

INVESTIGATING THE RELATIONSHIP BETWEEN FOREIGN LANGUAGE CLASSROOM ANXIETY AND READING COMPREHENSION AMONG IRAQI EFL LEARNERS

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Abstract

This study investigated the relationship between foreign language classroom anxiety (FLCA) and reading comprehension ability among Iraqi learners of English as a foreign language (EFL). A mixed-methods approach was employed, involving quantitative data collection through the Foreign Language Classroom Anxiety Scale (FLCAS) and a Reading Comprehension Test (RCT), as well as qualitative data collection through semi-structured interviews. The sample consisted of 128 Iraqi undergraduate EFL learners. Quantitative results revealed a significant negative correlation between FLCA and reading comprehension performance. Regression analysis indicated that FLCA was a significant predictor of reading comprehension ability. Qualitative findings corroborated these results, highlighting the prevalence of anxiety-inducing situations in the classroom, the perceived negative impact of anxiety on cognitive processes and comprehension, and the role of teachers in either alleviating or exacerbating anxiety levels. The study underscores the need for implementing effective anxiety-reducing strategies to enhance reading comprehension outcomes among Iraqi EFL learners.

Keywords: Foreign Language Classroom Anxiety, Reading Comprehension, Iraqi EFL Learners, Mixed-Methods.

INTRODUCTION

Foreign language classroom anxiety (FLCA) is a significant obstacle that English as a Foreign Language (EFL) learners often encounter, negatively impacting their ability to comprehend and process the language effectively (Horwitz et al., 1986). FLCA, a debilitating factor hindering successful foreign language learning (MacIntyre, 2002), can be influenced by factors such as communication apprehension, negative evaluation, and test anxiety (Aida, 1994; Arabai, 2015). These factors can lead to increased anxiety levels, subsequently affecting learners' reading comprehension abilities (Lee, 2011).

Reading comprehension is a critical academic task that poses significant challenges to EFL learners, particularly in contexts where the target language is not used in daily communication. Among the factors influencing foreign language learning success, anxiety stands out as a pivotal psychological construct garnering considerable attention in second language acquisition research (Horwitz et al., 1986). Iraqi EFL learners face unique challenges due to cultural and linguistic differences from their native language (Al-Khairiy, 2013) and the high-stakes testing environment in Iraqi schools, which can exacerbate FLCA (Oda, 2013).

While previous research has established that foreign language reading anxiety impacts reading performance (Bensalem, 2020; Sabti et al., 2016), the relationship between FLCA and reading comprehension among Iraqi EFL learners remains relatively understudied. This study aims to contribute to the existing body of knowledge by examining how FLCA specifically affects reading comprehension among this learner population.

Drawing upon the theoretical framework of foreign language anxiety (Horwitz et al., 1986), this study seeks to address the following research questions:

1. How does FLCA relate to reading comprehension among Iraqi EFL learners?
2. What are the Iraqi EFL learners' perceptions of the impact of foreign language anxiety on their reading comprehension ability?

By exploring the relationship between FLCA and reading comprehension, this research aims to provide insights that can inform teaching practices and support strategies to mitigate the negative effects of anxiety on reading performance in EFL contexts.

LITERATURE REVIEW

Foreign Language Classroom Anxiety

Foreign language classroom anxiety (FLCA) is a distinct form of anxiety that arises specifically in the context of learning and using a foreign language, particularly in classroom settings (Horwitz et al., 1986). It is a complex psychological construct that encompasses various cognitive, affective, and behavioral components, such as communication apprehension, fear of negative evaluation, and test anxiety (Horwitz et al., 1986; MacIntyre & Gardner, 1994). FLCA is conceptualized as a distinct form of anxiety that is specific to the language learning process and classroom environment, believed to arise from the unique challenges and demands associated with learning and using a foreign language (Horwitz et al., 1986).

Several theoretical models have been proposed to explain the nature and sources of FLCA. One influential model is the Language Anxiety Transfer Model (MacIntyre & Gardner, 1989), which suggests that language anxiety can be transferred from one language context to another, particularly from the first language to the second language learning context. Another model is the Anxiety/Uncertainty Management Theory (Gudykunst, 1995), which proposes that anxiety arises from the uncertainty and unpredictability associated with intercultural communication and language learning.

