



Investigating Foreign Language Ambiguity Tolerance and Class Anxiety of Preparatory Level Students at Tertiary Level

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Abstract

The aim of this study was to ascertain the level of ambiguity tolerance in second language learning and the level of foreign language class anxiety among students in preparatory classes, as well as to ascertain whether there was a significant relationship between the two variables and whether these variables differed significantly in relation to their gender, language level, and medium of instruction. This was a descriptive study with the relational survey method. The data were collected via “*the Foreign Language Classroom Anxiety Scale*” developed by Horwitz, Horwitz, and Cope (1986) and “*the Second Language Ambiguity Tolerance Scale*” developed by Ely (1995). The data were analyzed with SPSS 22 packet program, and statistical tests like t-test, One- way ANOVA, and Pearson correlation and frequency and percentage calculations were used in the analysis. The findings revealed that the overall ambiguity tolerance level of the preparatory class students’ was moderately high, but anxiety levels were moderately low. There were also no significant differences regarding their gender, language levels and medium of instruction for both constructs. The only significant difference was the negative correlation between their ambiguity and anxiety levels. That is as preparatory-level students’ second language ambiguity tolerance level increased, their level of foreign language anxiety decreased. Implications were also offered within the light of the related literature.

Keywords: Ambiguity tolerance, foreign language class anxiety, preparatory class students

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1. Introduction

Language learning is a sophisticated process since it embodies new linguistic and cultural elements; thus, language learners naturally face confusion deriving from new patterns. Accordingly, the process may lead to ambiguity (Abbe, Gulick & Herman, 2007; Kazamia, 1999). One of the most difficult issues facing foreign language teachers is how to respond to individual differences among students. Although many language teachers plan their classes meticulously and provide their learners with various activities, not all learners respond in the same manner. All students may be taught the same content in the same way; however, learners' performances vary significantly in a regular class. One of the reasons for the differing outcomes could be a lack of preparedness, such as foreign language proficiency on the part of learners (Lee, 2000). However, language proficiency is only one of the factors explaining the disparities in various achievement test results in a given language class.

Awareness of individual differences is a crucial phenomenon in language learning contexts since it allows language teachers to understand their students' specific needs and adapt to these individual differences in various teaching settings (Mamchur, 1996). To this end, the cause for the disparity among different learners regarding language achievement scores has prompted researchers to investigate individual learners. Some studies focused on learning styles to explain individual differences among language learners (Ash, 1986; Ehrman & Oxford, 1988; Dunn, Dunn, & Price, 1981; Hunt, 1981; Reid, 1987). Students may or may not be aware of the strategies they employ while learning a second language. These methods show how students engage, communicate, and develop their learning styles in the classroom as well as how they obtain new information (Keefe, 1979, p.4). Defined as a learning style, this particular feature can be identified as "a general predisposition, voluntary or not, toward processing information in a particular way" (Skehan, 1991, p.288). Mediating between emotion and cognition, learning style refers to the long-lasting tendencies and preferences of individuals (Skehan, 1991).

On the other hand, some studies examined cultural differences (Horwitz, 1999; Olshtain, Shohamy, Nelson, 1995), gender differences (Oxford, 1993), and ambiguity tolerance (AT) (Ely, 1995). In addition to cultural and gender differences as factors in language learning, learners' ability to cope with uncertainty or ambiguity (ambiguity tolerance) plays a significant role in any foreign language learning environment. Budner (1962) first pointed out the phenomenon as a personal variable. Ambiguity tolerance has been demonstrated to influence students' success in EFL classes when learning a foreign language. If an ESL (or EFL) learner feels threatened or uncomfortable when faced with linguistic uncertainty, for instance, he or she may be less willing to take risks, hesitate, and eventually lose interest in the lesson (Lee, 2000). Since any language learning environment is full of ambiguity, new structures, and unfamiliar lexicon and grammar, ambiguity tolerance is critical to language learners' success (Kamran, 2011); thus, the importance of ambiguity tolerance-intolerance in learning grammar and communicating in a foreign language is obvious (Ezzati & Farahiyan, 2016).

In addition to ambiguity tolerance as an individual difference, foreign language anxiety (FLA) is common in all learning disciplines (Tran, 2012). A term interweaved with concepts such as self-efficacy, self-esteem, risk-taking, and inhibition (Brown, 2007), anxiety is a state of mind of one's preparation for immediate adverse events, considered a promoting factor for L2 learning (Barlow, Raffa & Cohen, 2002). According to Horwitz (2001), one-third of all foreign language learners have some language anxiety.

Anxiety might also lead to a negative form of anxiety- “debilitating anxiety,” which cannot go unnoticed in L2 teaching (Couch, Garber & Turner, 1983, p.238). Research has revealed that a high level of foreign language learning anxiety negatively affects learners’ foreign language learning achievement (Coulombe, 2000; MacIntyre & Doucette, 2010; Woodrow, 2006; Yan & Horwitz, 2008).

