



T.R.

AKDENİZ UNIVERSITY

INSTITUTE OF EDUCATIONAL SCIENCES

**DEPARTMENT OF FOREIGN LANGUAGE
EDUCATION**

**MA
THESIS**

**THE IMPACT OF ONLINE GAMING
ON FOREIGN LANGUAGE
SPEAKING ANXIETY**

BILJANA UNVERDI

**ENGLISH LANGUAGE TEACHING
MASTER'S PROGRAM**

Antalya, 2025

AKDENİZ UNIVERSITY
INSTITUTE OF EDUCATIONAL SCIENCES
DEPARTMENT OF FOREIGN LANGUAGE EDUCATION
ENGLISH LANGUAGE TEACHING

**THE IMPACT OF ONLINE GAMING ON FOREIGN LANGUAGE SPEAKING
ANXIETY**

MASTER'S THESIS

Biljana UNVERDI

Supervisor:

Dr. Simla COURSE

Antalya, 2025

T.C.
AKDENİZ ÜNİVERSİTESİ
YABANCI DİLLER ANABİLİM DALI
İNGİLİZ DİLİ EĞİTİMİ TEZLİ YÜKSEK LİSANS PROGRAMI

ÇEVİRİMİÇİ OYUNLARIN YABANCI DİL KONUŞMA KAYGISI ÜZERİNDEKİ ETKİSİ

YÜKSEK LİSANS TEZİ

Biljana UNVERDI

Danışman:

Dr. Simla COURSE

Antalya, 2025

T.C.
AKDENİZ ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

Prof. Dr. UNVER Dİ 'nın bu çalışması ..23/27/2025.. tarihinde jürimiz tarafından *Yabancı Diller*
Ana Bilim Dalı *İngilizce Dili Eğitimi* Tezli Yüksek Lisans Programında **Yüksek Lisans Tezi** olarak oy
birliği/oy çokluğu ile kabul edilmiştir.

İMZA

Başkan : Prof. Dr. Gülden Tüm
Yabancı Diller Eğitimi, Eğitim Fakültesi, Çukurova Üniversitesi

Üye : Doç. Dr. Fatma Özlem Saka
Yabancı Diller Eğitimi, Eğitim Fakültesi, Akdeniz Üniversitesi

Üye (Danışman) : Dr. Öğr. Üyesi Simla Course
Yabancı Diller Eğitimi, Eğitim Fakültesi, Akdeniz Üniversitesi

YÜKSEK LİSANS TEZİNİN ADI: *The Impact of Online Gaming on Foreign*
Language Speaking Anxiety

ONAY: Bu tez, Enstitü Yönetim Kurulunca belirlenen yukarıdaki jüri üyeleri tarafından uygun görülmüş ve
Enstitü Yönetim Kurulunun tarihli ve sayılı kararıyla kabul edilmiştir.

DOĞRULUK BEYANI

Yüksek lisans olarak sunduğum bu çalışmayı, bilimsel ahlak ve geleneklere aykırı düşecek bir yol ve yardıma başvurmaksızın yazdığımı, yararlandığım eserlerin kaynakçalardan gösterilenlerden oluştuğunu ve bu eserleri her kullanışımında alıntı yaparak yararlandığımı belirtir; bunu onurumla doğrularım. Enstitü tarafından belli bir zamana bağlı olmaksızın, tezimle ilgili yaptığım bu beyana aykırı bir durumun saptanması durumunda, ortaya çıkacak tüm ahlaki ve hukuki sonuçlara katlanacağımı bildiririm.

14/07 /2025

Biljana UNVERDI

ACKNOWLEDGEMENTS

Firstly, I want to thank my mentor, Dr. Simla Course for being a great support, advisor, and guide. Without her assistance, I am certain I would not have managed to execute and commit to this thesis the same way.

Next, I want to thank Dr. Funda Çağlar Ölmez and Lect. Gülseren Asli Seçmen for helping me with the data collection process. This process would be a lot more difficult without their goodwill and help.

I owe my thanks to the Faculty of Education, English Language Teaching (ELT) department, and School of Foreign Languages at Akdeniz University for providing me the opportunity to carry out this study. My special thanks to all the teachers and students who were involved and participated in this study.

Finally, I am especially thankful to my husband Barış Ünverdi. Without his help and support it would be impossible to carry out this project.

ABSTRACT

THE IMPACT OF ONLINE GAMING ON FOREIGN LANGUAGE SPEAKING ANXIETY

UNVERDI, Biljana

Master of Arts, Foreign Language Education, English Language Teaching

Supervisor: Dr. Simla Course

July, 2025, 144 Pages

Foreign language speaking anxiety (FLSA) has been a common issue in English as a foreign language (EFL) study for decades. With new technologies, this issue can be addressed differently outside of the formal education systems. From this perspective, the current study focuses on exploring the influence of the digital environment, specifically video games on FLSA, in EFL Turkish context.

A mixed-methods study design was employed. Quantitative data were collected using an adapted version of the Foreign Language Classroom Anxiety Scale (FLCAS), and qualitative data were gathered using semi-structured interviews. The participants included pre-service teachers and preparatory program students from a public university in Türkiye. They were categorized based on their gaming habits and labeled as gamers or non-gamers.

This study explored not just the influence of video games, specifically online gaming on foreign language speaking anxiety but also the dynamics and nature of digital interactions in gaming environments. The results of this study indicate that participants who play online games show lower levels of foreign language speaking anxiety. Contributing factors to these results were found to be the anonymous nature of video games, reduced fear of negative evaluation, immersive gaming mechanics that prioritize gaming performance, and communicative collaborations over language accuracy. Grounded on the findings of the study, pedagogical implications were identified, and suggestions for further research were proposed.

Keywords: foreign language speaking anxiety, online gaming, communicative competence, second language acquisition, foreign language speaking anxiety scale (FLSAS)

ÖZET

ÇEVİRİMİÇİ OYUNLARIN YABANCI DİL KONUŞMA KAYGISI ÜZERİNDEKİ ETKİSİ

UNVERDI, Biljana

Yüksek Lisans, Yabancı Diller Eğitimi, İngilizce Öğretmenliği

Danışman: Dr. Simla Course

Temmuz 2025, 144 Sayfa

Yabancı dil konuşma kaygısı, onlarca yıldır İngilizceyi yabancı dil olarak öğretme çalışmalarında yaygın bir sorun olmuştur. Yeni teknolojilerle birlikte, bu sorun resmi eğitim sistemlerinin dışında farklı şekillerde ele alınabilir. Bu bakış açısıyla, mevcut çalışma dijital ortamın, özellikle de video oyunlarının, yabancı dil konuşma kaygısı üzerindeki etkisini Türkiye'deki İngilizce öğrencileri bağlamında incelemeyi amaçlamaktadır.

Karma yöntemli bir çalışma tasarımı kullanılmıştır. Nicel veriler, Yabancı Dil Sınıf Kaygısı Ölçeği'nin uyarlanmış bir versiyonu kullanılarak; nitel veriler ise yarı yapılandırılmış görüşmeler aracılığıyla toplanmıştır. Katılımcılar, Türkiye'deki bir devlet üniversitesinde öğrenim gören öğretmen adayları ve hazırlık sınıfı öğrencilerinden oluşmaktadır. Katılımcılar, oyun oynama alışkanlıklarına göre kategorilere ayrılmış ve "oyuncu" ya da "oyuncu olmayan" olarak etiketlenmiştir.

Bu çalışma, yalnızca video oyunlarının, özellikle çevrimiçi oyunların yabancı dil konuşma kaygısı üzerindeki etkisini değil, aynı zamanda oyun ortamlarındaki dijital etkileşimlerin dinamiklerini ve doğasını da incelemiştir. Çalışmanın sonuçları, çevrimiçi oyun oynayan katılımcıların daha düşük konuşma kaygısı seviyeleri gösterdiğini ortaya koymuştur. Bu sonuca katkıda bulunan faktörlerin; video oyunlarının anonim yapısı, olumsuz değerlendirme korkusunun azalması, oyun performansını önceliklendiren sürükleyici oyun mekanikleri ve dil doğruluğundan ziyade iletişimsel iş birlikleri olduğu belirlenmiştir. Çalışmanın bulgularına dayanarak pedagojik çıkarımlar belirlenmiş ve daha ileri araştırmalar için önerilerde bulunulmuştur.

Anahtar Kelimeler: yabancı dil konuşma kaygısı, çevrimiçi oyun oynama, iletişimsel yeterlilik, ikinci dil edinimi, yabancı dil konuşma kaygısı ölçeği

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	i
ABSTRACT	ii
ÖZET	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES	vii
LIST OF FIGURES	ix
SYMBOLS AND ABBREVIATIONS	x

CHAPTER I

INTRODUCTION

1.1. Background of Study.....	1
1.1 Statement of the Problem	2
1.2 Purpose of the Study.....	3
1.3 Research Questions.....	4
1.4 Significance of Study.....	4
1.5 Assumptions	5
1.6 Limitations.....	6
1.7 Definitions	7
1.8 Conclusion.....	8

CHAPTER II

LITERATURE REVIEW

2.1 Language Anxiety-A brief history of research	9
2.2 Language Anxiety- definitions and its place in language learning.....	11
2.3 Language Speaking Anxiety- Important research results.....	15
2.4 Games and Language Learning	18
2.4.1 Terminology.....	19
2.4.2 Theoretical Framework.....	20
2.5 Video Games and Language Anxiety	23
2.6 Speaking as a Language Skill.....	27
2.7 Video Games and Speaking.....	34

CHAPTER III

METHODOLOGY

3.1	Research Design.....	41
3.2	Participants	42
3.3	Data Collection Tools	43
3.3.1	Questionnaire Design and Structure.....	43
3.3.1.1	Factor 1: Communication Apprehension.....	46
3.3.1.2	Factor 2: Fear of Negative Evaluation.....	47
3.3.1.3	Factor 3: Speaking Confidence.....	47
3.3.2	Semi Structured Interviews	48
3.4	Data Collection Procedure.....	49
3.5	Data Analysis.....	49
3.5.1	Quantitative Data Analysis	50
3.5.2	Qualitative data analysis.....	51
3.6	An Overview of Data Analysis Procedures in Accordance with Research Questions ...	54

CHAPTER IV

FINDINGS

4.1	Quantitative analysis.....	55
4.2	Qualitative analysis.....	63
4.2.1	Theme 1: Low Anxiety Language Use in Gaming.....	64
4.2.1.1	Psychological and Emotional Safety	65
4.2.1.2	Social Safety.....	66
4.2.2	Theme 2: Classroom Anxiety and Self-induced Pressure	66
4.2.2.1	External Triggers	67
4.2.2.2	Internal Triggers	68
4.2.3	Theme 3: Role of Gaming in Alleviating Language Anxiety.....	70
4.2.4	Theme 4: Language Learning Through Play.....	72
4.2.4.1	Language Learning process in games.....	72
4.2.4.2	Motivation and engagement	73
4.2.5	Theme 5: Player Identity and Game Dynamics.....	74
4.2.5.1	Identity and Language Dynamics.....	74
4.2.5.2	Gaming Drawbacks	76

CHAPTER V

DISCUSSION, CONCLUSION AND SUGGESTIONS

5.1	Summary of the Study	79
5.2	Discussion of the findings	80
5.2.1	Group Differences in FLSA: Gamers vs. Non-Gamers.....	80
5.2.2	Impact of Gaming Habits on FLSA.....	81
5.2.3	Gaming Environment Dynamics and Their Role in FLSA	86
5.3	Conclusion.....	90
5.4	Pedagogical Implications.....	92
5.5	Recommendations for Future Research.....	93
REFERENCES		96
APPENDIX 1: ADAPTED FLCAS (PILOT FOR RELIABILITY TESTING)		105
APPENDIX 2: STUDENT QUESTIONNAIRE- GAMING HABITS SECTION.....		107
APPENDIX 2: APPLIED VERSION OF ADAPTED FOREIGN LANGUAGE CLASSROOM ANXIETY SCALE		112
APPENDIX 3: FINAL VERSION OF FOREIGN LANGUAGE SPEAKING CLASSROOM ANXIETY SCALE (ADAPTED FLCAS)		118
APPENDIX 4: SEMI-STRUCTURED INTERVIEW QUESTIONS (ENGLISH)		119
APPENDIX 5: SEMI-STRUCTURED INTERVIEW QUESTIONS (TURKISH)		121
APPENDIX 6: ETHICS COMITEE APPROVAL		123
APPENDIX 7: OFFICIAL PERMISSION FOR DATA COLLECTION		124
Approval from the Institute of Educational Sciences (dated 17.12.2024).....		124
Permission from the School of Foreign Languages (dated 16.12.2024).....		125
APPENDIX 8: ÖZGEÇMİŞ SAYFASI		126
APPENDIX 9: ORIGINALITY REPORT.....		127

LIST OF TABLES

table 3.1 Total Variance Explained	46
Table 3.2 Factor Loadings For Three-Factor Pca With Direct Oblimin Rotation On Adapted Flcas Items.....	47
Table 3.3 Item-Total Statistics	48
Table 3.4 The Results Of Tests Of Normality For Flsa	50
Table 4.1 Difference In Flsa Between Elt Group And Preparatory Program Group	55
Table 4.2 <i>Descriptive Statistics Of Language Speaking Anxiety By Gaming Status</i>	56
Table 4.3 Difference In Flsa Levels Between Gamers And Non-Gamers For All Participants.....	56
Table 4.4 Descriptive Statistics Of Language Speaking Anxiety By Gaming Status In Elt Group	56
Table 4.5 Difference In Flsa Levels Between Gamers And Non-Gamers For Elt Group.....	57
Table 4.6 Descriptive Statistics Of Foreign Language Speaking Anxiety By Gaming Status For Preparatory Program Group	57
Table 4.7 Difference In Flsa Levels Between Gamers And Non-Gamers In Preparatory Program Group.....	57
Table 4.8 Summary Of Non-Significant Regression Results Predicting Foreign Language Speaking Anxiety (Flsa) Based On Gaming Frequency.....	58
Table 4.9 Summary Of Statistically Non- Significant Results Of Linear Regression: Flsa Predicted By Time Spent Playing Video Games.....	58
Table 4.10 Model Summary For Regression Predicting Flsa Based On Duration Of Gaming Sessions In The Preparatory Group.....	59
Table 4.11 Anova Results For Regression Model Predicting Flsa From Duration Of Gaming Sessions In The Preparatory Group.....	59
Table 4.12 Regression Coefficients For Predicting Flsa Based On Duration Of Gaming Sessions In The Preparatory Group	59
Table 4.13 Model Summary For Regression Predicting Flsa Based On Speaking English During Gaming.....	60
Table 4.14 Anova Results For Regression Model Predicting Flsa From Speaking English During Gaming.....	60
Table 4.15 Regression Coefficients For Predicting Flsa Based On Frequency Of Speaking English During Gaming.....	60
Table 4.16 Model Summary For Regression Predicting Flsa Based On Belief In Language Learning Benefits Of Video Games	61
Table 4.17 Anova Results For Regression Model Predicting Flsa From Belief In Language Learning Benefits Of Video Games	61
Table 4.18 Regression Coefficients For Predicting Flsa Based On Belief In Video Games As A Tool For Language Learning.....	61
Table 4.19 Differences In Flsa Depending On The Type Of Games Played	62
Table 4.20 Model Summary For Regression Predicting Flsa Based On Number Of Different Game Types Played.....	62

Table 4.21 Anova Results For Regression Model Predicting Flsa From Number Of Different Game Types Played.....	62
Table 4.22 Regression Coefficients For Predicting Flsa Based On Number Of Different Game Types Played	63
Table 4.23 List Of Regression Analysis Significance And Variance Effect Values.....	63
Table 4.24 Themes, Subthemes And Codes Summary	64



LIST OF FIGURES

Figure 2.1. Components Of Communicative Competence (Sauvignon 2002, p. 17).....	28
Figure 2.2 Speaking Proficiency (Shumin, 2002, p. 207)	30
Figure 2.3 A Diagram Of The Processing Components Involved In The Generation Of Speech (Levelt, 1995, p. 14).....	32
Figure 2.4 Schematic Presentation Of The Main Factors Conditioning The L1 (Nowicka & Wilczynska 2011, p.25).....	33
Figure 3.1 The Explanatory Sequential Design (Creswell & Poth, 2018 p. 66).....	42
Figure 3.2 Initial Map Of Theme 2.....	53
Figure 3.3 The Map Of Creating The Subthemes And Initial Naming Of Them	53

SYMBOLS AND ABBREVIATIONS

B1:	Threshold level in Common European Framework of Reference for Languages.
CALL:	Computer-Assisted Language Learning
CEFR:	Common European Framework of Reference for Languages
DG	Digital Game
EFL:	English as a Foreign Language
ELT:	English Language Teaching
ESL:	English as a Second Language
FLA:	Foreign Language Anxiety
FLCAS:	Foreign Language Classroom Anxiety Scale
FLSA:	Foreign Language Speaking Anxiety
FLSAS:	Foreign Language Speaking Anxiety Scale
FPS:	First-Person Shooter
ICC:	Individual Communicative Competence
L1:	First Language
L2:	Second Language
MMO:	Massively Multiplayer Online Game
MMORPG:	Massively Multiplayer Online Role-Playing Game
MOBA:	Multiplayer Online Battle Arena
RPG:	Role-Playing Game
RTS:	Real-Time Strategy
SG:	Serious Game
SCMC:	Synchronous Computer-Mediated Communication
TBS:	Turn-Based Strategy
TPR:	Total Physical Response
VG:	Video Game
ZPD:	Zone of Proximal Development

CHAPTER I

INTRODUCTION

This chapter is going to explain in detail the basis of the study, the statements of the problem and its purpose. After that the research questions will be presented and the significance of the study will be elaborated. Next, the assumptions and limitations will be stated following the important definitions and abbreviations that are essential for understanding the terminology used throughout the study.

