

# The Impact of Gender on Learning Anxiety and English Communication Willingness among Chinese University Athletes: A Sports Psychology Analysis

Guojun Tan<sup>1</sup>, Chia-Ching Tu<sup>2\*</sup>

## Abstract

This study investigated the influence of gender disparities and English learning apprehension on the inclination of Chinese university athletes to engage in English communication. Employing purposive sampling, 787 athletes from diverse universities in China were selected as participants. An online questionnaire survey encompassed the administration of the Learning Anxiety Scale and the Scale of ability to converse in English. Scale validation ensued through confirmatory factor analysis, while the mediation effect of the structural model, along with gender differentials in path coefficients, was scrutinized using structural equation modelling (SEM). Outcomes unveiled the noteworthy impact of gender disparities on the conversational proficiency in English and learning anxiety among Chinese university athletes. Particularly, female athletes exhibited elevated levels of English learning apprehension compared to their male counterparts, thus signifying the necessity for supplementary support and resources to bolster their confidence in English communication. These findings accentuate the significance of athletes' perceptions regarding English acquisition and their attitudes toward English communication in moulding their conversational proficiency. The study carries significant implications for the realms of sports psychology and language education, underscoring the imperative to address gender disparities and attitudes toward English learning within language education initiatives tailored for athletes.

**Keywords:** Chinese University Athletes, Gender Difference, English Learning Anxiety, Learning Attitude, Sports Psychology, Language Education.

## 1. Introduction

In the contemporary global landscape, effective English communication skills have become increasingly indispensable, particularly for college athletes who frequently engage with individuals from diverse cultural and linguistic backgrounds. Nonetheless, many athletes encounter anxiety when communicating in English, thereby adversely affecting their conversational proficiency. English has evolved into a lingua franca, spoken as either a native or secondary language in over 50 nations worldwide (Rao, 2019), surpassing its native speakers in number. Proficiency in English facilitates seamless communication and aids learners in adapting to various environments. Consequently, the cultivation of proficient and articulate English communicators within non-native English-speaking cohorts is imperative (Allahyar, 2021; Putra et al., 2020).

China boasts the largest cohort of English learners globally, with English education mandated from primary school through university, constituting a compulsory subject across all educational tiers (Gan & Lam, 2020; Sang & Hiver, 2021; Wu,

2021). However, despite rigorous exam preparations and educational directives, many Chinese learners demonstrate proficiency in passing English examinations but struggle with fluent communication (Al-Murtadha, 2021). Labelled as "silent learners," Chinese English learners often evade English-speaking situations and language exchange activities, contributing to their reticence in verbal expression (S. Hodkinson & E. Poropat, 2014). Consequently, proficiency in English communication not only fosters active participation in interactions but also correlates with academic attainment (Sari & Mirici, 2021; Zarrinabadi et al., 2021), exerting a profound influence on language acquisition (Chen et al., 2021; Elahi Shirvan et al., 2019; Sato & Csizer, 2021).

Throughout the process of acquiring a second language, both anxiety and favourable attitudes emerge as pivotal determinants influencing the inclination to engage in English communication (Dewaele & Dewaele, 2018; Martin & Alvarez Valdivia, 2017). Embedded within Krashen's (1981) affective filter hypothesis, anxiety assumes a crucial role as an emotional component shaping second language acquisition. MacIntyre et al. (1998) underscored that heightened levels of communicative ability correlate with diminished levels of communicative

1Department of Educational Administration, International College, Krirk University, Bangkok, Thailand. Email: [737328997@qq.com](mailto:737328997@qq.com)

ORCID ID: Guo Jun Tan, <https://orcid.org/0000-0002-2087-7235>

2Department of Educational Administration, International College, Krirk University, Bangkok, Thailand. Email: [tulisa0929@gmail.com](mailto:tulisa0929@gmail.com)

ORCID ID: Chia-Ching Tu, <https://orcid.org/0000-0001-9090-1598>

\*Corresponding Author: [tulisa0929@gmail.com](mailto:tulisa0929@gmail.com)

anxiety; thus, language anxiety impedes learners' propensity to engage in communication (Fujii, 2021), while a reluctance to communicate exacerbates learners' anxiety (Liu, 2006). Escalating anxiety fosters a negative learning disposition, consequently exerting an adverse influence on university students' attitudes toward English (Coşkun & Taşgın, 2018; Jain & Sidhu, 2013). Central to the dynamics is the learning attitude, serving as the principal determinant impacting communication willingness (Arabai, 2022; MacIntyre & Blackie, 2012). Notably, a positive learning attitude positively influences communication willingness (Chen et al., 2021; Hvozdková, 2021). In essence, learners' apprehension regarding English acquisition may impinge upon their willingness to engage in communication, with their learning attitude acting as a mediating factor within this interplay.

Sabiq et al. (2021) discerned notable variances in emotional and behavioural patterns between male and female learners attributable to dissimilar cognitive frameworks. In comparison to their male counterparts in English learning contexts, female learners manifested heightened levels of anxiety, often stemming from apprehensions regarding negative feedback and a heightened need for reassurance (Yih et al., 2018). Gender-based studies indicate diverse coping mechanisms employed by learners in response to anxiety. Female learners, inclined towards relational cognition, typically seek support from peers or instructors when confronted with anxiety-inducing situations. Conversely, male learners, typically less constrained in their approaches compared to females, demonstrate a greater propensity to adopt multifaceted strategies to alleviate learning-related stress (Kao et al., 2017). The principal aim of this study was to anticipate distinctions in English learning anxiety levels between male and female university students, hypothesizing that their respective learning attitudes in the face of anxiety would yield discrepancies in their eagerness to engage in English communication. In essence, the investigation delved into the interplay among English learning anxiety, learning attitudes, and English conversational proficiency within a sample of Chinese university athletes, while also considering gender-specific nuances within these dynamics.

Effective communication stands as a cornerstone skill in the contemporary globalized milieu, particularly paramount for university athletes whose engagements traverse diverse cultural and contextual realms. Nonetheless, a considerable number of athletes encounter impediments rooted in anxiety when articulating in English, thereby encumbering their proficiency in English conversation. The present research endeavours to scrutinize the nexus between gender differentials, English learning anxiety, and the propensity of Chinese collegiate athletes to engage in English communication. The discernments derived from this inquiry hold profound

implications for the domains of sports psychology and language pedagogy, underlining the imperative of tailored language training initiatives adept at addressing gender-specific disparities and attitudes towards English acquisition to augment the communicative competencies of Chinese university athletes.

## 2. Literature Review

Drawing from Chinese cultural contexts and the learning environments of Chinese students, Wen and Clément (2003) devised a theoretical framework elucidating the inclination of Chinese learners to engage in English communication. Within this framework, emotions emerge as pivotal determinants influencing communication readiness, with learning anxiety commonly acknowledged as a salient personal emotional factor (Martin et al., 2017; Pyun et al., 2014). Aligned with Krashen's (1981) affective filter hypothesis, learners' linguistic input undergoes emotional filtration before assimilation, with emotional variables such as curiosity, enjoyment, and anxiety either facilitating or impeding language acquisition (García Uquillas, 2021). Extant literature on language anxiety consistently underscores its detrimental impact on communication readiness (Bielak, 2022; Ehsani & Moghaddam, 2021; Fathi et al., 2021; Tâm, 2022; Wang et al., 2022).

