Anxiety in Learning German as a Foreign Language: Its Association with Learners Variables

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Abstract

This study aims to investigate the foreign language anxiety (FLA) level among learners of German as a foreign language and discover the relationship between FLA and students' variables that are gender, year of study, achievement in German classes, experience staying in Germany for more than six months, weekly contact hours, and course load of the term. The study used a quantitative research method using a survey approach. The Foreign Language Classroom Anxiety Scale (FLCAS), developed by Horwitz (1986), was administered to 246 German language learners in Jordan. Descriptive statistics, Chi-Squared, and univariate and multivariate ordinal logistic regression analysis were used to analyse the collected data then fitted on a regression model. The results suggest that the participants' level of FLA was on a moderate level, with the anxiety of the German Class as the most dominant aspect and Text Anxiety as the least aspect. The gender of the participants and their weekly contact hours of the German language did not determine their level of anxiety in learning German as a foreign language. The variables that significantly affected the participants' language anxiety, whether high or low anxiety, were the year of study, the German-language assessment score, staying for more than six months in Germany studying or field training, and the total number of credit hours registered for the term. It is recommended that language instructors create a positive and friendly attitude towards students to reduce language anxiety in the classroom.

Keywords: Foreign language anxiety, FLCAS, learners variables, language learning, German language.

القلق في تعلم اللغة الألمانية كلغة أجنبية: ارتباطها بمتغيرات المتعلمين

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ملخّص

بحثت الدراسة في مستوى القلق بشأن اللغة الأجنبية بين متعلمي اللغة الألمانية كلغة أجنبية. استكشفت العلاقة بين قلق اللغة الأجنبية ومتغيرات الطلاب التي تشمل جنس الطالب، وسنة الدراسة، والإنجاز في فصول اللغة الألمانية، وتجربة الإقامة في ألمانيا لأكثر من ستة أشهر، وساعات الاتصال الأسبوعية، وعبء الفصل الدراسي. مقياس القلق في صف دراسي اللغة الأجنبية، الذي طوره هورويتز (1986)، تم إدارته إلى 246 من متعلمي اللغة الألمانية في الأردن. تم استخدام الإحصاء الوصفي، Chi-Squared، وتحليل الانحدار اللوجستي الترتيبي أحادي المتغير ومتعدد المتغيرات لتحليل البيانات التي تم جمعها ثم تم تركيبها على نموذج الانحدار. كشفت النتائج أن مستوى المشاركين في FLA، بشكل عام، كان معتدلاً. كانت المتغيرات التي لم يكن لها تأثير كبير على القلق من اللغة الألمانية هي جنس الطالب وساعات الاتصال الأسبوعية. في حين أن المتغيرات التي أثرت على القلق اللغوي كانت سنة الدراسة، ودرجة تقييم اللغة الألمانية، والبقاء لأكثر من ستة أشهر في ألمانيا إما دراسة أو تدريب ميداني، وإجمالي عدد الساعات المعتمدة المسجلة للفصل الدراسي. كان قلق الطلبة الألمانية هو المصدر الأعلى تصنيفًا لـ FLCAS، وكان Text Anxiety هو المصدر الأقل تصنيفًا لـ FLCAS أخيرًا، تم اقتراح بعض التوصيات لمدرسي اللغة لتقليل القلق في بيئات الفصل، ومساعدة الطلاب على التغلب على قلق التحدث، وتجنب استخدام التقييم السلبي للطلاب.

الكلمات الدالة: قلق اللغة الأجنبية، متغيرات المتعلمين، تعلم اللغة، اللغة الألمانية.

1. Introduction

Second or foreign language learning is connected with emotions compared to native language acquisition (Michiko & Yoshitaka, 2021). The most commonly researched emotion in the context of second or foreign language learning is anxiety (Dewaele & MacIntyre, 2014). Anxiety is the response of individuals when there is a demand exceeding their resources for handling it (Irving, Dobkin & Park, 2009). Also, Morgan (2020) states that anxiety is an emotion with stressed thoughts and is marked by physiological and psychological symptoms. The physiological signs of anxiety can be increasing in pulse rate, sweating, cold fingers, insomnia, hyperventilation, and dyspepsia (Morgan, 2020). The psychological symptoms of anxiety can be agitation, problems focusing, and derealization (Irving, Dobkin & Park, 2009; Morgan, 2020).