1.1. Background of Study

Foreign language anxiety has been a widely researched topic in the past, from Horwitz, Horwitz, and Cope (1986) establishing the basis to the problem. Later researchers such as Cheng et al. (1999) and MacIntyre and Gardner (1991) further broadened the field by identifying speaking anxiety as a specific subdomain inside the broader concept of language anxiety. Unlike other language skills speaking is the most affected by real-time processing, time limitations and environmental factors, such as public exposure and fears that could stem from it (Horwitz et al., 1986; MacIntyre & Gardner, 1994; Cheng et al., 1999). The complexity of this problem still draws scholarly attention and with modern times and advancement of technologies new dimensions of this phenomenon are being revealed.

The abovementioned research was conducted in traditional classroom environments (Horwitz et al., 1986; Young, 1992) and as such they were focused on formal settings but with the new technology language learning extensively spread out from classrooms into the digital environment such as online games. Many of the study were done in digital environments but extensively relying on the games that were developed for language learning, known as serious games (Reinders, 2011; Zyda, 2005). Commercial games, known as video games, are used more by language learners as a form of entertainment in the first place, then as an environment that provides authentic and spontaneous language use (Reinders & Wattana, 2014; Dixon & Jordan, 2020). Surprisingly, even though these digital spaces are highly interactive and broadly used they remain underexplored.

Massive multiplayer online role play games (MMORPG) are proven to improve different language skills since the nature of these games are characterized by the need of interaction between the players, engaging environments and opportunities for language practice (Peterson, 2010; Rama

et al., 2012, Sylvén & Sundqvist, 2012). Research showed that different types of games support different levels of opportunities for language learning and even though the main focus of these studies were fluency, language learning motivation and vocabulary acquisition (Reinders & Wattana, 2014; Zheng et al., 2009), some of the studies opened the door to language anxiety and language speaking anxiety. Researchers such as Reinders and Wattana (2014), Grimshaw and Cardoso (2018), and Soyooof and McLay (2019) along with Turkish scholars like, Ünlü and Aydın (2023), tried to explore the relationship between video games and foreign language speaking anxiety, their outcomes all implied that video games have a negative influence on language anxiety, e.g. games contribute to alleviating language anxiety. However, most of these studies still rely either on structured or semi-structured game contexts or applying purely quantitative data analysis limiting the depth of insight into learners' experiences and emotional responses. As a result, a clear research gap remains in understanding how informal, commercial video games influence FLSA.

To address this problem this study explores in-depth the experiences of different groups of Turkish university students- pre-service teachers vs. students of the preparatory program at the school of foreign languages and gamer vs. non-gamers- trying to understand digital dynamics that affect their experiences and how their academic and personal goals interact with it.

1.1 Statement of the Problem

Speaking as a language skill has been known as one of the most complex language skills (Thornbury, 2005) and extensive research was done to address the problems and stipulators for acquiring it. Today since the globalization became the reality and the cultural bridges need to be made between the cultures, English found its place as a lingua franca of 21st century (Crystal, 2003; Seidlhofer, 2013). Communication became faster and geographical distances became almost irrelevant for far distance connections. Now, with just a few clicks on the phone, tablet or computer people can talk almost for free with someone in another part of the world (Warschauer, 2000). Communication being important now more than ever, and the speed of sharing information requires instant replies, speaking holds a throne as an imperative for successful business, academic success or for just socializing.

Being as it is, the obstacles for acquiring speaking were researched for years and one of the main factors is found to be language speaking anxiety (LSA) (Horwitz et al., 1986). The complexity of the topic has been bothering the scientific community for decades (MacIntyre & Gardner, 1991;

Cheng et al., 1999) and the new modern framework has given it deeper dimension (Botes et al., 2020). Language acquisition became more available to everyone with the digital era offering more opportunities for communication and interaction (Warschauer, 2000). Although these opportunities being more available in the gaming world, as video games became an almost 200 billion dollars industry (Palandrani, 2021) consumed by millions of people the research in this area did not progress at the same pace. The focus of the studies was serious games, and the research conducted focused more on controlled environment, process of language acquisition and learning, and not focusing on the more in-depth research of gamers' experiences and opinions of the gaming, gaming communities and all the dimensions that could be missed with just relying on the raw data. With this gap not being filled, this study tries to understand better the interactions in these virtual worlds and how they vary depending on the type of the game or even different communities within one with their own social dynamics could influence foreign language speaking anxiety (FLSA).

In this research, this identified gap is addressed by examining the emotional responses and experiences of tertiary level Turkish students with different levels of gaming engagement and different academic goals through mixed-method approach that includes both quantitative and qualitative data analysis. The aim is to understand how video games, online games and gaming habits intersect with language learning goals and how together these interactions may alleviate, reinforce, or reshape foreign language speaking anxiety in various ways.

1.2 Purpose of the Study

The purpose of this study is to reimagine and reframe scholars understand foreign language speaking anxiety by looking beyond traditional academic settings and into the informal, digital worlds that learners already know and use, sometimes even daily. Rather than treating language anxiety solely as a classroom issue to be managed through pedagogical strategies, focused only on structured environments, this research explores whether anxiety can be naturally lowered in direct, spontaneous and socially immersive environments such as online gaming communities.

In this study, by focusing on video games, specifically online games not as just tools, but as interactive social environment, the study challenges the assumption that effective language learning must occur through explicit and structured instruction offered by an instructor or curriculum. It instead proposes that learners can find greater emotional safety and freedom of

expression when they are voluntarily, individually engaging in digital interactions, and where their language use is tied not to assessment but to participation, identity, and shared play.

Even though the primary focus of the study is online games as a main form of digital interaction it is important to note that they are part of the broader video gaming ecosystem. That is why the results and insights in this study encompasses broader categories as well, especially the ones that facilitate social interaction and spontaneous language use.

Finally, the study aims to shift the conversation from “how can we reduce anxiety in the classroom?” to “where do learners already feel less anxious, and why?” and how we can bridge the two environments. The broader purpose is to expand our understanding of language learning and speaking anxiety as an obstacle to it and frame it as something that does not belong exclusively to educational institutions but is distributed across the analog and digital social environments where learners already live, play, and communicate.

1.3 Research Questions

Even though foreign language speaking anxiety has been a widely researched topic, the influence of gaming habits on it has stayed less explored. This study aims to explore whether active engagement in gaming relates to language speaking anxiety, and if so to have a deeper understanding of how these factors interact with each other during the language learning process. To achieve this goal the following research questions were formulated:

1. What is the foreign language speaking anxiety levels of language learners who actively play online games?
2. What is the foreign language speaking anxiety levels of language learners who do not actively play online games?
3. Is there a relationship between actively playing online games and foreign language speaking anxiety levels?
4. How do actively playing online games and foreign language speaking anxiety interact with each other in the language learning process?

1.4 Significance of Study

In the intersection of language learning, gaming and psychology this study found a place to explore FLSA in a different manner. While this topic was widely explored and researched in formal

settings there is a slight neglect of this topic in the lens of the digital environment, especially related to commercial video games with the accent on online games. This research contributes to understanding non-traditional, informal and immersive platforms such as video games can contribute to alleviating FLSA by fostering an environment that can provide comfort, motivation and willingness to speak during the games.

Specifically, this study focuses on how students'/gamers' emotional responses and experiences differ when language is used in these dynamic digital environments and how social interaction, peer collaboration, or identity play affect the language and in the first place FLSA and how these informal experiences can transfer to formal settings. With these insights the research could inform not only the teachers and educators in formal education but also curriculum design and extracurricular support for learners who experience anxiety in classroom settings.

Moreover, this study could contribute to educators and policymakers in closing the gap between the students' lived digital experiences and conventional schooling environments. With recognizing how students already communicate in L2 in these virtual environments with other users -usually outside of the classroom and often voluntarily and enthusiastically- this research opens the door to invite all the traditional stakeholders to rethink how language education can be adapted for better harmonization with learners' preferences and digital identities in order to increase long-term language retention, learning motivation and to reduce anxiety.

Finally, this study addresses students that would normally be left out or not considered as a marginalized students such as female gamers and casual gamers, by exploring how their identity, motivation, and anxiety interact across different academic and gaming contexts. The findings may influence how emotional safety and learner autonomy are defined and understood in L2 acquisition, especially in today's post-pandemic, hyper-digital era.

1.5 Assumptions

In this study the following assumptions were made:

- Participants answered honestly and accurately.
- Participants understood all items and interview questions as the survey was in their native language and interviews were conducted in both English and Turkish depending on participant's preferences.

- Participants' self-reported gaming habits reflect stable, ongoing behavior.
- Participants share a reasonably consistent understanding of "anxiety" in the context of foreign language speaking.

1.6 Limitations

This study, like any research, is not without certain restrictions, which should be considered when interpreting the results. First is the sample size, since the sampling method was method of convenience and results are related solely to participants that are public university students in Türkiye.

Second, as the data relied on self-reporting, it was presumed that all the participants answered honestly and to the best of their understanding in both questionnaire and interviews, even though potential for response bias still remains.

Next, the lack of diversity of games and gaming context in this thesis must be acknowledged as a limitation. The number of video games available is broad and extensive, which means that the participants in this study can report experience on limited number of games. This is a significant point since all the games have their own mechanics and communities and as such, they have the potential to create different experiences for different players, that is why participants' emotional responses and opinions can be shaped by the specific games they play. Subsequently this variability can limit the generalizability of findings considering these different gaming environments.

Furthermore, it is important to point out the problems of language used in the interviews, since the interviews were conducted in the participants' preferred languages, either English or Turkish. Even though the choice of language depended on participants' preferences, L2 usage could have influenced their responses.

Finally, this study did not focus specifically on gender differences or the ways that identity can shape learner experiences. As a result, differences tied to gender identity, cultural background, or other social factors related to gaming social dynamics were not fully examined. These factors could provide valuable insights into future research.

1.7 Definitions

For better comprehension of the study the following definitions are provided.

Language Anxiety: “Language anxiety can be defined as the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning.” (MacIntyre, & Gardner, 1994, p. 284)

Foreign Language Anxiety: “A distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process.” (Horwitz et al., 1986, p. 128)

Foreign Language Speaking Anxiety (FLSA): Foreign Language Speaking Anxiety refers to the apprehension and nervousness experienced by individuals when speaking in a foreign language, which can significantly impact their performance and confidence. (Alamri & Qasem, 2024, p. 2)

Video Games: Esposito (2005) states in the opening paragraph, “A video game is a game which we play thanks to an audiovisual apparatus and which can be based on a story.” In this study, the term video games is occasionally used as an umbrella term that includes both offline and online digital games. This approach reflects how many commercial games today blur the boundary between these formats, offering integrated gameplay experiences that combine solo and multiplayer features (Toh & Lim, 2022)

Serious Games: “Games primarily focused on education rather than entertainment.” (Miller et al. 2011, p. 1425).

Online Games: Games that allow multiple players to connect and play at the same time using Internet communication protocols. (Gao & Liu, 2007)

Single-Player Video Games: as opposed to online or multiplayer games, involve only one participant and do not rely on Internet connectivity or real-time peer interaction. The players interact with other characters that are virtually created. (Esposito, 2005; Neely, 2019)

Massively Multiplayer Online Role-playing Games: “MMORPGs are large-scale permanent virtual worlds providing access to high-quality 3D graphic interfaces that are characterized by a high degree of realism and immersion.” (Peterson, 2010, p. 430)

Commercial Video Games: games not strictly developed for educational purposes (Reyes-de-Cózar et al., 2022)

Gaming Anonymity: In digital platforms, such as video games, anonymity allows individuals to mask their real identity, often through avatars, which may influence communication and confidence levels (Kaplan & Haenlein, 2009; Peterson, 2010).

1.8 Conclusion

In this chapter the studies overview was outlined, starting with providing background information, continuing with identifying the research problem, and explaining the purpose and importance of the research. It discusses why FLSA continues to be a significant barrier in foreign language education and providing a modern perspective by incorporating video games, specifically online games as not just a tool for alleviating FLSA but also as a safe environment for its users.

By forming specific research questions and reviewing assumptions and limitations, the chapter puts out a clear plan for investigating the relationship between gaming habits and foreign language speaking anxiety. Finally, the key definitions were included to ensure clarity of the most significant concepts in the thesis. All these elements together will serve as a guide for the following chapters, which will focus deeper into the theoretical foundations, methodology, and analysis of findings.

CHAPTER II

LITERATURE REVIEW

This study explores the dimensions of online video games and their influence on foreign language speaking anxiety. Bearing that in mind, this chapter starts with explanations of language anxiety, beginning with the historical development of its research and continuing with the key points in defining it and explaining the dimensions it covers. Following this, the chapter explains video games and their impact on language learning, emphasizing the relevance of vocabulary differences between certain concepts such as serious games, video games and online games. To understand the connection between video games, specifically online games, language learning, and language speaking anxiety, it was important to explain the theoretical frameworks that serve as the basis for understanding this relationship. Later, it explores past research that highlights the connections between video games and foreign language speaking anxiety. Since the focus of this research is speaking anxiety specifically, it was significant to explain speaking as a language skill and all the dimensions it includes, before delving into the importance of gaming in developing this skill.

2.1 Language Anxiety-A brief history of research

When talking about anxiety there is a need to dive deep into its beginnings in research and how and when it took the interest of the academic community. According to Klee (1994) one of the first research about language learning and anxiety was conducted during the 1940's (Wittenborn et al., 1945 and Dunkel, 1949). The results of these were either procedurally weak or had different results for different languages (Wittenborn et al., 1945) where results related to French language showed negative correlation between anxiety and grades, but results related to Spanish language showed opposite. Later decades did not create many new discoveries, it was superficially looked, in different words it can be claimed that it was not interesting for academia to delve in this topic. Maybe that is why Klee (1994) separates the research of language and anxiety into two timelines: up to 1985 and after 1985. This timeline can also lead to the conclusion that the most important research happened after 1985, and it can show the critical point of when the research gained the wind at its back by posting proper definitions and creating proper measurements.

One of the most important works in area of affective dimension in language learning can probably be ascribed to Krashen and his affective filter hypothesis (1980). In chapter *The Input*

Hypothesis (1980) Krashen separates affective filter hypothesis as an acquisition problem and states:

“Comprehensive input is necessary for language acquisition, but it is not sufficient... if the affective conditions are not right, the affective filter will be up, and the input, while understood, may not penetrate deeply... if we do indeed provide an interesting message, do not put the student on the defensive by excessive error correction and demands for premature performance, we will do a great deal toward lowering the filter” (p. 177).

Horwitz et al. (1986) in their work reference Krashen where they highlight that anxiety contributes to affective filter of students making them less receptive to foreign language input. In the same work, Horwitz et al. for the first time publish the anxiety scale they developed before as an unpublished manuscript in 1983. In the next two years there is another important work happening in the area anxiety and that is Peter McIntyre writes his master thesis (1988) on effects of anxiety on foreign language learning and production and later, the same year writes an annotated bibliography with Gardener on the same topic. But, according to Klee (1994), Gardner is the first one to examine the role of anxiety in language learning around thirty years prior to her work. Also, in the same work Klee (p. 24) highlights the definitions of anxiety taken from Gardner and McIntyre (1988):

1. Test anxiety
 - Drive theory
 - Facilitating/debilitating anxiety
 - State anxiety
 - Worry Emotionally
 - Cognitive Attentional Theory
 - Direction of Attention Theory
2. General anxiety
 - Communication apprehension
 - Social Evaluative Anxiety
 - Trait Anxiety

Even though they were quite extensive these definitions were not enough for defining the anxiety in foreign language framework. For example, Horwitz et al. (1986) made a distinction between three related performance anxieties:

1. Communication apprehension
2. Test anxiety and
3. Fear of negative evaluation

Before delving into this research, it would be important to circle the timeline of important research up to 1994, as several influential papers on the topic were published from the mid-1980s onward. Horwitz, Horwitz and Cope were of great influence for creating the Classroom Anxiety Scale and later Elaine Horwitz and Dolly J. Young are credited for creating the term Language Anxiety (Young, 1991). Gardner and MacIntyre's collaborative work brought fruitful results for further development on this topic, but Gardener himself is responsible for creating French Classroom Anxiety Scale (FCAS) (1985).

Young (1986, 1990, 1991, 1992, 1993) focused on exploring the sources of language anxiety and developing strategies for creating low-anxiety classrooms. Her work, often employing qualitative methods like interviews and questionnaires, offers insights into learners' perceptions of language anxiety and the factors that contribute to it. The biggest importance of her work is that she has categorized the sources of language anxiety stemming from personal and interpersonal anxieties, role-related beliefs, instructor-learner interactions, classroom procedures, and language testing (Young, 1991). She has also advocated for anxiety-reducing strategies and language teaching approaches that foster positive language learning experiences (Young, 1991).

