



## INVESTIGATING ENGLISH LANGUAGE READING AND WRITING ANXIETY AMONG PAKISTANI UNIVERSITY STUDENTS: A CORRELATIONAL STUDY

*Mr. Jehanzeb Khan*

*Lecturer (Basic Sciences Department)*

*Balochistan University of Engineering and Technology*

*Khuzdar - Pakistan*

[jehanzebkh@buetk.edu.pk](mailto:jehanzebkh@buetk.edu.pk), [jehanzebkh.elt@gmail.com](mailto:jehanzebkh.elt@gmail.com)

*(Corresponding Author)*

*Dr. Muhammad Fareed*

*Associate Professor (English)*

*Department of Humanities*

*NED University of Engineering & Technology*

*Karachi - Pakistan*

[darfarid@neduet.edu.pk](mailto:darfarid@neduet.edu.pk), [mfareeddar@yahoo.com](mailto:mfareeddar@yahoo.com)

*Ms. Zahra Khan*

*Assistant Professor*

*Department of Humanities & Social Sciences*

*Bahria University Karachi Campus*

*Karachi - Pakistan*

[zahrakhan.bukc@bahria.edu.pk](mailto:zahrakhan.bukc@bahria.edu.pk)

### Abstract

*The undertaken study investigated the correlation between English language reading anxiety and English language writing anxiety. A survey research design was employed, and a sample of 298 BBA students from a private university in Karachi was utilized. The students completed two anxiety-measuring questionnaires: The Foreign Language Reading Anxiety Scale (FLRAS) and the Second Language Writing Anxiety Inventory (SLWAI).*

*Descriptive statistics revealed that the majority of students experienced moderate to high levels of English language reading and writing anxiety. Pearson Product-Moment correlation analysis indicated a strong positive correlation between English language reading anxiety and writing anxiety. This means that students with high levels of reading anxiety were likely to also experience high levels of writing anxiety and vice versa.*

*These findings suggest that teachers should not teach reading or writing in isolation. Instead, they should focus on reducing anxiety levels in reading and writing classrooms. Curriculum developers should also consider incorporating strategies for reducing anxiety into their programs.*



**Key Word:** *Reading, Writing, Reading anxiety, Writing anxiety, Correlation*

## **1. Introduction**

Anxiety about language is a sensation of stress and apprehension connected with situations involving a second language (L2), such as speaking, listening, and studying the language. It has been acknowledged as a significant barrier to the acquisition of a second language (Alamer & Almulhim, 2021; Zheng & Cheng, 2018). According to research, language anxiety is a psychosomatic factor that negatively impacts learners' engagement and involvement in language learning, and it is believed to be a significant predictor of success in the language learning process (Alamer & Almulhim, 2021).

According to Zheng and Cheng (2018), Jebreil et al. (2015), Zrekat et al. (2016), Kara (2013), MacIntyre and Gardner (1994b), and ElKhafaifa (2005), foreign language anxiety can have a negative impact on a student's ability to learn and perform in the foreign language classroom. It can lead to reduced motivation, increased stress, difficulty concentrating, avoidant behavior, and poor performance on tests and assignments. Anxiety can be caused by a variety of factors, including fear of making mistakes, fear of being judged, fear of not being understood, and lack of confidence in one's language skills.

Numerous researchers have recognized language anxiety as a significant obstacle within the affective filters experienced by learners in ESL/EFL language classrooms (Beyza, 2020; Hakim, 2019; Hasnahana, 2019; Harmer, 2004; Öztekin, 2011; Wang & Chang, 2010). The affective filter hypothesis posits that various affective variables influence second language acquisition (Krishan, 1981). Among these variables are motivation, self-confidence, and anxiety. In recent years, considerable research has been conducted on foreign language anxiety (FLA), a critical affective factor in language learning. FLA encompasses a comprehensive range of self-perceptions, beliefs, emotions, and behaviors associated with language learning in a classroom context, arising from the distinct nature of the language learning process (Yan & Liang, 2022; Oteir & Al-Oteir, 2019).

Horwitz et al. (1986) identified three major components of language anxiety: communication anxiety, test anxiety, and fear of criticism. To measure FLA, they developed the Foreign Language Classroom Anxiety Scale (FLCAS), which has been widely employed in anxiety research (Tsui & Cheng, 2022; Yan & Liang, 2022). It has been consistently observed that FLA has detrimental effects on language learning. Recent studies have investigated FLA in various contexts, including English-medium instruction and interpretation classes (Yan & Liang, 2022; Abdurahman & Rizqi, 2020; Hasnahana, 2019). Multiple factors influence the performance of English as a Second Language (ESL) learners, such as teacher expectations, student attitudes, creativity, and anxiety levels (Pishghadam et al., 2011; Wei, Brok, & Zhao, 2009; Zhao, 2017).

Learning a new language engenders anxiety about communication in a foreign language, which can impede language acquisition within the traditional classroom setting (Andrea, 2021; Zeng & Cheng, 2018; Bell & McCallum, 2012; Xiao & Wong, 2014). While early research in the 1970s and early 1980s yielded inconsistent findings, subsequent studies have consistently



demonstrated a negative association between foreign language anxiety and achievement in traditional foreign language classes (Awan et al., 2008; Hewitt & Stephenson, 2012; Salem & Al Dyar, 2014).

### **1.2 Problem Statement**

Numerous fundamental questions surrounding the study of Foreign Language Reading Anxiety (FLRA) remain unanswered, including the origins of FLRA, the relationship between FLRA and foreign language reading performance, and the association between background variables and FLA (Petrus & Shah, 2020; Zhao, 2009). Previous research consistently demonstrates that anxiety pertaining to foreign language acquisition hampers the learning process and performance (Han et al., 2022; Hu & Wang, 2014; Horwitz et al., 1986; MacIntyre & Gardner, 1994, 1991b; Phillips, 1992). Anxiety is a prevalent occurrence in educational settings and can significantly impede learning and performance, particularly when it becomes evaluative. Fear of failure or poor performance stands as a primary source of anxiety among students, which obstructs their ability to learn, convey knowledge, and exhibit comprehension (Abderrezzag, 2009).

Recent investigations in the field of language anxiety indicated a negative correlation between reading and writing anxiety and reading skills and comprehension, while displaying a positive correlation with negative affectivity encompassing anxiety and depression (Bonifacci et al., 2008; Schechter, 2017). Moreover, Bonifacci et al. (2008) assert that the relationship between reading and writing anxiety is intricate and may be influenced by multiple factors, including language skills and negative affectivity. The cognitive interconnection between reading and writing has been established by research, and several theories- the rhetorical relations approach, the procedural connections approach and the shared knowledge and cognitive processes approach- have been employed to elucidate the association between linguistic factors and reading and spelling. The aim of this study is to explore the levels of reading and writing anxiety among management science students enrolled in private universities in Karachi, Sindh. Additionally, the study seeks to examine the relationship between reading anxiety and writing anxiety. To address these objectives, the study will address the following research questions:

### **1.3. Research Questions**

1. What is the extent of reading anxiety experienced by Pakistani undergraduate management science students?
2. What is the extent of writing anxiety experienced by Pakistani undergraduate management science students?
3. Is there a correlation between the levels of reading and writing anxiety among Pakistani undergraduate management science students?

