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Exploring the relationship between Tolerance of ambiguity and listening anxiety among Iraqi EFL learners

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استكشاف العلاقة بين تحمل الغموض وقلق الاستماع لدى المتعلمين العراقيين للغة الإنجليزية كلفة أجنبية

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قسم اللغة الإنكليزية، كلية التربية، جامعة الكوفة، النجف، العراق

Abstract

This study investigated the relationship between tolerance of ambiguity (TA) and listening anxiety among 72 Iraqi EFL learners (32 males, 40 females) at the University of Kufa. Data were collected using an adapted version of McLain's (2009) MSTAT-II and a Listening Anxiety Questionnaire developed from Kim (2000), Elkhafaifi (2005), and Horwitz et al. (1986). Both instruments demonstrated high reliability ($\alpha = .89$ and $.91$, respectively). Descriptive statistics revealed moderate-low TA ($M = 2.98$, $SD = 0.71$) and moderate-high listening anxiety ($M = 3.65$, $SD = 0.82$), with "Fear of Misunderstanding" as the highest dimension. A Pearson correlation analysis revealed a strong, negative relationship between TA and listening anxiety, $r(70) = -.68$, $p < .001$, with TA explaining 46% of the variance in listening anxiety. Significant negative correlations were also found between TA and all three subscales: Classroom LA ($r = -.62$), Fear of Misunderstanding ($r = -.65$), and Test/Exam LA ($r = -.63$). Independent samples t-tests revealed no significant gender differences in either TA ($t(70) = 0.78$, $p = .44$) or listening anxiety ($t(70) = -0.74$, $p = .46$). These findings highlight the important role of ambiguity tolerance in mitigating listening anxiety among Iraqi EFL learners. **Keywords:** Tolerance of ambiguity, listening anxiety, Iraqi EFL learners, gender differences, foreign language learning

المستخلص

استهدفت هذه الدراسة استقصاء العلاقة بين تحمل الغموض وقلق الاستماع لدى ٧٢ متعلماً عراقياً للغة الإنجليزية كلفة أجنبية (٣٢ طالباً و ٤٠ طالبة) في جامعة الكوفة. تم جمع البيانات باستخدام نسخة معدلة من مقياس ماكلين (٢٠٠٩) لأنواع المحوآت المتعددة لتحمل الغموض (MSTAT-II) واستبيان قلق الاستماع الذي تم تطويره بالاستناد إلى أعمال كيم (٢٠٠٠) والخفيفي (٢٠٠٥) وهورويتز وآخرون (١٩٨٦). أظهرت أداتا القياس ثباتاً عالياً (كرونباخ ألفا = ٨٩.٠ و ٩١.٠ على التوالي). أظهرت الإحصائيات الوصفية مستوى منخفضاً-معتدلاً لتحمل الغموض (متوسط = ٢.٩٨، انحراف معياري = ٠.٧١) ومستوى مرتفعاً-معتدلاً لقلق الاستماع (متوسط = ٣.٦٥، انحراف معياري = ٠.٨٢)، وكان بعد "الخوف من سوء الفهم" الأعلى بين الأبعاد. كشف تحليل ارتباط بيرسون عن علاقة سلبية قوية ذات دلالة إحصائية بين تحمل الغموض وقلق الاستماع، $r(70) = -.68$ ، $p < .001$ ، حيث فسر تحمل الغموض حوالي ٤٦٪ من التباين في قلق الاستماع. كما وجدت ارتباطات سلبية ذات دلالة إحصائية بين تحمل الغموض والأبعاد الوعية الثلاثة: قلق الاستماع الصفّي ($r = -.62$)، الخوف من سوء الفهم ($r = -.65$)، وقلق الاختبارات. ($r = -.63$) أظهرت اختبارات t المستقلة عدم وجود فروق ذات دلالة إحصائية بين الجنسين في كل من تحمل الغموض وقلق الاختبارات. ($t(70) = 0.78$)، ($p = .44$) أو قلق الاستماع ($t(70) = -0.74$)، ($p = .46$). تسلط هذه النتائج الضوء على الدور المهم لتحمل الغموض في التخفيف من قلق الاستماع لدى المتعلمين العراقيين للغة الإنجليزية كلفة أجنبية