Language researchers have had a growing interest in examining the psychological factors affecting foreign language learning due to its extreme effects on learners (Horwitz, 2008; Hossein et al., 2020; Jin, Zhang, & MacIntyre, 2020; Liu & Huang, 2011; Olivares-Cuhat, 2010). The term foreign language anxiety (FLA) has been considered in language anxiety research for a long time (MacIntyre, 2017). MacIntyre (1999) conceptualized foreign language anxiety (FLA) as "the worry and negative emotional reaction aroused when learning or using a second language" (p.27). FLA can interfere in all language learning stages input, process, and output (Young, 1991). From a contextual point of view, it is essential to comprehend the sources and effects of FLA to facilitate the language learning and development processes.

This study is to fill the gap in German foreign language anxiety research in the Jordanian context. In better understanding the foreign language anxiety of German language learners in Jordan, it is vital to examine the causes of German language anxiety and its relation to learners' variables as gender, year of study, academic achievement in German classes, experience staying in Germany for more than six months, weekly contact hours, and course load of the term.

2. Literature Review

With hindsight at the early research on language anxiety, the so-called early 'Confounded Approach' existed before introducing the term foreign language anxiety in the field of foreign language learning. This approach produced perplexing findings as the concept of anxiety was not precisely related to foreign language learning and the discrepancy of measuring this concept (MacIntyre, 2017). Horwitz, Horwitz, and Cope's (1986) identification of "Foreign Language Anxiety" (FLA) (p.27) terminated this approach. Foreign or second language anxiety is associated with the negative emotional reactions of learners towards the learned language (Horwitz, 2001).

Regarding the foreign language classroom anxiety (FLCA), Horwitz et al. (1986) defined FLCA as "a distinct complex of self-perceptions, beliefs, feelings, and behaviour related to classroom language learning arising from the uniqueness of the language learning process" (p.125). Their definition proclaimed the birth of the 'Specialized Approach' of the FLCA research that caused foreign language anxiety research to focus on FLCA (MacIntyre, 2017). This transition in foreign language anxiety research helped construct the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al. (1986). This instrument with 33 items reflects the experience of anxiety-provoking aspects of second or foreign language learners in a classroom learning context. The FLCAS has been extensively implemented or modified in various research of FLA contexts since it has high validity and reliability (see Dewaele & Al-Saraj, 2015; Dewaele & MacIntyre, 2014; Horwitz, 2017; Liu, 2006; Marcos-Llinás & Garau, 2009). In general, studies of foreign or second language learning have revealed that anxiety significantly exists in second and foreign language classrooms and negatively affects language learning. These studies show that low-anxious students tend to learn better and participate in oral communication activities in the classes, while high-anxious students are reluctant to engage in the class activities (e.g., Alshahrani & Alshahrani, 2015; Dewaele, 2019; Horwitz, 2001; Tang, 2005; Zheng & Cheng, 2018). Horwitz (2017) clarified that foreign language learners could experience anxiety "because of distress at their inability to be themselves and to connect authentically with other people through the limitation of the new language" (p. 41).

The most well-known psychological anxiety types are trait anxiety and state anxiety (Horwitz, 2000). According to MacIntyre and Gardner (1989), trait anxiety is identified as being anxious in various situations, whereas state anxiety occurs in specific circumstances. Another type of anxiety stated by Scovel (1978) is facilitating and debilitating anxiety. Facilitating anxiety

encourages language learners to succeed in the new learning task and to be victorious over the challenge of language learning. On the other hand, debilitating anxiety motivates language learners to keep away from the new learning tasks to escape anxiety feelings.

Researchers have tried to detect the sources of foreign language anxiety that hinder language learning (Gregersen & Horwitz, 2002; Liu, 2006; Young, 1991). Three components of foreign language anxiety have been identified from the definition of FLCA by Horwitz et al. (1986) as the sources or causes of foreign language anxiety. The first component is communication apprehension, which is defined by Horwitz et al. (1986) as "a type of shyness characterized by fear of or anxiety about communicating with people" (p. 127). Communication apprehension emerges when students lack communication skills even though they have ideas, it is also caused when language learners encounter difficulty understanding others. The second component is test anxiety which Aydin (2008) describes as "fear of failing in tests and an unpleasant experience held either consciously or unconsciously by learners in many situations" (p. 423). The fear of negative evaluation is the third component that Horwitz et al. (1986) explained as foreign language learners' concern about being evaluated by other people, and they expect negative evaluation by language teachers, peers, and others.