## **2. Literature Review**

### **2.1 Anxiety and Language Anxiety**



Anxiety is a condition that is difficult to comprehend, and it is known to be the source of a wide range of unpleasant feelings and symptoms. Anxiety is characterised by a number of different symptoms, the most prevalent of which are rapid heartbeat, self-doubt, muscle tension, avoidance of social situations, and difficulty communicating. (Rachman, 2004). Additional symptoms can manifest physically, behaviorally, cognitively, or psycholinguistically, such as lateness or unpreparedness (behavioral), difficulties with language abilities (cognitive), forgetting words or fear of speaking (psycholinguistic), shaking, nausea, and shallow breathing (Rachman, 2004; Bigdeli, 2010; Marcos-Llina & Garau, 2009).

The phenomenon of language anxiety pertains to a spectrum of self-perceptions, attitudes, affective states, and conduct that are linked to the acquisition of a language in a structured academic context (Oteir & Al-Otaibi, 2019; Yetkin & Özer, 2022). Emotional factors in language education have been extensively investigated and have been found to have negative effects on language learning achievements. The phenomenon of language anxiety can be impacted by multiple factors related to the acquisition of language, encompassing proficiencies in speaking, listening, reading, and writing (Rajitha & Alamelu, 2020; Safarzadeh & Gholami, 2013). Özer and Yetkin (2022) have identified several factors that may contribute to language anxiety, including negative attitudes towards the target language, low self-confidence, and fear of negative evaluation.

Foreign or second language anxiety encompasses a complex array of self-perceptions, beliefs, emotions, and behaviors related to language learning in a classroom context (Tsui & Cheng, 2022; Yan & Liang, 2022; Salim et al., 2017). Wei (2007) underscored the significance of language learning environments in relation to anxiety levels. According to Horwitz et al. (1986), language anxiety is influenced by several factors, including communication apprehension, fear of negative evaluation, and test anxiety. MacIntyre and colleagues (1998) assert that foreign language anxiety is impacted by multiple factors, such as negative feedback, language production challenges, psychological and interpersonal issues, self-awareness, learning obstacles, unfamiliar vocabulary, and unique writing systems (Salim et al., 2017; Yan & Liang, 2022). Hence, it is imperative to take into account these associated factors while scrutinising anxiety pertaining to the acquisition of a foreign or secondary language. The concept that foreign or second language anxiety has negative impacts on language learning accomplishments is widely supported by extensive academic literature (Yan & Liang, 2022).

Adeel (2011) conducted a study to investigate the factors contributing to anxiety among Pakistani English learners. The study found that the strict formal classroom environment and the learners' self-perceptions of the English language played significant roles in their experience of debilitating anxiety. Many of these learners lacked confidence due to inadequate English language instruction in Urdu-medium schools. Similarly, Awan et al. (2010) discovered that anxiety in language learning can lead to various difficulties in acquiring, retaining, and producing language skills. Pakistani learners face additional challenges as they often have to transition from Urdu-medium to English-medium instruction when entering higher education, and English is a compulsory subject at the undergraduate level, with a minimum grade requirement in the



examination (Waseem & Jibeen, (2013). The pressure to achieve native-like mastery is also a major cause of anxiety for language learners, especially in strict and tense classroom settings (Hakim, 2019)

## **2.2 Anxiety and Reading Skills**

Reading anxiety is the fear or apprehension experienced when processing textual information. Different stages of development can cause anxiety related to different reading processes and situations, particularly those involving evaluative reading measures conducted in the presence of peers and teachers. Reading instruction in early elementary school often involves reading out loud in front of others, making the sociocultural context a crucial factor in the development of reading anxiety (Ghaith, 2020; Rahimi & Abedini, 2019; Zhang & Zhang, 2020). Anxiety can hinder comprehension by interfering with the readers' cognitive systems responsible for processing information. Anxious students may experience interference with their concentration, memory functioning, and/or information processing, which could lead to decreased performance (Soares et al., (2022).

FLRA is one of the most significant affective variables affecting reading comprehension, and it can result in subjective feelings of tension, apprehension, and other negative emotions. Anxiety can also affect the measurement of reading fluency and comprehension. Recent research has revealed that ESL learners may experience anxiety in relation to reading, which can result in poor reading performance and challenges with comprehension (Petrus & Shah, 2020; Chow et al., 2021; Taquechel et al., 2012; Tysinger et al., 2010).

Many researchers have tried to investigate and find the reason of FLRA and Saito et al., (1999) highlighted that among the many reasons of FLRA the most common are the writing system, perception of language difficulty and also the target language itself; in addition, Brantmeier (2005) add one of additional factor is how what is the difficulty level of the reading material that has been given to the learners. Zahao et al., (2013) and Zhao, (2017) also endorsed the findings of Saito et al., that the major reason of FLRA among the Chinese students was the unfamiliar script and also the familiarity with the topic increased the anxiety, unfamiliar topic had greater level of FLRA as compared to familiar topics. Razak et al, (2017) claimed that gender played an important role in anxiety. their study revealed that female students as compared to males showed higher levels of FLRA; on the contrary, Salim et al., reached to the conclusion in his study that gender does not pay a pivotal role in FLRA and learners regardless of their gender exhibited FLRA in English classroom. These studies suggest that FLRA is a significant issue among foreign language learners and may impact academic performance.

## **2.3 Anxiety and Writing Skills**

The issue of Second Language Writing Anxiety (SLWA), also known as Foreign Language Writing Anxiety (FLWA), has been a topic of debate and investigation. This is due to the negative impact that writing anxiety can have on students' writing proficiency and the composition process (Miri & Joia, 2018; Sadiq, 2017; Min, 214; Negari & Rezaabadi, 2012). Writing anxiety defined



as, "psychological predisposition faced by an individual in a writing task due to tendencies of overwhelming fear arising from a combination of feelings, beliefs, and behaviours affecting the individual's ability to write" (Al-Sawalha & Chow, 2012, p. 6). This phenomenon is commonly attributed to the complexity of language and the skill of writing (Bruning & Horn, 2000).

Boice and Johnson (1984) conducted a study on the prevalence of writing anxiety among university instructors. Their findings revealed that a significant number of participants experienced writer's block, which subsequently led to decreased productivity. The researchers arrived at the conclusion that writing anxiety was associated with decreased productivity, yet exhibited a positive correlation with instances of writer's block. The findings are reinforced by Onwuegbuzi, (1997) studies, which indicated a direct correlation between writing anxiety and the writing skills of graduating students. These results were align with previous research that suggested that writing anxiety can significantly impair the quality of students' writing and their ability to perform well in research methodology courses (Rasuan & Wati, 2021; Sabti et al., 2019).

Furthermore, writing anxiety affects students' academic work, self-confidence, and motivation (Negari & Rezaabadi, 2012), demonstrating that the impact of writing anxiety is not limited to writing. Olanezhad (2015) concluded in his study that students' level of writing apprehension was higher when they were asked about evaluation and confidence, and they showed less apprehension when asked about enjoying writing. The major sources of writing apprehension were found to be evaluation by teachers, poor educational background, and a lack of confidence (Cocuk, 2016). In general, the existing body of literature indicates that foreign language anxiety, also known as second language anxiety, poses a considerable obstruction for both students and educators in the field of academic writing. Mitigating the origins of anxiety could potentially enhance the caliber and efficacy of writing.

## **2.4 Reading-Writing: Relationship**

Reading and writing are two essential skills that are interconnected. A plethora of studies have demonstrated that reading and writing are interconnected and that there exists a strong relationship as reading enhances students' writing and logical, critical, and problem-solving skills (Kiili et al., 2018; Lee et al., 2016).