الكلمات المفتاحية: تحمل الغموض، قلق الاستماع، متعلمو اللغة الإنجليزية كلفة أجنبية، الفروق بين الجنسين، تعلم اللغة الأجنبية

1. Introduction

Foreign language anxiety (FLA) has occupied a central position in second language acquisition research since Horwitz, Horwitz, and Cope's (1986) seminal work conceptualizing it as a situation-specific anxiety distinct from general trait anxiety. They defined FLA as "a distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom learning arising from the uniqueness of the language learning process" (p. 125), characterized by communication apprehension, test anxiety, and fear of negative evaluation. While extensive research has examined FLA among beginning and intermediate learners, less attention has been devoted to understanding how anxiety manifests among advanced-level foreign language learners, particularly in relation to specific skill areas. Listening comprehension represents a domain where anxiety may be especially pronounced. Bozorgian and colleagues (2024) note that "listening comprehension occurs when listeners can reasonably interpret a speaker's intention; therefore, reducing foreign language listening anxiety among EFL learners significantly facilitates their comprehension". Listening anxiety has been recognized as a distinct affective factor that influences the second and foreign language listening comprehension process, yet its relationship with learner characteristics such as tolerance of ambiguity remains underexplored. Tóth's (2009) qualitative inquiry, which serves as the foundation for this review, addressed the gap in understanding advanced-learner anxiety by investigating Hungarian English majors whose foreign language anxiety levels were highest among a larger surveyed sample. Although the mean FLA score of these English majors did not differ remarkably from lower proficiency learners reported in previous studies (Aida, 1994; Horwitz et al., 1986), a sizeable minority (22.2%) reported high levels of target language-related anxiety. This finding raises important questions about the persistence of anxiety even among learners who have achieved considerable proficiency. The relationship between proficiency and anxiety remains contested in the literature. Some studies have found no significant differences in anxiety across proficiency levels (Liu, 2006; Onwuegbuzie et al., 1999; Pichette, 2009), while others have reported that advanced learners score higher on anxiety measures than their less proficient counterparts (Cheng, 2002; Kitano, 2001; Marcos-Llinás & Garau, 2009). Qualitative investigations have similarly documented heightened anxiety in upper-level language courses, with students reporting more anxiety in advanced classes than in lower-level courses (Ewald, 2007; Hilleson, 1996). These contradictory findings underscore the need for nuanced examination of advanced learners' anxiety experiences across different language skills. This literature review synthesizes research on foreign language anxiety with particular attention to advanced learners, while exploring related constructs that illuminate the nature and development of FLA. Specifically, it examines listening anxiety as a distinct phenomenon, tolerance of ambiguity as a cognitive style potentially linked to anxiety and listening comprehension, reviews evidence for gender differences in fear and anxiety, and considers trait-level predispositions that may render learners vulnerable to language learning anxiety. The review concludes by identifying gaps in the literature that warrant further investigation, particularly regarding the intersection of listening anxiety and ambiguity tolerance among advanced learners. While international research has increasingly shown that tolerance of ambiguity and listening anxiety are closely connected with studies suggesting that learners who are more comfortable with uncertainty tend to feel less anxious when processing spoken language (Matsuura, 2007; Sadeghi & Bakhshi, 2025; Trabanco, 2017), this relationship remains entirely unexplored in the Iraqi EFL context. Although we know from separate studies that Iraqi learners tend to struggle with both ambiguity (Taha & Hassan, 2026) and listening anxiety (Avci & Doghonadze, 2017), no research has yet brought these two lines of inquiry together to examine how they might influence each other within the same population. This is a notable gap, especially given the theoretical likelihood that a learner's ability to tolerate ambiguity could directly impact their anxiety levels during listening tasks, and the practical need to understand how these factors uniquely manifest in Iraq's specific educational and cultural setting.