It is important to note that there are many other researchers who worked and contributed to the topic, but highlighted authors have been particularly influential in this field. Their work provided foundation for further research.

2.2 Language Anxiety- definitions and its place in language learning

“Anxiety: an emotion characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune. The body often mobilizes itself to meet the perceived threat: Muscles become tense, breathing is faster, and the heart beats more rapidly. Anxiety may be

distinguished from fear both conceptually and physiologically, although the two terms are often used interchangeably. Anxiety is considered a future-oriented, long-acting response broadly focused on a diffuse threat, whereas fear is an appropriate, present-oriented, and short-lived response to a clearly identifiable and specific threat” (“APA Dictionary of Psychology,” n.d.)

As mentioned before, MacIntyre and Gardener (1988) pointed out a couple of different definitions of anxiety. They defined test anxiety in different instances like Drive theory which is similar to Yerkes Dodson Law. This law states that the relation between motivation and performance can be explained by an inverted U-curve (“APA Dictionary of Psychology,” n.d.). This U-curve explains that arousal or a limited amount of stress can lead to motivation, but too much of stressors can cause a counterproductive result. Similarly, there is a distinction between facilitating and debilitating anxiety which explains that not all types of anxieties are negative, and they can both improve and impair the performance of the individual. MacIntyre and Gardener (1988) also provided another duality, worry and emotionality, where the first one refers to worry and the latter to automatic reactions like trembling and perspiring. Worry has a debilitating effect on performance while emotionality does not. They also proposed that Cognitive Attentional Theory’s framework of anxiety and Direction of hypothesis had an important role in language learning and anxiety affecting it, since direction of attention hypothesis refers to anxiety from different points of view. Cognitive Attentional Theory refers to anxiety as a product of cognition, a cognitive response to self-doubt, feeling of inadequate and self-blame (MacIntyre & Gardener, 1988). According to this hypothesis the difference between high-anxiety students and low-anxiety students’ is due to their attentional focus, in other words it depends on cognitive interference. Unpleasant emotional condition and temporary state of anxiety are called state anxiety, and it is limited by time and place (MacIntyre & Gardener, 1988). That is why it is connected to test anxiety while trait anxiety is related to general anxiety. Trait anxiety is an actual permanent condition of an individual. They also emphasized the importance of making a distinction between communicative apprehension and social evaluative anxiety for language learners, since communicative apprehension refers to fear of communicating with others and social evaluative anxiety refers to fear of social situations that can lead to avoidance. Even though these anxieties were already defined by psychologists they still were not specific enough to explain language anxiety.

In 1986 three authors (Horwitz et.al, 1986) came forward with a different approach to this problem. They viewed language anxiety three-dimensionally, where language anxiety is closely connected to performance and its evaluation in social and academic context. This tripartite model consists of communication apprehension, test anxiety and fear of negative evaluation.

Communication apprehension is tightly related to the social dimension of the individual, by being defined as “stage fright” or as receiver anxiety depending on the position the communication participant is in (Horwitz et.al, 1986). In the same article they stated that a person who naturally has these traits can have difficulty in speaking in the class and it can challenge their learning process even further since the communication is closely monitored. On the other hand, they said that foreign language can produce totally opposite effects where it can serve as a medium for communication and release speakers from tensions they normally have. They compared it to stuttering and using singing and acting as a tool for speaking in a fluent way. Furthermore, test anxiety is defined as a fear of testing in general and it can have a negative impact on foreign language anxiety. This is especially truer for language classrooms where testing is more often conducted than in other subjects, and where oral testing can trigger even higher anxiety and “freezing” responses in comparison with other types of testing. Finally, fear of negative evaluation is explained as a broader term for test anxiety since it has a social dimension included. Negative evaluation is not strictly related to the classroom, but it can refer to any type of speaking in a foreign language (interview, in the classroom, social gatherings etc.) where evaluation of peers can have an important role for the individual.

Even though these three dimensions of language anxiety are “building blocks” for understanding language classroom anxiety (Horwitz et.al, 1986) language classroom anxiety is not just a combination of the three. Language classroom anxiety is defined as “a distinct complex construct of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of language learning process” (Horwitz et.al, 1986, p. 128).

It is interesting and important for this paper to mention that this type of anxiety is not only reserved for students but also for the teachers as well. Namely, research suggests that teaching role and teaching experience influence. For example, Kobul and Saraçoğlu (2020) found that Turkish pre-service EFL teachers reported higher levels of Foreign Language Teaching Anxiety (FLTA) than in-service teachers where years of experience were main predictor of anxiety.

After establishing and defining the term language anxiety other researchers came up with different versions of the definitions. For example, Young (1992) defined it as a complex psychological phenomenon typical for language learning. On the other hand, MacIntyre and Gardener (1994) offered a more complex definition than Young and related it to a broader psychological framework defining language anxiety as “the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening and learning” (p. 284). Later, MacIntyre (1999) defined it as emotion of worry and/or negative arousal during the process of second language learning. Similarly, Zhang (2001) based on the thought of his forerunners came to conclusion that language anxiety, broadly speaking, is a psychological tension that learners feel during the process of language learning. And according to him this anxiety is situation specific anxiety.

On the other hand, some researchers have questioned the idea that language anxiety is a primary cause, or they doubt its negative influence on language learning. For instance, Sparks and Ganschow (1995) do not disprove that anxiety can make language learning more challenging, but they claim that anxiety itself is more a result than a cause of poor language learning. They compared this conflation to “chicken and egg” phenomenon asking the question: Does anxiety cause poor learning or is it vice versa? According to later research it can be said that answers to this question differ depending on different situations (Tran, 2012). To defend her own theory that anxiety negatively influences language learning, Horwitz (2000) argued that it cannot be possible to explain the anxiety as a result of poor language learning since it is present among good language learners as well, not just poor language learners. According to this it can be argued that anxiety is both the result and the cause of language learning. Later, Horwitz (2001) adds that viewing anxiety as a result makes the research easier and that the real challenge lays in determining language as the cause of language learning difficulties.

In conclusion, there can be an agreement that most of these definitions, being confirmative or not, are based on the thought of Elaine and Michael Horwitz and Joann Cope where they managed to find the importance of language specific anxiety and to put the cornerstone for further research (Tran, 2012).

2.3 Language Speaking Anxiety- Important research results

As mentioned above, the idea of language anxiety and its effect on language learning intrigued applied linguistics for half a century. In the last 30 years the research picked up speed in the 1980's and continued to grow until today. The extensive research on the topic is as complex as it can be, that is why the author decided to narrow down the research that is going to be revised in this study to speaking, oral, anxiety related to language learning. Also, for this thesis, it is relevant to refer to studies that used the same data collection instruments-the Foreign Language Classroom Anxiety Scale (FLCAS) and/or a qualitative approach to the topic- since the author finds it important to provide greater validity to the choice of measurement tools. Furthermore, according to Botes et al. (2020) FLCAS is the only scale that is valid through many different contexts. In other words, this scale was used in different countries, different languages, different educational context etc.

Cheng, Horwitz and Schallert (1999) conducted research where they investigated the relationship between second language classroom anxiety and second language writing anxiety and their impact on speaking and writing achievements. Their study involved 433 Taiwanese students, where the researchers implemented FLCAS and Second Language Writing Apprehension Test (SLWAT) and compared it to students' speaking and writing course grades. They found that there is a negative correlation between speaking anxiety and speaking performance, but the interesting part here is that the authors referred to other authors (Wu, 1994; Aida, 1994) and concluded that FLCAS mainly measures speaking anxiety in a broader sense, that is not classroom specific. They also concluded that the scale can be a great predictor for speaking achievement. Although it can be used to predict writing achievement, the most reliable results were obtained for speaking. They drew the inference that some students are anxious about speaking in L2 because of the four reasons: perceived importance of speaking, differences in first and second language competences across different skills, individual experiences of acquiring L2 skills and their history of success and failure in language performance. On the other hand, Orbeta & San Jose (2013) came up with a little different result. In their study they conducted on 150 students in Philippines they implemented FLCAS and standardized telephone conversation test. Results they found reveal that apprehension affects language performance whereas language anxiety does not. The discrepancy between the two studies can be explained by the influence of three factors: awareness of weaknesses (with hypothesis that students are already aware of their strong and bad sides), exposure to English (the

participants are exposed to English for a significant period that might lead to lowering language anxiety overall) and learning environment of the study (it was conducted through phone that can be a disconnecting factor since it is not a formal classroom environment and it can trigger different types of tensions such as fear of negative peer evaluation). With these results authors (Orbeta & San Jose, 2013) conclude that the relationship between language learning anxiety and speaking abilities is more layered and can be influenced by a range of interrelated psychological and contextual factors. In contrast to these results, a study (Syazana Baharuddin & Rashid, 2014) that involved undergraduate ESL students in Malaysia presented different conclusions. In this study students were also exposed to English for a long time, they were familiar with the environment and students knew each other well, but still the anxiety level significantly influenced the overall oral performance.

Ganschow et al. (1994) report research that was focused on the comparison between high, medium and low anxiety students and their performance. The subjects in the study were Spanish students, they were firstly given FLCAS and then divided in groups low anxiety (LO-ANX), medium or average anxiety (AVE-ANX) and high anxiety (HI-ANX). After that the researchers measured their language performance and language aptitude. Significant differences between these three groups of students were found, where LO-ANX students were the ones that excelled in their language performance and language aptitude in comparison to the other peers. HI-ANX students and AVE-ANX students both showed their skills are in the average range but still HI-ANX students showed the worst performance. Granschow et al. (1994) concluded that oral performance was the most affected by the anxiety, whereas reading, comprehension and memory performances were almost not affected at all. Similarly, Phillips (1992) came to conclusion also using FLACS that students with higher anxiety significantly perform worse than their peers with lower anxiety. The same study was replicated in the beginning of 2010's (Hewitt & Stephenson, 2012) and the results were different from the original study. Namely, they found that there is a moderate negative correlation between oral performance and language anxiety since for some learners' moderate anxiety levels serve as motivator more than a demotivator. Therefore, anxiety served as a tool to push learners to perform better by increasing their engagement in language tasks. On the other hand, Azizifar and Fariadian (2015) focused more on moderate anxiety and its impact on oral performance and their results were opposite of Hewitt and Stephenson results (2012). Similar results

appeared in another study three years later (Subekti, 2018). This pattern suggests that language anxiety has a different impact on different students.

The studies that continue to confirm significant negative correlation between speaking and anxiety are not rare as can be seen in abovementioned studies, therefore, the role of Turkish researchers in shaping this area of study should not be underestimated. For example, in Türkiye, Istanbul a study was conducted with 90 high school female students (Satar & Özdener, 2008). This research is relevant not only because it delved into speaking anxiety but also it incorporated technology, synchronous computer-mediated communication (SCMC). The research was experimental and divided the participants into three groups: text-based communication group, voice-based communication group, and control group, each group consisting of 30 participants. They used FLCAS as a measurement tool for anxiety and questionnaires after each session. In total the experiment lasted four weeks with four 40-45 minutes sessions. As a result, the participants showed lower levels of anxiety and improved speaking proficiency after the experiment, with the text-based communication group achieving better results among lower proficiency students. The same conclusion was reached in a qualitative research conducted by Abdullah et al. (2022) where they focused more on understanding students' experiences and feelings. They interviewed 25 students that were labeled as anxious students by their language teachers. Also, the students wrote self-reports, and they recorded their oral presentations that were done in two parts, one in front of the class and the other in front of the researchers. Information gathered and analyzed helped researchers to pinpoint the main obstacles students found hard to overcome in language learning specifically for improving oral performance. It was found that the desire to learn is present but the anxiety (fear of negative evaluation by their peers) is greater. Also, nervousness and insecurity in the classroom (fear of judgment) and over-preparation lead students to feel higher levels of anxiety which consequently resulted with worse performance during the presentations. Lastly, negative self-perception, e.g. negative comparison with peers, contributed to higher anxiety and speaking opportunity avoidance.

Interestingly, high pronunciation anxiety levels were found in pre-service teachers (Kafes, 2018) where in-service teachers showed lower levels of anxiety. This suggests that high pressure academic environments can highly influence speaking related anxiety and change of environment and levels of experience in teaching can influence FLA.

Finally, looking at all these results, we come to wonder how strong a negative correlation between anxiety and oral performance is. In 2020 a meta-analysis was conducted (Botes et al., 2020) and special attention was given to speaking anxiety. Similarly, this research found that four articles showed a positive correlation between anxiety and oral performance, which does not disturb the overall statistical significance ($p < 0.001$) and indicates that the likelihood of the negative correlation being a product of chance is low. The authors also calculate higher heterogeneity which is logical since the results of the studies are differing. The high variability between the studies suggests that many other factors could be influencing the differences in the results, such as teaching methods, learning environment, and possibly even overlap with public speaking anxiety (Botes et al., 2020). These types of results open a door for further research for gaining a better understanding of this phenomenon of sudden “freezing” of the students/speakers when it is their turn to talk.

2.4 Games and Language Learning

After the WHO declared a global pandemic of COVID-19 on March 11, 2020, and the quarantine period was announced (Cucinotta and Vanelli, 2020), the schools were closed, and only the workers of essential sectors were able to leave their houses and work outside of the global general lockdowns. Quarantine during the years 2020 and 2021 forced the education systems to teach by using different technologies to reach students and to provide quality education. In this period there was a huge spike in interest in using technology and remote education to teach. Additionally, the new state of social distancing and lack of social interaction led people to rely on video games to lower their anxiety, stress, depression, and loneliness (Pallavicini et al., 2022).

Be that as it may, the gaming industry was not a new thing as a home activity and/or classroom activity, although it reached new dimensions during the COVID-19 quarantine, its implementation during the pandemic was not a novelty. Overall, we can say that in recent years among available technological milieu, games found their place in schools and foreign language education. Video games online and offline have been shown to have great potential for engaging and immersive learning experiences (Reinders, 2011). But even though it is not unusual for people to play video games, the scale of the effects of quarantine can be seen in some of the statistics in gaming industry revenue. For example, in the year 2020 alone there was a 20% increase in global revenue reaching \$175 billion USD worldwide (Palandrani, 2021).

Even though the technological era is present in people's everyday lives, traditional classroom faces challenges in providing authentic, interesting, and engaging learning experiences for students, due to classical lecturing and endless drillings in the classroom (Huang & Huang, 2015). Reinhardt and Thorne (2016) even noted that games can now be viewed as authentic, significant and can be widely used for language learning. Technology is an integral part of students' daily lives, yet its implementation in the classroom is often not effective enough to foster an environment conducive to language skill development. At times teachers seem like they are fighting against technology and not using it for their own advancement (Howard, 2013). What if the role of technology is switched and used in the teachers' favor? By exploiting the interactive nature of video games, educators can create environments that can encourage language practice in meaningful contexts and at the same time nurture diverse learning styles and preferences of their students.

2.4.1 Terminology

Before continuing with the topic, there is a need to explain the main terms used in this study such the difference between video games (VG), digital games (DG) and serious/educational games (SG). Digital games are any type of games that are played on any type of electronic device and have a goal, rules, provide feedback and monitor progress via scores or levels (Wouters, et al., 2013). Video games and serious games, on the other hand, have more narrow definitions. VGs are a category of DGs, and their main purpose is entertainment (Girard et al., 2013) while SGs are more commonly known as educational games, and their purpose is promoting education and are designed based on pedagogy (Zyda, 2005). VG's can be distinguished by the player interaction, where single player games are played by a single player while multiplayer games are played as a group of players and the ones that are played with larger groups of players simultaneously that are called massive multiplayer online games (MMO's) (Dixon & Jordan, 2020). Multiplayer games are also online games, where players interact with each other by using internet network (Gao & Liu, 2007). There are also massively multi-player online role-playing games (MMORPG) that were extensively researched in the last two decades (Jabbari & Eslami, 2019; Peterson, 2016; Rama et al., 2012; Zariski, 2010). These games are types of role-play games that have numerous players that can interact with each other (De Souza et al., 2010). It is important to note that video games, online games and multiplayer games are often used interchangeably in many papers. For instance, Triberti et al. (2018) refer to both 'online video gaming' and 'video gaming' synonymously when

discussing Internet Gaming Disorder, while Ružić-Baf et al. (2016) treat ‘online video games,’ ‘video games,’ and ‘internet-based gaming’ as overlapping constructs. This overlapping occurs since the distinction between online and offline games became difficult to define in digital spaces (Toh & Lim, 2022). While the primary focus of this study is commercial online games, the broader term video games is used complementarily, as many commercial games today incorporate both offline and online elements, and the two are often treated interchangeably in literature

2.4.2 Theoretical Framework

There are many theories that can serve as a foundation for explaining the usefulness of games itself. According to Dixon & Jordan (2020) in their meta-analysis of DG’s based language learning the most common theory that researchers use is Vygotsky’s zone of proximate development (ZPD) (Vygotsky, 1978). The term was developed by Lev Semenovitch Vygotsky in 1920’s and he defined ZPD as: “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peer” (Vygotsky, 1978, p. 86). This definition can be broken down into a couple of elements: actual developmental level, potential developmental level, independent problem solving and problem solving under adult guidance or collaboration with more capable peers. In other words, there is an area of learning development that a learner can do by themselves up to a certain limit and reach full potential with the help of others. For example, MMO can create an environment for establishing meaningful input in L2 through collaboration, interaction and co-construction processes (Peterson, 2016). In other research it was shown that negotiation of meaning was fostered through the need for collaboration in the game (Dixon & Christison, 2021). These hypotheses are derived from an interactional point of view, where fostering communication and creating the need for it form the basis for understanding the effects video games have on the language learning process.