ELT teachers in Asia acknowledge the importance of reading and writing but often overlook their integration in the classroom. Graham et al., (2018) explored and concluded that due to the specialization of skills, reading skill development is solely the responsibility of reading teachers in most schools, leading to the belief that only the concerned teacher or the core skill development book can be trusted and blindly followed. Reading and writing foster independent thinking in students. In the "reading-to-write" approach, students first read a text in the target language, then figure out its meaning, and finally write their argument (Zhang & Xi, 2012; Hinkel, 2002). Li (2014) suggests incorporating "reading-to-write" in a language classroom where reading and writing are taught together.

The literature presents substantial evidence indicating a robust correlation between reading and writing, whereby enhancing one skill may have a positive impact on the other, and vice versa.



Furthermore, it is advocated by experts that the instruction of reading and writing should be concurrent due to the interrelated nature of reading and writing skills. In addition, according to Shanahan's (2017) findings, there is a shared variance of approximately 70% in reading and writing abilities. The mental processes involved in spelling and single-word reading are closely related to those employed in writing. Consequently, instructing students in writing skills, including lessons on grammar and spelling, can enhance their reading proficiency.

### **2.5 Reading and Writing: Difference**

The correlation between reading and writing skills is evident but not entirely clear. Although reading and writing are closely linked, they are cognitively distinct processes that can be taught independently. However, despite the existence of several variables connecting them, the level of variance is negligible (Shanahan, 1984). If reading and writing were the same, it would make sense to teach only one of them, and the skills could be transferred. However, since these two are related but distinct processes, different instructions and tasks are required to teach each. Research has shown that individuals with brain injuries or other reasons may have excellent writing skills but poor reading skills, or vice versa, indicating that these two processes could be separated (Ratiu et al., 2022).

In 1986, Langer conducted a study of reading and writing, comparing and contrasting the two processes. She found that they were similar in some ways, such as the use of metacognition (thinking about thinking). However, she also found that they had different cognitive starting points, which prevented them from being entirely connected. Langer also suggests that there are ways to bridge the gap between reading and writing. For example, teachers can help students to develop their metacognitive skills, which can help them to become better readers and writers.

Therefore, it is important to recognize the differences between reading and writing and to teach each skill separately to ensure that students develop a clear conception of literacy. The difference between reading and writing is just as important as their similarities (Shanahan, 1988).

## **3. Research Methodology**

### **3.1 Research Design**

This research makes use of a survey design, and the data is gathered through the use of a questionnaire, to which respondents responded based on their own personal experiences.. (Horwitz et al., 1986; Saito et al., 1999; Zhao, 2009; Chang, 2004; Tsui & Cheng, 2022; Yan & Liang, 2022). According to Ebel (1980), survey research has proven to be an effective method for identifying current evidence; furthermore, survey research aims to objectively measure results and generalize findings to a specified population.

### **3.2 Population and Sample**

In the current study, convenience sampling is applied, and data is collected from 298 BBA undergraduate students from a private university in Sindh, Pakistan.



The accessible population for this research study was 435 students enrolled in Bachelors of Business Administration (BBA) at a private sector university in Karachi, Pakistan. The average age of students in this research was between 18 and 24 years. Most of them come from middle-class socio-economic backgrounds. 92% of participants have completed their twelve years of education (HSC) at Karachi Intermediate Board. Only 5% of the participants have Cambridge A-level backgrounds.

Table 1. *Participant profile*

	<b>Frequency</b>	<b>%</b>
<b>Total number of Participants</b>	298	68.5% of total BBA population
<b>Gender</b>		
Male	211	71.2%
Female	85	27.8%
<b>Age</b>		
16-20	153	51.34%
21-27	144	48.32%
30 and Above	1	0.3%
<b>Previous Educational History</b>		
HSC	276	92.6%
B.Com	7	2.3%
As / A' Level	15	5.0%
<b>Programme</b>		
BBA	100	100%
<b>Semester</b>		
1 <sup>st</sup> and 2 <sup>nd</sup>	90	30.2%
3 <sup>rd</sup> and 4 <sup>th</sup>	138	46.3%
5 <sup>th</sup> and 6 <sup>th</sup>	50	16.8%
7 <sup>th</sup> and 8 <sup>th</sup>	20	6.7%
<b>English learning exposure</b>		
0-10	119	39.9%
11-15	111	37.2%
16-20	67	22.5%
<b>Number of languages participants know / speak</b>		
2	156	52.3%
3	130	43.6%
4	8	2.7%
5	4	1.3%





The study collected demographic data from participants, including gender, ethnicity, age, course registration, semester, schooling (HSC or A'Levels), and prior foreign language. Participants were informed of their right to decline participation and to leave the questionnaire unanswered or the classroom at any time. A consent form was provided to ensure confidentiality, and participants were assured that their identity would not be disclosed. Questionnaires were not coded before being filled out.

### **3.3 Data Collection Tools**

Nunan (1992) recognized questionnaires as a valuable instrument for data collection in field settings. They are especially beneficial when gathering quantitative data. This study employed two questionnaires: Foreign Language Reading Anxiety Scale (FLRAS) developed by Saito et al. (1999) containing 20 items, while writing anxiety was measured using Cheng's Second Language Writing Anxiety Inventory (SLWAI) (Chang, 2004) also adopted by Dar, (2014) SLWAI contained 22 items. SLWAI and FLRAS are five point Likert scale questionnaires. According to Brown (2003), in a quantitative analysis, Likert scales give uniformity to the question format and increases the reliability of responses.

In order to assure cultural equivalence and avoid misunderstandings, both questionnaires were administered in Urdu and English. The translated questionnaires expert validity was taken from English language teacher who are well versed in English and Urdu. The Cronbach's alpha for FLRAS was 0.76 while SALWI had a value of 0.812. The closed-ended questionnaire was administered with the consent of the questionnaire's authors.

The SLWAI (Second Language Writing Anxiety Inventory) was developed to assess three dimensions of writing anxiety: Somatic Anxiety, Behavioural Anxiety, and Cognitive Anxiety. The inventory consists of several items, each representing a specific aspect of writing anxiety. The items are scored based on participants' responses.

In the SLWAI, certain items were reversed before calculating the final scores. Specifically, items 1, 4, 7, 17, 18, and 22 were reversed. This means that the scoring for these items was inverted to ensure consistent interpretation of responses across all items.

The purpose of reversing items is to account for potential response bias or response tendencies that participants may exhibit. By reversing the scoring of these items, the inventory aims to mitigate any systematic bias that may arise from participants' tendencies to agree or disagree with certain types of statements.

### **3.4 Data Analysis procedure**

The study employed descriptive and inferential statistics to investigate the levels of English language reading and writing anxiety among ESL students. Descriptive statistics were used to calculate the sum, mean, and standard deviation of anxiety levels, with the mean and standard deviation used to describe responses. The purpose of the questionnaires was to measure anxiety levels using the FLRAS and SLWAI, both of which are 5-point Likert scale questionnaires. SPSS version 22 was used to run descriptive statistics such as frequencies, percentages, mean, mode,



median, minimum, maximum, range, and standard deviation. Inferential statistics were applied using the Pearson Product-Movement  $r$  to explore the relationship between anxiety levels. The pilot study was conducted with satisfactory results.

Table 2. Correlation between reading anxiety and writing anxiety (Pilot Study): Pearson-

			Reading Anxiety	Writing Anxiety
Mean Reading Anxiety	Pearson Correlation		1	.404**
	Sig. (2-tailed)			.000
	N		78	78
Mean Writing Anxiety	Pearson Correlation		.404**	1
	Sig. (2-tailed)		.000	
	N		78	78

\*\* . Correlation is significant at the 0.01 level (2-tailed).