Causes and Effects of FLCA

FLCA can stem from a multitude of factors, both internal and external to the learner. Learner characteristics, such as introversion, low self-esteem, and perfectionism, have been associated with higher levels of FLCA (Dewaele & Al-Saraj, 2015; MacIntyre & Gardner, 1991; Woodrow, 2006). Additionally, learners with lower levels of proficiency or limited prior experience with the target language may experience higher anxiety due to the perceived difficulties and challenges associated with language learning (Dewaele & Al-Saraj, 2015; Onwuegbuzie et al., 1999).

The classroom environment, including factors such as teacher behavior, instructional methods, and peer interactions, can contribute to or alleviate FLCA (Horwitz et al., 1986; Young, 1991). Classrooms that are perceived as threatening, competitive, or unsupportive may exacerbate anxiety levels (Young, 1991). Cultural and societal factors, such as learners' cultural backgrounds, societal attitudes towards language learning, and the perceived status or importance of the target language in their context, can also shape their anxiety levels (Dewaele & Al-Saraj, 2015; Onwuegbuzie et al., 1999).

Higher levels of FLCA have been found to have significant negative effects on various aspects of language learning and performance. Numerous studies have reported a negative correlation between FLCA and measures of language proficiency, such as course grades, test scores, and self-rated proficiency (Horwitz, 2001; MacIntyre & Gardner, 1994; Zhang, 2019). FLCA has also been linked to difficulties in specific language skills, including speaking, listening, reading, and writing (Horwitz et al., 1986; MacIntyre & Gardner, 1994; Onwuegbuzie et al., 1999).

Furthermore, FLCA can negatively impact learners' motivation, self-confidence, and willingness to participate in language learning activities (Horwitz et al., 1986; MacIntyre et al., 1997). It can also interfere with cognitive processes essential for language learning, such as attention, memory, and information processing (MacIntyre & Gardner, 1994; Onwuegbuzie et al., 1999). In addition to psychological effects, FLCA can manifest in physical symptoms, such as increased heart rate, sweating, and muscle tension (Horwitz et al., 1986; Young, 1991). Learners with high levels of FLCA may exhibit avoidance behavior, such as skipping classes, avoiding speaking opportunities, or even dropping out of language courses altogether (Horwitz et al., 1986; MacIntyre & Gardner, 1994).

Reading Comprehension in Foreign Language Learning

Reading comprehension is a complex cognitive process that involves extracting meaning and constructing understanding from written texts (Kintsch, 1998; Snow, 2002). It is a fundamental skill essential for academic success, personal growth, and effective communication in various domains, including language learning. The theoretical foundations of reading comprehension are rooted in cognitive psychology and psycholinguistics, drawing from various models and theories that attempt to explain the intricate processes involved in comprehending written materials.

One influential theoretical model is the Construction-Integration Model proposed by Kintsch (1998). This model suggests that reading comprehension involves two primary processes: construction and integration. The construction process involves decoding the text and forming a mental representation of its meaning at the word, sentence, and discourse levels. The integration process involves incorporating the constructed meaning with the reader's prior knowledge and experiences to create a coherent mental model or situation model of the text (Kintsch, 1998; van Dijk & Kintsch, 1983).

Reading comprehension is a multidimensional process that involves various interrelated components, such as word recognition and decoding, vocabulary knowledge, syntactic knowledge, inference making, background knowledge, and monitoring and metacognition (Cain et al., 2004; Kendeou et al., 2009; Oakhill et al., 2015). In foreign language contexts, several additional factors can influence reading comprehension abilities.

These include learners' overall proficiency in the target language, their cultural background knowledge and its alignment with the cultural references in the texts, the extent to which reading skills can be effectively transferred from the first language, the linguistic distance between the learner's first language and the target language, learners' motivation and attitudes towards reading in the foreign language, and the quality and effectiveness of reading instruction (Grabe, 2009; Koda, 2005; Shiotsu & Weir, 2007).

Relationship between FLCA and Reading Comprehension

Numerous empirical studies across diverse contexts have consistently reported a negative correlation between FLCA and reading comprehension performance, wherein higher levels of anxiety are associated with poorer reading comprehension abilities (Bensalem, 2020; Sabti et al., 2016; Saito et al., 1999; Sellers, 2000; Zhang, 2019). Several potential mechanisms have been proposed to explain this negative relationship.