The relationship between ambiguity and anxiety has been investigated in various disciplines and language learning; hence, literature on anxiety and ambiguity tolerance in language learning is also various. The concept is applied to multiple aspects of language learning (Nosratinia, Niknam, & Sarabchian, 2013). Learner anxiety and ambiguity tolerance are assumed to be important indicators of success in language learning as students’ acceptance and grasp of the new skills may be hindered by uncertainties deriving from the nature of the tasks to be carried out in the classroom; therefore, students’ reaction to ambiguity built-in the tasks might be hampered. Accordingly, they may feel ‘reluctant’ or be ‘unable to internalize the skill’ (Ely, 1995, p.89).

The only way to enter a university's foreign language department within the Turkish education system is to take different departments’ exams. For example, to be accepted into any language-related department, the students take the Foreign Language Exam (YDS) and the core proficiency test administered by Student Selection and Placement Center (OSYM) in Turkey. For other departments, students must take tests that aim to assess their verbal and computational skills and the core proficiency test. After completing the enrollment process, students must complete the English competency exam conducted by the Schools of Foreign Languages at the university. If students fail this exam, they must spend a year in the English preparatory class before beginning their studies at their department. The English preparatory program requires students to take intensive English classes for at least 25 hours a week to develop their reading, writing, listening, speaking skills as well as their ability to follow and comprehend English-language courses. Students must retake the English proficiency exam after completing their preparatory class within one year before being allowed to continue their regular studies in their department. Students who do not pass this exam must retake the preparatory class.

In most studies, preparatory-level students have been reported to have foreign language anxiety and may fail to tolerate ambiguities when learning due to external factors like exams and time pressure (Cakici, 2016; Demirdaş & Bozdoğan, 2013; Elaldı, 2016; Erten & Topkaya, 2019; Genç, 2016; Karabıyık & Özkan, 2017; Öz, 2022). Ambiguity tolerance is discussed and studied in the context of ESL, but mainly with a focus on general language learning achievement. Furthermore, studies investigating affective difficulties in skill-specific domains have emerged in recent years (Kondo-Brown, 2006).

Given the importance of ambiguity tolerance in the language learning contexts and the scarcity of studies on ambiguity tolerance among English language learners, comprehensive studies are needed to shed light on the impact of ambiguity tolerance and foreign language anxiety (FLA) on English language learners’ learning process in addition to the possible relationships between these two constructs. Nonetheless, these studies are rare worldwide, and few studies investigating ambiguity tolerance and its associations with various factors in the Turkish context have been found. To this purpose, the purpose of this study was to explore the ambiguity tolerance and anxiety levels of the students in the preparatory classes as they learned a foreign language, as well as to reveal any possible relationships between these variables.

Research Questions

This study sought to answer the following research questions:

1. What is the preparatory class students' level of ambiguity tolerance?
2. What is the preparatory class students' level of anxiety?
3. Does their level of ambiguity tolerance differ significantly in terms of
 - a. their gender,
 - b. language level,
 - c. the medium of instruction?
4. Does the level of anxiety differ significantly in terms of
 - a. their gender,
 - b. language level,
 - c. the medium of instruction?
5. Is there a significant relationship between the level of ambiguity tolerance and the level of anxiety?

2. Literature Review

This section presents ambiguity tolerance and language learning, studies on ambiguity tolerance, foreign language anxiety (FLA) and studies on FLA and the studies conducted on the relationship between ambiguity tolerance and anxiety.

2.1 Ambiguity Tolerance (AT) and Language Learning

Definitions of ambiguity tolerance vary since it is a complex term, and various nuances are interwoven within the concept (Kazamia, 1999). According to Ellis (1994), tolerance of ambiguity is the ability to deal with ambiguous new stimuli without becoming frustrated or resorting to authority. According to Brown (2000), ambiguity tolerance relates to one's cognitive willingness to accept ideas and propositions that contradict their belief system or knowledge structure. It is essential to trace the origins of ambiguity tolerance and its relationship to the language learning environment, clarify its role, and determine how it can influence learners in a language learning situation to comprehend it better (Kamran, 2011). As Brown (2000) postulates, ambiguity tolerance is deemed one of those learning styles emerging in the second research as contributing to successful language acquisition. However, Ely (1989) was the first to apply this content-specific perspective on cognitive factors to study ambiguity tolerance in the context of second language acquisition. Ely (1995) pointed out that uncertainty was a typical attitude among EFL students, and it might limit students' willingness to take risks and hinder their acquisition of new learning methodologies.