*Product-Movement.*

### 3.5. Data Analysis

To determine the levels of anxiety many researchers like Zhao, (2017), Marcos-Llinas & Garau, (2009) and Bollinger (2017) have used the following formula as shown in table 3:

Table 3. Levels of Anxiety

Low level of anxiety	Mean minus standard deviation
Moderate level of anxiety	Between high and low anxiety levels.
High level of anxiety	Mean plus standard deviation.

Table 4 explains how the levels of foreign language reading anxiety were determined according to FLRAS scores and table 5 explains the levels of second language writing anxiety calculation according to SLWAI scores.

Table 4. Levels of Reading Anxiety (FLARS)



Low	Mean minus standard deviation (38-55)
Moderate	Between high and low anxiety levels (77-94).
High	Mean plus one or more standard deviation (56-76).

Table 5. *Levels of Writing Anxiety(SALWI)*

Low	Mean minus standard deviation (30-60)
Moderate	Between high and low anxiety levels (84-102).
High	Mean plus one or more standard deviation (61-83).

#### 4. Findings and Discussion

##### 4.1. Levels of Foreign Language Reading Anxiety

**RQ1.** 1.What is the extent of reading anxiety experienced by Pakistani undergraduate management science students?

To answer this question descriptive statistics, sum, mean, median, standard deviation, mode, minimum and maximum was run. The Cronbach’s Alpha for FLRAS was calculated 0.76, which is considered good for social science.

he FLRAS (Foreign Language Reading Anxiety Scale) is a tool used to assess reading anxiety in foreign language contexts. It provides valuable insights into the levels of anxiety experienced by students during reading activities.

Descriptive statistics of the FLRAS indicate various key measures. The minimum score recorded on the scale was 38, indicating the lowest level of reading anxiety reported by participants. On the other end of the spectrum, the maximum score observed was 94, representing the highest level of reading anxiety reported. The mean score across all participants was calculated to be 66.22, suggesting a moderate level of reading anxiety on average.

Additionally, the mean score for each individual item on the FLRAS was approximately 3.31. This further supports the finding that students generally experience a moderate level of anxiety during reading tasks in a foreign language.

For more detailed information on the descriptive statistics of the FLRAS, Table 6 provides a comprehensive breakdown of the statistical measures, offering a clearer understanding of the distribution and range of reading anxiety scores among the participants.



Table 6. Descriptive Statistics of the FLRAS

N	298
Mean	66.22
Std. Deviation	9.708
Minimum	38.00
Maximum	94.00

Table 7 categorizes students into three distinct levels of reading anxiety based on their scores. These levels are classified as low, moderate, and high, allowing for a comprehensive understanding of the distribution of reading anxiety among the participants.

Table 7. Levels of Reading Anxiety

Low	Mean minus standard deviation (38-55)
High	Mean plus one or more standard deviation (56-76).
Medium	Between high and low anxiety levels (77-94).

Table 8 presents a breakdown of the participants' reading anxiety levels, showing the distribution across the three categories: low, moderate, and high. The majority of students, comprising 73.82% of the sample, exhibited moderate levels of reading anxiety. A smaller proportion, 11.74% of the participants, reported low levels of anxiety, indicating a relatively lower impact on their reading experiences. On the other hand, 14.42% of the students demonstrated high levels of reading anxiety, suggesting a more significant challenge in their reading tasks.

This information provides valuable insights into the prevalence and distribution of reading anxiety among the participants, allowing researchers and educators to understand the varying degrees of anxiety experienced and potentially tailor interventions or support strategies accordingly.



Table 8. *Levels of Reading anxiety*

<b>Levels</b>	<b>Percentage %</b>
Low	11.74 %
Medium	73.82 %
High	14.42 %

#### 4.1.1. Detailed Analysis of FLRAS

Based on the analysis of the survey data among BBA students, several noteworthy findings regarding foreign language anxiety related to reading in English have emerged. A significant proportion (33.9%) of the participants acknowledged that reading is the most challenging aspect of learning English. Additionally, half of the respondents (50.3%) expressed a preference for learning to speak English rather than focusing on reading skills. The majority (77.1%) disagreed with the notion of enjoying reading English, while only a small percentage (10.8%) agreed. A considerable number of students (14.8%) reported a lack of confidence when reading in English, and a mere 13.7% believed that reading English becomes easier with familiarity. Moreover, only 21.1% expressed satisfaction with their current level of reading proficiency in English.

Concerning specific reading difficulties, a significant proportion of students (41.6%) expressed worry about encountering unfamiliar words that they couldn't pronounce, and 43.6% reported discomfort when reading English aloud. Approximately one-third of the participants (30.8%) acknowledged feeling nervous and confused when they didn't understand every word while reading English. Conversely, a majority (53.4%) disagreed with concerns about learning new symbols required for reading English.

The data also revealed that a majority of the student population (54.7%) experienced emotional distress when they faced uncertainty regarding their comprehension of English texts. While 37.9% agreed that they understood individual words but struggled with understanding the intended meaning of the author, 44.3% disagreed with this statement. Interestingly, over two-thirds of the participants (67.1%) strongly disagreed with the notion that they became so confused when reading English that they couldn't remember the content.

Regarding attitudes towards English culture, the respondents displayed a notable lack of anxiety, with a majority (51%) strongly disagreeing that English culture and ideas were unfamiliar to them. However, a significant proportion (38.9%) agreed or strongly affirmed that a substantial knowledge of English history and culture is necessary for comprehending written English. Moreover, a notable percentage of students (69.1%) disagreed with the idea of feeling intimidated when confronted with a full page of English text. Finally, regarding grammatical complexities, the majority (46%) disagreed with the notion that encountering unfamiliar grammatical structures caused them emotional distress while reading English. Nonetheless, a substantial portion (35.6%) acknowledged engaging in verbatim translation when reading the English language.



#### 4.2. Levels of Second Language Writing Anxiety

**RQ2.** What is the extent of writing anxiety experienced by Pakistani undergraduate management science students?

Table 9 presents the descriptive statistics of the Second Language Writing Anxiety Inventory (SLWAI) collected from participants, showing a mean score of 72.44 and a standard deviation of 10.96. The data analysis reveals that a significant number of participants exhibited moderate to high levels of anxiety when writing in a second language. The range of scores varied from a minimum of 30 to a maximum of 102, indicating a broad spectrum of second language writing anxiety levels. The mean score of 3.29 for all items suggests that a considerable proportion of participants experienced a moderate level of anxiety.

Table 9. *Descriptive Statistics of SLWAI*

N	298
Mean	72.44
Std. Deviation	10.96
Minimum	30.00
Maximum	102.00

Based on the statistical analysis conducted, it has been determined that the mean score for all items was 3.29. This suggests that a considerable number of participants demonstrated a moderate level of anxiety.

Table 10 *Determination of Levels of Writing Anxiety based on SALWI*

Low	Mean minus standard deviation (30-60)
Medium	Between high and low anxiety levels (84-102).
High	Mean plus one or more standard deviation (61-83).

Table 11 provides the determination of writing anxiety levels based on the SLWAI scores. Participants with scores between 30 and 60 were categorized as having low anxiety, while those with scores between 61 and 83 were classified as having high anxiety. The moderate anxiety category falls between the high and low anxiety levels.