One proposed mechanism is cognitive interference, wherein the presence of FLCA can consume cognitive resources that would otherwise be allocated to the reading comprehension task (MacIntyre & Gardner, 1994; Sellers, 2000). Anxious thoughts, worries, and self-doubts may divert attention away from the text, making it more difficult for learners to focus on decoding, processing information, and constructing meaning (MacIntyre & Gardner, 1994; Sellers, 2000).

Another potential mechanism involves the impairment of working memory and information processing due to anxiety (Eysenck et al., 2007; Mohammadpur & Ghafournia, 2015). Working memory plays a crucial role in reading comprehension by temporarily storing and manipulating information from the text (Eysenck et al., 2007; Mohammadpur & Ghafournia, 2015). FLCA may disrupt the efficient functioning of working memory, making it more difficult for learners to retain and integrate information as they read.

Furthermore, FLCA may impact learners' self-regulation and metacognitive processes during reading (Brantmeier, 2005; Sellers, 2000). Anxious learners may experience difficulties in effectively monitoring their comprehension, identifying breakdowns, and employing appropriate fix-up strategies when comprehension difficulties arise (Brantmeier, 2005; Sellers, 2000). In addition, avoidance behavior, such as skipping reading assignments or avoiding reading tasks altogether, has been proposed as a potential mechanism mediating the relationship between FLCA and reading comprehension (Horwitz et al., 1986; MacIntyre & Gardner, 1994). This avoidance can limit opportunities for practice and exposure to reading materials, ultimately hindering the development of reading comprehension skills (Horwitz et al., 1986; MacIntyre & Gardner, 1994).

Moderating and Mediating Factors

While the negative relationship between FLCA and reading comprehension has been widely documented, several moderating and mediating factors have been identified that influence the nature and strength of this relationship.

Language proficiency has been found to be a moderating factor, with lower proficiency levels exacerbating the negative impact of FLCA on reading comprehension (Zhang, 2019). More proficient learners may have larger vocabularies, stronger grammatical knowledge, and more efficient decoding skills, which can facilitate the reading process and potentially mitigate the interference caused by anxiety (Shi & Liu, 2006; Zhang, 2019). Moreover, more proficient learners may have developed a wider repertoire of reading strategies and metacognitive skills, enabling them to better regulate their comprehension processes and overcome anxiety-related challenges (Ali & Fei, 2017; Shi & Liu, 2006; Zhang, 2019).

Text type and genre have also been identified as moderating factors, with narrative texts being more susceptible to the negative effects of anxiety compared to expository texts (Brantmeier, 2005; Zhou & Siriyothin, 2011). The familiar and engaging nature of narrative texts may make the effects of anxiety more pronounced, as anxious learners struggle to allocate cognitive resources to comprehension processes (Brantmeier, 2005). Conversely, the more complex and unfamiliar structure of expository texts may require learners to allocate more cognitive resources to comprehension, potentially mitigating the impact of anxiety (Brantmeier, 2005).

Learner characteristics, such as motivation, self-efficacy, and learning strategies, have been explored as potential moderating or mediating factors (Feng & Mohd Rawian, 2023; Ghonsooly & Elahi, 2010; Ghonsooly & Loghmani, 2012; Zhang, 2019). For instance, the relationship between FLCA and reading comprehension has been found to be mediated by learners' use of cognitive and metacognitive reading strategies (Mohammadpur & Ghafournia, 2015). Learners with higher levels of FLCA tend to employ fewer effective reading strategies, which in turn contributes to poorer reading comprehension performance (Mohammadpur & Ghafournia, 2015).

Conversely, learners with higher self-efficacy and better strategy use may be more resilient to the negative effects of FLCA on reading comprehension (Ghonsooly & Elahi, 2010). Self-efficacious learners may be more likely to persist in the face of challenges, employ adaptive strategies, and maintain motivation, even when experiencing anxiety (Ghonsooly & Elahi, 2010).