(1957) proposition of the discovery learning theory accentuates the primacy of self-awareness in students' cognitive development, with personal factors exerting significant influence on communication behaviours, including tendencies towards reticence (Allahyar, 2021). Scholarly discourse suggests that learners' attitudes frequently mediate such dynamics. Zhang and Wang (2019) revealed that attitude modulates the link between local emotions and behavioural intentions, suggesting that learning attitude can serve as a mediating factor between emotions and behavioural intentions (Hameed & Qayyum, 2018; Ibrahim et al., 2017; Mykolenko et al., 2022). This study posits that the learning attitude of university students mediates the association between English learning anxiety and English conversational proficiency. Grounded in theoretical insights and extensive literature review, Hypothesis 1 (H1) is advanced as follows.

**H1:** *English learning attitude mediates the relationship between the English learning anxiety of Chinese university athlete students and their willingness to communicate in English.*

Gender disparities in second language acquisition present challenges in educational contexts (Taghinezhad et al., 2016). Numerous studies indicate significant discrepancies in learning anxiety, attitudes towards learning, and English communication willingness between men and women (Alavinia & Alikhani, 2014; Aldosari, 2014; Fariadian et al.,

2014), which in turn impact learners' emotional states and cognitive processes (Sabiq et al., 2021). Rooted in identity theory (Stryker & Burke, 2000), men typically exhibit traits of autonomy, assertiveness, and independence, while women tend towards empathy and expressiveness. Gender influences learning anxiety, with women exhibiting heightened fears of negative feedback, making errors, and facing disapproval (Hwa & Peck, 2017; Mesri, 2012; Namy Soghady et al., 2022), consequently presenting with higher levels of learning anxiety compared to men (Bensalem, 2018; Briesmaster & Briesmaster-Paredes, 2015; Piniel & Zólyomi, 2022).

According to socialization theory (Carter, 2014), women tend to employ less effective coping strategies than men during the socialization process, with gender differences evident in response to negative emotions such as stress (Sigmon et al., 1995). Men typically adopt active coping styles, emphasizing confidence and autonomy, while women lean towards affective coping styles (Lewis et al., 2015; Matud, 2004). Despite being more prone to anxiety, women generally hold more positive attitudes towards academic pursuits compared to men (Aldosari, 2014; Murtafi'ah & Putro, 2020). Correspondingly, studies suggest that women tend to be more willing to communicate in English relative to men (Cheng & Xu, 2022; MacIntyre et al., 2002; Yetkin & Özer, 2022).

The intersection of English learning anxiety, learning attitudes, and gender differences significantly influences conversational proficiency in English among male and female athletes. Consequently, Hypothesis 2 (H2) posits the following.

**H2:** Male and female Chinese athlete university students differ significantly in terms of their mediating structural models of English learning anxiety, learning attitudes, and conversational ability in English. Drawing upon Hypotheses 1 (H1) and 2 (H2), we formulated a conceptual model as depicted in Figure 1.

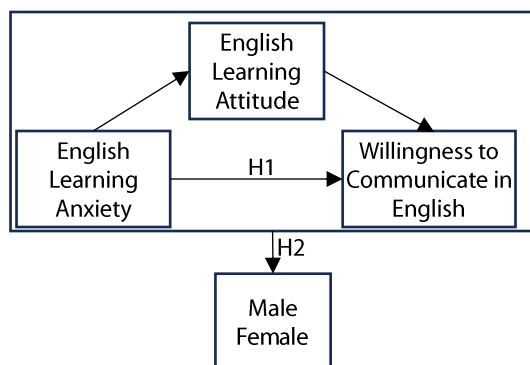


Figure 1: Hypothesis Model.

### 3. Research Method

#### 3.1. Participants

This investigation targeted first- to fourth-year student athletes enrolled in three representative universities

situated in Weifang, Shandong Province, China. Within these academic institutions, first- and second-year students, inclusive of athletes, are obligated to attend English courses, encompassing 15 credit hours per week each semester. Conversely, for third- and fourth-year students, English is an elective subject, with weekly credit hours ranging from 3 to 5. An online questionnaire survey was administered by counsellors affiliated with the aforementioned universities. These questionnaires were disseminated among cohorts of student athletes, with counsellors securing informed consent from participants and elucidating the absence of definitive right or wrong responses. Participants were instructed to complete the questionnaire digitally by scanning a quick-response (QR) code using their smartphones. To safeguard anonymity, the participant-provided details in the questionnaire remained undisclosed, and participants retained the prerogative to withdraw their participation at any juncture, ensuring the veracity of responses. Responses exhibiting excessively truncated or protracted completion durations were considered invalid. Additionally, the questionnaire was equipped with items designed to identify spurious responses, with responses failing this scrutiny deemed invalid. The demographic distribution of both male and female athlete participants is delineated in Table 1.

Table 1

Sample Demographics of the Athlete Participants.

|             | Group           | Number and Rate (N = 787) |       |
|-------------|-----------------|---------------------------|-------|
| Gender      | Male Athletes   | 330                       | 41.9% |
|             | Female Athletes | 457                       | 58.1% |
| Grade Level | Freshman        | 302                       | 38.4% |
|             | Sophomore       | 211                       | 26.8% |
|             | Junior          | 179                       | 22.7% |
|             | Senior          | 95                        | 12.1% |

#### 3.2. Research Instruments

The questionnaire deployed in this study comprises three distinct scales: the Foreign Language Anxiety Scale, Learning Attitude Scale, and Scale of Conversational Ability in English both within and outside the classroom. Each item within these scales has demonstrated robust reliability and validity, scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Foreign language anxiety denotes the fear or unease experienced by learners when tasked with communicating in a second or foreign language (MacIntyre & Gardner, 1994). For the assessment of foreign language anxiety, the scale developed by Li (2018) was employed in this study. Comprising 18 items, this scale evaluates three distinct dimensions: fear of negative feedback (e.g., "I worry about making errors in English class"), test anxiety (e.g., "I fear failure in my English examinations"), and language skill anxiety (e.g., "I become anxious when conversing with others in English").

Learning attitude delineates an individual's predisposition towards language acquisition (Zulfikar et al., 2019). For the evaluation of learning attitude, the scale devised by Tian (2009) was utilized in this study. Comprising 15 items, this scale assesses three dimensions: cognition (e.g., "I perceive English as highly significant"), affection (e.g., "I am intrigued by the prospect of learning English"), and conation (e.g., "I actively participate in responding to questions posed by the English teacher").

Communication willingness denotes the propensity of language learners to engage in communication utilizing a second or foreign language across diverse scenarios (Botes et al., 2020). For the assessment of communication willingness, the scale of Conversational Ability in English both within and outside the classroom, developed by Wu (2021), was employed in this study. Comprising 11 items, this scale evaluates two dimensions: willingness to communicate within the classroom (e.g., "During English class, I engage in English communication with classmates in small groups") and willingness to communicate outside the classroom (e.g., "When encountering foreign acquaintances on campus, I proactively initiate conversations in English").