Thus, instead of rigorous categorization, ambiguity tolerance allows for indeterminacy. In psychology, ambiguity tolerance is defined as uncertain learning settings with no definite cues (Chu, Lin, Chen, Tsai & Wang, 2015). Budner (1962) classified ambiguous circumstances into three categories based on the nature of the cues or information available in the context: new (i.e., no familiar cues), complex (i.e., too many clues), and contradictory (i.e., conflicting cues). People with a low tolerance for ambiguity perceive these situations as causes of psychological discomfort, anxiety, or threat (Norton, 1975). In contrast, those with a high tolerance for ambiguity are more likely to take risks and accept change (McLain, 1993).

Furthermore, ambiguity tolerance is domain dependent. To put it another way, one person may have a high tolerance for ambiguity in one domain yet a low tolerance for ambiguity in another. According to the findings of a study by Durrheim and Foster (1997), high levels of ambiguity tolerance in one domain may be associated with low levels in another, and ambiguity tolerance in a third domain may be unrelated, which 'questions the utility of personality measure of ambiguity tolerance' (p. 748).

On the other hand, Norton (1975) defines ambiguity intolerance as a predisposition to see or interpret information with imprecise, incomplete, fragmented, multiple, likely, unstructured, uncertain, inconsistent, conflicting, or obscure interpretations as actual or possible causes of psychological discomfort or threat. Furnham and Ribchester (1995) also note that a person with a 'low tolerance of ambiguity experiences stress, reacts prematurely, and avoids ambiguous stimuli. In contrast, 'a person with a high tolerance for ambiguity perceives ambiguous situations=stimuli as desirable, challenging, and interesting and neither denies nor distorts their complexity of incongruity' (p. 179).

Therefore, it is assumed that a person with a low ambiguity tolerance level might feel overwhelmed. In contrast, such uncertainty would not negatively affect a person with a high level of ambiguity. Similarly, McLain (1993) postulates that learners with a high level of ambiguity tolerance are likely to take risks and tolerate change. Besides, moderate second language ambiguity tolerance levels are considered to foster foreign language learning (Ely, 1995). Thus, language learners' success depends on their ability to cope with these sophisticated processes, including the level of ambiguity tolerance encountered during the language learning process (Chiang, 2016).

2.2. *Ambiguity Tolerance and Studies on AT*

A few research findings on ambiguity tolerance in second language learning are available. Li (2004), Liu & Sun (2005), Li (2010), and Liu (2011), for instance, focused mainly on ambiguity tolerance and reading comprehension, and their study demonstrated that students' overall reading comprehension proficiency was found to be positively correlated with their ambiguity tolerance. Additionally, it was found that students with higher levels of reading proficiency and those with lower levels of reading proficiency differed significantly regarding their ambiguity tolerance levels.

In another study, Kamran, Karbalaee and Maftoon (2012) tried to explore whether there was a statistically significant link between ambiguity tolerance (AT) and reading strategy use among Iranian EFL students. 114 intermediate-level EFL learners from Iran Language Institute were given three instruments: *Survey of Reading Strategy* (Mokhtari & Sheorey, 2002), *Second Language Ambiguity Tolerance Scale* (Ely, 1995), and a reading test. Data analysis revealed no statistically significant link between participants' AT and their overall reading strategy utilization.

Atamanova and Bogomaz (2014) also focused on developing communicative competence in non-language majors, with ambiguity tolerance as a defining element of foreign language learning. The researchers aimed to investigate if there was a link between ambiguity tolerance and communication skills in English as a foreign language among engineering students. The outcomes of the study demonstrated that the dimension of human potential impacts the qualitative quality of students' communicative competence growth rather than the quantitative nature. In addition, it was found that other

aspects of the students' potential, such as dedication, challenge, tenacity, present orientation, and self-worth, could play a role in the process under investigation.

In another study, Haishan and Quingshun (2016) aimed to explore if there was a relationship between ambiguity tolerance and preferred perceptual learning strategies among Chinese EFL students. Their findings showed that learners relied heavily on tactile and kinesthetic learning modes more than visual and auditory learning styles and were more sensitive to English ambiguities. Additionally, ambiguity tolerance differed significantly by gender but not in perceptual learning style preferences. The four perceptual learning styles were significantly linked to ambiguity tolerance, with the auditory learning style having a more significant impact than the visual, tactile, and kinesthetic learning styles.

2.3 Foreign Language Anxiety (FLA) and Studies on FLA

Anxiety has piqued educators' interest in the language education setting since it is a significant barrier to foreign language learning that learners must overcome (Wu, 2010; Zheng, 2008). Academic anxiety as a term was coined by Cassady (2010) as a 'unifying framework for the array of fears learners face while in school' (p.1). Scovel (1978) defined anxiety as a construct embodying the feeling of unease and apprehension.