Other research (Chen et al., 2018) leans on motivational theories and the importance of flow theory (Csikszentmihalyi, 1975, 1990). Flow according to APA dictionary is referred as “a state of peak enjoyment, energetic focus, and creative concentration experienced by people engaged in adult play, which has become the basis of a highly creative approach to living” (Beyond Boredom and Anxiety., n.d.). Csikszentmihalyi himself illustrated flow in one of the interviews (Beard, 2015) as an immersion in work, like painters do while painting the picture. He adds that he spent lots of time observing painters and their process of creating the artwork and was amazed by

how focused they were on creating the painting but were not interested in enjoying the end product. They would rather focus on painting another artwork. He defines this process of immersion in work and not focusing on result as “flow”. The reasoning for the importance of the role of this theory in explaining the gamification of language learning, in other words, of using DGs as the instrument for effective acquisition of L2, lies in the opportunities games provide to a learner (Chen et al., 2018). DGs create the environment with enhanced motivation and with the mechanism of “play-learn-improve-win” (Malliarakis, Satratzemi & Xinogalos, 2013). This cycle is based on rewards, interactivity and multi-channel input that helps gamers/learners to stay engaged. Related to this there is another term coined by Ortiz de Gortari and Griffiths (2015) known as Game Transfer Phenomena (GTP). GTP in most simple words can be explained as phenomena where video games do not only serve to entertain but to teach topics relevant to real life, whether its language, history, problem solving or other types of knowledge. Why GTP is relevant to flow theory is that GTP is also known as *Tetris Effect* (Horowitz, 2019) where players immerse so much into the pattern of the game that sometimes they can even see it in their dreams (Curtis, 2012). Researchers had found that GTP is relevant to language learning (Ortiz de Gortari & Griffiths, 2015) since players claimed that the “urge for communication” they fulfill with the in-game interactions. The other instant where the flow can be observed during the gaming sessions is by observing the statistics of gameplay time. For example, it was observed that the duration of MMORPG game sessions, such as World of Warcraft (Tarng, Chen, & Huang, 2008), averaged 1.9 hours per day in-game, while over 50% of players with this level of gameplay remained subscribed for more than 500 days. These extended play patterns suggest deep, sustained engagement where players lose track of time, remain intrinsically motivated, and become fully immersed in the gaming activity.

Even though the motivation for language learning has one of the crucial roles it does not guarantee success. For example, DeHaan (2005) recognized this premise and noted that there are other dimensions that can have crucial roles in language acquisition such as level of involvement in the task and cognitive capacities of players to navigate both the gameplay and learning. In conclusion the cognition hypothesis is added as another theoretical framework. Cognition hypothesis of L2 development (Robinson, 2001, 2005, 2007, 2011a, 2011b, 2011b; Robinson & Gilabert, 2007) aims to explain the logic of sequencing the tasks paying attention on three factors such as: complexity, conditions and difficulty of a language learning task. Even though sometimes the balance between the video game complexity and learning capacity can cause struggle, the help

of the written text and repetition of the vocabulary and playing the game at the desired pace can help learners (De Haan, 2005). Additionally, it was found that players do not want to play short and easy games, but the ones that cause challenges to the players (Gee, 2003). Even though the games can be educational and beneficial for players, the difficulty level is important for players to stay motivated; it should not be too easy, too difficult or too short. In some way the game difficulty can be compared to Bloom's knowledge mastery taxonomy (Zhang, 2018). In the end the complexity of games can be found in the term of "multiliteracies in the wild" (Beavis, 2012) that is coined due to different dimensions of DG. These dimensions include text, sound, image, actions and symbols which can stand alone or interact with each other and create meaning. In games, these multimedia opportunities enable game designers to create different levels of difficulty. The combinations can be created to match the player's learning ability and cognitive development, which helps create the right kind of challenge for them at each stage of the game (Zhang, 2018). In other words, even though the games can cause a cognitive challenge to players/learners, with a correct design it can create optimum difficulty content for language learners that can keep them motivated while learning.

Furthermore, De Haan (2005) noted that video games can serve as a *kinesthetic link* as well, comparing it to the total physical response method (TPR), where virtually learners can find a connection between the action and language used to describe it. Similarly, Vázquez et al. (2018) mentioned previous research (Kuo et al., 2013) that showed digital games have even outperformed TPR conducted in traditional classrooms in terms of vocabulary retention.

There is another concept that has captured the interest of researchers—Naturalistic Computer-Assisted Language Learning (CALL) which involves video games as a basis for this approach and was explained in detail by Benson and Chik (2011). To explain the concept of naturalistic CALL, they found it useful to highlight the differences between traditional CALL and naturalistic CALL. They categorized these differences into four key areas: location, formality, pedagogy, and locus of control. By examining these points, a better understanding can be gained of how naturalistic CALL differs from traditional CALL, which allows for a clear definition of the terms and highlights the key characteristics of both. According to them, the location of traditional CALL is usually a classroom or computer lab, whereas naturalistic CALL takes place in more informal settings such as homes, gaming centers, internet cafés, and even public areas. From this, it can be concluded that the second point is that traditional CALL is structured, curriculum-driven,

and formal, whereas naturalistic CALL is characterized by its informality. In these systems, learners tend to engage with content based on their personal interests, where language learning is not the primary goal but rather a secondary outcome of such engagement. In their article, they further explain this distinction through the pedagogical approach to CALL. Traditional CALL, they argue, is well-planned and structured around a curriculum, utilizing explicit instruction, prepared materials, and formal assessments. In contrast, naturalistic CALL promotes non-instructed learning, where language is acquired intuitively through observation, reasoning, and interaction. Finally, they also identify video games as a form of “public pedagogy,” serving as a medium that teaches language implicitly through gameplay, repeated exposure, and embedded explanations. The locus of control in traditional CALL is other-directed, while in naturalistic CALL it is self-directed. For example, in their research (Benson & Chik, 2011), players could choose the language used in the game, select a game specifically made in the target language, and/or decide whether to interact with other players in the target language. In this study, conducted with 10 students at Hong Kong University, it was suggested that these aspects of naturalistic CALL can greatly benefit students in terms of vocabulary learning, communication skills, increased motivation and engagement, and in providing an environment to apply the skills learned in formal education. On the other hand, they caution that naturalistic CALL should be carefully implemented when it comes to grammar learning. They concluded that gaming should be supplemented with other forms of language learning, and that providing a degree of intentional learning could help create a well-rounded learning experience for students.

The other hypothesis that was used in a number of research (Ahmed et al., 2022; Barnes & Prescott, 2018; Horowitz, 2019; Pallavicini et al., 2022; Reinders & Wattana, 2011) is the influence of video games in alleviating anxiety. Since this topic is the main theme of this research it will be elaborated separately.

2.5 Video Games and Language Anxiety

Online video games can also be described as a type of social media. According to Kaplan and Haenlein (2009) online video games such as MMORPG can represent an ultimate version of social media with high social presence/richness and low self-presentation. In this type of social media players can use their gaming characters and avatars to stay completely anonymous and yet feel it personal since the design can be adjusted according to personal preferences. *World of Warcraft* game can be taken as an example to show all the layers the game can provide to users. In

this game there are many different races (e.g. humans, elves, orcs etc.) and they can be played as different roles (e.g. wizard, cleric, warrior). The game is set to be played on the planet called *Azeroth* where players ought to fight monsters and search for treasures. The game has limitations in personal disclosure so the player can keep total anonymity of their personal identities or create the characters that can best reflect their real-life personality. This game is just an example of how the games can provide various environments for players to engage in interactions with other players and depending on their personality or even their current mental state while playing games, e.g. low-anxiety environments (Dixon & Jordan, 2022). This was also proven by Reinders and Wattana (2014) where the students who participated felt more liberated to make mistakes and communicate with each other even though the level of anonymity was low and students, since they know each other well, could guess which avatar belonged to whom. Freedom of expression was higher than in a traditional classroom environment.

In a different study (Ahmed et al., 2022) the researchers tested 58 students from an English language school with average knowledge of English. The aim of the study was to measure anxiety and motivation for language learning levels by conducting an experiment where two groups were taught new vocabulary, where experimental groups used game-based learning, and control group participated in traditional classroom lessons. The results show that game-based learning affected these two variables significantly, it negatively affected anxiety and positively affected motivation.

Another study, that was conducted using the same game, *Speaceteam*, (Grimshaw & Cardoso, 2018) showed similar results. The difference was that the researcher used qualitative data via conducting semi-structured interviews with 20 students that participated in gaming sessions. In this study participants commented and described their feelings after the gaming sessions as comfortable, good or funny. Also, the study suggests that the anxiety level was decreasing as the gaming sessions progressed. Even though these two papers can be found significant to gamification and results imply that they alleviate anxiety, the games used are SG's that are made for educational purposes only. That is why it is important to mention experimental research conducted in Iran (Soyooof & Mclay, 2019). In this research there were 100 participants separated randomly into two groups, 50 in experimental and 50 in control group. The idea was that participants of control group should continue with their regular lessons while experimental group should play a video game called *Grand Theft Auto: Chinatown Wars* for half an hour each day and participate in 15 minutes daily online chat group where students would discuss their gaming experience. The pre-test and

posttest were conducted as semi-structured interviews with 5 randomly selected participants in experimental group. The implemented Perceived Stress Scale showed significant differences between the two groups, where experimental group showed significant changes in alleviating stress while control group stayed the same.

Similarly, there was research conducted in Algeria during the outbreak of COVID-19 and quarantine period (Ishaq & Omar, 2021). In this research they chose one group of 26 participants to measure their stress level before and after treatment. The treatment involved two times a week, 5 weeks long gaming sessions. Each session lasted approximately 2 hours and participants were communicating with each other using *Discord* platform. The games that were involved in the experiment were: *Among Us* and *Deceit*. The results showed significant changes in anxiety level among participants. Interestingly, the study conducted in Türkiye, showed different results (Güzel & Aydin, 2019).

Similar to the abovementioned research, this study (Guzel & Aydin, 2019) was also based on experimental method. They separated 44 participants into two groups, experimental (gaming group) and control group (traditional classroom group) and did comparative analysis of pre-test and post-test results. The game that the participants played is called Second Life and basically what gaming sessions involved transforming a traditional classroom into a virtual one. Both groups had the same lessons except the experimental group participated by using the game. The treatment was 5 weeks long with a well-structured teaching plan, but the results came out not significantly different between the groups. These results should be understood critically since there is a need to explain the game and the implementation of the experiment. Mainly, Second Life is a game that by some scholars has been labeled more as type of social media (Kaplan & Haenlein, 2010) by putting it in the same cluster as Facebook and YouTube with the difference of virtual reality (Kaplan & Haenlein, 2009). Essentially, this game is a meeting point for people that are able to communicate with each other through avatars and no matter the distance between the users they can meet in any type of the environment. This means that avatars, similarly to real life, can meet at the campus, office and in this case of Güzel and Aydın (2019), they can meet in the classroom. This is contradictory to the above-mentioned naturalistic CALL (Benson & Chik, 2011) and has no difference between the sense of formality, pedagogy, and locus of control, since both groups were participating regular classes with the same curriculum and lesson plans and were taught by the teacher during these 5 weeks period. Even the classroom itself can be disputable, since there is no

direct difference between physical classroom and virtual one, all the characteristics of a normal classroom are identically copied to virtual design. That is why the question that can be asked is: Is there really a great difference between experimental and control groups?

Another research conducted in Türkiye (Ünlü & Aydın, 2023) came with the different results than the previous paper. Namely, they conducted a survey that included 175 high school students that had to fill in a three-part questionnaire that included demographic part, gaming-habits part and FLACS developed by Horwitz et al. (1986). The results they found were rather interesting, like the students who played action and adventure games felt less nervous and afraid of negative evaluation, or the participants who spent more than two hours playing online games felt less uncomfortable around native speakers. Overall, they found that video games can reduce language anxiety.

In conclusion, the studies reviewed above give a great insight into how games (both VG and SG) can reduce anxiety in language learning context. Across multiple studies disclosed in this part of the review showed how nuanced the effect can be. Games like *SpaceTeam* and *Grand Theft Auto: Chinatown Wars* have demonstrated that social interaction, combined with the immersive and interactive nature of gaming, can reduce anxiety levels and help learners feel more at ease while communicating in a second language. The gamers' ability to engage anonymously, make mistakes, and collaborate in a low-pressure environment appears to be key to these positive outcomes. The importance of these dimensions of gaming can be seen in the study of Güzel and Aydın (2019). The results of their study showed no impact on language learning and language anxiety, and this lack of difference between the groups can be attributed to omission of the abovementioned aspects of gaming. These results imply that the effectiveness of video games in reducing language anxiety is not only determined by the medium itself but also by how the game is integrated into the learning process. This can be seen in the results of Ünlü and Aydın (2023) where their results strengthen the premises of the importance of the way of implementation of the medium, since they found as an interesting thing as the direct connection between adventure and action games and fear of negative evaluation. Taken together, it can be concluded that video games can have a positive impact on reducing anxiety and fostering learning, if educators carefully consider the choice of games and the way of its implementation for educational purposes. These factors are crucial for achieving positive results. On the other hand, the ambiguity of the results

leaves a research gap for further studies and requires more detailed research that could give clearer answers about the role of video games in reducing anxiety.

2.6 Speaking as a Language Skill

Hymes (1971) in his critique of Chomsky's Linguistic competence and its limitations said: "It takes the absence of a place for sociocultural factors, and the linking of performance to imperfection, to disclose an ideological aspect to the theoretical standpoint. It is, if I may say so, rather Garden of Eaden view." (p. 8). In this work he emphasized the degree of complexity a language acquisition requires, and that language knowledge cannot be based only on grammar and vocabulary, which was the basis of Chomsky's linguistic competence, but it must involve understanding of how to use language appropriately in line with social context. According to Hymes (1971), communicative competence needs to include the ability to know what to say, how to say it, when to say it and whom to say it to. Communicative competence was an alternative to linguistic competence, and it served as a basis for understanding speaking as a skill, a practical skill that not only includes speaking (grammatically) correctly but also appropriately. Later, Canale and Swain (1980) expanded on this and created more complex dimensions to communicative competence: discourse competence and strategic competence. They highlighted that speaking is not just fluency and accuracy but also ability to structure speech appropriately, use language according to the level of formality, and managing communication challenges when they arise.