### 3.3. Data Analysis

In this investigation, descriptive statistics, reliability analysis, and validity analysis were conducted using SPSS and AMOS software packages. A measurement model was employed to assess the reliability and validity of the scale, while the bootstrap method within structural equation modelling was utilized to examine mediation effects. Subsequently, a multigroup analysis was undertaken to discern disparities between male and female students concerning the path coefficients of a structural equation model.

### 3.4. Reliability and Validity

Based on the three measured constructs—English learning anxiety, English learning attitude, and conversational ability in English—a confirmatory factor analysis measurement model incorporating three variables and eight factors was established.

The English Learning Anxiety Scale underwent evaluation, revealing skewness values ranging from -0.363 to 0.150, kurtosis values spanning from -0.865 to -0.364, and a Mardia value of 232.513, below the threshold of 360. Similarly, the English Learning Attitude Scale exhibited skewness values between -1.019 and -0.012, kurtosis values ranging from -1.079 to 0.180, and a Mardia value of 178.497, below the critical value of 255. The findings pertaining to the Scale of Conversational Ability in English yielded skewness values between -0.660 and 0.014, kurtosis values ranging from -0.713 to 0.119, and a Mardia value of 93.513, all falling below the critical value of 143. The reliability of the results was affirmed

with a sample size of 787 demonstrating a normal distribution, in accordance with Kline (1998).

The confirmatory factor analysis of the measurement model demonstrated excellent fit indices, with a  $\chi^2/df$  value of 15.735, SRMR of 0.067, RMSEA of 0.070, NFI of 0.939, CFI of 0.939, PNFI of 0.568, and PCFI of 0.912 (Raykov & Marcoulides, 2008). The constructs of anxiety, learning attitude, and communication willingness exhibited high internal consistency, as evidenced by Cronbach's  $\alpha$  coefficients of 0.921, 0.961, and 0.964, respectively. Factor loadings for the scales ranged from 0.675 to 0.942, with all composite reliability values exceeding 0.70, specifically, 0.87, 0.86, and 0.93, respectively (Hair et al., 1998; Schumacker & Lomax, 2004). Additionally, the AVE values were substantial, registering at 0.69, 0.67, and 0.87, surpassing the threshold of 0.50 and aligning with the findings of Hair et al. (2010). Moreover, the confidence interval bounds did not encompass the value of 1, as noted in Torzkadeh et al. (2003).

## 4. Results

### 4.1. Total Mediation Effects

The current investigation devised a mediation model integrating learning anxiety, learning attitude, and conversational ability in English to assess H1 and H2. Initially, a direct impact model was formulated to scrutinize the relationship between learning anxiety and the inclination to engage in English communication. The findings revealed that learning anxiety concerning English acquisition contributed to 3% of the variance in conversational ability in English ( $\gamma = -.18$ ,  $p < .001$ ). Subsequently, English learning attitude exerted a comprehensive influence on the direct model, prompting the construction of a total mediation model (depicted in Figure 2), where path coefficients for direct effects vanished (English learning anxiety  $\rightarrow$  English learning attitude,  $\gamma = -.06$ ,  $p > .005$ ). Conversely, significant path coefficients for indirect effects were observed, encompassing the paths "English learning anxiety  $\rightarrow$  English learning attitude" ( $\gamma = -.19$ ,  $p < .001$ ) and "English learning attitude  $\rightarrow$  willingness to communicate in English" ( $\gamma = .68$ ,  $p < .001$ ). The variance attributable to learning anxiety in English acquisition was 3%. Collectively accounting for 48% of the variance in conversational ability in English, both attitudes towards English learning and the presence of anxiety emerged as significant determinants of this outcome.

The total mediating model demonstrated a reasonable and consistent fit ( $\chi^2 = 267.488$ ,  $p < .001$ ,  $\chi^2/df = 15.735$ , GFI = .939, CFI = .939, RMR = .071, RMSEA = .080, PNFI = .568, NFI = .935). Factor loadings for the complete mediation model ranged from 0.67 to 0.94. Overall effects, encompassing both the direct and indirect impacts of learning anxiety on

conversational ability in English, were estimated utilizing a 95% confidence interval. The findings illustrated that English learning attitude fully mediated the association between learning anxiety and the inclination to communicate ( $\theta = -0.061, p > .05$ ; depicted in Table 2), thereby validating H1.

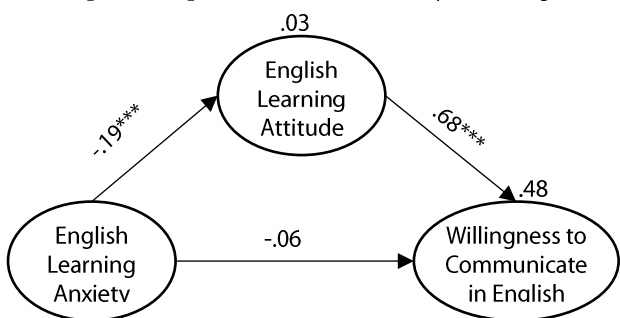


Figure 2: Mediator Model.

Table 2

Bootstrap Estimates for Total Mediating Effect.

| Mediating Effect                                                             | Path Value | Bias-Corrected 95% CI |        | Percentile 95% CI |        |
|------------------------------------------------------------------------------|------------|-----------------------|--------|-------------------|--------|
|                                                                              |            | Lower                 | Upper  | Lower             | Upper  |
| Total Effect (English Learning Anxiety-conversational ability in English)    | -.189**    | -0.286                | -0.091 | -0.286            | -0.091 |
| Direct Effect (English Learning Anxiety-conversational ability in English)   | -.061      | -0.139                | 0.020  | -0.142            | 0.018  |
| Indirect Effect (English Learning Anxiety-conversational ability in English) | -.128**    | -0.194                | -0.056 | -0.196            | -0.057 |

\*\* p < .01.

The mediation models for the male and female cohorts are delineated in Figure 3. In the male athlete group, the direct relationship between "English learning anxiety" and "conversational ability in English" displayed a negative predictive effect when devoid of a mediator, with an explained variance ( $R^2$ ) of 3% and a path coefficient ( $\gamma$ ) of  $-.56 (p < .001)$ . Subsequently, upon integration of "attitude towards English learning" as a mediator, the coefficients for the structural paths between anxiety in learning and conversational ability in English decreased from  $-0.56 (p < .001)$  to  $-0.05 (p > .05)$ . Additionally, English learning anxiety exhibited a negative impact on English learning attitude ( $R^2 = 2\%, \gamma = -.16, p < .01$ ), with 48% of the variance in willingness to communicate and attitude towards English learning being explained by English learning anxiety and attitude ( $\gamma = .70, p < .01$ ).

In the female athlete group, the absence of a mediator in the relationship between "anxiety" in learning English and "willingness to communicate in English" elucidated that anxiety stemming from learning English negatively influenced conversational ability in English, with an  $R^2$  value of 13% and a path coefficient of  $-.36 (p < .001)$ . However, upon introduction of "attitude towards learning

\*\*\* p < .001.