While there appears to be some overlap in terms of the nature and consequences of anxiety, the type of anxiety elicited and experienced by learners in each discipline is, to some extent, unique to that discipline and foreign language anxiety is one such distinct form of anxiety (Tran, 2012). In the literature, there is a substantial number of studies demonstrating that foreign language anxiety is not only an abstract notion researched by theorists or researchers yet a reality for many language learners (e.g., Casado & Dereshiwsy, 2001; Coryell & Clark, 2009; Liu, 2006; Liu & Jackson, 2008; MacIntyre & Gardner, 1994; Von Wörde, 2003).

Foreign language anxiety can lead to a considerable decrease in motivation and a poor mood. Low motivation can result in poor performance, leading to even more anxiety. Anxiety can occur in response to a specific scenario or event (situational or state anxiety). However, it can also be a permanent personality trait, such as a person who is prone to becoming afraid of various things (trait anxiety). In language classrooms, situational or state anxiety, rather than trait anxiety, is the most common type (Oxford, 1992).

2.4 Studies Conducted on the Relationship between AT and Anxiety

Several studies have been conducted on the relationship between ambiguity tolerance and anxiety worldwide. Focusing on ambiguity tolerance and foreign language anxiety, Huang (2006) and Wu (2009) maintained that both ambiguity tolerance and learning anxiety significantly impacted students' English reading comprehension ability and that students' tolerance of the ambiguities was negatively correlated with reading anxiety. Shi (2007) notably proposed that students' ability to handle ambiguity could be improved while their reading abilities were developed.

Zhang & Wang (2006), Zhang (2007), and Yang & Wang (2009) also focused on the relationship between tolerance of ambiguity and students' learning anxiety in various Chinese contexts, and their

research demonstrated that students' ambiguity tolerance was found to be highly associated to their learning anxiety. Students with varying levels of ambiguity tolerance had varying degrees of language learning anxiety. Students with higher levels of ambiguity tolerance and lower levels of anxiety performed better in English language learning than those with lower levels of ambiguity tolerance and higher anxiety levels.

The study by Dewaele and Ip (2013) investigated the relationship between foreign language classroom anxiety and ambiguity tolerance in English of 73 secondary school students in a Hong-Kong context. The data were collected via *Foreign Language Classroom Anxiety Scale* (Horwitz, Horwitz, & Cope, 1986) and *Second Language Tolerance of Ambiguity Scale* (Ely, 1995). The study results showed that foreign language classroom anxiety, second language tolerance of ambiguity and their self-rated English proficiency predicted half of the variance in each other and that students who were more tolerant of second language ambiguity were less worried in their EFL classes and felt more skilled.

In another study, Genç (2016) investigated the association between reading anxiety and ambiguity tolerance of 295 Turkish EFL English learners. The study's findings revealed that participants had a low degree of second language ambiguity tolerance and that the nature of the text and personal characteristics were primarily responsible for their reading anxiety. Furthermore, the study found that ambiguity tolerance in a second language was a powerful predictor of foreign language reading anxiety.

Sadeghi and Soleimani (2016) also investigated the possible relationships among shyness, anxiety, and ambiguity tolerance in learners and language learning methodologies. The study included 132 advanced and pre-intermediate female and male students between the ages of 16 and 18 from an Iranian language institute. A one-way between-groups multivariate analysis of variance revealed that the shyest, most worried, and least ambiguity-tolerant students exploited more strategies when learning a foreign language. On the other hand, the study also demonstrated that the most ambiguity-tolerant learners were the least shy and apprehensive, and vice versa.

It is evident from the literature review that both ambiguity tolerance and foreign language classroom anxiety have significant roles to play in language learning environments. Language teachers must be aware of these constructs. To this purpose, this study intends to investigate whether there are any differences between these constructs in connection to various variables and to emphasize and determine the relationship between ambiguity tolerance and classroom anxiety when learning a foreign language.

3. Methodology

This section presents detailed information about the research design, sampling, and data collection instruments, and the researchers explain how the data were analyzed.

3.1 Research Design

This is a descriptive study utilizing the relational survey method. Correlational research involves gathering data to establish the degree to which two or more variables are related (Fraenkel, Norman & Hyun, 2012). A correlational design is appropriate when the aim is to reveal the nature of the relationship

between variables that cannot be manipulated (Schoch, 2020). Through this design, opinions, attitudes, or behaviors of a particular group of participants on a given subject can be defined better.

3.2 Participants

The data were collected from the preparatory class students studying at a reputable state university in the Marmara region during the 2017-2018 academic year. One hundred thirty-nine students took part in the study. The participants' ages ranged from 17-21. There were 60 females and 75 males.

