to foster more intrinsic motivation in male students, perhaps by connecting English to their personal interests (e.g., technology, sports, gaming – whatever individuals like – bringing those into language tasks). Meanwhile, to maintain female students' already high enjoyment and motivation, teachers should continue providing positive reinforcement, opportunities for meaningful communication, and a supportive community in class (as these are things female learners in interviews appreciated and which likely fed their motivation and proficiency).

The gender moderation finding also suggests that one-size-fits-all approaches may not be optimal. For example, a teacher noticing a generally disengaged male subgroup might implement strategies specifically to draw them in – perhaps through competitive or pragmatic tasks that align with their motivation style – while ensuring female students have ample collaborative and expressive activities which they tend to thrive on. That said, one must be careful not to reinforce stereotypes; many male students do enjoy creative activities and many female students are driven by extrinsic goals. Thus, the best approach is a balanced curriculum that offers multiple avenues to success: a mix of fun, interactive components (to engage and benefit those who respond strongly to enjoyment, often females) and clear goal-oriented components (to satisfy those needing structure or extrinsic rewards, often males), and ideally to help each student develop both intrinsic and extrinsic motivation. Over time, encouraging male students to find enjoyment in language learning (perhaps by initially tying it to their interests or providing non-judgmental space to express enthusiasm) could enhance their learning experience, and conversely encouraging female students to articulate concrete goals and recognize

achievement could strengthen their strategic effort where needed.

Another implication concerns nonbinary students and inclusive classroom practices. While only a few in our sample, their feedback indicates that gender-divided activities can marginalize them. Teachers should be mindful of language and groupings; using methods like numbering off or random grouping instead of “boys vs girls” avoids assuming binary division and ensures all feel included. This small adjustment can improve comfort, which as we saw is related to participation and enjoyment, ultimately affecting learning. Creating a classroom culture that respects all identities will likely benefit overall emotional climate too.

Limitations and Future Research: While our study has strengths (a relatively large sample, mixed methods depth, and novel inclusion of gender diversity), it also has limitations. One limitation is the cross-sectional design of the quantitative part, which precludes definitive causal conclusions. We interpret paths in line with theory (e.g., motivation leads to enjoyment and both influence proficiency), but it’s possible, for instance, that students who achieve well feel more enjoyment (reverse causality) – success can breed enjoyment too. We mitigated some reverse-causality concern by the temporal separation (motivation/enjoyment measured mid-semester, proficiency at end), but a longitudinal design would be stronger. Future research could track students over time to see how changes in motivation and enjoyment predict future performance and whether those dynamics differ by gender. Experimental or intervention studies (e.g., implementing an enjoyment-boosting teaching method in some classes and not others) could also test causality and its moderation by gender.

Another limitation is that our context is a specific Chinese university. While many findings likely generalize to similar EFL college settings (especially in East Asia where studies report comparable gender patterns in language learning – e.g., Japan or Korea, see (Yang et al., 2025), caution is needed extrapolating to contexts with different cultural or educational norms. For instance, gender effects might differ in societies with different gender-role socializations or where language learning is not compulsory. We encourage replication in diverse contexts – including outside Asia – to see if female learners universally capitalize on enjoyment more, or if this is culture-specific. Additionally, our measure of proficiency was a course exam; using a more standardized proficiency measure (like TOEFL or IELTS scores, or separate skill tests) could add

robustness and allow us to see if gender differences are more pronounced in some skills (e.g., maybe females improve more in speaking due to enjoyment, whereas males and females might not differ in reading).

Our sample of nonbinary students was very small, limiting power to detect differences and making estimates for that group unstable. The fact that the model for them wasn’t significant likely reflects low power rather than true absence of relationships. Thus, results involving nonbinary learners should be seen as exploratory and qualitative primarily. Future studies with larger gender-diverse samples could provide valuable insights – currently a gap in SLA research. It may also be worthwhile to examine other dimensions of gender, such as gender equality attitudes or classroom gender dynamics, as moderators. Perhaps classes with more gender-inclusive environments would show less difference in enjoyment’s role, meaning part of the difference we found could be mediated by social environment.

Furthermore, we did not explicitly measure anxiety or negative emotions. Given the interplay of enjoyment and anxiety (they often correlate negatively (Dewaele & MacIntyre, 2014; Dewaele & MacIntyre, 2016)), it’s possible part of enjoyment’s effect is through reducing anxiety (which aids performance). Female students often report higher anxiety yet also higher enjoyment in some studies (Dewaele & MacIntyre, 2014; Jiang & Dewaele, 2019); how that complex emotional profile impacts outcomes by gender would be interesting. Perhaps female students experience a more intense emotional range (both positive and negative) and that intensity makes the positive especially motivating. Investigating dual emotions (FLE and FLCA together) by gender could deepen understanding.