Contextual factors, such as classroom environment, instructional practices, and cultural influences, may also play a role in moderating or mediating the relationship between FLCA and reading comprehension (Horwitz et al., 1986; MacIntyre & Gardner, 1994). A supportive and non-threatening classroom climate may help mitigate the negative effects of FLCA on reading comprehension (Horwitz et al., 1986; MacIntyre & Gardner, 1994), while instructional practices that emphasize high-stakes testing or public performance may exacerbate FLCA and its impact on reading comprehension (Horwitz et al., 1986; MacIntyre & Gardner, 1994).

Cultural influences, such as societal attitudes towards language learning, communication styles, and power dynamics in the classroom, may also shape the manifestation and impact of FLCA on reading comprehension (Horwitz et al., 1986; MacIntyre & Gardner, 1994). In cultures where language learning is highly valued and encouraged, learners may experience lower levels of anxiety, potentially mitigating its negative effects on reading comprehension (Horwitz et al., 1986; MacIntyre & Gardner, 1994).

The Iraqi EFL Context

Despite the wealth of research investigating the relationship between FLCA and reading comprehension, there is a paucity of studies examining this phenomenon in the specific context of Iraqi EFL learners. Given the unique socio-cultural and educational environment in Iraq, factors such as cultural and linguistic differences from the learners' native language (Al-Khairi, 2013), the high-stakes testing environment in Iraqi schools (Oda & Khammat, 2013), and societal attitudes towards language learning may shape the manifestation and impact of FLCA on reading comprehension among Iraqi learners.

Furthermore, the variability in findings across studies conducted in different contexts (Bensalem, 2019; Dong et al., 2022; He et al., 2021; MacIntyre et al., 2016; Shariati & Bordbar, 2011; Woodrow, 2006; Zhang, 2001; Zhou, 2017) highlights the need for further research to deepen our understanding of the complex interplay between FLCA and reading comprehension. Investigating this relationship within the Iraqi EFL context can provide valuable insights and potentially uncover context-specific factors that may influence the nature and strength of this relationship.

Exploring the relationship between FLCA and reading comprehension among Iraqi EFL learners is crucial for informing pedagogical practices and interventions aimed at reducing anxiety and enhancing reading comprehension abilities in this specific context. By considering the unique socio-cultural and educational factors at play, educators and researchers can develop tailored strategies and support systems to address the specific needs and challenges faced by Iraqi EFL learners, ultimately fostering their language learning success and academic achievement.

METHOD

This study employed a mixed-methods approach to investigate the relationship between foreign language classroom anxiety (FLCA) and reading comprehension ability among Iraqi EFL learners.

Participants

A convenience sample of 128 undergraduate EFL learners (62% female, 38% male) from the College of Languages, Baghdad University, participated in the study. Their ages ranged from 18 to 23 years old, and Arabic was their native language.

Instruments

Three instruments were used to collect the data for this study.

Foreign Language Classroom Anxiety Scale (FLCAS): The Foreign Language Classroom Anxiety Scale (FLCAS) is a widely used questionnaire developed by Horwitz et al. (1986) to measure anxiety in foreign language learning. It consists of 33 items assessing three dimensions of anxiety: communication apprehension, fear of negative evaluation, and test anxiety. The scale has high reliability and has been translated into multiple languages for international use. It helps assess the negative impact of anxiety on language learning and performance. In this study, an adapted Arabic version of the FLCAS was used to measure foreign language classroom anxiety levels in the Iraqi EFL context..

Reading Comprehension Test (RCT): A researcher-developed Reading Comprehension Test (RCT) assessed participants' English reading skills. The test included adapted passages with multiple-choice questions targeting various comprehension levels. Prior to the main administration of the test, its reliability and validity were estimated. The RCT was then used alongside FLCA scale to explore the connection between anxiety and reading ability.

Semi-structured Interview: A semi-structured interview was used as a key qualitative data collection tool to explore the experiences of Iraqi EFL learners and how Foreign Language Classroom Anxiety (FLCA) affected their reading comprehension skills. Participants were informed about the purpose of the interview, which focused on their personal experiences with FLCA and its impact on reading comprehension. The interview consisted of open-ended questions that allowed participants to freely express their views and experiences. Topics covered included overall English learning experiences, anxiety-triggering situations, the direct impact of anxiety on reading comprehension, disruptive instances, coping strategies, the role of teachers, and the relationship between FLCA and reading comprehension. Participants were assured of confidentiality to promote trust and encourage honest responses, enhancing the quality of the collected data.