This study tries to answer the following questions

1: Is there a significant relationship between tolerance of ambiguity and listening anxiety among Iraqi EFL learners?

2: Do the levels of tolerance of ambiguity and listening anxiety differ significantly based on the learners' gender?

2. Literature review

1.2 The Conceptualization and Nature of Foreign Language Anxiety

Foreign language classroom anxiety (FLCA) has been conceptualized as a unique form of anxiety arising specifically from foreign language learning contexts. MacIntyre (1994) defined FLA as "the worry and negative emotional reaction aroused when learning or using a second language." MacIntyre and Gardner (1989) proposed

a developmental model wherein initial difficulties in language learning produce state anxiety; when this state anxiety is repeatedly associated with language learning, it becomes consolidated into a stable, situation-specific anxiety response. The relationship between FLCA and general anxiety has been subject to debate. While MacIntyre and Gardner (1989) characterized them as orthogonal dimensions, Dewaele (in press) found significant correlations between FLCA and neuroticism, a basic personality trait reflecting anxiety proneness, with both variables sharing up to 25% of variance. This finding suggests that language anxiety may be more closely intertwined with general affective predispositions than initially theorized. Recent research has expanded understanding of FLCA's correlates. Dewaele, Petrides, and Furnham (2008) identified negative associations between trait emotional intelligence and communicative anxiety across first, second, third, and fourth languages, suggesting that emotionally intelligent individuals are better equipped to manage their affective states during communication. Gregersen and Horwitz (2002) linked FLCA to perfectionism, finding that anxious learners set higher personal performance standards, procrastinated more, feared evaluation more intensely, and were more preoccupied with errors. In Asian contexts, Lu and Liu (2011) examined FLCA among 934 Chinese first-year university students and found that nearly one-third experienced anxiety. FLCA was negatively correlated with both cognitive and metacognitive strategy use, and regression analysis identified FLCA as the strongest negative predictor of English performance. These findings underscore the practical significance of understanding and addressing language anxiety across diverse learning contexts.

2.2 Foreign Language Listening Anxiety

Conceptualizing Listening Anxiety as a Distinct Phenomenon

Foreign language listening anxiety (FLLA) has emerged as a specialized area of inquiry within the broader FLA literature. Listening is inherently anxiety-provoking because it requires real-time processing of input over which the learner has no control, with limited opportunity for clarification or repetition. As Trabanco (2017) observes, "in-class listening activities are generally one of the most stressful tasks for L2 learners. Many L2 learners feel discouraged if they do not understand every single word in oral discourse. For this reason, learners can disengage from listening activities very easily". Listening anxiety is characterized by feelings of worry, tension, and apprehension specifically triggered by listening tasks. Adnan and colleagues (2020) investigated listening anxiety among advanced listening class students and found that students experienced moderate anxiety levels, with students reporting that anxiety impeded their ability to comprehend listening materials effectively. The researchers noted that "every time listening class begins, they tend to think they cannot do the listening practice due to their anxiety," illustrating the anticipatory nature of listening anxiety.

2.3 The Relationship Between Listening Anxiety and Metacognitive Strategy Use

Research has established connections between listening anxiety and learners' use of metacognitive strategies. Golzadeh and Moivaziri (2017) investigated the relationship between listening anxiety and metacognitive strategy awareness among 105 upper-intermediate and advanced level Iranian EFL learners. Their analysis revealed "a negative correlation between the participants' listening anxiety and their use of metacognitive strategies, indicating as the use of metacognitive strategies increased, lesser degrees of listening anxiety were observed and vice versa". This finding suggests that learners who are more aware of and able to regulate their listening processes experience less anxiety. Regarding proficiency level differences, the same study revealed that "upper-intermediate learners were more anxious than advanced level ones". This finding is particularly significant for understanding advanced learners: while anxiety persists at advanced levels, it may decrease as learners approach very high proficiency, suggesting a nonlinear relationship between proficiency and listening anxiety.