Table 1

Demographic Information about the Participants

Variables		f	%
Gender	<i>Female</i>	64	46
	<i>Male</i>	75	54
Language level	<i>Beginner</i>	103	74
	<i>Intermediate</i>	37	26
Medium of Instruction	<i>English</i>	77	55
	<i>Turkish</i>	62	45
Total		139	100

The study sample was determined with the stratified cluster sampling technique. The scales were given to at least the 25% of the population, considering the ratios in terms of the students' gender, language level, and medium of instruction in their future undergraduate programs. The participants provided the researchers with informed consent forms, and they participated in the study voluntarily.

3.3 Data Collection Instruments

Data were collected via *The Second Language Ambiguity Tolerance Scale* (SLATS) developed by Ely (1995) and *The Foreign Language Classroom Anxiety Scale* developed by Horwitz, Horwitz, and Cope (1986). The two scales were administered consecutively at one session. The first part of the scales included a demographic information section, which required information about the participants like their gender, language level, and the medium of instruction.

The Second Language Ambiguity Tolerance Scale consists of 12 items all ranging from 1= I completely disagree to 4= completely agree. Some items from the scale are as follows:

1. When I'm reading something in English, I feel impatient when I don't totally understand the meaning.
2. It bothers me that I don't understand everything the teacher says in English.
4. It is frustrating that sometimes I don't understand completely some English grammar.
8. When I'm writing in English, I don't like the fact that I can't say exactly what I want.
- ...
12. One thing I don't like about reading in English is having to guess what the meaning is.

The data were collected through the Turkish translation of the original scale (SLATS), whose Cronbach's Alpha internal consistency reliability was found at .866. Language instructors were asked to check the translated version of the scale regarding the language used and its comprehensibility to check the validity

and reliability of the scale. Upon completing the necessary corrections, Kural (2014) piloted the scale on 48 students to measure reliability, which was found to be reliable ($\alpha = .866$).

Secondly, 33-item *The Foreign Language Classroom Anxiety Scale* uses a 5-point Likert scale ranging from a 5-point Likert scale ranging from “1= I completely disagree to 5= I completely agree.” The lowest score to be taken from the scale is 33, and the highest score is 165. The higher the score obtained from the scale, the higher the students’ anxiety levels. In order to increase reliability, reverse items were included in the scale. Students’ average score of foreign language anxiety is obtained by dividing the total scores obtained by the students that correspond to 33 items on the scale. In the validity and reliability analyses of the original study (Horwitz et al., 1986), in which more than 300 participants participated, the internal consistency of the scale was found to be 0.933, and the correlation coefficient was found to be 0.83, $P < 0.001$ (Sarigül, 2000). Some of the items of *the Foreign Language Classroom Anxiety Scale* are demonstrated below:

1. I have never been too confident about teaching a foreign language I can't.
2. I don't worry about mistake in foreign language.
3. I tremble with excitement when it is my turn to speak the target language in a conversation.
15. I get upset when I don't understand what mistake the teacher corrected.
23. I feel other students' foreign language skills are always better than me when talking.
32. I would probably feel more comfortable if I find myself talking to native speakers
- ...

3.4 Data Analysis

The data were analyzed with SPSS 22 packet program. First, the data distribution was examined because normality is a requirement for performing specific statistical tests, and normal distribution is an underlying assumption for doing parametric testing (Mishra, Pandey, Singh, Gupa, Sahu & Keshri, 2019).

For this study, One-Sample Kolmogorov-Smirnov Test was run to test the reliability of both scales and the results of the tests are shown in Table 2 [.090 for the Second Language Ambiguity Tolerance Scale (SLATS) and .064 for the Second Language Ambiguity Tolerance Scale, $p < 0.001$]. Kolmogorov-Smirnov test was exploited since it is more appropriate when the sample size is larger than 50 (139 samples) (Mishra et al., 2019). The results of the normality tests are presented in Table 2 below.

Table 2

Results for One-Sample Kolmogorov-Smirnov Test

Values		Second Language Ambiguity Tolerance Scale (SLATS)	Foreign Language Classroom Anxiety Scale
N		139	139
Normal Parameters	\bar{x}	2.28	2.82
	SS	.601	.496
Kolmogorov-Smirnov Z		.090	.064
p		.007	.200*

$p > .05$

As can be seen in Table 2, the analysis of *the Second Language Ambiguity Tolerance Scale* (SLATS) did not show a normal distribution. Accordingly, non-parametric tests were used for this instrument. On the other hand, the normality test revealed a normal distribution for *the Foreign Language Classroom Anxiety Scale*; thus, parametric tests were used for this dimension. In addition to frequency and percentage calculations, statistical tests like t-test, One-way ANOVA, and Spearman Brown test were utilized.