Procedure

The study followed a series of steps to collect data and explore the research questions. The target population of Iraqi EFL learners from Baghdad University was identified, and a sample size of 150 participants was determined, with 128 opting to participate. A draft version of the Reading Comprehension Test (RCT) was developed and piloted with a separate group of participants to ensure reliability.

The finalized RCT and the Foreign Language Classroom Anxiety Scale (FLCAS) were then administered to the selected participants. Semi-structured interviews were conducted with 15 participants to gather qualitative data. The collected data was scored and analyzed using appropriate statistical and qualitative techniques.

Correlation analysis examined the relationship between FLCA and reading comprehension ability, while thematic analysis identified recurring themes and patterns. The quantitative and qualitative findings were integrated to provide a comprehensive understanding of the relationship between FLCA and reading comprehension ability among Iraqi EFL learners. The results were presented following the prescribed format and guidelines of the study.

Data Analysis

Quantitative data (FLCAS scores, RCT scores) were analyzed using SPSS. Pearson correlation and linear regression analyses explored the relationship between FLCA and reading comprehension. Qualitative interview data underwent thematic analysis to identify recurring themes. Quantitative and qualitative findings were integrated to provide a comprehensive understanding of the research question.

RESULTS

Quantitative Analysis

Before conducting inferential statistical analyses on the relationship between foreign language classroom anxiety (FLCA) and reading comprehension test (RCT) scores, it was essential to verify the assumption of normality in the data. Normality tests, such as the Shapiro-Wilk test presented in Table 4.1, are crucial for choosing appropriate statistical methods, as many parametric tests require normal data distribution. The Shapiro-Wilk test was chosen for its suitability for sample sizes under 2000, making it fitting for the current study's 128 participants.

Table 4.1: Tests of Normality for FLCA and RCT Scores

Shapiro-Wilk			
Tests	Statistic	df	Sig.
FLCA	.969	128	.103
RCT	.939	128	.137

The Shapiro-Wilk test results in Table 4.1 confirm that the assumption of normality is met for both the FLCA and RCT score distributions. The FLCA scores have a Shapiro-Wilk statistic of 0.969 and a p-value of 0.103, while the RCT scores have a statistic of 0.939 and a p-value of 0.137.

As both p-values are greater than the conventional significance level of 0.05, we cannot reject the null hypothesis that the scores are normally distributed. This indicates that any deviations from normality are likely due to chance and not statistically significant.

Satisfying the normality assumption allows for the valid application of parametric statistical tests like Pearson's correlation and linear regression analyses, which can now be employed with confidence to investigate the relationship between foreign language classroom anxiety and reading comprehension abilities.

A Pearson correlation analysis was conducted to examine the relationship between foreign language classroom anxiety and reading comprehension abilities, with the results presented in Table 4.2.

The correlation coefficient, a measure of the linear association between two continuous variables, was calculated to determine the nature and strength of the relationship between participants' scores on the Foreign Language Classroom Anxiety (FLCA) scale and their Reading Comprehension Test (RCT) performance.

Table 4.2: Correlation Coefficient between FLCA and RCT Scores

Variables			
		FLCA	RCT
FLCA	Pearson Correlation	1	-.61**
	Sig. (2-tailed)		.004
	N	128	128
RCT	Pearson Correlation	-.61**	1
	Sig. (2-tailed)	.004	
	N	128	128

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

Table 4.2 shows a statistically significant negative correlation ($r = -0.61$, $p = 0.004$) between foreign language classroom anxiety (FLCA) scores and reading comprehension test (RCT) scores, indicating that higher levels of anxiety are associated with lower reading comprehension performance. The significant correlation ($p < 0.01$) provides strong evidence against the null hypothesis, suggesting a detrimental impact of anxiety on participants' ability to comprehend written English texts, possibly due to increased cognitive load, reduced focus, or decreased motivation. However, it is important to note that correlation does not imply causation, and further investigation is needed to identify potential underlying factors influencing this relationship.