#### 4.2. Mediation Effects on Male and Female Groups

A total of 330 valid questionnaire responses were obtained from male athletes, while 457 valid questionnaire responses were received from female athletes. Subsequently, the model underwent multigroup comparison analysis, and the ensuing fit index results underscored the adequacy of the structural model:  $\chi^2 = 323.933, p < .001, \chi^2/df = 9.527, GFI = .912, CFI = .929, RMR = .078, RMSEA = .080, PNFI = .56, NFI = .922$  (Kline, 2023). Factor loadings within the mediation models for both the male group (ranging from 0.61 to 0.99) and female group (ranging from 0.59 to 0.94) were deemed satisfactory (Kline, 2023).

English" as a mediator, the path coefficient decreased from  $-.36 (p < .001)$  to  $-.18 (p < .001)$ , indicating a weakened relationship between the two variables. Furthermore, anxiety exerted a negative effect on learning attitude ( $R^2 = 8\%, \gamma = -.28, p < .001$ ), and the combined contribution of anxiety and learning attitude in elucidating the variance in conversational ability in English was 51%. Both anxiety related to learning English ( $\gamma = -.18, p < .001$ ) and attitude towards English learning ( $\gamma = .64, p < .001$ ) demonstrated a proclivity towards English communication.

As ascertained through the bootstrap method, it was evident that English learning attitude mediated the impact of English learning anxiety in both male and female athlete groups.

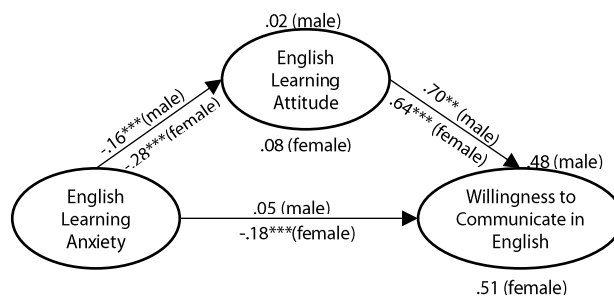


Figure 3: Demonstrates the Mediation Model for a Male and Female Group (\*\* p < .01, \*\*\* p < .001).

**Table 3**

An Analysis of Bootstrapping Estimates for Male and Female Athletes.

| Mediating Effect | Path Value | Bias-Corrected 95% CI |        | Percentile 95% CI |        |
|------------------|------------|-----------------------|--------|-------------------|--------|
|                  |            | Lower                 | Upper  | Lower             | Upper  |
| Male             |            |                       |        |                   |        |
| Total Effect     | -.059**    | -0.126                | -0.027 | -0.127            | -0.028 |
| Direct Effect    | .051       | -0.100                | 0.178  | -0.097            | 0.182  |
| Indirect Effect  | -.110*     | -0.173                | -0.036 | -0.174            | -0.037 |
| Female           |            |                       |        |                   |        |
| Total Effect     | -.356***   | -0.458                | -0.249 | -0.459            | -0.250 |
| Direct Effect    | -.176***   | -0.275                | -0.082 | -0.274            | -0.080 |
| Indirect Effect  | -.180***   | -0.273                | -0.098 | -0.274            | -0.098 |

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

In the study of male athletes, Table 3 revealed a significant and adverse association between learning anxiety and conversational ability in English, with a confidence interval estimation of  $-0.059$  ( $p < .01$ ). However, the favourable impact of learning attitude towards English effectively counteracted this negative influence, as indicated in the table. The indirect effect's value was  $-0.110$ , with a  $p$ -value below  $0.05$ , signifying statistical significance. Moreover, the direct effect decreased to  $0.51$ , with a  $p$ -value exceeding  $0.05$ , implying a weakened relationship. In the subgroup analysis of female athletes, the confidence interval estimated an overall effect of  $-0.356$  for the association between learning anxiety and conversational ability in English, with a  $p$ -value below  $0.001$ , indicating a statistically significant effect. The association between attitude towards learning English and the propensity to communicate effectively was partly offset by the adverse impact of anxiety towards learning English. Specifically, the indirect effect was determined to be  $-.180$  ( $p < .001$ ), while the direct impact diminished to  $-0.176$  ( $p < .001$ ).

#### 4.3. Multigroup Analysis

In the parallel model, it is postulated that the three structural paths for male and female mediation models are equivalent (Byrne, 2010), suggesting a direct association between English learning anxiety and the willingness of both male and female students to communicate in English (Paulssen et al., 2014). Utilizing the default model as a benchmark, the study examined the structural invariance between male and female athlete groups. Upon conducting multigroup comparisons, notable disparities were identified between the default model and the parallel model, as evidenced by the following values:

( $\chi^2 = 323.933$ ,  $p < .001$ ,  $\chi^2/df = 9.527$ ,  $GFI = .912$ ,  $CFI = .929$ ,  $RMR = .078$ ,  $RMSEA = .080$ ,  $PNFI = .56$ ,  $NFI = .922$ ) for the default model and ( $\chi^2 = 338.872$ ,  $p < .001$ ,  $\chi^2/df = 9.159$ ,  $GFI = .908$ ,  $CFI = .926$ ,  $RMR = .091$ ,  $RMSEA = .070$ ,  $PNFI = .607$ ,  $NFI = .918$ ) for the parallel model.

**Table 4**

The Comparison of Male and Female Athletes Based on Pairwise Parameters.

|                                                              | Default Model | Parallel Model | Differences Between the Group |
|--------------------------------------------------------------|---------------|----------------|-------------------------------|
| $\chi^2$ Value                                               | 323.933       | 338.872        |                               |
| Group                                                        | Male (N)      | 330            |                               |
| Number                                                       | Female (N)    | 457            |                               |
| Structural Path Value                                        |               |                |                               |
| English Learning Anxiety-English Learning Attitude           |               |                |                               |
| Male Athletes ( $\gamma$ )                                   | -.16**        | -.18**         | -1.91                         |
| Female Athletes ( $\gamma$ )                                 | -.28***       | -.27***        |                               |
| English Learning Anxiety- Conversational ability in English  |               |                |                               |
| Male Athletes ( $\gamma$ )                                   | .05           | -.08           | -3.262*                       |
| Female Athletes ( $\gamma$ )                                 | -.18***       | -.12***        |                               |
| English Learning Attitude- Conversational ability in English |               |                |                               |
| Male Athletes ( $\gamma$ )                                   | .70***        | .69***         | 1.368                         |
| Female Athletes ( $\gamma$ )                                 | .64***        | .63***         |                               |

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

The present study revealed distinct path coefficients between male and female athlete groups in the mediation model. Examination of pairwise parameter comparisons unveiled measurement invariance across three structural paths, as delineated in Table 4. The paths "English learning anxiety  $\rightarrow$  English learning attitude" and "English learning attitude  $\rightarrow$  conversational ability in English" exhibited no significant differences, indicating invariance between male and female athlete groups. However, a notable disparity emerged in the path "English learning anxiety  $\rightarrow$  willingness to communicate in English" ( $Z = -3.262$ ,  $p < .05$ ), signifying significant differences between male and female groups regarding the association between English learning anxiety and willingness to communicate in English.