Jackson (2002) identified sources of FLA that ascend from situational causes (course activities, course level, and teacher behaviour), while Dewaele (2002) referred to learners' variables (age, gender, personality, learning styles) as the sources of FLA. Other sources of FLA categorized by Zhang and Zhong (2012) are "learner-induced, classroom-related, skill-specific, and some society-imposed depending on different contexts" (p.27). Learner-induced anxiety is caused by the flawed and non-realistic beliefs of foreign language learners about language learning. They expect to achieve high standards of the target language as the level of native speakers, but they are scared not to achieve these standards (Zhang & Zhong, 2012). Regarding anxiety related to the class, it is attributed to language teachers, classmates, and classroom practices (Zhang &Zhong, 2012). Language teachers who do not apply communicative teaching strategies in their classes as they fear losing control in the classroom and frequently correct students may be a factor in learner language anxiety (Young, 1991). Language learners experience anxiety when they fear negative evaluation of their classmates, and they are scared to participate in class activities (Dewaele, 2019; Jones, 2004; Young, 1991).

Empirical findings have revealed several negative impacts of foreign language anxiety on foreign language learners at academic, cognitive, physiological, and social levels (MacIntyre, 2017). FLA has been correlated negatively with the academic achievement of learners indicated by their course grades, language tests (Awan et al., 2010; Horwitz, 2017; MacIntyre, 2017, Marcos-Llinás & Garau, 2009; Xiao & Wong, 2014). FLA among foreign language learners can harm learners' language proficiency measured by final course grades, self-assessments, objective language tests, and GPAs (Aida, 1994; Chasten, 1975). According to Gregersen et al. (2014), anxious learners are likely to perform worse in language tests than their peers with low anxiety as they use less effective learning strategies. Language learners who experience a high level of anxiety affect their willingness to communicate in the language classroom because they lack self-confidence, unable to take part in in-class activities, or use avoidance strategies (Castillejo, 2019; Dewaele, 2019; Gregerson & Horwitz, 2003; Horwitz et al., 1986; Horwitz, 2001; Liu, 2006). Besides, learners who experience anxiety fear negative evaluation of their teachers and counterparts (Dewaele, 2019). Anxious learners exhibited various physiological symptoms that include heart palpitations, tension, trembling, and sweating (Gregersen et al., 2014; Horwitz et al., 1986).

Foreign language anxiety has become one of the most highly investigated topics in foreign language research among language learners of diverse target languages in a variety of educational settings (see Aida, 1994; Alshahrani, 2016; Arnaiz & Guillén, 2012; Djafri & Wimbarti, 2018; Elaldi, 2016; Hakim, 2019; Liu, 2006; Piechurska-Kuciel, 2008; Rabadi & Rabadi, 2020; Young, 1991). Due to the lack of studies that scrutinize FLA or FLCA among Jordanian or Arab learners of the German language, this study sought to take a step to examine FLA among Jordanian learners of German as a foreign language and its relation to learners' variables.

2. Purpose of the Study and Research Questions

Learners of languages other than English as French, German, Spanish, and Russian are increasing, nonetheless research on the anxiety of these languages is scarce. The focus of this study was first to examine the level of FLA among Jordanian

students of German as a foreign language. Second the study sought to inspect the relationship between German language anxiety and learners' variables. The following research questions were addressed:

- RQ1. What are the levels of foreign language anxiety among learners of German as a foreign language?

- RQ2. Is there a relationship between the participants' foreign language anxiety and their internal variables (gender, year of study, achievement in German classes, experience staying in Germany for more than six months, weekly contact hours, and course load of the term.)?

- RQ3. What are the main sources of foreign language anxiety among learners of German as a foreign language?

3.Methodology

3.1. Participants

The participants of this study consisted of 246 (90% female, 10% male) German foreign language learners in Jordan. They were undergraduate students majoring in the German Language from different Jordanian universities. They were fifth (11%), fourth (30%), third (26%), and second (33%) year students. They aged between 18–25 years old (M =21.35). The participants were homogenous in terms of their mother tongue (Arabic), socio-economic and educational background.

3.2. Survey and Data Collection

To assess the foreign language anxiety levels of the participants, the Foreign Language Classroom Anxiety Scale (FLCAS), designed by Horwitz et al. (1986), was employed. The FLCAS is the most frequently used survey to gauge the foreign language anxiety of language learners (e.g., Arnaiz & Guillen, 2012; Awan et al., 2010; Jee, 2016). The FLCAS includes 33 items on a 5-point Likert- type scale with answers ranging from *strongly agree* to *strongly disagree*. The total scores of the survey ranged from the lowest score of 33 to the highest score of 165. The higher the score, the more anxious the student is (Horwitz et al. 1986). The items of the FLCAS assess four types of performance anxieties attributed to communicative anxiety (items 1, 9, 14, 18, 24, 27, 29, and 32), test anxiety (items 2, 8, 10, 11, 19, and 21), fear of negative evaluation (items 3, 7, 13, 15, 20, 23, 25, 31 and 33), and anxiety of language class (German class) (4, 5, 6, 11, 12, 16, 17, 22, 26, and 30). The cumulative scores of the FLCAS scale results in three levels of foreign language anxiety, which are high, moderate, and low.