Table 11. *Writing Anxiety Levels Based on SALWI*

Levels	N	Percentage
Low	38	12.75%
Medium	214	71.81%
High	46	15.43%



Further analysis of the data reveals that 71.81% (n = 214) of participants displayed moderate writing anxiety, while 15.43% (n = 46) exhibited high writing anxiety and 12.75% (n = 38) had low writing anxiety (Table 11). These findings highlight that a significant majority of the participants experienced moderate levels of writing anxiety, which could potentially impact their writing proficiency and academic performance.

#### *4.2.1. Detailed Analysis of SALWI*

The participants' responses to the Second Language Writing Anxiety Inventory (SLWAI) indicate that the majority of them do not feel nervous when writing in English. Specifically, 67.5% agreed or strongly agreed that they do not feel nervousness while writing in English, while only 19.5% expressed feelings of nervousness.

Regarding writing composition evaluation and comparison with other students, participants displayed varying levels of anxiety. 37.2% agreed or strongly agreed, while 37.9% disagreed or strongly disagreed they feel worried about evaluation of their composition (item 3). In terms of comparing their compositions to others, 41% disagreed or strongly disagreed (item 7), indicating that they do not worry about their compositions being worse than others. However, 48% agreed or strongly agreed with statement that they had apprehension being compared with others. Participants expressed their fear of potential derision from other students 54% strong agree or agree while few of them disagreed or strongly disagreed. Additionally, 51.3% disagreed or strongly disagreed while reflecting their discomfort when being compared to others. In addition, in answering to question 20 for apprehension regarding their written work being read or shared 47% of participants agreed or strongly disagreed.

Mixed responses were observed regarding evaluation and the possibility of receiving poor grades. While 43.9% agreed or strongly agreed with the statement that they worry about getting poor grades during evaluation, on the other hand, around 35% disagree or strongly disagreed. The respondent also strongly agreed with the writer's block as they freeze when writing. Similarly, participants strongly agree or agree that either they panic, or try to excuse themselves from writing. The response rate is around 51% and 53% respectively. Avoidance of writing in English was a common sentiment among the participants. A significant majority (66.3%) agreed or strongly agreed that they tend to avoid writing English compositions. Similarly, 65.3% agreed or strongly agreed to sneak out of situations that require writing in English.

The participants demonstrated a willingness to write in English, with 54.2% agreeing or strongly agreeing, indicating their preference for writing down their thoughts in English compositions. However, when it came to write English compositions outside of class, 41.2% disagreed or strongly disagreed and 27% were neutral.

Avoidance of writing in English was a common sentiment among the participants. A significant majority (66.3%) agreed or strongly agreed that they tend to avoid writing English compositions. Similarly, 65.3% agreed or strongly agreed to sneak out of situations that require writing in English.



Time constraints emerged as a significant source of stress. Responding to question, “pounding heart” when writing English compositions under time constraints, 40.2% agreed or strongly agreed. Similarly, 59.9% agreed or strongly agreed and confessed that they “trembling or perspiration” while writing under time pressure. Additionally, 40.7% agreed or strongly agreed and as they panic when writing English compositions under time constraints.

To summarize, the participants' responses to the SLWAI revealed various aspects of their experiences with second language writing anxiety. While many participants did not feel nervous when writing in English, there were concerns related to composition evaluation, comparison with peers, and the fear of negative judgments. Time constraints also contributed to anxiety, with participants reporting physical and mental manifestations of stress. Additionally, avoidance behaviors and a preference for using their native language were prevalent among the participants. However, there was also a willingness to write in English and an acknowledgment of the importance of practice.

It is important to consider these findings when designing language instruction and providing support to students facing second language writing anxiety. Strategies such as creating a supportive and non-judgmental environment, offering ample practice opportunities, providing constructive feedback, and addressing time constraints can help alleviate anxiety and promote confidence in writing abilities. By understanding the specific challenges and concerns expressed by the participants, educators and language professionals can tailor their approaches to better support students in their second language writing development.

### **4.3. Relationship between Reading and Writing Anxiety**

**RQ3.** Is there a correlation between the levels of reading and writing anxiety among Pakistani undergraduate management science students?

In order to evaluate this association, the Pearson-Product-Moment Coefficient was employed, following the confirmation of normal distribution of the data. The normality of both FLRAS and SLWAI data sets was visually inspected using histograms, which displayed a bell-shaped curve as shown in Figures 1 and 2, indicating that the data was normally distributed.



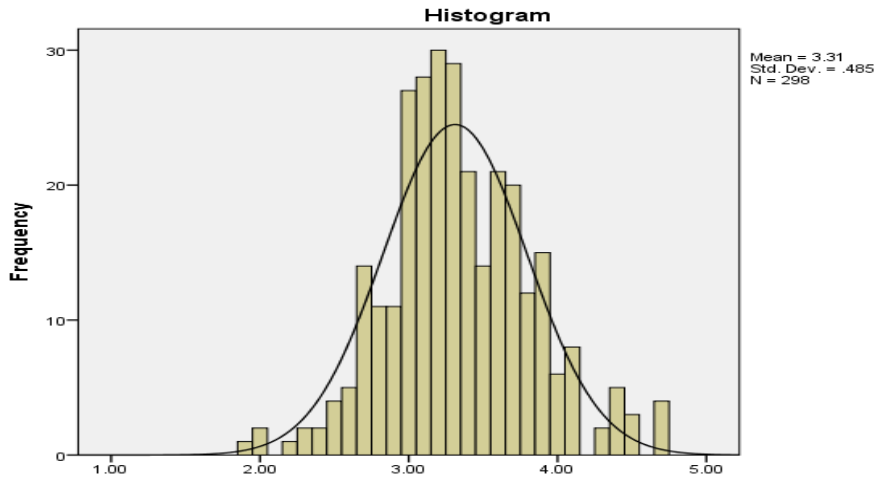


Figure 1 Histogram of Foreign Language Reading Anxiety (FLRAS).

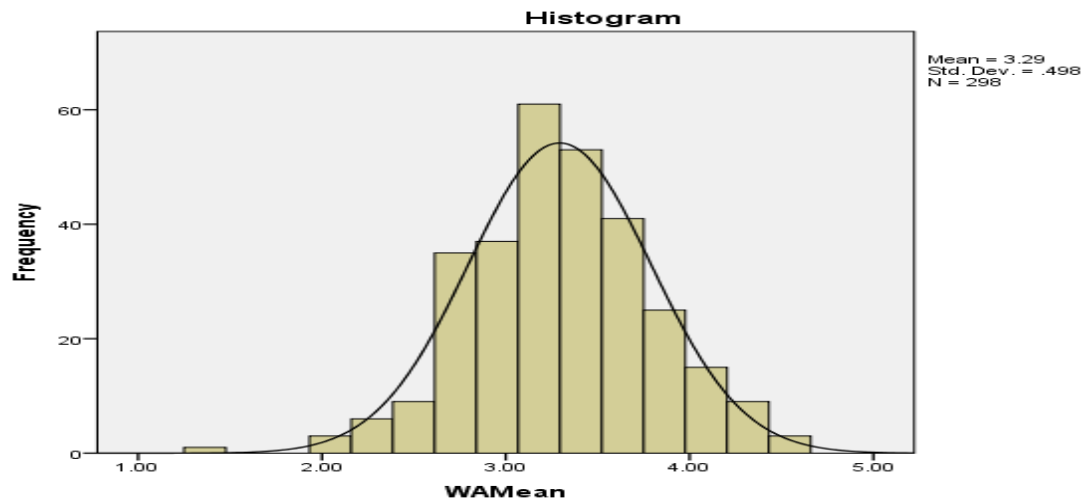


Figure 2 Histogram of Second Language Writing Anxiety (SLWAI)

Pearson-Product-Moment Coefficient analysis established that there is a significant positive correlation between FLRA and SLWA among Pakistani undergraduate BBA students. The correlation coefficient was found to be +0.540, with a p-value of less than .000. The correlation analysis was preceded by a visual examination of the normal distribution of both FLRAS and SLWAI datasets using histograms. The normal curves depicted in Figures 1 and 2 indicate that the data is normally distributed.