Within the female athletes' group, the mediation effect of English learning attitude resulted in English learning anxiety exerting a significantly negative impact on conversational ability in English ( $\gamma = -.18$ ,  $p < .001$ ). Conversely, in the male students' group, attitude towards learning English completely mediated the effect of learning anxiety, leading to no significant influence on their conversational ability in English ( $\gamma = .05$ ,  $p > .05$ ). Consequently, due to the mediation of attitude towards learning English, anxiety exhibited varying effects on the readiness to communicate among male and female athlete participants. The multigroup analysis results validated the H2.

## 5. Discussion

The total mediation model was utilized to corroborate H1, revealing the significant role of English learning attitude in mediating the association between anxiety in learning English and conversational ability among university athletes (depicted in Figure 3). The outcomes pertaining to H1 signify that anxiety associated with learning English directly and adversely predicted conversational proficiency in

English. This observation underscores the substantial impact of learning anxiety on the reluctance of college athletes to engage in English communication, as noted in previous literature (Li, 2021) (Fujii, 2021; MacIntyre et al., 1998). Anxious athletes often exhibit diminished self-assurance and apprehension regarding receiving unfavourable performance evaluations, thus fostering a disinclination to participate in English communication activities (Liu, 2006). The findings concerning H1 align with Bruner (1957) discovery learning theory and Krashen's (1981) affective filter hypothesis, suggesting that negative emotions stemming from anxiety associated with learning English can impede learning progress and diminish conversational proficiency in English among college athletes. Notably, the results of H1 underscore that anxiety related to learning English can entirely forecast willingness to communicate through the lens of the learning attitude towards English, highlighting the pivotal role of English learning attitude as an emotional determinant (Hvozdíková, 2021). In accordance with Wen et al. (2003) theoretical model of willingness to communicate, athletes harbouring a positive learning attitude towards English are predisposed to greater motivation, consequently enhancing their conversational proficiency in English (Chen et al., 2021). Thus, cultivating reflective practices and adjusting learning attitudes may aid university athletes in surmounting anxiety hurdles and communicating more effectively in English.

H2 was substantiated through multigroup analysis, revealing noteworthy distinctions between male and female university athletes regarding the mediation effects of English learning anxiety on conversational proficiency in English. Among female athletes, English learning attitude served as a partial mediator in this relationship, whereas among male athletes, it acted as a complete mediator, mitigating the adverse impact. A consistent trend was observed across both groups, denoting varying degrees of attenuation in the detrimental effects of anxiety associated with learning English on the aptitude for effective communication. Specifically, female athletes exhibited a partially diminished negative effect, whereas male athletes demonstrated a fully mediated negative effect. These findings imply that English learning anxiety exerts a more pronounced influence on conversational proficiency in English among female athletes compared to their male counterparts.

From a physiological standpoint, the discernible variances in English learning behaviours between genders can be ascribed to discrepancies in brain structure and higher cognitive functions (Keefe, 1982). Notably, men frequently demonstrate a higher prevalence of left hemisphere dominance compared to women (Banich, 1997). This study encompasses university athletes as its cohort. Psychologically,

women typically manifest heightened emotional sensitivity, introversion (Razak et al., 2017), susceptibility to external stimuli (Huo, 2009), and an increased propensity for experiencing anxiety in contrast to men. Conversely, men tend to internalize their learning-related anxieties and exhibit a greater inclination towards self-regulation. Conversely, women are more inclined to seek external support when grappling with learning anxiety, and their recovery process tends to be lengthier compared to men (Lewis et al., 2015). These distinctions may also be influenced by factors such as English proficiency and perceived sense of security. For instance, within predominantly patriarchal societies, the social milieu in which women are nurtured and educated can engender feelings of insecurity (Park & French, 2013). Women raised in such contexts often grapple with diminished self-assurance and may harbour sentiments of inferiority, thereby amplifying the impact of anxiety on their willingness to engage in English communication (Rafek et al., 2014). Conversely, the influence of anxiety stemming from English learning on men's readiness to communicate in English appears to be comparatively less pronounced, with their learning attitudes often mitigating this effect.

## 6. Implications

In this study, university athletes participated as subjects, revealing that the learning attitude towards English serves as a mediator between anxiety related to learning and proficiency in English conversation, a trend observed across both male and female athlete cohorts. These outcomes indicate that disparities in anxiety levels and self-assurance between genders may detrimentally impact the inclination of female university athletes to engage in English communication. To mitigate this challenge, China's Undergraduate Business English Teaching Guidelines for General Colleges and Universities (2020) underscore the necessity for Chinese university students to attain a proficient level of English language skills. Educators should prioritize female students exhibiting elevated anxiety levels and strive to grasp their cultural contexts and learning backgrounds for a more comprehensive understanding of their anxiety patterns (Gerencheal, 2016; Liu & Chen, 2013; Rehman et al., 2022). Additionally, educators should foster a relaxed learning environment and engage in regular conversational interactions with female university athletes to bolster their attitudes towards English learning and alleviate their anxiety (Namy Soghady et al., 2022). By acknowledging and addressing these anxiety concerns, students can cultivate positive learning attitudes, thereby enhancing their overall learning outcomes (Liu, 2021; Zhao, 2022).

## 7. Limitations and Scope for Future Research

The current study is subject to several limitations. It primarily surveyed a specific region of China and exclusively included university athletes as participants. Future research endeavours should aim for larger sample sizes and extend the scope of inquiry to encompass vocational college and postgraduate students. Such an approach would facilitate a deeper understanding of disparities among diverse demographic groups, yielding more comprehensive and generalizable findings. Furthermore, due to the inherent complexities of investigating multifaceted interactions, this study solely focused on personal factors influencing the English conversational proficiency of university athlete students. Subsequent investigations could incorporate qualitative methods such as interviews to explore additional environmental and personal factors shaping the communicative abilities of university athlete students.

## 8. Conclusion

This research aimed to explore how gender disparities and

English learning anxiety influence the willingness of Chinese university athletes to engage in English communication. The findings underscored the pivotal role of gender in shaping the relationship between learning anxiety and English conversational proficiency among Chinese university athletes. Notably, female athletes exhibited heightened levels of English learning anxiety compared to their male counterparts, underscoring the necessity for additional support and interventions to bolster their confidence in English communication. The study underscored the significance of athletes' perceptions of English learning and their attitudes toward English communication in determining their inclination to engage in English discourse. These results underscore the importance of addressing gender disparities and fostering positive attitudes toward English learning within language education initiatives tailored for athletes. The study holds significant implications for both sports psychology and language education, advocating for the development of targeted interventions aimed at enhancing the English communication abilities of Chinese university athletes.