Concerning the validity and reliability of the FLCAS, the internal reliability of the FLCAS, the Cronbach's alpha coefficient was reported by researchers ranging from 0.92 to 0.96 (see Bosmans & Hurd, 2016; Horwitz, 2001; Horwitz et al., 1986; Jee, 2016; Mahmood & Iqbal, 2010; Marcos-Llinás & Garau, 2009). The Cronbach's alpha for the FLCAS used in this study was ($\alpha = 0.89$), demonstrating a high level of reliability. Therefore, the FLCAS was chosen as the data collection tool in this study.

The survey was composed of two sections. The first section was for collecting the demographic data of the participants such as age, gender, year of study, mother tongue, total credit hours registered during the term of data collection (course load), a total of hours studying German per week, and if they stayed in Germany for more than six months (experience abroad). The second section included the Foreign Language Classroom Anxiety Scale (FLCAS). The participants took the FLCAS during the first four weeks of the second term of the academic year 2019-2020 while attending their regular classes. They were instructed to answer honestly as their answers would be kept confidential and would not affect them in any way. They completed the survey in about 20 minutes.

The German language achievement of the participants was the final numerical course grades which assessed their overall ability in German language use. Final test grades are regarded as a suitable tool for measuring language performance of learners as several studies have used them to measure language performance (e.g., Aida, 1994; Bailey, 1983; Comeau, 1992; Horwitz, 2017; Mahmood & Iqbal, 2010; Marcos-Llinás & Garau, 2009). The grading scale of the final test grades is a whole number scale, with the lowest mark being 35 to represent an academic zero and 100 represents a full mark.

3.2. Data Analysis

All statistical analysis was conducted using STATA 15. (Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC; USA) to analyze the quantitative data obtained from the FLCAS. The associations between the observed variables and the FLCAS scale were evaluated using the Chi-Square test with statistically significant results defined as P-value. A linear regression analysis was used to assess the association between different factors and the degree of anxiety. Variables were first evaluated using univariate ordinal logistic regression analysis. Then, significant variables were fitted into the final linear regression model.

4. Results

4.1. FLA among Learners of German as a Foreign Language and its Sources

Table 1 presents the descriptive statistics of the participants' responses to the items of the FLCAS and the four types of performance anxieties through the means and standard deviations for each item. The four types listed according to their scores were anxiety of language class (German class) had the highest score of (3.19 ± .341), communicative anxiety (3.10 ± .411) scored second, followed by fear of negative evaluation (3.00 ± .782), and the least was test anxiety which had a score of (2.98 ± .495). Overall, a total score of (3.08 ± 1.16) showed moderate anxiety mainly due to anxiety of language class and communicative anxiety-related factors.

Table 1. Means and Standard Deviations of Sources of FLA Reported by Participants in Learning German (N = 246)

Domain	Item	FLCAS Question	Mean ± SD
Anxiety of Language Class (German Class)			3.19 ± .341
	4	It frightens me when I don't understand what the teacher is saying in the foreign language.	3.18 ± 1.13
	5	It wouldn't bother me at all to take more foreign language classes.	2.95 ± 1.04
	6	During language class, I find myself thinking about things that have nothing to do with the course	3.18 ± 1.22
	11	I don't understand why some people get so upset over foreign language classes.	3.18 ± 1.24
	12	In language class, I can get so nervous I forget things I know.	3.43*± 1.01
	16	Even if I am well prepared for language class, I feel anxious about it.	2.55**± .990
	17	I often feel like not going to my language class.	2.80 ± 1.32
	22	I don't feel pressure to prepare very well for language class.	3.25 ± 1.15
	26	I feel more tense and nervous in my language class than in my other classes.	2.80 ± 1.38
	28	When I'm on my way to language class, I feel very sure and relaxed.	3.40 ± 1.13
	30	I feel overwhelmed by the number of rules you have to learn to speak a foreign language.	3.40 ± 1.17
Communicative Anxiety			3.10 ± .411
	1	I never feel quite sure of myself when I am speaking in my foreign language class.	3.32 ± 1.10