Nunan (1999) highlights the importance of these studies. He also mentions Sandra Savignon and her work during the 70's in the last century where she focused on language teaching by creating a communicative environment. According to her, Nunan adds, communicative competence is the "ability to function in truly communicative setting", where the speaker needs to adjust to "total informational input". Total informational input refers to linguistic and paralinguistic inputs, in other words, it includes both physical and verbal communication. Nunan continues explaining her work and says that Savignon did not include only verbal competence into communicative competence but writing as well, and adds one more characteristic, content specific dimension. This means that the speaker who is well skilled in communication is good at making choices on which content to use in different situations. Savignon (2002) presents an inverted pyramid diagram (figure 2.1) and explains her view on communicative competence and its components. Grammatical components include the ability to understand and recognize grammatical forms of a language such as sounds vocabulary, word forms and sentence structures. According to Savignon (2002) it does not mean

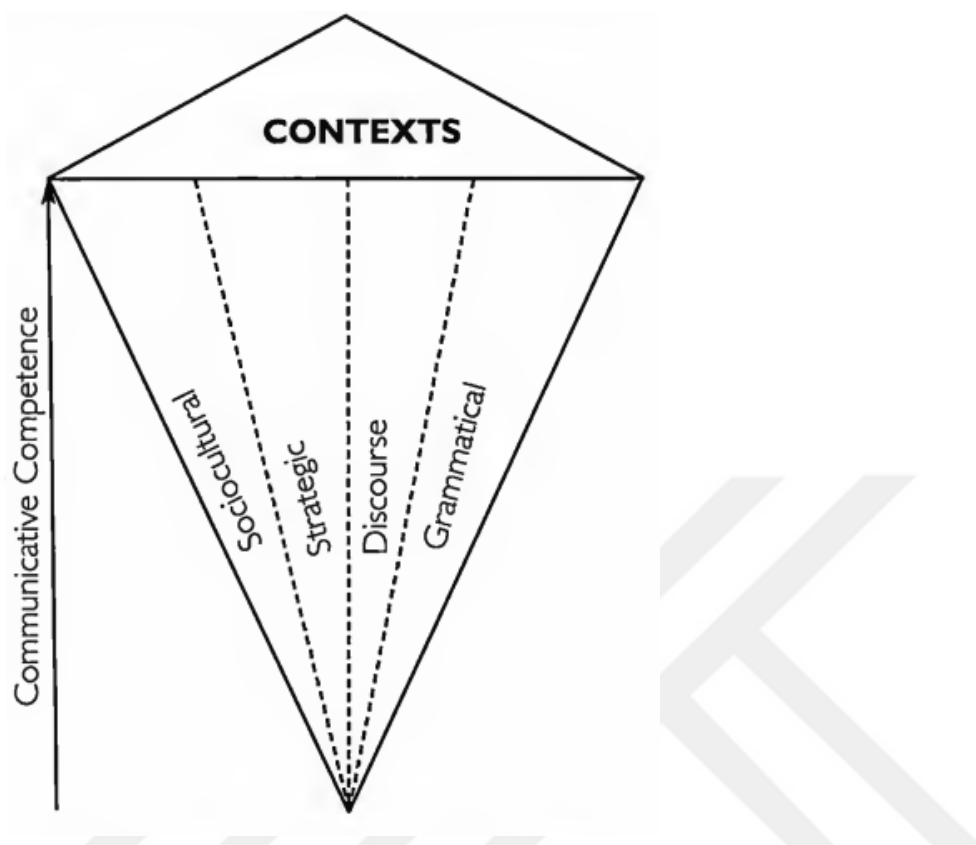


Figure 2.1. Components of Communicative Competence (Sauvignon 2002, p. 17)

stating grammatical rules but using this rule to create meaning. Next, discourse competence focuses on how words and sentences come together in creating meaningful coherent and cohesive content, such as an article, a novel etc. Identifying individual sounds and words helps with creating an overall meaning (bottom-up processing) and knowing the theme and purpose of the text helps with interpretation of individual element (top-down processing). Both processes are essential for effective communication. Sociocultural competence goes beyond grammar and focuses on the social rules of language use. It involves understanding the social context of communication, including the roles of participants, the information they share, and the purpose of their interaction. While grammar is not fully understood, describing sociocultural rules is even more complex. Finally, strategic competence refers to the coping strategies we use in unfamiliar situations or when facing limitations like incomplete knowledge, fatigue, or distractions to (Sauvignon, 2002). With practice, according to Sauvignon, people tend to upgrade their grammatical, discourse and sociocultural skills and use these strategic skills less, nevertheless these skills are always essential as a coping mechanism, and they also distinguish proficient speakers from less skilled ones. Finally, strategic competence refers to the coping strategies we use in unfamiliar situations or when facing

limitations like incomplete knowledge, fatigue, or distractions. With practice, according to Sauvignon, people tend to upgrade their grammatical, discourse and sociocultural skills and use these strategic skills less, nevertheless these skills are always essential as a coping mechanism, and they also distinguish proficient speakers from less skilled ones. Returning to Nunan's work (1999), he compares speaking to Cinderella's older sister, and equalized speaking to overall knowledge of a language. He emphasized the importance of understanding how speaking occurs (highlighting negotiation of meaning), where it occurs (situation), its nature (is it planned or spontaneous) and purpose (transactional and interactional) and he added that sometimes it is hard to explain how it occurs naturally between the speakers.

The purpose of a language was highlighted before by Brown and Yule (1983) where they defined not two but three functions of a spoken language: talk as an action, talk as an interaction and talk as a performance. Talk as an action refers to conversations, where speakers converse, greet each other, build their relationships overall, from small talks to more complicated debates. Later they separate speaking into two forms depending on the context: formal and casual; it has a dimension of politeness and to a degree it reflects the speakers' identities and their roles in conversation. Next, talk as a transaction refers to a situation where speakers seek to find an agreement, the focus of conversation is on what needs to be done, or is done. It focuses on the message itself and not on the participants, which means the conversation is occurring outside of personal beliefs and characteristics of participants. For effective communication speakers employ different strategies to be better understood and to prevent misunderstandings such as questions, repetitions, comprehension checks etc. This conversation can often be seen in professional environments, such as offices, construction sites, or any type of environment that includes tasks that need to be executed by a group of two or more people. Finally, a talk as a performance encompasses any form of speech delivered to an audience. Such talks are typically well-prepared and can span a broad spectrum, including public announcements and academic presentations.

Similarly, Shumin (2002) tried to graphically represent communicative competence that both Hymes (1971) and Canale and Swain (1980) suggested. According to him, speaking proficiency includes abilities such as grammatical competence, sociolinguistic competence, discourse competence and strategic competence (figure 2.2). In Figure 2.2 it is shown how all these factors are interconnected and how successful communication requires complete integration of all these competencies. It can be seen that even though we can study them separately, by their

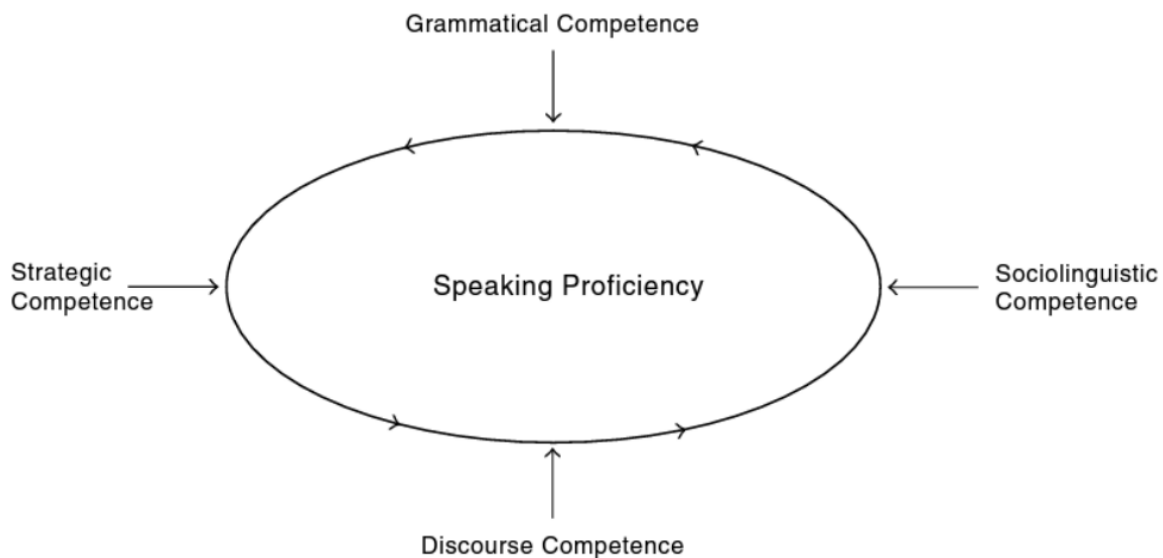


Figure 2.2 Speaking proficiency (Shumin, 2002, p. 207)

nature they cannot stand alone but they need to interact with each other in a dynamic process of actual speaking situations. This reflects the sophisticated nature of oral communication.

Thornbury, (2005) explains speaking as a skill in a more complex way and delves into the importance of extralinguistic knowledge and speech condition in addition to linguistic knowledge. He explains it as the knowledge of context and sociocultural knowledge. By this he means that using the language appropriately includes following the social and cultural rules. Additionally, he defines linguistic knowledge as genre, discourse, grammar, vocabulary, phonology and pragmatic knowledge. Lastly, he emphasized one more dimension of speech and that is speech conditions: cognitive, affective (emotional) and performance factors. Thornbury (2005) highlights that these factors are not necessarily predictors of the difficulty of speech acts since every speaker will react to them on a different level and according to their personality, for example, some people perform better under pressure while others underperform. While explaining the linguistic knowledge Thornbury (2005) as Nunan (1999) gave special attention to genre and how it can create constructions in speech. He highlighted that speech genre is defined by the type of interaction of communicators: interactive or non-interactive, planned or spontaneous, and transactional or interpersonal. He explains that interactive and non-interactive differ on point of whether it is an announcement or exchange of information. On the other hand, transactional speech occurs for the sole purpose of exchange of information while interpersonal (Nunan named it interactional)

communication holds the role of socialization. Planned and spontaneous communication is characterized by whether time and effort were spent for speech preparation, for example a simple meeting with a friend would be spontaneous communication while school presentation would be planned. This distinction cannot be perfectly separated from each other, as the categories often overlap; however, it provides an additional framework to demonstrate the complexity of speaking as a skill.

While these works focused more on sociolinguistic and functional aspects of communication and speech, in 1989 a groundbreaking book was published on cognitive processes that occur during speech production. Levelt (1989) created a framework which explains which mental mechanisms humans use to convert their intentions into spoken language. The importance of this work is not only in details that were provided but in the synthesis of the work of earlier researchers (Berg, 1990). Levelt (1989) created a scheme that explains how the process of speech occurs, then later (1995) he reviewed this as an evolution of understanding in this field and added a syllabary as an individual entity in this process (Figure 2.3). Levelt agrees with other researchers on the processes that occur during the speech production process, which means that his conceptualization is not solely his invention, but the summary and systematization of other research done by other scholars (Berg, 1990). This agreement is based on separation of mental processes into three operations: conceptualization, formulation and articulation. Conceptualization can be simply explained as an “message generation” that involves monitoring of whether meaning of the message is coherent. During formulation the message is transformed into linguistic structures that include selecting words and sound (phonological and phonetic encoding) and creating sentence structures (grammatical encoding). In the end of the process there is articulation, that refers to producing speech physically. In the model it can be seen that Levelt (1995) places comprehension as the reverse, opposite to language production, however it does not exist separately but interacts with it. That is why listeners interpret spoken language through several stages: receiving auditory signal after which phonological encoding occurs, and the sounds are converted into phonological representations that listeners process to find proper lexicon and then turn this lexicon into a more complex structure (syntax). Then appropriate semantic interpretation is derived and finally, this information is integrated to form a coherent understanding of the message. In other words, this model refers to brain processing the incoming speech from sounds to meaning. This model remains a cornerstone in the field since it provides insights into the complexity of speech production and

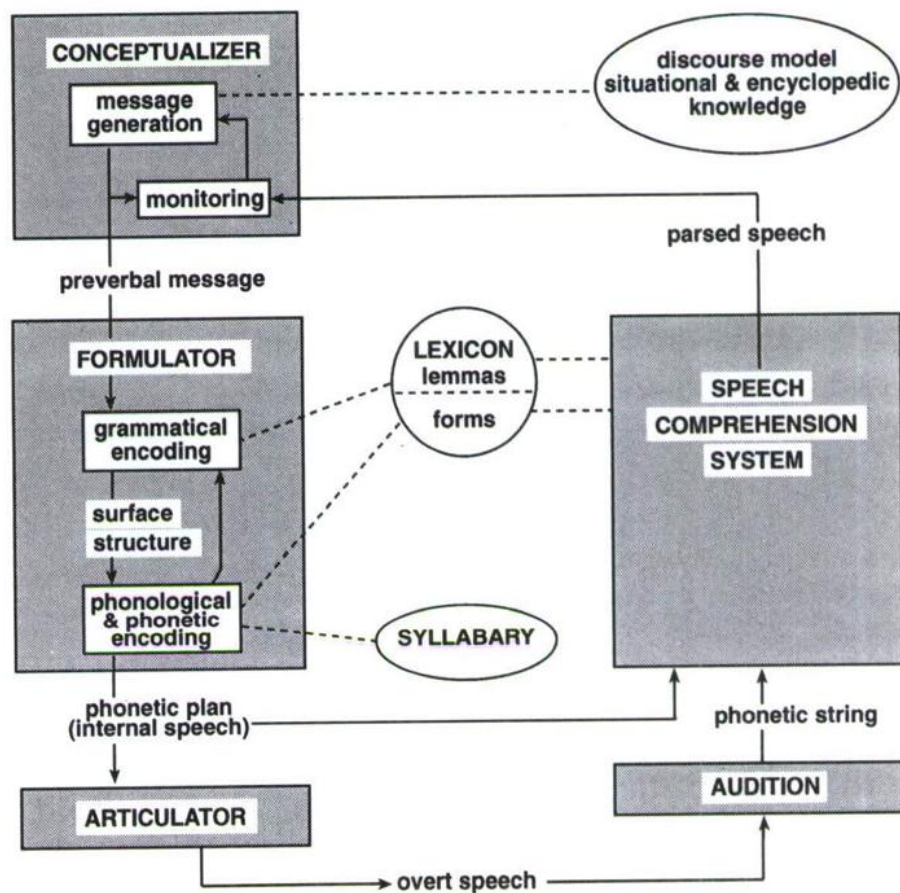


Figure 2.3 A diagram of the processing components involved in the generation of speech (Levelt, 1995, p. 14)

speech comprehension highlighting the importance of diverse mental mechanisms that are involved in this process.

The idea of complexity of speaking, as shown above, can be seen on both cognitive levels as sociolinguistic level, and there is another dimension added by Nowicka and Wilczynska (2011) where they give communicative competence individualistic characteristics. They proposed the term individual communicative competence (ICC) which, according to them, unifies the individual and social dimensions of speaking. In their work they proposed an expanded framework of the complexity of speaking and to prove how layered it is to explain speaking/communication itself they divided the concepts that explain speaking as a skill into two groups, the ones that belong to colloquial register (speaking, expressing oneself and communication) and special terms from language and communication research (text/utterances/discourse and speech acts/speech and communicative actions and interactions) and proposed their own view on speaking as a skill in L1.

They created a schematic presentation (Figure 2.4) of how factors and on how many levels there are and how they influence development of L1. Looking at figure 2.4 we can see two levels represented, the first level representing language communities that are divided into different discourse communities (professional, religious, social etc.) where each community hold different styles and discourse practices in their communication. On the lower plane we can see speech genres

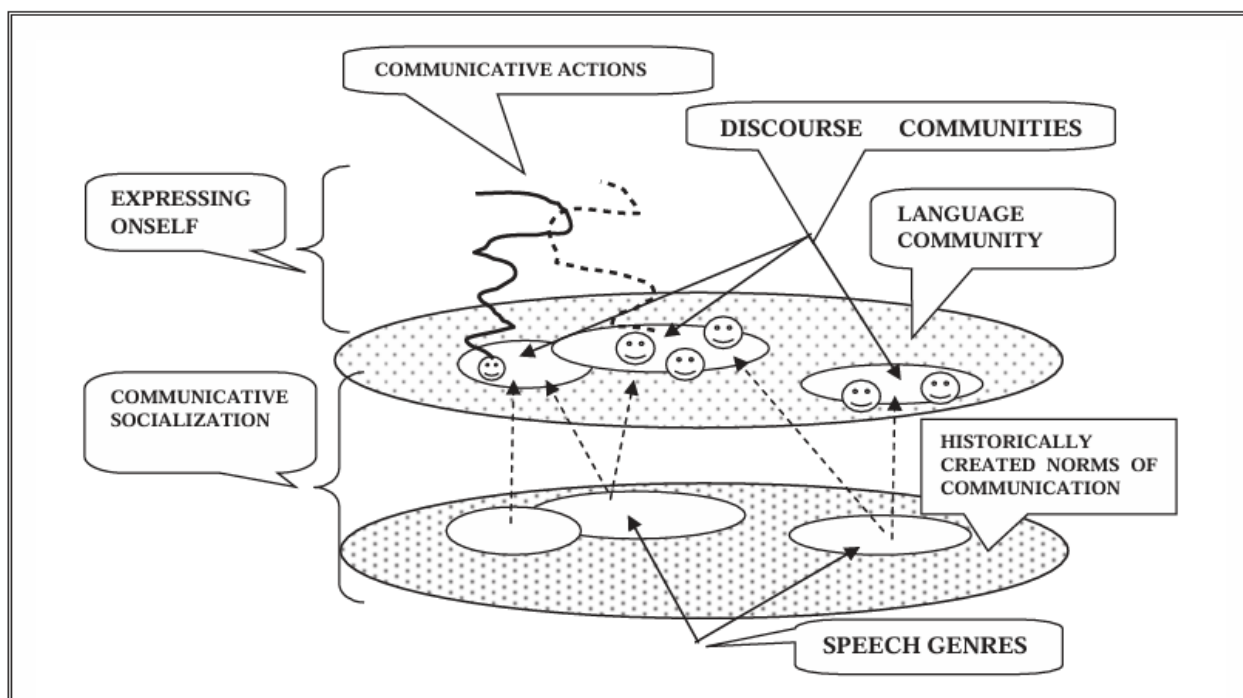


Figure 2.4 Schematic presentation of the main factors conditioning the L1 (Nowicka & Wilczynska 2011, p.25)

and different norms of communication that were historically created, which means that communication does not occur only on an individual level but is affected by many factors of different communities that the individual gets in contact with. The dotted and solid lines represent how these levels interact, it shows the dynamic process of how, for example, expressing oneself (individual level) is shaped by the norms of the community the individual belongs to but on another level, communities are made up of individuals communicating in specific way, they do not exist separately, and they are shaping each other. Since this point is true in developing L1 and creation of our individualistic self depends on it, the whole process of acquiring L1 includes the processes such as socialization and education for individuals to acquire different genres and registers they would use in this community. But problem occurs when we speak about L2 acquisition, since the language acquirement deeply depends on the process of identity construction in that language (Nowicka & Wilczynska 2011). The identity construction in L2 is not even merely like identity

construction of L1, since usually, the person acquiring L2 already has developed his L1 identity, the L2 is acquired in different contexts and this process proceeds in a more conscious way than in L1 and the surroundings of acquiring L2 identity is much poorer since it usually depends on teacher and textbooks (Nowicka & Wilczynska 2011). All these factors provide a different result of L2 identity which is usually more complex, multilingual and multicultural (Nowicka & Wilczynska 2011). This identity is usually very different from L1 identity of L2 speaker. By observing language learning as a part of community work and interaction between the individual and social groups we come to the conclusion of how the materials have an important role in language learning and how using technology can expand the number of communities the learner can reach to learn from and influence on.