4. Findings, Results and Discussion

4.1 Findings regarding the preparatory class students' level of ambiguity tolerance

Descriptive statistics were used to identify the level of ambiguity tolerance of the participants. Before agreeing or disagreeing with the items in the scale, the participants were informed that the SLATS sought their responses to statements reflecting intolerance of ambiguity in some items. Hence, disagreeing with something would be a sign of tolerance. Therefore, a mean of 3.00, which meant the anchor for “not sure,” could be utilized to define the line between tolerance and intolerance when interpreting how tolerant the participants were. Depending on how close they were to the mean score of 3.00, values above or below this boundary reflected lesser tolerance levels and vice versa.

Table 3

Descriptive statistics for the Second Language Ambiguity Tolerance Scale (SLATS)

Variable	N	Mean	SD
Second Language Ambiguity Tolerance Scale (SLATS)	139	2.285	.601
When I'm reading something in English, I feel impatient when I don't totally understand the meaning	139	2.561	.909
It bothers me that I don't understand everything the teacher says in English	139	2.438	1.015
When I write English compositions, I don't like it when I can't express my ideas exactly	139	1.942	.922
It is frustrating that sometimes I don't understand completely some English grammar	139	2.223	.901
I don't like the feeling that my English pronunciation is not quite correct	139	2.194	.984
I don't enjoy reading something in English that takes a while to figure out completely	139	2.410	.907
It bothers me that even though I study English grammar some of it is hard to use in speaking and writing	139	2.374	.895
When I'm writing in English, I don't like the fact that I can't say exactly what I want	139	1.942	.874
It bothers me when the teacher uses an English word I don't know	139	2.741	1.085
When I'm speaking in English, I feel uncomfortable if I can't communicate my idea clearly.	139	1.827	.741
I don't like the fact that sometimes I can't find English words that mean the same as some words in my own language.	139	2.230	.911
One thing I don't like about reading in English is having to guess what the meaning is.	139	2.539	.965

As shown in Table 3, the participants reported an ambiguity tolerance level slightly above the mid-point (the range is 4), (\bar{x} = 2.28), which suggests that the overall ambiguity tolerance level of the participants is moderately high. They are predisposed to the higher end of the continuum and enjoy a slightly moderate level of ambiguity tolerance. The total score of 2.28 should not lead to stereotyping, however, as people may have varying levels of tolerance for ambiguity: low, moderate, or high tolerance, as revealed by an item-by-item analysis of the scale, which shows a mean range between 1.827 and 2.741 (Ehrman, 1999; El-Koumy, 2000; Ely; 1995).

Based on SLATS, the participants' average tolerance for ambiguity score extended beyond the mid-point of the scoring continuum in most items, item one (M= 2.56, S.D. =.90), item two (M= 2.43, S.D. =1.01), item four (M=2.22, S.D. =.90), item five (M=2.19, S.D. =.98), item six (M=2.41, S.D. =.907), item seven (M=2.37, S.D. =.89), item nine (M=2.74, S.D. =1.08), item eleven (M=2.23, S.D. =.91), and item twelve (M=2.53, S.D. =.96). On the other hand, three items with the lowest means in terms of tolerance for ambiguity can be found as shown on the table. They are item three (M=1.94, S.D. =.92), item eight (M=1.94, S.D. =.87), and item ten (M=1.82, S.D. =.74). According to SLATS, all these three items are related to productive skills. Two of them are particular about the writing skill, which suggests that the participants scored the lowest on average for tolerating ambiguity in productive skills, mainly writing, and speaking. The results of this study are also corroborated by those of Kazamia (1999), who investigated the ambiguity tolerance of Greek English language learners as measured by the SLATS. Like the results of this study, Kazamia (1999) also found out that Greek participants showed a lesser tolerance for ambiguity in speaking and writing when compared to reading.

The level of tolerance noted in this study demonstrates that, on average, the participants do not display extreme tolerance or intolerance of ambiguity, accept without question, or be constrained by insufficient linguistic information. This gives support to Başöz (2015), who also maintained that the participants in her study did not exhibit high tolerance or intolerance of ambiguity, neither did they welcome others without asking questions nor did they become hampered by a lack of linguistic knowledge, like the findings of the present study.

4.2 Findings regarding the preparatory class students' level of anxiety

To demonstrate the participants' anxiety level, descriptive statistics were utilized, and the participants reported a level of 2.823 below the mid-point on a range of 5 (M=2.82, SD=.49), which indicates that the anxiety level of the participants is slightly low. In other words, they tend to favor a slightly reduced level of anxiety and are predisposed to the lower end of the continuum, as revealed by the descriptive statistics.