Domain	Item	FLCAS Question	Mean ± SD
	9	I would not be nervous speaking the foreign language with native speakers.	3.20 ± 1.07
	14	I would not be nervous speaking the foreign language with native speakers.	3.13 ± 1.22
	18	I feel confident when I speak in foreign language class.	3.05 ± 1.08
	24	I feel very self-conscious about speaking the foreign language in front of other students.	3.45*± 1.06
	27	I get nervous and confused when I am speaking in my language class.	2.68**± 1.10
	29	I get nervous when I don't understand every word the language teacher says.	2.78 ± 1.19
	32	I would probably feel comfortable around native speakers of the foreign language.	3.20 ± 1.24
Fear of Negative Evaluation			3.00 ± .782
	3	I tremble when I know that I'm going to be called on in language class.	2.73 ± 1.20
	7	I keep thinking that the other students are better at languages than I am.	3.13 ± 1.30
	13	It embarrasses me to volunteer answers in my language class.	2.75 ± 1.15
	15	I get upset when I don't understand what the teacher is correcting.	3.25 ± 1.01
	20	I can feel my heart pounding when I'm going to be called on in language class.	2.93 ± 1.31
	23	I always feel that the other students speak the foreign language better than I do.	3.07 ± 1.21
	25	Language class moves so quickly I worry about getting left behind.	3.13 ± 1.20
	31	I am afraid that the other students will laugh at me when I speak the foreign language.	2.60**± 1.22
	33	I get nervous when the language teacher asks questions which I haven't prepared in advance.	3.43*± 1.08
Test Anxiety			2.98 ± .495
	2	I don't worry about making mistakes in language class.	3.00 ± 1.26
	8	I am usually at ease during tests in my language class.	3.15 ± 1.10
	10	I worry about the consequences of failing my foreign language class.	3.25* ± 1.35
	19	I am afraid that my language teacher is ready to correct every mistake I make.	2.62**± 1.00
	21	The more I study for a language test, the more confused I get.	2.90 ± 1.24
Overall			3.08 ± 1.16

*The item with the highest mean

**The item with the lowest mean

4.2. Level of Language Anxiety in Relation to Learners Variables

Table 2 illustrates the participants' level of language anxiety: high anxiety, moderate anxiety, and low anxiety. The total score of each participant is divided by the total number of questions, which is 33. Participants were grouped into the three levels of anxiety according to their averages. According to Horwitz (2012), participants with an average of below three are identified with low-level anxiety. Whereas participants with an average of around three are categorized with moderate level anxiety. Finally, participants with an average of four and above are considered learners with high-level anxiety. The figures show that 68 participants (28%) had a low anxiety level; they scored between 2.2 and 2.9. While moderate-anxiety participants scored between 3 and 3.4 were 141 (57%) students, and finally, high-anxiety level participants were 37 (15%), they obtained between 3.5 and 3.9. On the whole, the majority of the participants showed moderate anxiety levels.

Table 2. Level of Language Anxiety in Relation to Observed Variables

Variable	Category	Total No (%)	Low Anxiety (%)	Moderate Anxiety (%)	High Anxiety (%)	P value
Total		246 (100)	68 (28)	141 (57)	37 (15)	
Gender	Male	25 (10)	8 (32)	16 (64)	1 (4)	0.602
	Female	221 (90)	60 (27)	125 (57)	36 (16)	
Year of study	2nd year	81 (33)	17 (21)	44 (54)	20 (26)	0.003
	3rd year	63 (26)	5 (8)	47 (75)	11 (17)	
	4th year	75 (30)	27 (36)	44 (59)	4 (5)	
	5th year	27 (11)	19 (70)	6 (23)	2 (7)	
Achievement in German classes (out of 100)	100 -75	84 (34)	13 (15)	53 (64)	18 (21)	
	74 - 50	104 (42)	46 (44)	49 (47)	9 (9)	0.037
	49 - 35	58 (24)	9 (16)	39 (67)	10 (17)	
An experience of staying in the target language country for more than 6 months	Yes	59 (24)	32 (54)	23 (39)	4 (7)	0.000
	No	187 (76)	36 (19)	118 (63)	34 (18)	
Weekly contact hours of German language	9-12	112 (46)	24 (21)	77 (69)	11 (10)	0.809
	13-16	134 (54)	44 (33)	64 (48)	26 (19)	
Course load of the term	12-16	168 (68)	51 (30)	94 (56)	23 (14)	0.031
	17-21	78 (32)	17 (22)	47 (60)	14 (18)	

Table 2 demonstrates the German language anxiety of the participants concerning the different variables measured. It is noticeable that the majority of the participants were between 18-25 years of age, and the female participants were the majority (90%). As for the year of study, the second-year students (33%) formed the majority. The range of the most recent language assessment test mark was from 74-50 (42%), and the percentage of (76%) was for students who did not stay for six months

in Germany. The range of German language contact hours during the term was from 13-16 hours per week (54%). Finally, the total number of credit hours registered ranged from 12-16 per (68%).