2.7 Video Games and Speaking

The commercial industry of video games is growing and with it the implementation of video games both in personal free time and in classroom (Cole et al., 2024). A recent report indicates that teachers are using video games more in their classroom teaching (Drossel et al., 2017). In the last decade the main research was based on understanding how video games influence learning in different aspects: knowledge acquisition, affective and motivational outcomes, cognitive outcomes, social skills and behavioral changes (Cole et al., 2024). The idea of using video games for educational purposes is not only reserved for technology and science teachers but also for social science and arts, like history (McCall, 2022). In some cases, there can be seen an improvement of language skills even for the students with learning disabilities, for example action video games can improve reading skills for children with dyslexia (Franceschini et al., 2017).

The idea of using video games as a tool for education is not that new, as over two decades ago Gee (2003) suggested ways for the video gaming industry to enhance learning processes. Gee identified 36 principles that compliment deep learning, among which the most prominent are problem-solving, immediate feedback, scaffolding and motivation. He suggests that deep learning involves active engagement, meaning making and ability to transfer knowledge across different contexts. Additionally, he highlights the points where video games present a good environment for learning, like situated learning, low-stakes environment for experimentation, multimodal learning, community learning and embracing failure as growth. According to him video games provide the things that school are not able to, they provide players/learners to participate in creations of scenarios and are always challenged with learning new skills and using them, and this process

creates “the cycle of expertise” (p.3). He says that video games keep gamers motivated since there is always a challenge with problem solving but, in a “do-able manner”, that keeps people eager to continue playing the games. However, how can we connect this to language learning, specifically to the development of speaking?

Indeed, a study in Finland, (Marsh & Tainio, 2009) looked into the relationship between games and development of speaking skill. The participants were two 13-year-old boys who were playing video games in their free time. From time to time, they had friends that participated in gaming sessions, all boys aged 10-14. The boys played game Final Fantasy X and researchers used conversation analysis to focus on “other-repetitions”, which means that they were analyzing the instances where the boys would use the words, sentences and phrases from game as means of communication and participation in the games. One similar research conducted in the same year had a different approach, they used observation and interviews with children playing video games in internet cafes in Türkiye (Turgut & Irgin, 2009). The 10 children that participated were primary and secondary school students aged 10-14 and were observed three times, followed by 30-minute long semi-structured interviews. According to personal preferences children could choose between several games: *Knight Online* World version, *Counter-Strike*, *Grand Theft Auto: Vice City*, *Warcraft III: Reign of Chaos*, and *FIFA 08*. The children agreed in all interviews that video games helped them with language learning and vocabulary acquisition. Some of the players said that the games helped them connect with other players around the world and improve their language skills. Also, communication between the players occurred when they were not familiar with some of the words that were necessary to understand the game flow. One of the main reasons that researchers pointed out as better for language acquisition than traditional media is repetition of the vocabulary and instant feedback the games provide. Similar results were found with Iranian students (Ashraf et al., 2014). The experiment lasted 14 weeks and included 2 seasons per week. The findings indicated that the combination of playing commercial video games and getting a constructed plan and input from teachers lead to the best results in vocabulary retention.

In another research (Zheng et al., 2009) computer mediated discourse analysis was conducted by collecting data of chat logs, interviews and observations of four girls playing *Quest Atlantis*. Two of the girls were native English speakers and two of them were Mandarin Chinese speakers. This went beyond just vocabulary acquisition, they found out that during these gaming sessions negotiation of meaning and collaboration was of great importance for leveling up in the

game and this resulted in other aspects of language to naturally emerge, such as syntax, semantics, discourse and pragmatic knowledge.

A separate study suggests that video games can improve willingness to communicate and self-perception of L2 language proficiency (Reinders & Wattana, 2011). Namely, they were focusing on a game called *Ragnarok Online* which was one of the most popular games at the time in Thailand and included 16 students from age 21 to the age 26 using the separate server that was adjusted to lesson time of 40 minutes and curriculum. Only two sessions were recorded, and a willingness to communicate scale and interviews were conducted. Interestingly in interviews students mentioned that they had an opportunity to develop their own vocabulary, the need for quick response made them feel like their fluency had improved and they could practice English outside of the classroom.

A different approach suggests that online games and social media can influence creation of cultural identity in L2 (Thorne et al., 2009). Thorne et al. (2009) found out that online chats and online video games can create a hybrid identity construction, where users use the constructions from their L1 and L2 and their online experience and create a different type of cultural identity. On the other hand, they say that fan clubs and fan fiction can lead to cultural development of L2 since it includes L2 materials and discussions about it. As for the overall speaking proficiency dimension, they claim that the sources of online environments offer opportunities for development of speaking proficiency through engagement, feedback and collaboration with other users.

Extending on this idea, similar results were found by Sylvén and Sundqvist (2012) where, even though they researched on overall language proficiency and vocabulary development and role of gaming, suggest that MMORPG games have a great role in developing speaking skills. Also, they imply that collaboration and communication lead to the development of vocabulary which consequently leads to the development of speaking skills. They also claim that video games lead to incidental language acquisition which leads to development of all language skills including speaking. Interestingly, they also found that the choice of games between genders varies, in a way that boys prefer games such as MMORPG like *World of Warcraft*, and first-person shooters such as *Call of Duty* which led to more opportunities for speaking where girls prefer single player simulation games such as *The Sims*. The authors claim that these differences were crucial in gender differences in proficiency, where boys outperformed girls. This outcome can be seen in research

done by Yang and Chen (2012) where they confirmed that single player games benefit the least to speaking skills. Later, similar results were discovered by Alrajhi, (2020) where he focused on accumulative gaming experience on the development of students' linguistic competence. On the other hand, Sylvén and Sundqvist (2012), discovered that the non-gamers performed the worst in proficiency tests which leads to the conclusion that games improve overall proficiency including speaking, but the type of games played are of great importance as well.

One study focused specifically on the game *World of Warcraft* and questioned whether chats can influence fluency, accuracy and vocabulary complexity (Zariski, 2010). The research was conducted with eight participants coupled in pairs, where each pair had one native English speaker and one non-native speaker. Each pair met in *World of Warcraft* and played this game for 5 to 8 hours. The results showed improvement in all four non-native speakers overall, but the results of improvement of each skill varied between the players. Some of the players showed improvement in all three skills while others in one or two. This claim is also supported by Peterson (2010) where he says that “Research further suggests that learner participation in network-based gaming provides valuable opportunities for vocabulary acquisition and the development of communicative competence”. In his paper he delved into the importance of MMORPG games and urged for further investigations into how these games can be implemented in the classroom environment.

Further, the extension of the research on these types of games is not limited only on English as a second language. Rama et al. (2012) for example investigates games for learning Spanish as L2. The game that was used for this research was also *World of Warcraft* (WoW), but the Spanish version. The study included 6 participants 4 males and 2 females and the gaming sessions lasted 7 weeks. Researchers conducted semi-structured interviews in two weeks period for follow-up. The results were the same as in the above-mentioned papers (Turgut & Irgin, 2009; Ashraf et al., 2014; Zheng et al., 2009; Reinders & Wattana, 2011; Peterson, 2010; Zariski, 2010; Sylvén & Sundqvist, 2012), but for this paper the most interesting part is how this online game foster communicative competence.

Forms of communicative competence emphasized in MMOG play are closely associated with sociolinguistic (i.e., knowing how and what to say to whom, and when) and strategic competence (e.g., repair strategies, turn-taking strategies, etc.) ...Play in MMOGs favors these forms of communicative competence, which places emphasis on contextualized

meaning rather than grammatical and lexical correctness of standard language forms. (Rama et al. 2012, p. 330)

As mentioned in the previous chapter, sociolinguistic and strategic competence are inseparable parts of communicative competence (Canale & Swain, 1980) and WoW is a game where we can see many aspects that can give different affordances to players to develop their communicative skills. Some of them prioritize function over form, where players are more interested in the meaning of the message than of its grammatical correctness. Negotiation and engagement can be easily obtained by using simple words like “grats” (meaning: congratulations) for establishing rapport and develop interactional skills. Flexibility in communication is also another aspect that may not be present outside the virtual worlds since delays in answers are completely acceptable due to multitasking, which is the nature of gaming itself. This also leads to error tolerance, since the informal environment helps and encourages learners to engage and experiment with language without fear of making mistakes (Rama et al., 2012). Lastly, multiple modalities of gaming nature (text chat, voice chat and in-game interactions) offer variety of experiences for gamers.

Games such as MMORPG and MMOG are one of the most researched games in second and foreign language learning and teaching because of their characteristics Jabbari and Eslami (2019) reviewed the research that investigated MMOG. They analyzed 31 research paper related to MMOG and came to conclusion that MMOGs “*provide socially supportive and emotionally safe (i.e. low-language-anxiety)*” and in these environments the players are offered with multiple opportunities for L2 learning and socialization. Consequently, these help players/L2 learners to broaden their vocabulary and to develop their communicative competence in the target language.

As mentioned in the previous chapter, pragmatic knowledge as a part of linguistic knowledge plays a great role in the communicative competence schemata. That is exactly what (Shirazi et al., 2016) took as a main point in their research. The study was conducted for 8 sessions in both control and experimental groups (20 participants in each of the groups). Main idea was teaching pre-intermediate students’ speech acts of request and apology. Multiple Choice Questionnaire (MCQ) for apology and request pre-test and post-test were implemented and experimental group significantly outperformed the control group.

Following this perspective, another research conducted in Iran focused on another aspect of communicative competence, which is the cultural factor (Soyooof, 2018). If we again refer to the previous chapter, we should remember the theory that was proposed by Nowicka and Wilczynska (2011) where they mentioned the identity and importance of establishing different selves. Also, one of the main elements of communicative competence's inverted diamond is sociocultural competence (Sauvignon, 2002). Soyooof (2018) referred to this dimension in his case study where he interviewed 6 Iranian male gamers on their opinions on how video games influence their cultural awareness and their perception of their sociocultural development in target language. His results were quite positive in favor of video games and his main reasons for these results were the nature of games, the multimedia virtual environments that games provide to players. He adds that also personal involvement, emotional before everything else, provides players with better understanding of cultural differences. The other part that he mentions is that video games teach L2 subconsciously which minimizes person's L1 ego.

The value of strategic competence, as a crucial component of communicative competence, has not gone unnoticed. The strategic competence found its place in one of the research projects in Algeria (Fouzia, 2022). The research was conducted via an online questionnaire where participants explained their video gaming habits and their view on their impact on their social skills. The interesting part was that it included strategic competences where they isolated memory, cognitive, compensation, metacognitive strategies in addition to other affective and social strategies. It is highlighted that most of the players do not use games as a sole mean for learning, rather the entertainment is the main goal, while learning and strategy use is by product of this process.

Recently there had been a study conducted in Türkiye (Bakan et al., 2022) where 67 students of English Language and Literature Department had to fill in two types of questionnaires, open-ended and Likert-type. The results showed that most of the students use online gaming as a tool for practicing L2 speaking, and their attitudes are positive towards this type of language learning. On the other hand, this study, as mentioned by the research, is not in depth as it could be since it is based only on written answers from students. Also, the students that participated in the study were already the students of language, specifically of English language and literature, so this can be a limitation to the study as well, and research gap for further study.

In conclusion, while significant research has been conducted over the last 20 years on the relationship between video games and foreign language speaking and overall language learning, the diversity of topics and findings underscores the complexity of the field, making it clear that the results cannot be generalized, yet it can be said that video games have an impact on L2 language development. This highlights the need for more thorough research to bridge the gaps in current understanding and establish a foundational basis for future exploration in this area.



CHAPTER III

METHODOLOGY

This chapter explains the methodology used in the study by first presenting the research design and the rationale behind the chosen methodology. It then continues with an overview of the participant structure, followed by a description of the tools used and developed for this research. The chapter includes a detailed explanation of the scale adaptation and development process, including factor analysis for the quantitative data collection. This is followed by a description of the qualitative data collection tools. Finally, the data analysis process is explained in detail at the end of the chapter.

3.1 Research Design

This study employs a mixed method approach for investigation of connection between online games and foreign language speaking anxiety (FLSA). Mixed method types of research are defined as procedures for collecting, analyzing and integrating both quantitative and qualitative data (Creswell & Poth, 2018). This methodology is not just appropriate, but it is essential for investigating a complex phenomenon such as anxiety, as can be seen in previous chapter, neither qualitative nor quantitative study alone can offer a comprehensive understanding of the issue. A purely quantitative study can measure the prevalence and intensity of FLSA among students by using surveys, scales and questionnaires which can provide valuable statistical data. However, using only this type of data would deprive us of a more nuanced picture of the personal experiences of the learners. On the other hand, a purely qualitative study could offer great descriptions of personal experiences, perceptions and coping strategies, but it would be limited in its ability to generalize findings to a larger population or identify larger trends (Creswell & Poth, 2018). The vary strength of the mixed method lie in its ability to close these gaps of each method by merging them and providing knowledge that is not just a sum of its parts but something more complex as described by Fetters and Freshwater (2015) by an equation $1+1=3$. This integration can help the research not only to understand *what* the connection between FLSA, and online video games is, but also *why* this connection exists.

In this research explanatory sequential design is used. This method is found to be appropriate when quantitative results need further explanation (Creswell & Poth, 2018). The method is conducted in two stages, the first stage is collecting quantitative data, getting the results

and then conducting the collection of qualitative data after which the interpretation of both types of results occurs (Figure 3.1) (Creswell & Poth, 2018).

(b) The Explanatory Sequential Design

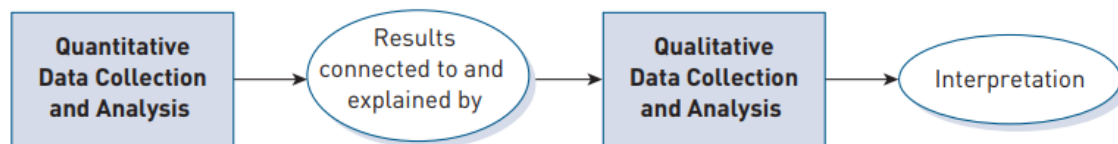


Figure 3.1 The Explanatory Sequential Design (Creswell & Poth, 2018 p. 66)

Quantitative data are usually given more importance, and the integration of the data takes place when the initial quantitative findings guide the subsequent qualitative data collection. As a result, the two types of data remain distinct yet interconnected. One of the key strengths of this approach is its simplicity, it is easy to conduct since they are organized into two separate phases (Creswell, 2008).

In conclusion, this method was found to provide both depth and breath of understanding a complex phenomenon such as FLSA that both qualitative and quantitative methods alone would lack and gives the opportunity to understand the relationship between FLSA and online video games.

3.2 Participants

The participants selected for this survey were selected using convenience method or opportunity sample. This method is the most used method in L2 (Dörnyei, 2007) and like in much other research, this method too was not completely based on convenience, but it needed to fulfill certain characteristics suitable for this study. The survey included students from Akdeniz University, Türkiye with the total number of 300 students where 158 students were students from Faculty of Education, English Language Teaching Department and 142 students from Preparatory Program at the School of Foreign Languages. Both groups include students aged from 18 to 24 years old and their proficiency level is at least B1 according to CEFR.

Out of this group of students, 11 students were selected for semi-structured interviews according to their willingness to participate, their level of anxiety and their gaming experience. The researcher ensured participants that they are both gamers and non-gamers. Among them 6 identified as gamers (two females and four males), while three identified as non-gamers (all females).

The participants' proficiency level varied, where they demonstrated high proficiency (B2 and higher) and just newly acquired B1 level of proficiency. The interviews were conducted both face to face and online, and both in Turkish and English language, depending on the students' preferences. On average interviews lasted 30 minutes.

To protect participants' anonymity, pseudonyms were assigned instead of their real names. English names were used for narrative clarity of this study. Each pseudonym's first letter corresponds to the participant's real name for researcher traceability.

3.3 Data Collection Tools

For collecting data for this survey both qualitative and quantitative methods were applied. For qualitative method it was used a questionnaire and adapted Foreign Language Anxiety Scale (Horwitz et al. 1986). The questionnaire included eight questions related to gaming habits and their frequency, and the adapted scale included 21 Likert type questions. The questionnaire was later followed by the semi-structured interview with questions created by the researcher. The details of these tools will be explained in the following parts of this paper.

3.3.1 Questionnaire Design and Structure

The comprehensive questionnaire used in this thesis consists of two parts, the first part related to gaming and gaming habits, and second part is adapted version of Foreign Language Anxiety developed by Horwitz et al. (1986).