2.4 Interventions for Reducing Listening Anxiety

Recent research has explored pedagogical interventions to mitigate listening anxiety. Bozorgian and colleagues (2024) conducted a mixed-methods study examining the effect of metacognitive intervention (MI) and metacognitive intervention through dialogic interaction (MIDI) on EFL learners' FLLA. The study involved 90 advanced undergraduate students and found that "learners benefit from MI and specifically MIDI to reduce the level of their FLLA and further improve LC". This research demonstrates that listening anxiety is malleable and responsive to instructional approaches that enhance learners' metacognitive awareness and provide opportunities for collaborative processing.

2.5 The Debilitating Effects of Listening Stress

Kurita (2014) introduced the concept of "listening stress" as an alternative to listening anxiety, arguing that it allows for examination of real-time effects on cognitive processing. Through a small-scale stress-inducing

experiment with Japanese learners of English, the study found that "increased listening stress hinders the use of coping strategies, debilitating listening comprehension, especially in higher cognitive processing, such as inferencing and generalization/application of information". This research highlights the mechanism through which anxiety impairs listening performance: by disrupting the cognitive resources and strategies necessary for effective comprehension.

2.6 Tolerance of Ambiguity and Its Relationship to Language Anxiety and Listening

Tolerance of ambiguity (TA) has been defined as the "tendency to perceive ambiguous situations as desirable" (Budner, 1962). Furnham and Ribchester (1995) elaborated that individuals with low TA experience stress, react prematurely, and avoid ambiguous stimuli when confronted with unfamiliar, complex, or incongruent cues, whereas those with high TA perceive such situations as desirable, challenging, and interesting. The construct has been linked to second language learning since Rubin (1975) characterized tolerance of ambiguity as an attribute of the "good language learner," arguing that such learners are comfortable with uncertainty and able to evaluate their hypotheses. Rubin (2008) later contended that learners comfortable with ambiguity possess an advantage because change is inherent to language learning. Second Language Tolerance of Ambiguity (SLTA) has been conceptualized as both a cognitive style and a potential antecedent of strategy use (Ely, 1989; Ehrman & Oxford, 1990).

2.7 Tolerance of Ambiguity and Listening Comprehension

The relationship between tolerance of ambiguity and listening comprehension has received focused attention in recent research. Trabanco (2017) conducted an explanatory mixed-method study investigating this relationship among elementary Spanish learners. The experimental group received "training to develop listening comprehension strategies aimed at increasing the students' level of TA," including attention to supra-segmental and extra-linguistic features, deployment of cognitive strategies for identifying global themes, social strategies for processing content through partner discussions, and promotion of metacognitive awareness of the listening process. This intervention recognized that tolerance of ambiguity can be developed through strategic instruction and may enhance listening outcomes.

2.8 Tolerance of Ambiguity in Integrated Skills Assessment

Sadeghi and Bakhshi (2025) conducted research examining the role of individual characteristics in integrated listening/speaking assessment performance. Their study of 60 EFL learners at B2-C1 proficiency levels revealed that "FLA had a negative relationship, while AT and the use of cognitive and metacognitive strategies had a positive correlation with integrated listening/speaking test performance". The researchers emphasized that "individual differences have generally been neglected in the assessment literature, but this study revealed that performance on integrated listening/speaking tests can be affected by language-irrelevant constructs such as individual attributes in addition to test-takers' language competence". This finding has significant implications for understanding how tolerance of ambiguity functions in complex, real-world language tasks that combine listening and speaking.

3. Methodology

3.1 Design

According to Farhadi (1995), there are three major research designs: descriptive, correlational, and experimental. The present study is correlational because it aims to find meaningful relationships among the variables under study.