The variables which had no significant effect on German language anxiety were gender and weekly contact hours. The male participants did not have significantly higher anxiety levels than females (p<0.602). There was no significant effect between the participants' level of anxiety (p<0.809) and the weekly contact hour of their German language. Whereas the variables that affected the language anxiety experienced by the participants considerably were the year of study (p<0.003), the most recent German-language assessment score (p<0.037), staying for more than six months in Germany studying or field training (p<0.000), and the total number of credit hours registered for the term (p <0.031).

Table 3. presents the results of linear regression analyses. The variables that had a p < 0.05 on the Chi-Square were deemed significant to undergo a univariate ordinal logistic regression analysis to prove the statistically significant results.

Table 3. Linear Regression Model Analysis

	Subgroups	β coefficient	*P* value	95% Confidence Interval	
FLCAS		2.43	0.000	1.88	2.81
Year of study	2ⁿᵈ year (ref)				
	3ʳᵈ year	-0.43	0.042	-0.80	-0.13
	4ᵗʰ year	-1.49	0.031	-3.56	-1.05
	5ᵗʰ year	-2.04	0.029	-4.75	-1.61
Achievement in German classes (out of 100)	100-75 (ref)				
	74-50	9.66	0.890	3.59	15.73
	49-35	-11.76	0.054	-16.39	-7.13
An experience of staying in the target language country for more than 6 months	Yes (ref)				
	No	6.33	0.020	1.02	11.65
Course load for the term	12-16 (ref)				
	17-21	4.07	0.025	1.52	7.62

According to the results of the linear regression analyses, FLCAS had a significant effect on anxiety (β=2.43, CI = [1.88 2.81], p <0.000) along with the increase in the anxiety language class. Regarding the year of study, compared to second-year students, third-year students had significantly lower levels of anxiety (β= -0.43, CI = [-0.80   -0.13], p<0.042) as well as fourth and fifth-year students where they showed significantly lower levels of anxiety (β=-1.49, CI = [-3.56   -1.05], p<0.031) and (β= -2.04, CI= [-4.75   -1.61], p<0.029) respectively. Students who did not spend more than six months had significantly higher levels of anxiety (β=6.33, CI = [1.02 11.65], p<0.020) than their peers who spent that period. Besides, students who registered more than the total number of credit hours per term had significantly higher levels of anxiety compared to students who had fewer total credit hours (β= -4.07, CI = [1.52   7.62] p<0.025). No significant difference in levels of anxiety found between the most recent German-language assessment score or gender.

5. Discussion

The research questions of the study investigated the foreign language anxiety level of German language learners, the relationship between their language anxiety and their achievement in German classes, gender, and the experience abroad in Germany, in addition to the sources of their foreign language anxiety. This section intends to discuss each of the research

questions based on the results detected.

Concerning the first research question, which examines the levels of FLA among learners of German as a foreign language, the results of the FLCAS showed that the largest number of participants experienced a moderate anxiety level (3.08 ± 1.16). Considering Horwitz's (2008) analysis, participants with an average of around three regarded as slightly anxious. This result is in line with previous studies that used FLCAS in the context of other foreign languages such as Chinese ESL students (Liu, 2006), English students of Spanish (Arnaiz &Guillén, 2012), language learners of Japanese (Aida, 1994), Turkish EFL students (Elaldi, 2016), and Saudi EFL students (Alshahrani, 2016).

One explanation for the participants' moderate level of anxiety might be the number of years students have studied the German language in their colleges. Another reason might be due to the German year that fourth-year students of one of the universities have to spend studying for one semester and doing an internship during the second semester. This year provides them with the maximum level of linguistic benefit as they use the German language in everyday communicative situations, and they are in contact with the German culture. Studies conducted by Tang (2005) and Thompson and Lee (2014) stated that FLA can be reduced when foreign language learners are exposed to native speakers of the target language and the culture of that language. Piechurska-Kuciel (2008) concluded that Polish students of the German language who lived in a German-speaking country experienced low anxiety comparing their colleagues who had not lived in a German-speaking country. Participants with considerable language exposure who studied for one year in Germany would experience lower anxiety than the ones with shorter language exposure; this would have affected the results of their FLCAS as the results showed a significant relationship in students who did not stay for six months in Germany compared with those who did (β=6.33, CI = [1.02 11.65], p<0.020).

The last plausible explanation for the participants' moderate level of anxiety is their German language proficiency as fifth-year students were high level (C1), fourth and third-year students were intermediate level (B1), and second-year students were beginner level (A2). A significant relationship existed between anxiety and the German language level; students experience less anxiety when they have a high German language level. According to Young (1991), foreign language learners with high proficiency are less anxious than those with low foreign language proficiency. This relationship could affect the level of their FLA and result in a medium level of anxiety. In this regard, previous studies have anticipated that the increase of learners' language proficiency and their linguistic experience cause their foreign language anxiety to decrease (Hismanoglu, 2013; Liu, 2006; Samimy, 1994).