A linear regression analysis was conducted to further explore the predictive relationship between foreign language classroom anxiety (FLCA) and reading comprehension performance. Table 4.3 presents the results, showing how FLCA scores predict variations in Reading Comprehension Test (RCT) scores. The table includes the unstandardized and standardized regression coefficients (B and β), standard error (SE), t-statistic, p-value for the predictor variable (FLCA), intercept value, and the coefficient of determination (R^2). The R^2 value indicates the proportion of variance in the dependent variable (RCT) explained by the predictor variable (FLCA).

Table 4.3: Linear Regression Analysis for FLCA Predicting RC Ability

Predictor	B	SE	β	t(126)	p
Intercept	3.79				< .001
FLCA	0.75	0.065	-0.61	11.24	< .001

Note: $R^2 = .372$ ($N = 128$, $p < .001$)

The linear regression analysis in Table 4.3 demonstrates the predictive relationship between foreign language classroom anxiety (FLCA) and reading comprehension test (RCT) performance. The unstandardized regression coefficient ($B = -0.75$) indicates a decrease of 0.75 units in RCT scores for every one-unit increase in FLCA scores, revealing an inverse relationship. The standardized regression coefficient ($\beta = -0.61$) confirms this negative relationship, with a statistically significant t-statistic ($t(126) = 11.24$, $p < 0.001$). The coefficient of determination ($R^2 = 0.372$) shows that FLCA scores account for approximately 37.2% of the variance in RCT scores, suggesting that anxiety may hinder participants' comprehension of English texts due to increased cognitive load, reduced focus, or decreased motivation.

However, other variables not included in this analysis may also contribute to the relationship, and further research is needed to explore potential mediating or moderating factors.

Qualitative Analysis

The qualitative component of the study explored Iraqi EFL learners' subjective experiences and perceptions of foreign language anxiety's impact on their reading comprehension abilities. A semi-structured interview with 15 participants revealed various themes related to their experiences with foreign language classroom anxiety and its influence on their reading comprehension.

Prominent themes included anxiety-inducing situations in the English classroom, such as reading aloud and public speaking (Participant 7: "Reading aloud in front of classmates, fear of being called upon, and timed reading activities are major sources of anxiety for me."; Participant 2: "Speaking activities like roleplay or discussions make me quite anxious due to fear of making mistakes."). Participants also reported a negative impact of anxiety on comprehension, with cognitive difficulties like loss of focus and trouble processing information (Participant 4: "When I'm anxious, my mind tends to wander, and I have a hard time focusing on the text, which affects my understanding."; Participant 15: "When anxious, I have trouble concentrating and comprehending what I'm reading. My mind goes blank.").

Participants shared strategies to manage anxiety, such as deep breathing exercises and positive self-talk (Participant 5: "I try to practice positive visualization techniques and remind myself of my strengths before reading activities to manage my anxiety."). They emphasized the teacher's role in creating a supportive environment (Participant 6: "Teachers who create a supportive and collaborative learning environment, where mistakes are seen as learning opportunities, help alleviate my anxiety."; Participant 1: "Some teachers are very strict and shout, this increase my anxiety a lot."). Participants also discussed how their anxiety levels evolved as their proficiency improved (Participant 9: "My anxiety levels have fluctuated over time, but I've noticed a gradual decrease as my English proficiency and confidence have improved.").

DISCUSSION AND CONCLUSION

The present study investigated the relationship between foreign language classroom anxiety (FLCA) and reading comprehension abilities among Iraqi learners of English as a foreign language (EFL). A mixed-methods approach was employed, involving quantitative data collection through the Foreign Language Classroom Anxiety Scale (FLCAS) and a Reading Comprehension Test (RCT), as well as qualitative data collection through semi-structured interviews.

The quantitative results revealed a significant negative correlation between FLCA and reading comprehension performance. Regression analysis indicated that FLCA was a significant predictor of reading comprehension ability, accounting for approximately 37.2% of the variance in RCT scores. These findings align with previous research, which has consistently reported a negative correlation between foreign language anxiety and reading comprehension

performance (Bensalem, 2020; Sabti et al., 2016; Saito et al., 1999; Sellers, 2000; Zhang, 2019).