## 9. References

- Al-Murtadha, M. A. (2021). The relationships among self-reported and observed first language and second language willingness to communicate and academic achievement. *Language, Culture and Curriculum*, 34(1), 80-94. <https://doi.org/10.1080/07908318.2020.1727495>
- Alavinia, P., & Alikhani, M. A. (2014). Willingness to communicate reappraised in the light of emotional intelligence and gender differences. *Procedia-Social and Behavioral Sciences*, 98, 143-152. <https://doi.org/10.1016/j.sbspro.2014.03.400>
- Aldosari, H. S. (2014). The entwined effects of attitude, motivation and gender on EFL learning: A correlation study. *Studies in Literature and Language*, 8(1), 1-5. <https://doi.org/10.3968/j.sll.1923156320140801.4183>
- Allahyar, N. (2021). What Does Students' Willingness to Communicate or Reticence Signify to Teachers? In *New perspectives on willingness to communicate in a second language* (pp. 119-134). Springer. [https://doi.org/10.1007/978-3-030-67634-6\\_6](https://doi.org/10.1007/978-3-030-67634-6_6)
- Alrabai, F. (2022). Modeling the relationship between classroom emotions, motivation, and learner willingness to communicate in EFL: Applying a holistic approach of positive psychology in SLA research. *Journal of Multilingual and Multicultural Development*, 1-19. <https://doi.org/10.1080/01434632.2022.2053138>
- Banich, M. (1997). *Neuropsychology: The neural bases of mental function*. [Google Scholar]. John Wiley & Sons. <https://doi.org/10.1002/0470854871.chx>
- Bensalem, E. (2018). Foreign language anxiety of EFL students: Examining the effect of self-efficacy, self-perceived proficiency and sociobiographical variables. *Arab World English Journal (AWEJ) Volume*, 9(2), 38- 55. <https://dx.doi.org/10.2139/ssrn.3201901>
- Bielak, J. (2022). To what extent are foreign language anxiety and foreign language enjoyment related to L2 fluency? An investigation of task-specific emotions and breakdown and speed fluency in an oral task. *Language Teaching Research*. <https://doi.org/10.1177/13621688221079319>
- Botes, E., Gottschling, J., Stadler, M., & Greiff, S. (2020). A systematic narrative review of International Posture: What is known and what still needs to be uncovered. *System*, 90, 102232. <https://doi.org/10.1016/j.system.2020.102232>
- Briesmaster, M., & Briesmaster-Paredes, J. (2015). The relationship between teaching styles and NNPSETs' anxiety levels. *System*, 49, 145-156. <https://doi.org/10.1016/j.system.2015.01.012>
- Bruner, J. (1957). Going beyond the information given. Contemporary approaches to cognition. In *In Search of Pedagogy Volume I* (pp. 41-69). Routledge. <https://doi.org/10.4324/9780203088609-8>
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: basic concepts, applications, and programming (multivariate*



- applications series) (Vol. 396). <https://doi.org/10.4324/9781315757421>
- Carter, M. J. (2014). Gender socialization and identity theory. *Social Sciences*, 3(2), 242-263. <https://doi.org/10.3390/socsci3020242>
- Chen, X., Dewaele, J.-M., & Zhang, T. (2021). Sustainable development of EFL/ESL learners' willingness to communicate: the effects of teachers and teaching styles. *Sustainability*, 14(1), 396. <https://doi.org/10.3390/su14010396>
- Cheng, L., & Xu, J. (2022). Chinese English as a foreign language learners' individual differences and their willingness to communicate. *Frontiers in Psychology*, 13, 883664. <https://doi.org/10.3389/fpsyg.2022.883664>
- Coşkun, G., & Taşgın, A. (2018). An investigation of anxiety and attitudes of university students towards English courses. *Journal of Language and Linguistic Studies*, 14(2), 135-153. <https://dergipark.org.tr/en/pub/jlls/issue/43364/527930>
- Dewaele, J.-M., & Dewaele, L. (2018). Learner-internal and learner-external predictors of willingness to communicate in the FL classroom. *Journal of the European Second Language Association*, 2(1), 24-37. <http://doi.org/10.22599/jesla.37>
- Ehsani, F., & Moghaddam, J.-n. (2021). The Relationship between willingness to communicate, locus of control and foreign language anxiety among Iranian EFL learners. *Iranian Evolutionary Educational Psychology Journal*, 3(3), 319-331. <http://dx.doi.org/10.52547/ieepj.3.3.319>
- Elahi Shirvan, M., Khajavy, G. H., MacIntyre, P. D., & Taherian, T. (2019). A meta-analysis of L2 willingness to communicate and its three high-evidence correlates. *Journal of Psycholinguistic Research*, 48(6), 1241-1267. <https://doi.org/10.1007/s10936-019-09656-9>
- Fariadian, E., Azizifar, A., & Gowhary, H. (2014). Gender contribution in anxiety in speaking EFL among Iranian learners. *International Research Journal of Applied and Basic Sciences*, 8(11), 2095-2099. <https://www.academia.edu/64318419/?uc-sb-sw=90376584>
- Fathi, J., Mohammaddokht, F., & Nourzadeh, S. (2021). Grit and foreign language anxiety as predictors of willingness to communicate in the context of foreign language learning: A structural equation modeling approach. *Issues in Language Teaching*, 10(2), 1-30. <https://doi.org/10.22054/ilt.2021.63362.627>
- Fujii, S. (2021). Relationships between foreign language anxiety and willingness to communicate among Japanese EFL learners. *Journal of Management and Training for Industries*, 8(1), 1-12. <https://doi.org/10.12792/JMTI.8.1.1>
- Gan, L., & Lam, R. (2020). Understanding university English instructors' assessment training needs in the Chinese context. *Language Testing in Asia*, 10(1), 11. <https://doi.org/10.1186/s40468-020-00109-y>
- García Uquillas, A. M. (2021). *The affective filter and the speaking skill* (Bachelor's thesis, Universidad Técnica de Ambato-Facultad de Ciencias Humanas y de la Educación ...). <https://repositorio.uta.edu.ec/handle/123456789/32329>
- Gerencheal, B. (2016). Gender Differences in Foreign Language Anxiety at an Ethiopian University: Mizan-Tepi University Third Year English Major Students in Focus. *Online Submission*, 1(1), 1-16. <https://www.iprjb.org/journals/index.php/AJEP/article/view/65/281>
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed ed.). Pearson Prentice Hall. <https://www.drnishikantjha.com/papersCollection/Multivariate%20Data%20Analysis.pdf>
- Hair, J. F., Tatham, R. L., Anderson, R. E., & Black, W. C. (1998). *Multivariate Data Analysis*. In *Upper Saddle River* (5th ed ed.). NJ: Pearson Prentice Hall. <https://www.scirp.org/reference/ReferencesPapers?ReferenceID=1519308>
- Hameed, F., & Qayyum, A. (2018). Determinants of behavioral intention towards mobile learning in Pakistan: Mediating role of attitude. *Business and Economic Review*, 10(1), 33-61. <https://dx.doi.org/10.22547/BER/10.1.2>
- Huo, W. H. (2009). A Brief Study of Gender Differences in Anxiety for Foreign Language Learning in the 21st Century. *Modern educational management*, (05), 66-68. <https://doi.org/10.16697/j.cnki.xdjygl.2009.05.003>
- Hvozdičková, S. (2021). Willingness to Communicate and Motivation of English Language Learners. *American Journal of Educational Research*, 9(8), 543-548. <https://doi.org/10.12691/education-9-8-12>
- Hwa, S. P., & Peck, W. K. (2017). Gender differences in speaking anxiety among English as a second language learners in a Malaysian tertiary context. *International Journal for Studies on Children, Women, Elderly and Disabled*, 2(6), 108-117. [https://www.ijcwed.com/wp-content/uploads/2017/06/IJCWED2\\_85.pdf](https://www.ijcwed.com/wp-content/uploads/2017/06/IJCWED2_85.pdf)
- Ibrahim, M. A., Kim-Soon, N., Ahmad, A. R., & Sirisa, N. M. X. (2017). Mediating roles of attitude on intention to use M-learning among students at Malaysian technical universities. *Advanced Science Letters*, 23(4), 2795-2798. <https://doi.org/10.1166/asl.2017.7657>
- Jain, Y., & Sidhu, G. K. (2013). Relationship between anxiety, attitude and motivation of tertiary students in learning English as a second language. *Procedia-Social and Behavioral Sciences*, 90, 114-123. <https://doi.org/10.1016/j.sbspro.2013.07.072>
- Kao, P.-C., Chen, K. T.-C., & Craigie, P. (2017). Gender differences in strategies for coping with foreign language learning anxiety.