Regarding the second research question, which scrutinizes the participants' German language anxiety concerning the different variables measured, results showed that students with a course load between 21 and 17 credit hours were more anxious than students who had fewer hours between 16 and 12 credit hours. This result indicates that course load had a significant relationship with anxiety as senior students tend to register a lower course load than junior and sophomore students. As for the final test grades that measure the students' achievement in German classes, results of the Chi-Squared test (p<0.037) showed a significant positive relationship between the participants' anxiety level and their test scores. Participants who experienced a high level of foreign language anxiety tended to have higher language performance scores. This finding is not consistent with the results of Horwitz et al. (1986), which suggested that FLA has an unfavorable effect on students' performance. Conversely, this outcome confirms some studies (Chastain, 1975; Liu, 2006; Oxford, 1999; Park & French, 2013) that concluded a positive relationship between FLA of Spanish, German, and French language learners and their final scores. One explanation that can be thought of is the positive attitudes of learners towards or higher motivation for learning the German language, even though these variables have not been analyzed in this study. Moreover, senior students had more exposure to the study of German than sophomore and junior students, which affected their language academic achievement positively. In addition, language anxiety can be facilitative anxiety to motivate language learners to learn and obtain a better overall linguistic performance (Oxford, 1999; Young, 1991).

However, after the completion of logistic univariate regression analysis, the p-value (p<0.890, p<0.054) of those who scored 74-50/100 and 49-35/100 respectively compared to the ones who scored 100-75/100 on their final course grade test showed non-significant collinearity between most recent test marks and levels of anxiety. The reason for this result might

be caused by different confounding variables, where the test marks were taken as a whole without stratifying them according to language level mastery or year of study. Another probable reason can be the Pygmalion effect (Niari, Manousou, & Lionarakis, 2016) in students who played a role in altering their anxiety levels while improving their performance level on tests. Students have previous knowledge that their assessment scores will be considered for future recommendation letters to develop their future careers. Thus, this may have induced the Hawthorne effect (Sedgwick & Greenwood, 2015) and disrupted the results shown in this study. Şener's study (2015) concluded a significant negative relationship between the FLA of 77 ELT students measured by the FLCAS and their language achievement. This finding indicated that students achieved good language achievement with lower levels of foreign language anxiety. One of the first studies was Horwitz's (1986) that showed a moderate negative correlation between the grades of 40 Spanish and French learners and their FLA measured by the FLCAS. This result implied that low test grades of students correlated with their higher levels of anxiety. No verification of a direct cause-effect relationship between FLA and language achievement was found according to the previous studies. A possible explanation is that "test anxiety does not have a direct impact on academic achievement, but it may manifest differently based on many factors, including familial background, level of achievement, motivation, and intellectual giftedness" (Goonan, 2003, p.7).

The last findings of research question two displayed that there was no statistically significant relationship between FLA and gender or weekly contact hours as they had a p-value of (p<0.602) and (p<0.809), respectively. It denotes that male and female participants of the present study experienced similar levels of foreign language anxiety. This result is in line with the results of numerous supportive studies that reported no significant correlation between the gender of foreign language learners and language anxiety (Aida, 1994; Alshahrani & Alshahrani, 2015; Dewaele & Al-Saraj, 2015; Kao & Craigie, 2010; Yamat & Bidabadi, 2012). Contrariwise, the findings of previous studies (e.g., Awan et al., 2010; Elaldı, 2016; Kitano, 2001; Nyikos, 1990; Öztürk & Gürbüz, 2013; Wang, 2014) contradict the results of the present study, concluding that male foreign language learners experienced higher FLA than their female counterparts. Nonetheless, other related studies (see Abu-Rabia, 2004; Dewaele & MacIntyre, 2014; Ezzi, 2012; Mesri; 2012; Sylvén & Thompson, 2015; Wang, 2014) determined that female learners reported higher levels of FLCA than male peers. According to Dörnyei (2005), political and socio-educational factors are the reasons for the effect of gender on FLA.