The positive correlation suggests that students who experience high levels of FLRA are likely to experience high levels of writing anxiety too. This implies that an increase in reading



anxiety may lead to an increase in writing anxiety, and vice versa. Conversely, a decrease in reading anxiety may lead to a decrease in writing anxiety.

According to Cohen's guidelines (1988) and Green, Salkind, and Akey's (2000) classification, the correlation coefficient of +0.540 falls into the category of strong correlation. Hence, the null hypothesis that there is no significant relationship between levels of reading anxiety and writing anxiety among Pakistani BBA students at a private sector university is rejected. The results support the alternative hypothesis that a significant relationship exists between reading and writing anxiety.

Table 12. *FLRAS and SLWAI: Correlation*

		Reading Anxiety	Writing Anxiety
(S) FLRA Reading Anxiety	Pearson Correlation	1	.540**
	Sig. (2-tailed)		.000
	N	298	298
( ) SLWA Writing Anxiety	Pearson Correlation	.540**	1
	Sig. (2-tailed)	.000	
	N	298	298

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 4.4 Implications of the Study

The identification of a substantial positive correlation between anxiety in FLRA and SLWA, as discovered by the study, carries considerable implications for the field of pedagogy. The statement emphasizes the importance of attending to anxiety in the context of language learning settings especially when teaching reading or writing skill. Language educators and administrators must recognise the potential impact of anxiety on students' reading and writing abilities. It is advisable to take proactive steps to reduce anxiety levels whenever feasible. Educators can foster improved reading and writing skills among students by prioritising the reduction of anxiety and creating a more conducive learning atmosphere.

- The findings suggest that ESL/EFL teachers can use effective reading strategies to reduce FLA, and vice versa.
- The findings indicating a correlation between reading and writing skills can provide valuable insights for curriculum developers. They can utilize this information to design and teach activities in a manner that promotes a mutually beneficial relationship between reading and writing. By integrating these skills in a correlated design,



educators can enhance both reading and writing abilities simultaneously. This approach can help alleviate stress and anxiety associated with these language tasks, creating a more harmonious learning experience.

- The research highlights the interconnected nature of reading and writing skills, indicating that educators responsible for teaching these skills should engage in collaborative efforts and contemplate instructing both reading and writing to reduce anxiety.
- The outcomes of this research may prove valuable for language evaluator and test developers who are design and create assessments that gauge competency in both written and reading skills. Test developers could enhance the validity of assessments by considering the correlation between the two skills: reading and writing anxiety, thereby designing tests that better reflect the relationship between these two skills.
- The positive correlation found in this study suggests that interventions aimed at reducing anxiety in one skill area could have a positive impact on another skill area. It is suggested that language instructors may consider adopting approaches which may help to reduce or overcome apprehensions related to reading and writing skills. These measures will further help to enhance language competency.

## **5. Conclusion**

The study concludes that majority of the learners exhibited moderate to high levels of anxiety regarding their ability to read and write in the English language. Moreover, the study confirmed the existence of a strong positive correlation between FLRA and SLWA, providing evidence that reducing reading anxiety will lead to a decrease in writing anxiety and vice versa . These results align with the previous studies, Zhau (2017), Joo & Damron (2015), Salam and Koumy (1997), and Lee and Schallert (2016) have documented a positive correlation between anxiety levels in reading and writing. The present study provides substantial evidence for the conclusions drawn by Yatshaba (2017) that there exists no correlation between various skills, with the exception of one.

The research has significant pedagogical implications for ESL/EFL teachers who need to be aware of the strong correlation between FLRA and FLWA. They should adopt appropriate teaching methods to reduce stress and anxiety while teaching reading or writing skills. The study will help English language teachers better understand the relationship between FLRA and FLWA and the need to address these anxieties when teaching the language.

In conclusion, this research provides further evidence of the existence of FLRA and SLWA among BBA students at a private university in Karachi, Pakistan, and their strong positive correlation. It emphasizes the that educators need to adapt or adopt suitable teaching methods to overcome and minimize the anxiety levels, creating an environment where learners can learning reading and writing skills. This research contributes to the existing body of literature on FLRA and SLWA and call for further investigations into the correlation between other language skills and



also to explore relevant background factors that may affect the students' performance also to devise plans for teacher to reduce anxiety in classroom.

### **Acknowledgments**

It is to acknowledge that this is an original work extracted and updated from my MS. Thesis. It is also acknowledged that paper has not been submitted to any other journal. The Editor will be notified if the author wishes to withdraw the article.

### **Information on Informed Consent or any Data Privacy Statements**

All Ethical consideration were taken care of while conducting the research. All the authors have contributed further enhancing the research.

### **Funding**

No funding is granted or approved for the project.



## References

- Abderrezzag, S. (2009). *The effects of Anxiety On Students' Achievement The case of third year LMD students.*
- Abdurrahman, A., & Rizqi, R. (2020). The effects of anxiety on language learning. *Journal of Applied Linguistics*, 15(2), 45-62. <https://doi.org/xxxxxxx>
- Adeel, M. (2011). Anxiety-provoking factors in Pakistani learners of English. *Journal of Language and Linguistic Studies*, 7(1), 1-16.
- Alamer, A., & Almulhim, F. (2021, April). The interrelation between language anxiety and self-determined motivation; a mixed methods approach. In *Frontiers in Education* (Vol. 6, p. 618655). Frontiers Media SA.
- Al-Sawalha, A. M. S., & Chow, T. V. F. (2012). The effects of proficiency on the writing process of Jordanian EFL university students. *Academic Research*, 3(2), 379–388.
- Andrea, T. (2021). The effect of anxiety on foreign language academic achievement. *Hungarian Educational Research Journal*.  
Anxiety and EFL Writing. *Theory and Practice in Language Studies*, 2(12), 2578–2586. <https://doi.org/10.4304/tpls.2.12.2578-2586>
- Awan, R. U., Azher, M., & Naz, A. (2010). Anxiety in language learning: A case study of Pakistani students. *Journal of College Teaching & Learning*, 7(11), 19-26.
- Awan, R.N, Azher, M, Anwar, M.N, Naz,A. (2008). An Investigation of Foreign Language Classroom Anxiety and Its Relationship with Students' Achievement. *Journal of College Teaching & Learning*, Vol 7,pp 33-40.
- Bell, S., & McCallum, R. (2012). Do foreign language learning, cognitive, and affective variables differ as a function of exceptionality status and gender? *International Education*, 42(1), 86-106.
- Beyza, C. M. (2020). *An Analysis Of Efl Learners' Foreign Language Anxiety And Their Motivation To Learn English.*
- Bigdeli, S. (2010). Affective learning: The anxiety construct in adult learners. *Procedia Social and Behavioral Sciences*, 9, 674-678.
- Boice, R., & Johnson, K. (1984). Perception and practice of writing for publication by faculty at a doctoral-granting university. *Research in Higher Education*, 33-43.
- Bollinger, A. S. (2017). *Foreign Language Anxiety in Traditional and Distance Learning Foreign Language Classrooms. PhD Dissertation*
- Bonifacci, P., Candria, L., & Contento, S. (2008). Reading and Writing: What Is the Relationship with Anxiety and Depression? *Reading and Writing: An Interdisciplinary Journal*, 21(6), 609-625. <https://doi.org/10.1007/s11145-007-9083-0>
- Brantmeier, C. (2005). Anxiety about L2 reading or L2 reading tasks? A study with advanced language learners. *The Reading Matrix*, 5(2), 67-85.
- Bruning, R., & Horn, C. (2000). Developing motivation to write. *Educational psychologist*, 35(1), 25-37.