- Social Behavior and Personality: an international journal*, 45(2), 205-210. <https://doi.org/10.2224/sbp.5771>
- Keefe, J. W. (1982). Assessing student learning styles: An overview. *Student learning styles and brain behavior*, 43-53.
- Kline, R. B. (1998). *Structural equation modeling*. New York: Guilford.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford Publications. <https://cir.nii.ac.jp/crid/1370285712575157894>
- Krashen, S. (1981). Second language acquisition. *Second Language Learning*, 3(7), 19-39. <https://cir.nii.ac.jp/crid/1130000795073876608>
- Lewis, A. J., Kremer, P., Douglas, K., Toumborou, J. W., Hameed, M. A., Patton, G. C., & Williams, J. (2015). Gender differences in adolescent depression: Differential female susceptibility to stressors affecting family functioning. *Australian Journal of Psychology*, 67(3), 131-139. <https://doi.org/10.1111/ajpy.12086>
- Li, J. X., & Tang, W. J. (2021). A study of the relationship between foreign language anxiety and communicative willingness in the flipped classroom model. *Modern communication*. <https://kns.cnki.net/kcms/detail/detail.aspx?FileName=XKJJ202106058&DbName=CJFQ2021>
- Li, Q. (2018). *A Survey Study of Foreign Language Anxiety and Its Influencing Factors among Higher Education Students [Bachelor's thesis]*. Nanjing University of Post and Telecommunications, Nanjing). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201901&filename=1018892195.nh>
- Liu, H.-j., & Chen, T.-h. (2013). Foreign Language Anxiety in Young Learners: How It Relates to Multiple Intelligences, Learner Attitudes, and Perceived Competence. *Journal of Language Teaching & Research*, 4(5), 932. <https://doi.org/10.4304/jltr.4.5.932-938>
- Liu, M. (2006). Anxiety in Chinese EFL students at different proficiency levels. *System*, 34(3), 301-316. <https://doi.org/10.1016/j.system.2006.04.004>
- Liu, M. (2021). The Effect of Anxiety on Second Language Learning of Students in Our Higher Education Institutions. *Overseas English*, (16), 84-85. <https://kns.cnki.net/kcms/detail/detail.aspx?FileName=HWYY202116040&DbName=CJFQ2021>
- MacIntyre, P. D., & Blackie, R. A. (2012). Action control, motivated strategies, and integrative motivation as predictors of language learning affect and the intention to continue learning French. *System*, 40(4), 533-543. <https://doi.org/10.1016/j.system.2012.10.014>
- MacIntyre, P. D., Clément, R., & Donovan, L. A. (2002). Willingness to communicate in the L2 among French immersion students. In *Second language research Forum, Toronto*. Researchgate. <https://www.researchgate.net/publication/241267893>
- MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545-562. <https://doi.org/10.1111/j.1540-4781.1998.tb05543.x>
- MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44(2), 283-305. <https://doi.org/10.1111/j.1467-1770.1994.tb01103.x>
- Martin, S., & Alvarez Valdivia, I. M. (2017). Students' feedback beliefs and anxiety in online foreign language oral tasks. *International Journal of Educational Technology in Higher Education*, 14(1), 1-15. <https://doi.org/10.1186/s41239-017-0056-z>
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37(7), 1401-1415. <https://doi.org/10.1016/j.paid.2004.01.010>
- Mesri, F. (2012). The relationship between gender and Iranian EFL learners' foreign language classroom anxiety (FLCA). *International Journal of Academic Research in Business and Social Sciences*, 2(6), 147-156. <https://www.researchgate.net/publication/287104753>
- Murtafi'ah, B., & Putro, N. H. P. S. (2020). Gender differences in santriâ€™s reading attitude and motivation. *EduLite: Journal of English Education, Literature and Culture*, 5(2), 251-262. <http://dx.doi.org/10.30659/e.5.2.251-262>
- Mykolenko, O., Ippolitova, I., Doroshenko, H., & Strapchuk, S. (2022). The impact of entrepreneurship education and cultural context on entrepreneurial intentions of Ukrainian students: the mediating role of attitudes and perceived control. *Higher Education, Skills and Work-Based Learning*, 12(3), 519-536. <https://doi.org/10.1108/HESWBL-08-2020-0190>
- Namy Soghady, M. R., Hosseinpour, N., & Talebinejad, M. R. (2022). Effect of Dialogic Tasks on Iranian EFL Learners' Language Learning Anxiety: Focus on Moderating Roles of Gender and Levels of Proficiency. *Issues in Language Teaching*, 11(2), 67-91. <https://doi.org/10.22054/ilt.2022.68227.701>
- Park, G.-P., & French, B. F. (2013). Gender differences in the foreign language classroom anxiety scale. *System*, 41(2), 462-471. <https://doi.org/10.1016/j.system.2013.04.001>