Qualitative findings corroborated the quantitative results, highlighting the prevalence of anxiety-inducing situations in the classroom, the perceived negative impact of anxiety on cognitive processes and comprehension, and the role of teachers in either alleviating or exacerbating anxiety levels. Participants reported experiencing cognitive difficulties such as loss of focus and trouble processing information when anxious, which is consistent with the cognitive interference theory that suggests anxiety consumes cognitive resources that would otherwise be allocated to the reading comprehension task (MacIntyre & Gardner, 1994; Sellers, 2000).

Furthermore, participants shared strategies to manage anxiety, such as deep breathing exercises and positive self-talk, and emphasized the importance of a supportive learning environment fostered by teachers. This aligns with previous research that has identified teacher behavior and classroom environment as critical factors contributing to or alleviating FLCA (Horwitz et al., 1986; Young, 1991). Some participants also noted that their anxiety levels had fluctuated over time, with some reporting a gradual decrease as their English proficiency and confidence improved. This finding suggests that language proficiency might play a role in mediating the relationship between FLCA and reading comprehension, which warrants further investigation.

Theoretical and Rational Justifications

Several theoretical frameworks can be employed to explain the rationale behind this relationship. First, the cognitive interference theory posits that anxiety consumes cognitive resources that would otherwise be allocated to the reading comprehension task (MacIntyre & Gardner, 1994; Sellers, 2000). High levels of anxiety can lead to increased cognitive load, which in turn can limit the available cognitive resources required for effective reading comprehension (Sweller, 1988). As a result, EFL learners experiencing FLCA may have fewer cognitive resources available to devote to reading comprehension, leading to poorer performance on reading comprehension tasks.

Moreover, the Attentional Control Theory (ACT) (Eysenck et al., 2007) posits that anxiety impairs cognitive performance by reducing the efficiency of attentional control processes. According to ACT, anxiety affects the functioning of the central executive component of working memory, which is responsible for controlling attention and coordinating cognitive processes during task performance. In the context of reading comprehension, high levels of FLCA may hinder the ability to focus attention on the reading material and to effectively allocate attentional resources to relevant information, resulting in decreased reading comprehension performance.

LIMITATIONS AND SUGGESTIONS

The findings of this study have important implications for teaching practices and support strategies aimed at mitigating the negative effects of anxiety on reading performance in EFL contexts, particularly in Iraq. Educators should be aware of the potential impact of foreign

language classroom anxiety on reading comprehension abilities and strive to create supportive learning environments that encourage active participation and reduce anxiety levels. This can be achieved by implementing various anxiety-reducing strategies, such as providing clear instructions, offering positive feedback, and promoting collaborative learning (Gregersen & Horwitz, 2002; Horwitz, 2001).

However, several limitations should be acknowledged when interpreting the findings of this study. First, the study relied on self-reported measures of FLCA and reading comprehension, which may be subject to biases such as social desirability and response inconsistency. Future research should incorporate multiple methods of assessment, such as behavioral observations and physiological measures, to obtain a more comprehensive understanding of the relationship between FLCA and reading comprehension. Second, the cross-sectional design of the study precludes any causal inferences about the relationship between FLCA and reading comprehension. Longitudinal research is needed to investigate the directionality and potential reciprocal nature of this relationship. For instance, it is possible that poor reading comprehension performance may contribute to increased levels of FLCA over time, creating a vicious cycle of anxiety and poor performance. Third, the study was conducted with a sample of Iraqi EFL learners, which may limit the generalizability of the findings to other cultural and linguistic contexts. Future research should aim to replicate the findings in diverse EFL contexts to establish the cross-cultural validity of the observed relationship between FLCA and reading comprehension.

In conclusion, this study contributes to the existing body of knowledge on the relationship between FLCA and reading comprehension among Iraqi EFL learners. The findings underscore the need for implementing effective anxiety-reducing strategies to enhance reading comprehension outcomes among Iraqi EFL learners and highlight the importance of creating supportive learning environments that foster active participation and reduce anxiety levels. Theoretical frameworks such as the cognitive interference theory and the Attentional Control Theory can help explain the underlying mechanisms of the observed relationship between FLCA and reading comprehension. However, further research is needed to address the limitations of the present study and to better understand the complex interplay between FLCA and reading comprehension in diverse EFL contexts.

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