3.2 participants

The participants of this study consisted of 72 Iraqi EFL learners (32 males and 40 females) enrolled in the Department of English, College of Education at the University of Kufa during the academic year 2024–2025. All participants were fourth-year students who had completed three years of university-level English language instruction, placing them at an advanced stage of their undergraduate studies. This specific population was purposively selected as they possess considerable exposure to the target language and have developed a relatively high level of proficiency, making them suitable for examining the nuanced interplay between tolerance of ambiguity and listening anxiety among advanced learners.

Table1 Demographic Characteristics of Participants (N = 72)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	32	44.4

	Female	40	55.6
University Year	Fourth year	72	100

3.3 Instruments

1.3.3 Second Language Tolerance of Ambiguity Questionnaire

The English Language Ambiguity Tolerance Scale used in this study was adapted from the Multiple Stimulus Types Ambiguity Tolerance Scale-II (MSTAT-II) developed by McLain (2009). The MSTAT-II is a widely recognized and psychometrically validated instrument designed to measure an individual's general tendency to perceive ambiguous situations as desirable or threatening. For this research, the original scale was carefully adapted to suit the specific context of English as a Foreign Language (EFL) learning, with items modified to reflect language learning situations rather than general, ambiguous scenarios. The questionnaire was piloted with a cohort of 10 students and validated by three experts from Kufa University, College of Education, who hold PhDs in English Language Teaching and have over 15 years of teaching experience. Cronbach's Alpha was used to estimate the reliability of the questionnaire.

Table 2. Reliability Statistics for Second Language Tolerance of Ambiguity Questionnaire

Scale	No. of Items	Cronbach's α	Mean of Inter-Item Correlations
Tolerance of Ambiguity (TA)	13	.89	.39

2.3.3 Listening Anxiety Questionnaire

The Listening Anxiety Questionnaire used in this study was developed based on the theoretical frameworks of foreign language listening anxiety established in the literature, drawing particularly from Kim (2000), who created the Foreign Language Listening Anxiety Scale (FLLAS), and Elkhafaifi (2005), who investigated listening comprehension anxiety in Arabic learning contexts, as well as Horwitz, Horwitz, and Cope's (1986) conceptualization of situation-specific anxiety. The instrument consists of 12 items divided equally into three subscales: Classroom Listening Anxiety, Fear of Misunderstanding, and Test/Exam Listening Anxiety, designed to capture the multidimensional nature of listening anxiety as experienced by Iraqi EFL learners across different listening situations. The questionnaire was piloted with a cohort of 10 students and validated by three experts from Kufa University, College of Education, who hold PhDs in English Language Teaching and have over 15 years of teaching experience. Cronbach's Alpha was used to estimate the questionnaire's reliability.

Table 3 Reliability Statistics for Listening Anxiety Questionnaire

Scale	No. of Items	Cronbach's α	Mean of Inter-Item Correlations
Listening Anxiety (LA)	12	.91	.45

4. Procedure

The Tolerance of Ambiguity Scale and the listening anxiety questionnaires were administered in this survey. Before formal data collection, a pilot test of the instruments' clarity and procedure feasibility were performed. A convenience sampling method was employed, and eligible participants were recruited to the study after learning about its aims. The marked questionnaire form was shared electronically in Google Forms format via a specific Telegram group during 7 days of gathering period. All answers were collected and anonymized for analysis, which were then processed with SPSS (Statistical Package for the Social Sciences), using descriptive statistics and inferential methods.

5. Results

To examine the central tendency and variability of the data, means and standard deviations were computed for the total scores on the Tolerance of Ambiguity (TA) and Listening Anxiety (LA) scales, as well as for the three LA subscales. These results are displayed in Table 4. The analysis reveals that the average TA score ($M=2.98$, $SD=0.71$) was marginally below the theoretical midpoint of the scale (3.00), pointing to a generally moderate-low capacity for tolerating ambiguity in the sample. In contrast, the mean LA score ($M=3.65$, $SD=0.82$) exceeded the midpoint, reflecting a moderate-high degree of listening-related anxiety among the learners. Furthermore, an examination of the LA subcomponents shows that the "Fear of Misunderstanding" dimension yielded the highest average score.