- Paulssen, M., Roulet, R., & Wilke, S. (2014). Risk as moderator of the trust-loyalty relationship. *European Journal of Marketing*, 48(5/6), 964-981. <https://doi.org/10.1108/EJM-11-2011-0657>
- Piniel, K., & Zólyomi, A. (2022). Gender differences in foreign language classroom anxiety: Results of a meta-analysis. *Studies in Second Language Learning and Teaching*, 12(2), 173-203. <http://dx.doi.org/10.14746/sslt.2022.12.2.2>
- Putra, E., Teknologi, I., & Nopember, S. (2020). The importance of learning English nowadays. *Jurnal Institute of Technology Sepuluh November at Surabaya*, 1=7. <https://www.researchgate.net/publication/346400434>
- Pyun, D. O., Kim, J. S., Cho, H. Y., & Lee, J. H. (2014). Impact of affective variables on Korean as a foreign language learners' oral achievement. *System*, 47, 53-63. <https://doi.org/10.1016/j.system.2014.09.017>
- Rafek, M. B., Ramli, N. H. L. B., Iksan, H. B., Harith, N. M., & Abas, A. I. B. C. (2014). Gender and language: Communication apprehension in second language learning. *Procedia-Social and Behavioral Sciences*, 123, 90-96. <https://doi.org/10.1016/j.sbspro.2014.01.1401>
- Rao, P. S. (2019). The role of English as a global language. *Research Journal of English*, 4(1), 65-79. [https://www.rjoe.org.in/Files/vol4issue1/new/OK%20RJOE-Srinu%20sir\(65-79\)%20rv.pdf](https://www.rjoe.org.in/Files/vol4issue1/new/OK%20RJOE-Srinu%20sir(65-79)%20rv.pdf)
- Raykov, T., & Marcoulides, G. A. (2008). *An introduction to applied multivariate analysis*. Routledge. <https://doi.org/10.4324/9780203809532>
- Razak, N. A., Yassin, A. A., & Maasum, T. N. R. B. T. M. (2017). Effect of Foreign Language Anxiety on Gender and Academic Achievement among Yemeni University EFL Students. *English Language Teaching*, 10(2), 73-85. <https://ideas.repec.org/a/ibn/eltjnl/v10y2017i2p73.html>
- Rehman, I., Samad, A., & Ali, M. (2022). An investigation of the role of gender in foreign language learning anxiety in students of department of english at kust. *Harf-o-Sukhan*, 6(1), 246-268. <https://harf-o-sukhan.com/index.php/Harf-o-sukhan/article/view/361>
- S. Hodkinson, C., & E. Poropat, A. (2014). Chinese students' participation: The effect of cultural factors. *Education+ Training*, 56(5), 430-446. <https://doi.org/10.1108/ET-04-2013-0057>
- Sabiq, A. H. A., Arwi, S. H., Khusna, A., Adifia, D. U. S., & Nada, D. Z. Q. (2021). Investigating gender differences on the students' attitudes and motivation toward English learning. *English Franca: Academic Journal of English Language and Education*, 5(2), 233-258. <https://doi.org/10.29240/ef.v5i2.2704>
- Sang, Y., & Hiver, P. (2021). Using a language socialization framework to explore Chinese Students' L2 Reticence in English language learning. *Linguistics and Education*, 61, 100904. <https://doi.org/10.1016/j.linged.2021.100904>
- Sari, S., & Mirici, I. H. (2021). An Investigation of Non-Native EFL Instructors' Behavioral, Emotional and Speech Disorders. *International Journal of Curriculum and Instruction*, 13(3), 2888-2901. <https://ijci.globets.org/index.php/IJCI/article/view/783>
- Sato, M., & Csizer, K. (2021). Introduction: Combining learner psychology and ISLA research: Intersections in the classroom. *Language Teaching Research*, 25(6), 839-855. <https://doi.org/10.1177/13621688211044237>
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. Psychology Press. <https://doi.org/10.4324/9781315749105>
- Sigmon, S. T., Stanton, A. L., & Snyder, C. (1995). Gender differences in coping: A further test of socialization and role constraint theories. *Sex Roles*, 33(9-10), 565-587. <https://doi.org/10.1007/BF01547718>
- Stryker, S., & Burke, P. J. (2000). The past, present, and future of an identity theory. *Social Psychology Quarterly*, 63(4), 284-297. <https://doi.org/10.2307/2695840>
- Taghinezhad, A., Abdollahzadeh, P., Dastpak, M., & Rezaei, Z. (2016). Investigating the impact of gender on foreign language learning anxiety of Iranian EFL learners. *Modern Journal of Language Teaching Methods*, 6(5), 417-426. [https://www.academia.edu/download/47717863/Taghinezhad\\_Abdollahzadeh\\_Dastpak\\_Rezaei.pdf](https://www.academia.edu/download/47717863/Taghinezhad_Abdollahzadeh_Dastpak_Rezaei.pdf)
- Tâm, N. T. (2022). College Students' willingness to Communicate and Its Influential Factors in Speaking Classes. *European Journal of Foreign Language Teaching*, 6(3), 97-109. <http://dx.doi.org/10.46827/ejfl.v6i3.4433>
- Tian, J. (2009). A Survey on the Attitude of Non-English Major College Students towards English Learning. *Journal of Yichun College*, 31(S1), 118-120. <https://doi.org/10.3969/j.issn.1671-380X.2009.z1.050>
- Torkzadeh, G., Koufteros, X., & Pflughoeft, K. (2003). Confirmatory analysis of computer self-efficacy. *Structural Equation Modeling*, 10(2), 263-275. [https://doi.org/10.1207/S15328007SEM1002\\_6](https://doi.org/10.1207/S15328007SEM1002_6)
- Wang, M., Wang, H., & Shi, Y. (2022). The role of English as a foreign language learners' grit and foreign language anxiety in their willingness to communicate: Theoretical perspectives. *Frontiers in Psychology*, 13, 1002562. <https://doi.org/10.3389/fpsyg.2022.1002562>

- Wen, W.-P., & Clément, R. (2003). A Chinese conceptualisation of willingness to communicate in ESL. *Language culture and curriculum*, 16(1), 18-38. <https://doi.org/10.1080/07908310308666654>
- Wu, Y. N. (2021). *A study of the correlation between college students' second language motivational self-systems and English communicative intention* (Bachelor's thesis, Shanghai International Studies University, Shanghai). <https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD202102&filename=1021065696.nh>
- Yetkin, R., & Özer, Z. (2022). Age, gender, and anxiety as antecedents of willingness to communicate: Turkish EFL context. *Acuity: Journal of English Language Pedagogy, Literature and Culture*, 7(2), 195-205. <https://doi.org/10.35974/acuity.v7i2.2800>
- Yih, Y. J., Chin, V., & Ling, T. H. (2018). The role of gender in English language learning anxiety among tertiary students. *E-Academia Journal*, 6(2). <https://ir.uitm.edu.my/id/eprint/83875>
- Zarrinabadi, N., Lou, N. M., & Shirzad, M. (2021). Autonomy support predicts language mindsets: Implications for developing communicative competence and willingness to communicate in EFL classrooms. *Learning and Individual Differences*, 86, 101981. <https://doi.org/10.1016/j.lindif.2021.101981>
- Zhang, Y., & Wang, L. (2019). Influence of sustainable development by tourists' place emotion: Analysis of the multiply mediating effect of attitude. *Sustainability*, 11(5), 1384. <https://doi.org/10.3390/su11051384>
- Zhao, X. Q., & Liu, X. (2022). A Survey Study on Language Anxiety in Foreign Language Learning among Higher Education Students. *Overseas English*, (14). <https://kns.cnki.net/kcms/detail/detail.aspx?FileName=HWYY202214092&DbName=CJFQ2022>
- Zulfikar, T., Dahliana, S., & Sari, R. A. (2019). An Exploration of English Students' Attitude towards English Learning. *English Language Teaching Educational Journal*, 2(1), 1-12. <https://eric.ed.gov/?id=EJ1283014>