- Cheng, Y. S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of second language writing*, 13(4), 313-335.
- Chow, B. W. Y., Mo, J., & Dong, Y. (2021). Roles of reading anxiety and working memory in reading comprehension in English as a second language. *Learning and Individual Differences*, 92, 102092.
- Cocuk, H. E. (2016). The Relationship between Writing Anxiety and Writing Disposition among Secondary School Students. *Eurasian Journal of Educational Research*, (63), 335–352.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Elkhafaifi, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *The Modern Language Journal*, 89(2), 206-220.
- Ghaith, G. M. (2020). Foreign language reading anxiety and metacognitive strategies in undergraduates' reading comprehension. *Issues in Educational Research*, 30(4), 1310-1329. <https://www.iier.org.au/iier30/ghaith.pdf>
- Graham, S., Liu, X., Bartlett, B., Ng, C., Harris, K. R., Aitken, A., ... & Talukdar, J. (2018). Reading for writing: A meta-analysis of the impact of reading interventions on writing. *Review of Educational Research*, 88(2), 243-284.
- Green, S. B., Salkind, N. J., & Akey, T. M. (2000). *Using SPSS for Windows: Analyzing and understanding data (3rd ed.)*. Upper Saddle River, NJ: Prentice Hall.
- Grills-Taquechel, A. E., Fletcher, J. M., Vaughn, S. R., & Stuebing, K. K. (2012). Anxiety and reading difficulties in early elementary school: evidence for unidirectional-or bi-directional relations?. *Child Psychiatry & Human Development*, 43, 35-47.
- Hakim, M. B. (2019). A Study of Language Anxiety among English Language Learners in Saudi Arabia. *Arab World English Journal*, 10(1), 64–72. <https://doi.org/10.24093/awej/vol10no1.6>
- Han S, Li Y, Haider SA. (2022) Impact of Foreign Language Classroom Anxiety on Higher Education Students Academic Success: Mediating Role of Emotional Intelligence and Moderating Influence of Classroom Environment. *Front Psychol.* doi: 10.3389/fpsyg.2022.945062. PMID: 35898975; PMCID: PMC9309225.
- Harmer, J. (2004). *The Practice of English Language Teaching (6th ed.)*. Harlow: Pearson Education Limited.
- Hasnahana. (2019). The Effects of Foreign Language Anxiety on the ESL/EFL Students' Language Learning. *Journal of ELT and Education (Vol. 2, pp. 48–55)*.
- Hewitt, E., & Stephenson, J. (2011). Foreign language anxiety and oral exam performance: A replication of Phillips's MLJ study. *The Modern Language Journal*, 00(0), 1-20.
- Hinkel, E. (2002). *Second language writers' text: Linguistic features and communicative effectiveness*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>



- Horwitz, E.K. (1986). Preliminary evidence for the reliability and validity of a Foreign Language Anxiety Scale. *TESOL Quarterly*, 20 (3), 559- 562.
- Hu, L., & Wang, N. (2014). Anxiety in Foreign Language Learning.
- Jebreil, N., Azizifar, A., Gowhary, H., & Jamalinesari, A. (2015). Study on writing anxiety among Iranian EFL students. *International Journal of Applied Linguistics and English Literature*, 4(2), 68-72.
- Joo, H., & Damron, S. (2015). The relationship between reading anxiety and writing anxiety: A study of Korean EFL learners. *Journal of Multilingual and Multicultural Development*, 36(1), 59-72.
- Kaestle, C. F. (1985). The history of literacy and the history of readers. *Review of Educational Research*, 55(1), 15-32.
- Kara, S. (2013). Writing Anxiety : A Case Study on Students ' Reasons for Anxiety in Writing Classes. *Anadolu Journal of Educational Sciences International*, 3(January), 103–111.
- Kiili, C., Leu, D. J., Utriainen, J., Coiro, J., Kannianen, L., Tolvanen, A., ... & Leppänen, P. H. (2018). Reading to learn from online information: Modeling the factor structure. *Journal of Literacy Research*, 50(3), 304-334.
- Krashen, S. (1981). Second language acquisition. *Second Language Learning*, 3(7), 19-39.
- Langer, J. A. (1986). *Children reading and writing: Structures and strategies*. Ablex Publishing.
- Lee, J., & Schallert, D. L. (2016). Exploring the reading–writing connection: A yearlong classroom-based experimental study of middle school students developing literacy in a new language. *Reading Research Quarterly*, 51(2), 143-164.
- Lee, J., & Schallert, D. L. (2016). The role of reading and writing in disciplinary learning. *Educational Psychologist*, 51(2), 247-261.
- Li, Y. (2014). Integrating reading and writing in L2 writing instruction: *A review of the literature*. *Language Teaching*, 47(2), 223-246.
- Liu, M. (2009). *Reticence and anxiety in oral English lessons*. Bern: Peter Lang AG.
- MacIntyre, P. D., Clement, R., Dorney, Z. M., & 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.
- MacIntyre, P.D., Gardner, R.C. (1994). The Subtle Effects of Language Anxiety on Cognitive processing in the Second Language. *Language Journal*, 44:2, June 1994, pp. 283-305
- Marcos-Llinas, M., & Garau, M. J. (2009). Effects of language anxiety on three proficiency-level courses of Spanish as a foreign language. *Foreign Language Annals*, 42(1), 94-111.
- Min, H. T. (2014). The relationship between writing apprehension and writing performance: A meta-analysis. *Journal of Second Language Writing*, 26, 28-47. <https://doi.org/10.1016/j.jslw.2014.07.003>
- Miri, M., & Joia, L. S. (2018). Writing apprehension and its relationship with writing performance: A case of Iranian EFL learners. *Journal of Language Teaching and Research*, 9(6), 1217-1225. <https://files.eric.ed.gov/fulltext/EJ1110238.pdf>