Table 4 Descriptive Statistics for Tolerance of Ambiguity and Listening Anxiety (N = 72)

Variable	No. of Items	Possible Range	M	SD	Skewness	Kurtosis
1. Tolerance of Ambiguity (TA)	13	1-5	2.98	0.71	-0.21	-0.18
2. Listening Anxiety (LA)	12	1-5	3.65	0.82	0.12	-0.32
2.1 Classroom LA	4	1-5	3.58	0.88	-0.08	-0.41
2.2 Fear of Misunderstanding	4	1-5	3.81	0.90	-0.15	-0.55
2.3 Test/Exam LA	4	1-5	3.55	0.91	0.05	-0.49

Is there a significant relationship between tolerance of ambiguity and listening anxiety among Iraqi EFL learners? (Research Question 1)

A Pearson product-moment correlation coefficient was computed to assess the relationship between the overall scores of TA and LA. A strong, negative, and statistically significant correlation was found, $r(70) = -.68$, $p < .001$. This indicates that higher levels of tolerance of ambiguity are associated with lower levels of listening anxiety. The coefficient of determination ($r^2 = .46$) suggests that approximately 46% of the variance in listening anxiety can be explained by tolerance of ambiguity. Further correlations between TA and the LA subscales were also significant, as shown in Table 5.

Table 5 Correlations between Tolerance of Ambiguity and Listening Anxiety Subscales

Variable	1	2	3	4
1. Tolerance of Ambiguity	-			
2. Listening Anxiety (Total)	-.68**	-		
3. Classroom LA	-.62**	.92**	-	
4. Fear of Misunderstanding	-.65**	.94**	.81**	-
5. Test/Exam LA	-.63**	.93**	.78**	.79**

Note. ** $p < .001$ (two-tailed).

Do the levels of tolerance of ambiguity and listening anxiety differ significantly based on the learners' gender? (Research Question 2)

An independent-samples t-test was conducted to compare TA and LA scores for male ($n = 32$) and female ($n = 40$) learners. The assumption of homogeneity of variances was tested and satisfied using Levene's test for both variables ($p > .05$). The results, presented in Table 4, revealed no statistically significant difference in TA scores between males ($M = 3.05$, $SD = 0.69$) and females ($M = 2.92$, $SD = 0.72$); $t(70) = 0.78$, $p = .44$, $d = 0.18$. Similarly, no significant gender difference was found for LA scores (Males: $M = 3.57$, $SD = 0.85$; Females: $M = 3.71$, $SD = 0.80$); $t(70) = -0.74$, $p = .46$, $d = 0.17$. The effect sizes (Cohen's d) for both comparisons were small, further confirming the absence of a meaningful gender-based difference. Table 6 shows the results of the independent samples t-test for gender differences in TA and LA.

Table 6 Independent Samples t-Test for Gender Differences in TA and LA

Variable	Gender	N	M	SD	*t*(70)	*p*	Cohen's *d*
Tolerance of Ambiguity	Male	32	3.05	0.69	0.78	.44	0.18
	Female	40	2.92	0.72			
Listening Anxiety	Male	32	3.57	0.85	-0.74	.46	0.17
	Female	40	3.71	0.80			

The analytical procedures led to two principal conclusions. Initially, the results indicated a substantial inverse association between tolerance of ambiguity and listening anxiety, thereby validating a meaningful connection between these variables. Subsequently, the analysis revealed an absence of any statistically notable disparities in either tolerance of ambiguity or listening anxiety attributable to gender among the participating Iraqi EFL learners.