The first part included information that could be important for analyzing differences of anxiety levels between the participants. It included the question related to whether the participants play video games, that could provide the researcher with data that relates to finding differences in anxiety between gamers and non-gamers. Later it included multiple choice multiple answer questions about game preferences, that could also provide information about which types of games could potentially lead to higher or lower levels of speaking anxiety. Later questions were related to gaming habits, which included the frequency of playing and length of gaming session, and how often they communicate in English with other players. The researcher also included questions related to participants' attitudes towards how much gaming influenced the development of their language skills.

To develop a scale that specifically measures foreign language speaking anxiety this scale needed to be adapted to the needs of the survey. In the initial stage, all items of the original scale were reviewed and the items that were referring to classroom anxiety were omitted, and all other items that were not related to speaking as a skill. Later the items which could be referring to speaking anxiety were adapted and rephrased resulting in omitting 8 questions total. Now the 25-item scale was further adapted, where phrases like “foreign language” were changed to “English language”. This adapted version was then translated into Turkish maintaining linguistic and conceptual equivalence. After these first two adaptations the finished scale was reviewed and approved by a linguistic expert, highly fluent in both languages.

The next step was testing reliability, where the group of 26 students was asked to fill in the questionnaire and to write their comments about the phrasing, grammatical mistakes, redundancy and comprehension. After data input, before any calculations some of the items need to be reverse-coded, flipped and those items were number 2, 5, 7, 9, 12, 16 and 25. After that the outliers were checked for any standard deviation value (Z) greater than ± 3 . The next step was testing internal consistency of the adapted Foreign Language Speaking Anxiety Scale was assessed using Cronbach’s alpha. The overall scale demonstrated very high reliability ($\alpha = .95$), indicating a high level of internal consistency among the items, however it also indicated that there might be some redundancy among the items. The next step was to remove the items that were suggested as redundant and repetitive by participants and final reliability is valued to $\alpha = .94$ with 21 as a total number of items. The reliability value is similar to another adaptation of a scale, translated to Hungarian where the Cronbach alpha was $\alpha = .93$ (Tóth, 2008). That was enough for the research to start with collecting data of 299 participants which did not include any outliers, and after this collection the factor analysis was conducted.

For examining construct validity of the Foreign Language Speaking Anxiety Scale (FLSAS) the exploratory factor analysis (EFA) was conducted. Since this scale consists of multiple items that were designed to capture different emotional and psychological states related to FLSA it was necessary to assess if these items form understandable and coherent items. The aim of this analysis was to determine whether these factors form distinct dimensions that are according to FLSA among university level Turkish students thereby supporting the theoretical structure of the scale.

Before continuing with the factor analysis again the reliability test was conducted that revealed Cronbach Alpha as $\alpha = .93$ which was identical with Tóth's result. Then when the factor analysis was run, it was found that the question number 15 "I am afraid that my language teacher is ready to correct every mistake I make." "İngilizce öğretmenimin yapacağım her hatayı düzetmek için hazır beklediğinden korkuyorum." is the one that is the most problematic since it is loading on all three factors that is why it was decided to exclude this question from the scale and later analysis. After this factor analysis was conducted again and it was revealed that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is .94, which falls within the "excellent" range (Kaiser, 1974) (Hutcheson & Sofroniou, 1999) (Field, 2012).

The present scale is based on an adaptation of the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al. (1986), a well-established instrument in foreign language anxiety research (Tóth, 2008) and we should have this in mind while analyzing the results. The Bartlett's test was significant ($p = 0.00$), indicating that the correlation matrix is not an identity matrix and justifying the use of factor analysis (Bartlett, 1954).

A three-factor solution was extracted based on theoretical and empirical evidence of the original FLCAS which was designed with a three-factor structure. The factors extracted accounted for 61.43% of the variance, suggesting that these three factors can be explained by these three factors and this percentage is considered acceptable in social sciences since a threshold of 60% is commonly accepted (Hair et al., 2006). In conclusion these three factors are enough to explain the main dimensions of speaking anxiety in this context (see table 3.1).

Table 3.1 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	9.218	46.089	46.089	9.218	46.089	46.089	9.018
2	2.000	10.002	56.091	2.000	10.002	56.091	1.910
3	1.068	5.342	61.433	1.068	5.342	61.433	3.682
4	.910	4.551	65.985				
5	.760	3.798	69.783				
6	.712	3.561	73.343				
7	.671	3.357	76.701				
8	.622	3.109	79.810				
9	.583	2.915	82.725				
10	.483	2.413	85.138				
11	.407	2.036	87.174				
12	.397	1.985	89.159				
13	.372	1.862	91.021				
14	.344	1.719	92.739				
15	.311	1.554	94.293				
16	.305	1.525	95.818				
17	.240	1.199	97.017				
18	.230	1.150	98.167				
19	.203	1.014	99.181				
20	.164	.819	100.000				

Factor loadings according to pattern matrix (see table 3.2) obtained three distinct factors where two were consistent with the previous theoretical framework (Horwitz et al., 1986), and the last factor is defined differently since it has negative loadings on all items.

3.3.1.1 Factor 1: Communication Apprehension

This factor is the most dominant and primarily it reflects the anxiety that is experienced while speaking in English, containing self-doubt and nervousness about one's language abilities. These items also include physical reactions during speech, panic, forgetting, and anxiety about speaking without preparation. Items like Q1 ("I never feel quite sure of myself when I am speaking in English"/"İngilizce konuşurken kendimden asla tam olarak emin olamıyorum") and Q4 ("It frightens me when I don't understand what the speaker is saying in English"/ "Konuşmacının İngilizce söylediklerini anlamadığımda korkuyorum") represent feelings of uncertainty and fear associated with speaking.

Table 3.2 Factor loadings for three-factor PCA with direct oblimin rotation on adapted FLCAS items

	Component		
	1	2	3
Q1	.793**		
Q2		.505*	-.328
Q3	.746**		
Q4	.768**		
Q5		.778**	
Q6			-.822**
Q7	.791**		
Q8		.461*	
Q9	.916**		
Q10	.647**		
Q11		.667**	
Q12	.787**		
Q13	.640**		-.340
Q14			-.823**
Q16	.744**		
Q17	.775**		
Q18	.798**		
Q19	.850**		
Q20	.735**		
Q21	.709**		

* = appreciable loading (.4-.6), ** = high loading (>.6)

3.3.1.2 Factor 2: Fear of Negative Evaluation

This factor captures the fear of being judged by others when speaking in English. Items such as Q2 ("I don't worry about making mistakes while speaking."/"Konuşurken hata yapmaktan endişe etmiyorum"-recoded item) and Q11 ("I would not be nervous speaking the English with native speakers."/"Ana dili İngilizce olan kişilerle İngilizce konuşmam gerekirse gergin olmam."-recoded item) reveal that anxiety is linked to the perception of being negatively evaluated by peers, natives and/or instructors.

3.3.1.3 Factor 3: Speaking Confidence

The third factor was surprising in this research, since instead of test anxiety there is a factor with complete negative loading on Q2, Q6, Q13, Q14. Which makes sense since these questions are the ones that need to be recoded (Q2, Q6) and Q13 and Q14 are the questions that reflect confidence in speaking if they are loading negatively.

Despite minor cross-loadings on items 2 and 13 these items were retained due to their theoretical relevance and contribution to overall scale reliability, especially since the loadings of questions 2 and 13 are between the factors 2 and 3 and 1 and 3 respectively. The differences between the loading exceed the acceptable minimum threshold of .20 difference between the item loadings and that is why it is going to be accepted that item number 2 is loading on factor number 2 and the item 13 is loading on factor number 1. To add to this reasoning, the item-total correlation analysis further supported their inclusion (see table 3.3). Item number 2 moderately contributes to the scale while item 13 is a very good item that is strongly related to scale's overall reliability. These types of correlations are not uncommon in psychological constructs like language anxiety. Similar overlapping can be found in Tóth's (2008) factor analysis of the adaptation of the same scale. As a result, items 2 and 13 were retained as part of the scale due to their theoretical relevance and the value of information they provide for measuring the construction of foreign language speaking anxiety.

Table 3.3 Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q2	55.8395	226.290	.420	.931
Q13	57.1940	211.821	.735	.925

3.3.2 Semi Structured Interviews

For the collection of qualitative data semi structured interviews were conducted with 11 participants, trying to find all levels of anxiety for both gamers and non-gamers. The initial number of questions included 10 questions created by the researcher and reviewed by an expert in language learning to ensure they were logical and in accordance with the research topic. These questions were conducted in a way that they cover similar areas of language learning for both gamers and non-gamers. The interviews were conducted in both Turkish and English depending on the preference of a participant. After a couple of interviews, the number of questions rose and reached the total number of 18 questions and 18 different topics. After presenting the findings from quantitative analysis these interviews helped with giving broader and in-depth elaboration of the

results. By exploring personal insights of participants, it gave insights into unexplored areas of gaming influence on language speaking anxiety and language learning overall.

3.4 Data Collection Procedure

Before proceeding with data collection, the researcher needed to collect all documents needed for ethical approval. The first approval was for English language teaching (ELT) department in Faculty of Education, and the data collection was conducted between the 3rd and 14th of December 2024. The approval for data collection for School of Foreign Languages, Akdeniz University was obtained later, in the middle of December that is why data collection was postponed for the next semester. Data collection occurred during February 2025, and interviews were conducted during February and March of the same year. For more efficient data collection Google Forms was used, where the researcher personally went to all classrooms in ELT department to explain the importance of the research and to share the internet links leading to questionnaires. The same Google Forms were used for collecting data in School of Foreign Languages, with the difference that the researcher could not be present in the classrooms but could only share the link with the teachers who later forwarded it to their students. The completion of the survey was approximately 10 minutes by each participant. The survey was conducted in Turkish for better understanding of all participants, since some of the students had only B1 level of English according to CEFR framework.

The participants were chosen for interview according to their survey results. The researcher tried to find highly anxious, mild anxious and low anxious gamers and non-gamers. The interviews were conducted both online and face to face, depending on the participants' preferences. Interviews were conducted and recorded via MS Teams when conducted online, and the phone voice recorder was used for recording face to face interviews. Before recording, the participants were notified that the recordings would be used for research purposes only, and the interviews were recorded with their consent. The interviews were conducted in both Turkish and English depending on the preferences of interviewee.

3.5 Data Analysis

The present study used a mixed method approach that includes both qualitative and quantitative analysis. Quantitative analysis was conducted by using statistical methods to understand quantitative data gathered. On the other hand, qualitative data incorporated thematic

analysis of interviews. More detailed explanations of these analyses will be provided in the following sections of this chapter.

3.5.1 Quantitative Data Analysis

Before starting any of the analysis the evaluation of z-scores were conducted, with threshold of ± 3 where no parameter exceeded this threshold. The next step was to test Mahalanobis distance value where no value exceeded the critical value of .001.

After this the descriptive statistics of total anxiety level of all 299 were computed (Table 3.4). It was found that the mean score is 59.43 with a median of 58.00 and a mode of 61.

Table 3.4 The Results of Tests of Normality for FLSA

N	Valid	299
	Missing	0
Mean		59.4314
Median		58.0000
Mode		61.00
Skewness		.341
Std. Error of Skewness		.141
Kurtosis		-.548
Std. Error of Kurtosis		.281

On 5-point Likert scale with minimum value of 20 and maximum value of 100, indicating an overall moderate level of foreign language speaking anxiety among participants. The distribution showed slight positive skewness but in acceptable range (± 1) and negative kurtosis suggests a fairly normal distribution with a slight tendency to a flatter shape but also in acceptable range (± 1).

For further investigation of group differences in anxiety levels independent sample *t*-tests were conducted. While no significant difference in anxiety levels was found between ELT group and preparatory program group, a statistically significant difference emerged between gamers and non-gamers, with non-gamers reporting higher FLSA. Further investigations revealed that this

difference was higher in the preparatory program group, while the ELT group showed no statistically significant difference between non-gamers and gamers.

Following this linear regression analysis was conducted for examination whether gaming habits could predict FLSA. Although gaming frequency and session length did not significantly predict anxiety level in the full sample, time spent during the gaming session was a significant negative predictor of FLSA for preparatory program group. Additionally, the frequency of speaking English during the gaming sessions and belief in language learning benefits of gaming both significantly predicted the lower FLSA. Finally, a regression model was conducted for each gaming type individually and it revealed that greater diversity in gaming experience can be associated with lower FLSA explaining approximately 9% of the variance.

3.5.2 Qualitative data analysis

Qualitative data gathering was conducted after quantitative data were gathered. The preliminary questions were reviewed to see if they answer the problems found in qualitative data. During the data collection process, the researcher actively engaged in a reflective cycle by relistening to previously recorded interviews. As insights started to emerge during the conversation, the interview questions were slightly adjusted to better explore existing topics participants were bringing up, making later interviews more focused and meaningful.

After conducting all 11 interviews the recordings were transcribed, and the ones conducted in Turkish language were also translated. Initial transcription was done digitally and later reviewed by relistening to ensure accuracy. After the corrections were made, translations were checked again for validity and consistency.

The next step involved conducting a thematic analysis, following the six-phase framework outlined by Braun and Clarke (2006): familiarization with the data, generating initial codes, searching for themes, reviewing and refining themes, naming them, and producing the final report. The procedure of coding data was done by two researchers independently and coding agreement was achieved, ensuring the reliability of coding process.

Familiarization with the data actually started with the first interview. The recorded interviews were relistened couple of times before and during transcription. Before transcription as

mentioned before, it was important for the researcher to understand if there is any need to refinement of the questions.

In more than 6 hours of interviews the initial number of codes was around 180. The taught process during the coding was marking anything that is related to the topic of this research, and since the number of codes was more than broad a lot of overlapping codes occurred. For example, codes “fast reaction speaking”, “no time to translate”, and “real-time language use” were merged into the code “fluency under pressure” to express participants’ experiences of speaking spontaneously in high-stakes or fast-paced gaming situations. Next phase was searching for themes, so that it was necessary to lower the number of codes, that is why the first step was merging the overlapping ones. After the initial merging the next step was merging the codes that were similar to each other. To give an example the code Anxiety Triggers Outside Gaming is the merged version of High Anxiety Situation, Anxiety Triggers (general/non-specified context), Teacher Induced Anxiety, Hostile Environment, Anxiety/Academic Pressure, Teacher Anxiety and Professional Expectations. After this phase the number of codes was lowered to final 36 codes. With these 36 codes the researcher tried to thread the connection between them. For this complex phase the researcher reread the research question and skimmed again through Chapter II literature review. Using pen and paper a couple of versions of different themes emerged finalizing with 5 different themes out of which the first 4 are deeply connected to interview questions and the 5th theme is the one that emerged by itself, from data. The thought process for the themes can be explained with example of theme number two since one of its codes is already mentioned above. The first thing that needed to be addressed was a research question in this example: What is the foreign language speaking anxiety levels of language learners who do not actively play online games? Even though this question can be answered with quantitative data analysis the deeper insights can be provided with qualitative data. The focus was on non-gamers’ experiences and experiences of both groups outside of gaming environment. The codes referring to this topic are: Formal Education Influence, Anxiety Triggers Outside Gaming, Social Triggers of Speaking Anxiety, Self-Induced Anxiety Triggers, Emotional and Linguistic Self-awareness, Anxiety Native vs. EFL, Fluency under pressure and Beliefs and Identity (see figure 3.2.). By reviewing this list, it was noticed that these codes can be separated into two subthemes and those are External and Internal triggers (figure 3.3.).

Next step was defining and naming the themes and the most important thing in this part is the revision of the codes and subthemes and finding the ones that most closely describe the theme itself. Naming this theme Classroom Anxiety and Self-induced Pressure narrowing down its scope, by connecting it to the specific situations and experiences of the participants.