Finally, the last research question examined the main sources of foreign language anxiety (Anxiety of German Class, Communicative Anxiety, Fear of Negative Evaluation, and Test Anxiety) of German foreign language learners. The FLCAS showed a beta coefficient with a significant p-value (β=2.43, CI = [1.88   2.81], p <0.000). The highest-rated source of FLCAS by the participants of the study was Anxiety of German Class (3.19 ± .341). Whereas Text Anxiety (2.98 ± .495) was the lowest-rated source of FLCAS by them. Several reasons can attribute to foreign language anxiety. First, the learning environment in the classroom, as stated by Wang (2014), affects learning. The learning environment is connected to classmates, teachers, and teaching practices in classrooms (Zhang & Zhong, 2012). Students feel uncomfortable and are unwilling to participate in in-class activities because language teachers do not adopt the communicative approach in their classes, they play the role of administrators (Young, 1991). Second, language learners are reluctant in in-class activities due to their speaking anxiety (Al-Sibai, 2005; Oteir & Al-Otaibi, 2019). Besides, when language learners do not communicate in the foreign language they are learning outside the classroom, they lack confidence in their language skills that causes them to be anxious when they practice it in front of their peers (Awan et al., 2010; Horwitz et al. 1986; Wu, 2010; Young, 1991; Zheng & Cheng, 2018). Third, situation-specific anxiety as language learners can experience in certain situations as not being prepared for teachers' questions (Horwitz, 2001; Önem, 2010). Moreover, Kitano (2001) and MacIntyre and Gardner (1989) confirmed the strong correlation between negative evaluation and communicative anxiety. Anxious language learners avoid participating in speaking activities in the classroom as they are afraid to be negatively evaluated by their peers and language instructors (Zheng & Cheng, 2018). As reported by Gregersen and Horwitz (2002), anxious foreign language learners tend to be "perfectionists" (p. 70) because of their fear of making mistakes in front of their teachers and peers; they will experience anxiety when they are not ready for teachers' questions. Finally, test anxiety among foreign language learners is the main factor that causes FLA (Aida, 1994; Ayidn, 2009). Test anxiety hinders language learners from obtaining good

results in their language tests and negatively affects their learning motivation (Young, 1991). According to Aydin (2009), test anxiety has a relation with fear of negative evaluation as students experience fear of failure.

6. Conclusion

This study inspected foreign language anxiety levels among Jordanian learners of German as a foreign language. It investigated the relationship between foreign language anxiety and participants' internal variables (gender, year of study, achievement in German classes, experience staying in Germany for more than six months, weekly contact hours, and course load of the term.) The findings indicated that Jordanian learners of German as a foreign language experienced a moderate level of foreign language anxiety. The variables which had no significant effect on their German language anxiety were gender and weekly contact hours. On the other hand, their language anxiety was affected by the year of study, the most recent German-language assessment score, staying for more than six months in Germany studying or field training, and the total number of credit hours registered for the term. Among the four components of the FLCAS, anxiety of German Class ranked the highest, and test anxiety ranked the lowest. The learning atmosphere, teachers, speaking anxiety, and fear of failure are the causes of the participants' FLA.

According to the findings, the following implications are suggested to reduce the foreign language anxiety among students. First, creating a positive emotional atmosphere in language classes is the responsibility of both students and instructors. Learners are attracted to language classes when instructors foster a positive emotional atmosphere; language instructors have to be facilitators, not administrators. Teachers have to create a relaxed, positive, and secure learning environment to motivate students to participate in in-class activities (Gregersen et al., 2014; Zhao, 2007; Yamat & Bidabadi, 2012; Young, 1991). As stated by Arnold and Fonseca (2007, p. 119), "a true learning environment where students believe in the value of learning a language, where they feel they can face that challenge and where they understand the benefit, they can get from attaining it." Instructors are required to apply suitable pedagogical approaches to keep learners motivated to learn the target language. As for the learners' responsibility towards learning a language, they have to be aware of their German language learning aims and purposes. Learners can be eager to devote their time and efforts to learning the German language and feel less anxious when they know what to do. In addition, it is advantageous for learners to be involved in activities that boost their interaction with the German culture and history to be motivated to study the German language and become less anxious when utilizing it (Du, 2013). Moreover, foreign or second language learners need to participate in various activities and interactions with German native speakers to improve their language proficiency, which will enhance their enthusiasm and self-confidence and lowering their anxiety when using German, as indicated in this study.

The second suggestion is regarding speaking anxiety, of which Jones (2004) recommended language instructors encourage students to speak in a class by participating in group work, presentation, role-play, and discussion, and assist them when they face difficulties in their speaking. Moreover, teachers can encourage students to practice in e-tandem to improve their speaking skills and self-confidence (Appel & Cristòfol Garcia, 2020). Third, teachers have to avoid using negative evaluation of students in front of their peers, and they have to make students aware of anxiety so they can cope with it. Finally, to ease language learners' test anxiety and their fear of falling in tests, language instructors can provide students with different kinds of exams in class before testing them for practicing purposes.

For future research, it is proposed to include both qualitative and quantitative analyses. It is advantageous for future studies to conduct interviews and observe the causes and sources of German language learning anxiety related to language skills.

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