6. Discussion

The present study revealed a strong negative correlation between tolerance of ambiguity and listening anxiety among Iraqi EFL learners ($r = -.68, p < .001$), indicating that learners who are more comfortable with ambiguous language input experience significantly lower levels of anxiety during listening tasks. This finding **agrees with** Matsuura (2007), who theorized that tolerance of ambiguity contributes to lowering anxiety when listening to unfamiliar speakers and novel discourse content. It also **supports** Sadeghi and Bakhshi (2025), who found that ambiguity tolerance positively correlated with listening/speaking performance while anxiety negatively correlated with performance. Furthermore, the result **aligns with** Trabanco's (2017) intervention research demonstrating that training designed to increase ambiguity tolerance enhances listening outcomes, and **corroborates** Gudykunst's (2005) Anxiety/Uncertainty Management Theory, which posits that increased tolerance for ambiguity reduces anxiety. The finding also **agrees with** Golzadeh and Moivaziri (2017), who reported negative correlations between listening anxiety and metacognitive strategy use, suggesting that tolerance of ambiguity may operate alongside metacognitive awareness to reduce anxiety. Regarding gender differences, the absence of significant differences in either TA or listening anxiety **agrees with** Golzadeh and Moivaziri (2017), who similarly found no gender differences in listening anxiety among Iranian EFL learners. This finding **aligns with** Klorman (1974) and Arrindell et al. (2003), who noted that gender differences are minimal for social-evaluative fears compared to other anxiety domains. However, this result **appears to contradict** epidemiological research documenting higher anxiety disorder rates among women (Kessler et al., 1994; Bruce et al., 2005). This discrepancy may be explained by the situation-specific nature of listening anxiety, which may be more influenced by shared educational experiences than by general anxiety predispositions. The homogeneous academic background of participants likely minimized gender-based variation.

Conclusion

This study investigated the relationship between tolerance of ambiguity and listening anxiety among Iraqi EFL learners, as well as gender differences in both variables. The findings revealed a strong, negative, and statistically significant correlation between tolerance of ambiguity and listening anxiety, indicating that learners who are more comfortable with ambiguous language input experience considerably lower levels of anxiety when engaged in listening tasks. Tolerance of ambiguity was found to explain approximately 46% of the variance in listening anxiety, highlighting its substantial role as a protective factor against anxiety in listening comprehension. Significant negative correlations were also observed between tolerance of ambiguity and all three listening anxiety subscales—Classroom Listening Anxiety, Fear of Misunderstanding, and Test/Exam Listening Anxiety—with the strongest relationship emerging with Fear of Misunderstanding, suggesting that ambiguity tolerance most directly mitigates the fundamental uncertainty inherent in interpreting spoken messages. Regarding gender differences, the study found no statistically significant differences between male and female learners in either tolerance of ambiguity or listening anxiety. This finding aligns with previous research in similar Middle Eastern contexts and suggests that within the relatively homogeneous population of advanced university EFL learners, gender does not function as a differentiating factor for these affective variables. The small effect sizes further confirm the absence of meaningful gender-based variation. These findings have several important implications. Theoretically, they contribute to the growing body of evidence supporting the interconnectedness of cognitive and affective individual difference variables in language learning, validating within the Iraqi context theoretical propositions that have been established internationally. Pedagogically, the results suggest that instructional interventions aimed at enhancing learners' tolerance of ambiguity—such as metacognitive strategy training, exposure to varied authentic listening materials, and guided practice in coping with unclear input—may effectively reduce listening anxiety and improve comprehension outcomes. Such interventions should be directed equally toward male and female learners, given the absence of gender differences. The study is not without limitations. The sample was limited to 72 fourth-year students from a single university, which may restrict generalizability. The cross-sectional design precludes causal conclusions, and reliance on self-report measures may not capture the full complexity of learners' affective experiences.

Future research should employ larger, more diverse samples across multiple Iraqi universities, utilize longitudinal or experimental designs to establish causality, and incorporate qualitative methods to explore how learners experience and manage ambiguity during listening tasks.

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