Table 4

Descriptive statistics for the Foreign Language Classroom Anxiety Scale (FLCAS)

Variable	N	Mean	SD
Foreign Language Classroom Anxiety Scale	139	2.823	.496
I never feel quite sure of myself when I am speaking in my foreign language class.	139	3.194	1.141
I do not worry about making mistakes in language class.	139	3.043	1.232
I tremble when I know that I'm going to be called on in language class.	139	2.575	1.290

It frightens me when I do not understand what the teacher is saying in foreign language.	139	2.964	1.259
It wouldn't bother me at all to take more foreign language classes	139	3.000	1.532
During language class, I find myself thinking about things that have nothing to do with the course.	139	2.726	1.048
I keep thinking that the other students are better at language than I am.	139	2.935	1.240
I am usually at ease during my tests in my language class.	139	2.597	1.255
I start to panic when I have to speak without preparation in language class.	139	3.302	1.294
It does not embarrass me to volunteer answers in English in my English class.	139	3.978	1.248
Even if I am well prepared for my German class, I feel anxious about it.	139	3.050	1.241
I feel confident when I speak German in my German class.	139	2.460	1.211
I worry about the consequences of failing my foreign language class.	139	2.158	1.168
I don't understand why some people get so upset over foreign language class.	139	3.028	1.312
In language class, I can get so nervous I forget things I know.	139	3.158	1.336
It embarrasses me to volunteer answers in my language class.	139	2.654	1.289
I would not be nervous speaking the foreign language with native speakers.	139	2.338	1.321
I get upset when I don't understand what the teacher is correcting.	139	2.971	1.185
Even if I am well prepared for language class, I feel anxious about it	139	2.345	1.196
I often feel like not going to my language class.	139	2.338	1.195
I feel confident when I speak in foreign language class.	139	2.107	.990
I am afraid that my language teacher is ready to correct every mistake I make.	139	3.014	1.285
I can feel my heart pounding when I'm going to be called on in language class.	139	2.733	1.282
The more I study for a language test, the more confused I get.	139	2.446	1.222
I don't feel pressure to prepare very well for language class.	139	2.791	1.406
I always feel that the other students speak the foreign language better than I do.	139	2.661	1.327
I feel very self-conscious about speaking the foreign language in front of other students.	139	2.856	1.207
Language class moves so quickly I worry about getting left behind.	139	2.899	1.193
I feel more tense and nervous in my language class than in my other classes.	139	2.928	1.322
I get nervous and confused when I am speaking in my language class.	139	3.287	1.193
When I'm on my way to language class, I feel very sure and relaxed.	139	2.410	1.255
I get nervous when I don't understand every word the language teacher says.	139	3.122	1.282
I feel overwhelmed by the number of rules you have to learn to speak a foreign language.	139	3.100	1.223
I am afraid that the other students will laugh at me when I speak	139	2.648	.615

the foreign language.			
I would probably feel comfortable around native speakers of the foreign language.	139	2.285	.601
I get nervous when the language teacher asks questions which I haven't prepared in advance.	139	2.823	.496

As can be seen from Table 4, an item-by-item analysis of the scale indicated a mean range between 1 and 5, and the participants reported a foreign language classroom anxiety level that is a little below the mid-point ($\bar{x}= 2.823$), on a mean range between 3.978 and 2.107, which suggests that the overall anxiety level of the participants is moderately low.

4.3 Findings related to if the preparatory class students' level of ambiguity tolerance differs significantly in terms of their gender, language level, and the medium of instruction

In the process of learning a language, gender is connected to a variety of emotive concepts. Further, to identify any differences regarding language level and medium of instruction as well as gender, Mann Whitney-U test was performed for each construct.

Table 5
Results for Mann Whitney-U Test (SLATS)

Variable	Groups	N	Mean Rank	Sum of Ranks	U	z	p
Gender	Female	60	61.23	3673.50	1843.50	-1.80	.07
	Male	75	73.42	5506.50			
	Total	135					
Language Level	Beginner	102	72.17	7361.50	1563.50	-1.32	.18
	Intermediate	36	61.93	2229.50			
	Total	138					
Medium of Instruction	English	70	65.87	4611.00	2126.00	-.20	.84
	Turkish	62	67.21	4167.00			
	Total	132					

$p < .05$

A careful reading of the analysis in Table 5 shows that the participants' level of ambiguity tolerance does not differ significantly in terms of their gender ($p=.07$). To the best of our knowledge, no research has been conducted specifically on gender differences in ambiguity tolerance. However, the topic has been covered in studies from the affective and cognitive realms. Fukuchi and Sakamoto (2005), for example, found that men are less tolerant than women. More men than women reported discomfort when they did not fully comprehend grammar or felt uncomfortable when they could not find English words that signified the same as the Japanese ones with which they are accustomed. However, the researchers' findings were not conclusive. In addition, Erten and Zehir-Topkaya (2009) indicated that female participants appeared to be less tolerant of ambiguity than their male counterparts.