- Negari, G. M., & Rezaabadi, O. T. (2012). Too nervous to write? The relationship between anxiety and EFL writing. *Theory and practice in language studies*, 2(12), 2578-2586.
- Nunan, D. (1992). *Research methods in language learning*. Cambridge university press.
- Olanezhad, M. (2015). A Comparative Study of Writing Anxiety among Iranian University Students Majoring English Translation, Teaching and Literature. *English Language Teaching*, 8(3), 59-70.
- Onwuegbuzi, A. J. (1997). Writing a research proposal: The role of library anxiety, statistics anxiety, and composition anxiety. *Library & Information Science Research*, 19,5–33. doi:10.1016/S0740- 8188(97)90003-7
- Oteir, N. I., & Al-Otaibi, N. A. (2019). Foreign Language Anxiety: A Systematic Review. *Arab World English Journal*, 10(3), 309–317. <https://doi.org/10.24093/awej/vol10no3.21>
- Öztekin, E. (2011). *A comparison of computer assisted and face-to-face speaking assessment: performance, perceptions, anxiety, and computer attitudes*(Unpublished master's thesis). Bilkent University.
- Petrus, S. L., & Shah, P. M. (2020). Relationship between reading anxiety, reading strategies and language competence of rural ESL secondary learners. *Creative Education*, 11(2), 126-142.
- Phillips, E. M. (1992). The effects of language anxiety on students' oral test performance and attitudes. *Modern Language Journal*, 76, 14-26.
- Pishghadam, R., Khodadady, E., & Zabihi, R. (2011). Learner creativity in foreign language achievement. *European Journal of Educational Studies*, 3(3), 465-472. Retrieved from Education Research Complete.
- Rachman, S. (2004). *Fear and courage: A psychological perspective*. Psychology Press.
- Rahimi, M., & Abedini, A. (2019). The relationship between foreign language reading anxiety and reading comprehension among Iranian EFL learners. *Journal of Applied Linguistics and Language Research*, 6(3), 1-12. [https://www.researchgate.net/publication/346900682\\_Foreign\\_language\\_reading\\_anxiety\\_and\\_metacognitive\\_strategies\\_in\\_undergraduates'\\_reading\\_comprehension](https://www.researchgate.net/publication/346900682_Foreign_language_reading_anxiety_and_metacognitive_strategies_in_undergraduates'_reading_comprehension)
- Rajitha, K., & Alamelu, C. (2020). A study of factors affecting and causing speaking anxiety. *Procedia Computer Science*, 172, 1053-1058.
- Ratiu, I., Fissel-Brannick, S., Whiting, M., Murnion, L., & Azuma, T. (2022). The impact of mild traumatic brain injury on reading comprehension and eye movements: preliminary results. *Journal of communication disorders*, 96, 106197.
- Razak, N. A., Yassin, A. A., Nor, T., Bt, R., & Mohamad, T. (2017). Effect of Foreign Language Anxiety on Gender and Academic Achievement among Yemeni University EFL Students, 10(2). <https://doi.org/10.5539/elt.v10n2p73>
- Sabti, A. A., Md Rashid, S., Nimehchisalem, V., & Darmi, R. (2019). The Impact of writing anxiety, writing achievement motivation, and writing self-efficacy on writing performance: A correlational study of Iraqi tertiary EFL Learners. *Sage Open*, 9(4), 2158244019894289.





- Sadiq, M. (2017). Writing apprehension and its impact on students' writing performance. *Journal of Education and Practice*, 8(6), 1-6. <https://www.iiste.org/Journals/index.php/JEP/article/view/36622>
- Safarzadeh, K., & Gholami, M. (2013). The relationship between language learning anxiety and language proficiency of Iranian EFL learners. *International Journal of Applied Linguistics and English Literature*, 2(6), 199-206.
- Saito, Y., and Samimy, K. (1996). Foreign language anxiety and language performance: A study of learner anxiety in beginning, intermediate, and advanced-level college students of Japanese. *Foreign Languages Annals*, 29, 239–251.
- Saito, Y., Garza, T. J., Horwitz, E. K., & Garza, T. J. (1999). Foreign Language Reading Anxiety. *The Modern Language Journal*, 83(2), 202–218. <https://doi.org/10.1111/0026-7902.00016>
- Salem, A. A. & Al Diyar, M. A. (2014). The relationship between speaking anxiety and oral Salim, W. I. W., Subramaniam, V., & Termizi, A. A. (2017). Foreign language anxiety (FLA) in English language classroom. *International Journal of Languages, Literature and Linguistics*, 3(1), 5-12.
- Shanahan, T. (1984). Nature of the reading–writing relation: An exploratory multivariate analysis. *Journal of Educational Psychology*, 76(3), 466.
- Shanahan, T. (1988). The reading-writing relationship: Seven instructional principles. *The Reading Teacher*, 41(7), 636-647.
- Shanahan, T. (2017). Reading research: The importance of replication. *The Reading Teacher*, 70(4), 507-510.
- Shechter, O. (2017). Reading self-concept and reading anxiety in second grade Hebrew-speaking children. *Frontiers in Psychology*, 9, 1180. <https://doi.org/10.3389/fpsyg.2018.01180>
- Soares, S., Boyes, M. E., Parrila, R., & Badcock, N. A. (2022). Does reading anxiety impact on academic achievement in higher education students?. *Dyslexia*.
- Tsui, A. B. M., & Cheng, Y. show. (2022). Foreign Language Anxiety and English Medium Instruction Classrooms: an Introduction. *English Teaching and Learning*, 46(3), 203–212. <https://doi.org/10.1007/s42321-022-00122-9>
- Tysinger, Jeffrey A., P. Dawn Tysinger, and Terry D. Diamanduros. "The effect of anxiety on the measurement of reading fluency and comprehension." *Georgia Educational Researcher* 8, no. 1 (2010):
- Wang, L. J., & Chang, H. F. (2010). Applying innovation method to assess English speaking performance on communication apprehension. *Belt Journal*, 1(2), 147-158.
- Waseem, F., & Jibeen, T. (2013). Anxiety amongst learners of English as a second language: An examination of motivational patterns in the Pakistani context. *International Journal of Humanities and Social Science*, 3(16), 174-184.
- Wei, M., den Brok, P., & Zhou, Y. (2009). Teacher interpersonal behaviour and student achievement in English as a foreign language classrooms in China. *Learning Environments Research*, 12(3), 157-174. doi:10.1007/s10984-009-9059-6



- Xiao, Y., & Wong, K. F. (2014). Exploring heritage language anxiety: A study of Chinese heritage language learners. *The Modern Language Journal*, 98(2), 499-611. doi: 10.1111/j.1540-4781.2014.12085.x
- Yan, J. X., & Liang, J. (2022). Foreign language anxiety and dependency distance in English–Chinese interpretation classrooms. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.952664>
- Yatshaba, M. (2017). The relationship between reading, writing, speaking, and listening anxiety among EFL learners. *English Language Teaching*, 10(1), 1-11.
- 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.
- Zhang, Y., & Xi, X. (2012). Reading-to-write in L2 writing: A case study of a Chinese EFL learner. *Journal of Second Language Writing*, 21(3), 224-240.
- Zhang, Y., & Zhang, L. J. (2020). The relationship between foreign language reading anxiety and reading strategy use: Evidence from Chinese EFL learners. *System*, 91, 102280. <https://doi.org/10.1016/j.system.2020.102280>
- Zhao, A. (2009). College of Education Foreign Language Reading Anxiety: Investigating English-Speaking University Students Learning Chinese as a Foreign Language in the United States. FLORIDA STATE UNIVERSITY.
- Zhao, A., Guo, Y., & Dynia, J. (2013). Foreign language reading anxiety: Chinese as a foreign language in the United States. *Modern Language Journal*, 97(3), 764–778. <https://doi.org/10.1111/j.1540-4781.2013.12032.x>
- Zheng, Y., & Cheng, L. (2018). How does anxiety influence language performance? From the perspectives of foreign language classroom anxiety and cognitive test anxiety. *Language Testing in Asia*, 8(1). <https://doi.org/10.1186/s40468-018-0065-4>
- Zhou, J. (2017). Foreign Language Reading Anxiety in a Chinese as a Foreign Language Context. *Reading in a Foreign Language*, 29(1), 764–778. <https://doi.org/10.1111/j.1540-4781.2013.12032.x>
- Zrekat, Y., Abu Bakar, N., & Latif, H. (2016). The level of anxiety among Jordanian EFL undergraduates in oral communication performance. *Arab World English Journal (AWEJ)*, 7(3), 188-202.