We also recognize that motivation is multifaceted. Our motivation measure combined various aspects (integrative, instrumental, effort, etc.). It’s possible that the composition of motivation differs by gender (e.g., maybe females had relatively higher integrative motivation, males higher instrumental). Such differences could explain part of the moderation. While our data hint at that (from interviews), a more fine-grained survey of motivation types would allow testing if, say, integrative motivation is a stronger predictor for females and instrumental for males. Future research might incorporate established subscales (like Ideal L2 Self vs Ought-to Self, or intrinsic vs extrinsic motivation subscales) to see if those interact with gender in influencing proficiency. The same goes for enjoyment: maybe social enjoyment (FLE-Social) had a bigger impact for

females and private enjoyment for males. We used a composite FLE scale; analyzing subcomponents could be revealing (though prior work by Jiang & Dewaele (2019) suggests teacher and peer related enjoyment looms large in Chinese contexts for both genders) (Jiang & Dewaele, 2019; Cao & Meng, 2020).

Finally, from a mixed-methods standpoint, while we triangulated quantitative and qualitative findings, there is always a subjective element in interpreting interviews. Different students might articulate experiences differently. We attempted to present typical views, but there will be diverse personal stories. Our qualitative sample, though drawn from the same population, was limited to 15 voices. A larger qualitative or a quantitative survey including open-ended questions might capture a broader range of experiences – for example, some male students likely do find enjoyment very important (indeed a few in our survey had high enjoyment and high performance, contrary to the average trend), and understanding those outliers could provide insights into how to cultivate that more widely.

Conclusion: This study underscores that gender matters in understanding how motivation and enjoyment contribute to language learning success. In our Chinese EFL context, both motivation and enjoyment are vital for all students' English development, but enjoyment appears to be a particularly key lever for female learners' achievement. Female students who find joy in learning English tend to excel, whereas their male counterparts are more likely to rely on motivation even without enjoyment to reach their goals. These findings suggest that language educators should consciously foster an enjoyable learning atmosphere and encourage all students – regardless of gender – to engage positively with the language. At the same time, understanding that students may be motivated in different ways can help tailor support: some may need help finding intrinsic enjoyment in English, others may need help connecting English to their personal goals to stay motivated. By addressing both the “heart” (enjoyment) and “mind” (motivation/utility) of learners, and being sensitive to gender dynamics, teachers can better support every student in reaching their full potential in language proficiency.

In sum, our evidence-based recommendation is clear: make language learning motivating and fun. Doing so not only directly benefits students' proficiency (especially for those inclined to embrace the fun, often female students) but also energizes their motivation in a reinforcing cycle. As one enthusiastic student put it during an interview:

“When learning English is enjoyable, you learn more without even realizing it.” If educators can create conditions for all learners to echo that sentiment, we will likely see improved outcomes and more equitable engagement across gender identities in the language classroom.

6. CONCLUSION

This research set out to explore how gender shapes the links between motivation, enjoyment, and English proficiency among first-year Chinese university students learning English as a foreign language. Through a mixed-methods study, we found that motivation and enjoyment are positively interrelated and both contribute significantly to English proficiency, but the strength and pathways of these effects differ by gender. In particular, enjoyment of learning English emerged as a critical mediator and enhancer of success for female students, whereas male students tended to rely more on motivation driven by external goals even in the absence of high enjoyment. Nonbinary students, while few in number, highlighted the importance of inclusive and comfortable classroom environments to enable their engagement on par with others.

The study contributes to a more nuanced understanding of L2 learning processes by integrating motivational and emotional factors and demonstrating that learner characteristics like gender can modulate these processes. It underscores that fostering positive emotions in language classrooms is not merely about making learning pleasant, but can tangibly improve learning outcomes – especially for those students who are inclined to benefit from an enjoyable environment. At the same time, it reminds us that students can and do achieve through different routes: some via passion and enjoyment, others via determination and obligation. Effective teaching should therefore strive to engage both routes – nurturing enjoyment and sustaining motivation – to support all learners.

For educators in EFL contexts, our findings advocate for pedagogies that create joyful, interactive learning experiences and simultaneously acknowledge students' pragmatic goals. Simple practices like incorporating games, discussions on interesting topics, and showing enthusiasm can boost enjoyment (benefiting many female learners and others who thrive on positive affect) (Dewaele & MacIntyre, 2014; Jiang & Dewaele, 2019), while clear goal-setting, feedback, and recognition of achievement can reinforce motivation (benefiting many male learners and those driven by extrinsic factors) (Boo *et al.*, 2015; Dornyei, 2016). Importantly,

teachers should avoid gendered assumptions – e.g., that only girls like group work or only boys need competition – and instead offer a variety of activities so each student can find personal engagement. Additionally, ensuring an inclusive atmosphere (e.g., avoiding segregating activities by gender) will help all students, including those of nonbinary identities, to participate fully and find their own enjoyment and motivation in learning.

In conclusion, “How Gender Shapes the Links Between Motivation, Enjoyment, and English Proficiency” can be answered thus: gender influences not so much what motivates students to learn English – nearly all recognize its importance – but how that motivation translates into learning behavior and success. Female students in our study often

translated motivation into engagement through the catalyst of enjoyment, thereby improving proficiency, whereas male students were more likely to translate motivation into effort directly, with enjoyment playing a lesser role. Recognizing these tendencies allows educators to better tailor their approach to support each learner. Moreover, by encouraging all students to find both purpose and pleasure in language learning, we can hope to see more balanced outcomes. Ultimately, whether one is male, female, or nonbinary, the ideal scenario is a learner who is both highly motivated and thoroughly enjoying the journey – a combination that our study suggests is a powerful formula for proficiency growth (Wang, 2022; Peng & Fu, 2021).

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