Moreover, the participants' level of ambiguity tolerance did not reveal a significant difference in their language levels ($p=.18$) and the medium of instruction ($p=.84$) within the body of this study, although Erten and Zehir-Topkaya (2009) demonstrated that as one's level of English proficiency increased, so did

one's tolerance for ambiguity. They justified their finding by stating that this was expected since students become more prepared to deal with new information as they improve their second language.

Besides, Elaldi (2016) tried to explore the anxiety levels of students majoring in English Language and Literature Department in a Turkish context. It was also intended to investigate the impact of gender on students' anxiety levels related to learning a foreign language. In parallel to the current study, anxiety levels were determined to be modest in preparatory classes and all levels, including the fourth grade. That is, there were no significant differences regarding language level for the first four grades (including preparatory classes) although the seniors' anxiety levels were slightly higher. However, it was found that males were shown to have higher levels of foreign language anxiety than their female counterparts, which is not congruent with the results of the present study. This might derive from the fact that as students progress in their learning careers, they may have more anxiety since they have better study skills and worry more about their future as they prepare for graduation. On the other hand, this study showed that preparatory students might have a comparatively lower degree of anxiety for the above reasons.

4.4 Findings Regarding if the preparatory class students' level of anxiety differs significantly in terms of their gender, language level, and the medium of instruction

Table 6 also demonstrates the findings that the participants' level of anxiety does not differ concerning their gender (.231), language level (.502) or medium of instruction (p=.169).

Table 6
Results for T test (Foreign Language Classroom Anxiety Scale)

Variables	Groups	n	\bar{X}	sd	t test		
					t	df	p
Gender	Male	60	2.87	.399	1.204	133	.231
	Female	75	2.77	.567			
Language Level	Beginner	102	2.84	.502	.673	136	.502
	Intermediate	36	2.77	.486			
Medium of instruction	English	70	2.76	.542	-1.384	130	.169
	Turkish	62	2.88	.446			

p<.05

In terms of gender, the results of the current study do not comply with Park and French's (2013) study in which The Foreign Language Classroom Anxiety Scale (FLCAS) was used to assess anxiety, and L2 performance was determined by the final grade of 948 university students studying English in Korea. Despite their finding that females reported higher anxiety levels than males, the participants in the present study did not report a significant difference by their gender concerning their foreign language classroom anxiety. In another study (Das, Halder & Mishra, 2014), it was also found that male and female students

differed significantly in terms of their academic anxiety, and females were more worried than males, notwithstanding the low significance level (0.05).

4.5 Findings related to if there is a significant relationship between the level of ambiguity tolerance and the level of anxiety of the participants

As seen from Table 7, the only significant difference was observed between the participants' level of ambiguity tolerance and their anxiety levels. This finding demonstrates that as students' second language ambiguity tolerance level increases, their level of foreign language anxiety decreases since there is a negative correlation between the variables ($r=-.45$). This is to be accepted as students feeling less anxious may be more tolerant of ambiguities when learning and vice versa.

Table 7

The results of the Pearson Correlation Test

	<i>Second Language Ambiguity Tolerance Scale</i>		
	N	r	p
<i>Foreign Language Classroom Anxiety Scale</i>	139	-.45	.00*

$p<.05$

In this regard, the result of the current study is parallel to the results of Zhang and Wang (2006), Zhang (2007), and Yang and Wang's (2009) research in that students' tolerance of ambiguity is closely related to their learning anxieties. That is students with different ambiguity levels varied in their language learning anxiety. Students with higher levels of ambiguity and lower anxiety levels performed better in English language learning than those with lower levels of ambiguity and higher anxiety levels.

5. Conclusions Limitations and Suggestions for Further Research

The purpose of this study was to acquire a better understanding of Turkish EFL learners' second language ambiguity tolerance and anxiety levels. More and more scholars are becoming interested in tolerance of ambiguity and class anxiety. The study of tolerance of ambiguity is a relatively undeveloped field, although appearing to be of no less relevance than other factors like empathy, self-esteem, and motivation that have been extensively explored and researched by scholars and theorists. On the other hand, foreign language anxiety has been highly investigated and documented in the literature. Based on the research findings, it is advised that ambiguity tolerance be encouraged and supported during the study of foreign languages to give EFL students the abilities and learning philosophies necessary for them to function successfully in a foreign language. To this end, future research should identify and characterize ambiguity tolerance or intolerance behavior patterns as well as their underlying causes and developmental processes to achieve this goal.

Even though the majority of the participants favored a somewhat lower degree of anxiety within the body of this research, further research should specifically investigate debilitating anxiety and the relationship between ambiguity tolerance and anxiety in EFL contexts. Further longitudinal research could therefore be conducted using other samples and addressing certain associated variables to investigate the links between ambiguity tolerance, anxiety, and foreign language achievement. Besides, since no significant

differences were found regarding gender, level or medium of instruction, it may be advised that the study be replicated in diverse cultural contexts with learners of varying ages and skill levels.

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