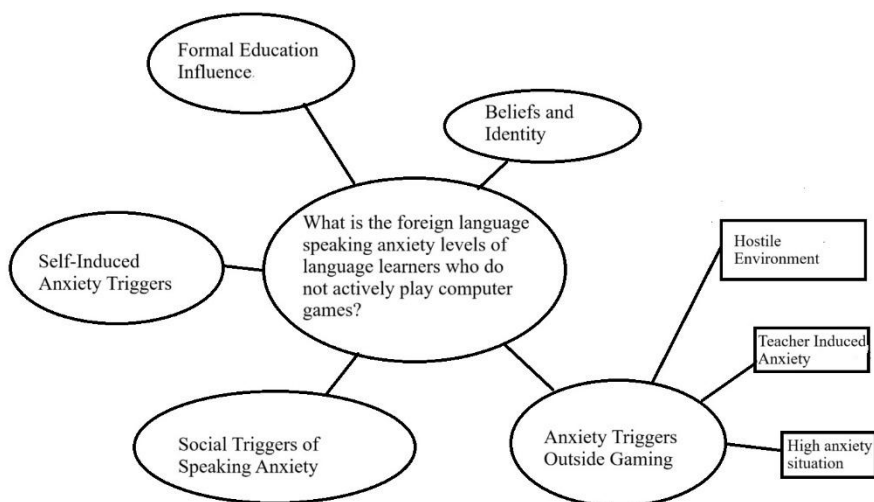


Figure 3.2 The map of creating the subthemes and initial naming of them

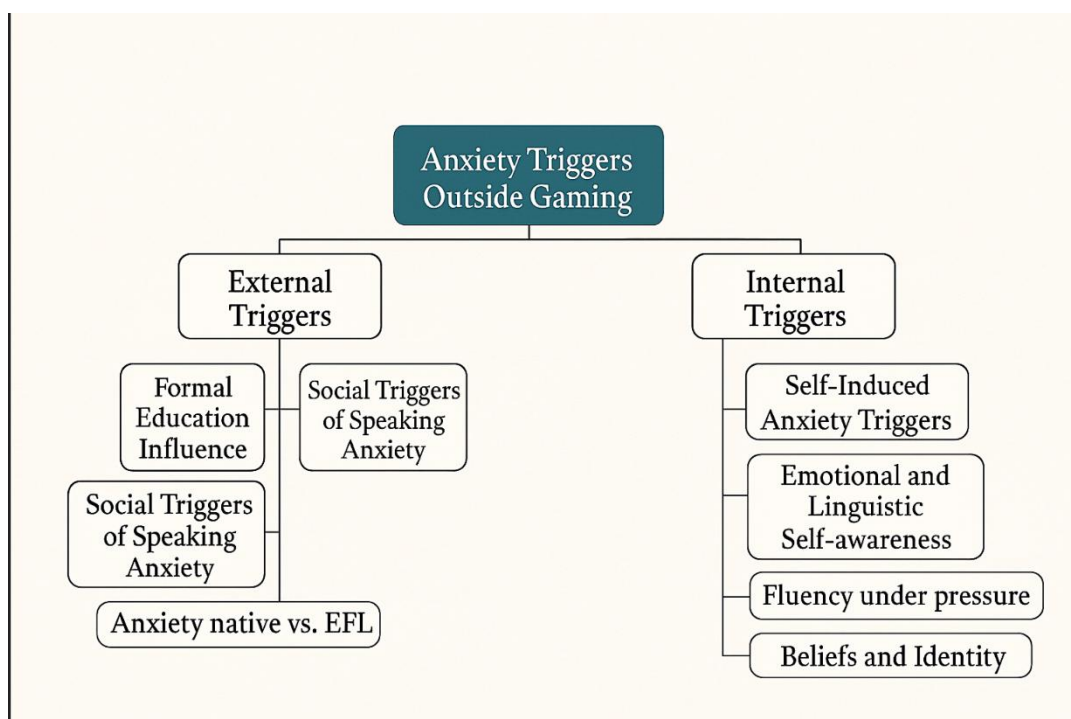


Figure 3.3 Initial map of theme 2

The final step was reporting the findings which will be elaborated in the next chapter. The report includes explanations and direct quotations of the participants. To preserve their anonymity

their names were hidden under the names typical for English speaking geography. Aside from the aliases given, next to their names were always mentioned their anxiety level and whether they are gamers or non-gamers. In just one part where it was necessary because of the context of the topic it was highlighted if they are coming from the ELT department or preparatory class.

3.6 An Overview of Data Analysis Procedures in Accordance with Research Questions

This chapter outlines the data procedures used in accordance with the research questions. To address RQ1 and RQ2, which explores the levels of FLSA among gamers and non-gamers descriptive statistics and independent sample *t*-tests were used. Aside from quantitative data analysis the quantitative data analysis through thematic analysis explains reasoning behind the quantitative results. RQ3, which was investigated through both group comparisons and linear regression analyses focusing on gaming frequency and session duration. Again, as in the case of RQ1 and RQ2 qualitative data interpret it in more detail. Finally, RQ4 aimed to explore how gaming and anxiety interact within the language learning process, was completely addressed through thematic analysis of interview data, revealing both anxiety-reducing and anxiety-inducing dynamics connected to gaming. Together these two types of analysis provided a comprehensive understanding of gaming and its role as a factor of FLSA. In the next chapter the results of these analyses are presented.

CHAPTER IV

FINDINGS

This chapter represents the summary of the analysis of qualitative and quantitative data collected for this research. Quantitative data were analyzed using statistical methods such as t-tests and simple linear regression while qualitative data were analyzed through thematic analysis. Thematic analysis serves to explore patterns of participants shared feelings and experiences of language learning by using video games, with a focus on online games and how they differentiate from formal language learning experiences. Both qualitative and quantitative data analysis were constructed to find answers to the beforementioned research questions.

4.1 Quantitative analysis

An independent sample t-test was conducted to compare the differences in anxiety levels between the English Language Education (ELT) department group and group from preparatory class. There was a slight difference in anxiety levels, where the preparatory group showed less anxiety levels than ELT group, but this difference was shown not to be significant $t(297) = 1.69$, $p = .092$, 95% CI [-0.50, 6.53] (Table 4.1).

Table 4.1 Difference in FLSA between ELT Group and Preparatory Program Group

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SUM _Anx	Equal variances assumed	.001	.978	1.688	297	.092	3.01755	1.78731	-.49985	6.53496
	Equal variances not assumed			1.686	291.561	.093	3.01755	1.78960	-.50461	6.53972

The same test was conducted to determine whether there is a difference in FLSA between gamers and non-gamers in both ELT and preparatory groups. Levene's test for equality of variances was not significant, $F = 0.143$, $p = 0.705$, indicating that the assumption of equal variances was met. Therefore, the t-test results assuming equal variances were used. The t-test revealed a statistically significant difference between the two groups, $t(297) = 2.21$, $p = .028$. The mean of FLSA score for non-gamers ($M = 61.99$, $SD = 50.56$) was significantly higher than gamers' anxiety

levels ($M = 57.92$, $SD = 15.27$), with a mean difference of 4.07, 95% CI [0.45, 7.69] (tables 4.2 and 4.3).

Table 4.2 Descriptive Statistics of Language Speaking Anxiety by Gaming Status

	Do you play video games?	N	Mean	Std. Deviation	Std. Error Mean
SUM_Anxiety	No	111	61.9910	15.56073	1.47696
	yes	188	57.9202	15.26553	1.11335

Table 4.3 Difference in FLSA levels between gamers and non-gamers for all participants

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Equal variances assumed	.143	.705	2.212	297	.028	4.07	1.84	.44879	7.69276
Equal variances not assumed			2.201	227.348	.029	4.07	1.85	.42626	7.71530

To delve more on the topic an independent samples t-test was conducted to compare FLSA scores between gamers and non-gamers in just ELT group. The results showed no significant difference in anxiety scores between non-gamers ($M = 60.07$, $SD = 14.67$) and gamers ($M = 61.44$, $SD = 15.75$), $t(156) = -0.56$, $p = .578$. (Tables 4.4 and 4.5)

Table 4.4 Descriptive Statistics of Language Speaking Anxiety by Gaming Status in ELT group

	Do you play video games?	N	Mean	Std. Deviation	Std. Error Mean
SUM_Anxiety	No	68	60.0735	14.66880	1.77885
	yes	90	61.4444	15.75452	1.66067

Table 4.5 Difference in FLSA levels between gamers and non-gamers for ELT Group

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SUM	Equal variances assumed	1.120	.292	-.558	156	.578	-1.37092	2.45798	-6.22613	3.48430
_Anx	Equal variances not assumed			-.563	149.304	.574	-1.37092	2.43355	-6.17955	3.43772

The same calculations were implemented for the other group, (an independent samples t-test) to compare FLSA scores between gamers and non-gamers in the preparatory group. Again, Levene's test for equality of variances was not significant, $F(1, 139) = 1.29, p = .258$, indicating that the assumption of equal variances was met. This time, the results revealed a statistically significant difference in anxiety scores between non-gamers ($M = 65.02, SD = 16.60$) and gamers ($M = 54.68, SD = 14.12$), $t(139) = 3.79, p < .001$. The mean difference was 10.34, 95% CI [4.95, 15.73], suggesting that non-gamers experienced significantly higher FLSA than gamers in the preparatory group (tables 4.6 and 4.7).

Table 4.6 Descriptive Statistics of Foreign Language Speaking Anxiety by Gaming Status for preparatory program group

	Do you play videogames?	N	Mean	Std. Deviation	Std. Error Mean
SUM	No	43	65.0233	16.59961	2.53142
_Anx	yes	98	54.6837	14.12142	1.42648

Table 4.7 Difference in FLSA levels between gamers and non-gamers in preparatory program group

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Equal variances assumed		1.292	.258	3.790	139	.000	10.34	2.72802	4.94580	15.73337
Equal variances not assumed				3.558	69.859	.001	10.34	2.90567	4.54420	16.13496

Next step was to find out whether gaming habits influence the FLSA levels. A linear regression was conducted to examine whether gaming time (frequency of playing video games) predicted language speaking anxiety. The model was not statistically significant, $F(1, 184) = 2.88$, $p = .092$, suggesting that gaming frequency did not significantly predict FLSA (Table 4.8). Later the same analysis was conducted for both groups separately, that also led to the results that found that this relationship was not significant, for ELT $p = .84$ and for preparatory program $p = .54$ (Table 4.8)

Table 4.8 Summary of Non-Significant Regression Results Predicting Foreign Language Speaking Anxiety (FLSA) based on Gaming Frequency

Group	B	SE	β (Beta)	p-value	t-value	R ²	F(df)
FLSA (All participants)	-1.45	15.25	-0.12	.092	-1.696	.015	$F(1, 184) = 2.88$
FLSA (ELT Group)	-0.23	14.25	-0.02	.843	-.199	.000	$F(1, 95) = 0.039$
FLSA (Preparatory Program Group)	-2.39	15.59	-0.21	.054	-1.950	.042	$F(1, 87) = 3.80$

The length of the gaming session was also incorporated into the analysis and a linear regression was conducted to examine whether the amount of time spent gaming (measured by the question "How much time do you usually spend playing video games?") predicted language FLSA. The model was not statistically significant, $F(1, 184) = 3.50$, $p = .063$, indicating that the amount of time spent gaming did not significantly predict FLSA. (Table 4.9)

Table 4.9 Summary of Statistically Non-Significant results of Linear Regression: FLSA Predicted by Time Spent Playing Video Games

Group	B	SE	β (Beta)	p-value	t-value	R ²	F(df)
FLSA (All participants)	-1.72	15.23	-0.14	.063	-1.870	.019	$F(1, 184) = 3.50$
FLSA (ELT Group)	-1.05	15.87	-0.08	.455	-.750	.006	$F(1, 87) = 0.56$

On the other hand, different results were found when conducting the same analysis only for preparatory program and the results were statistically significant, $F(1, 95) = 5.18$, $p = .025$, indicating that time spent gaming significantly predicted FLSA. The R² value was 0.052, suggesting that time spent gaming explains 5.2% of the variance in FLSA, which is a small but meaningful effect. The unstandardized coefficient for time spent gaming was -2.63, with a

standardized beta coefficient of -0.227 (tables 4.10., 4.11. and 4.12.). For the ELT group the length of gaming session was shown not to be a predictor for lower/higher LSA $p = .455$. (Table 4.9)

Table 4.10 Model Summary for Regression Predicting FLSA Based on Duration of Gaming Sessions in the Preparatory Group

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.227 ^a	.052	.042	13.88098

Table 4.11 ANOVA Results for Regression Model Predicting FLSA from Duration of Gaming Sessions in the Preparatory Group

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	998.123	1	998.123	5.180	.025 ^b
	Residual	18304.764	95	192.682		
	Total	19302.887	96			

Table 4.12 Regression Coefficients for Predicting FLSA Based on Duration of Gaming Sessions in the Preparatory Group

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	65.258	4.882		13.366	.000
	How much time do you spend playing?	-2.626	1.154	-.227	-2.276	.025

A linear regression was conducted to examine whether speaking English with other players while gaming predicted FLSA. The regression model was statistically significant, $F(1, 186) = 5.09$, $p = .025$, indicating that speaking English during gaming can significantly predict language speaking anxiety. The R^2 value was 0.027, which means that 2.7% of the variance in language speaking anxiety is explained by the frequency of speaking English while gaming. Although this is a small effect size, the relationship between the two variables is statistically meaningful. The unstandardized coefficient for speaking English with other players was -2.23, suggesting that for each increase in the frequency of speaking English while gaming, the level of FLSA decreases by approximately 2.23 points. The standardized beta coefficient of -0.163 indicates a small but significant negative relationship, meaning that higher frequency of speaking English while gaming is associated with lower anxiety levels (Tables 4.13., 4.14. and 4.15.).

Table 4.13 Model Summary for Regression Predicting FLSA Based on Speaking English During Gaming

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.163 ^a	.027	.021	15.10140

Table 4.14 ANOVA Results for Regression Model Predicting FLSA from Speaking English During Gaming

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1160.104	1	1160.104	5.087	.025 ^b
	Residual	42417.699	186	228.052		
	Total	43577.803	187			

Table 4.15 Regression Coefficients for Predicting FLSA Based on Frequency of Speaking English During Gaming

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	64.781	3.235		20.025	.000
	Do you speak English with other players while gaming?	-2.228	.988	-.163	-2.255	.025

Next, a simple linear regression was conducted again to examine whether participants' belief that video games help improve their English skills predicts their level of language anxiety. The dependent variable was foreign language speaking anxiety (FLSA), and the independent variable was the belief about video games improving English skills. The regression model explained 3.4% of the variance in language anxiety, $R^2 = .034$, indicating that the predictor variable accounted for a small portion of the variability in anxiety levels. The overall regression model was found to be statistically significant, $F(1, 187) = 6.61$, $p = .011$, meaning that the belief about video games improving English skills significantly predicted language anxiety. Specifically, the unstandardized coefficient for the belief variable was $B = -3.303$, indicating that for each one-unit increase in the belief that video games help improve English skills, language anxiety decreased by 3.303 points. This relationship was statistically significant, $t = -2.571$, $p = .011$, and the negative direction of the coefficient suggests that stronger belief in the benefits of video games for language learning is associated with lower levels of language anxiety (tables 4.16.,4.17.,4.18.).

Table 4.16 Model Summary for Regression Predicting FLSA Based on Belief in Language Learning Benefits of Video Games

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.185 ^a	.034	.029		15.01688

Table 4.17 ANOVA Results for Regression Model Predicting FLSA from Belief in Language Learning Benefits of Video Games

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1490.061	1	1490.061	6.608	.011 ^b
	Residual	42169.748	187	225.507		
	Total	43659.810	188			

Table 4.18 Regression Coefficients for Predicting FLSA Based on Belief in Video Games as a Tool for Language Learning

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	72.211	5.648		12.786	.000
	Do you think video games help improve your English skills?	-3.303	1.285	-.185	-2.571	.011

Finally, it was found to be of great importance to understand whether the type of games played can influence the FLSA. For better insight into the differences between the anxiety levels of groups that play/do not play each game is disclosed in table 4.19.

By looking at this table (4.14) it can be observed that players of RPG ($p = .006$), FPS ($p = .006$), Action/Adventure ($p < .001$), Simulation ($p = .006$), Sport ($p = .032$), Puzzle ($p = .032$), Fighting ($p = .015$), Horror ($p = .010$), Open World ($p = .005$), MMORPG ($p = .017$), and MOBA ($p = .007$) games reported significantly lower language anxiety compared to participants who do not play this games. The largest difference was observed with Action/Adventure games ($t = 4.18$, $p < .001$), suggesting a strong association between this game type and reduced FLSA. On the other hand, games such as Battle Royale ($p = .343$), Racing ($p = .337$), RTS ($p = .086$), and TBS ($p = .122$) and other games ($p = .835$) showed no statistically significant differences between the groups who play these games and the ones that do not. This result suggests that these games do not have a significant impact on the FLSA.

Table 4.19 Differences in FLSA depending on the type of games played

Game Type	N (Yes)	N (No)	Mean (Yes)	Mean (No)	t-value	p-value
RPG	58	83	53.59	60.81	2.77	.006*
FPS	58	83	53.59	60.81	2.77	.006*
Action/Adventure	30	111	49.63	60.05	4.18	<.001*
Battle Royale	40	101	55.85	58.62	0.95	.343
Simulation	41	100	52.22	60.14	2.80	.006*
Sport	41	100	53.44	59.64	2.17	.032*
Puzzle	14	127	49.36	58.77	2.17	.032*
Fighting	24	117	50.83	59.27	2.46	.015*
Racing	32	109	55.50	58.52	0.96	.337
Horror	32	109	59.66	51.62	2.61	.010*
Open World	41	100	52.76	59.92	2.90	.005*
MMORPG	13	128	48.00	58.83	2.43	.017*
RTS	22	119	52.59	58.81	1.73	.086
TBS	14	127	51.71	58.51	1.55	.122
MOBA	32	109	51.37	59.73	2.72	.007*
Other	5	294	58.00	59.46	0.21	.835

*p < .05, statistically significant

To delve more on the area the influence of the types of games on the FLSA a simple regression analysis was conducted (table 4.20, 4.21 and 4.22). The main reason was to see whether the variety of games played can influence language anxiety.

Table 4.20 Model Summary for Regression Predicting FLSA Based on Number of Different Game Types Played

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.299 ^a	.090	.083	14.94703

Table 4.21 ANOVA Results for Regression Model Predicting FLSA from Number of Different Game Types Played

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3056.757	1	3056.757	13.682	.000 ^b
	Residual	31054.491	139	223.414		
	Total	34111.248	140			

Table 4.22 Regression Coefficients for Predicting FLSA Based on Number of Different Game Types Played

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	62.092	1.705		36.413	.000
	TotalGames	-1.210	.327	-.299	-3.699	.000

According to these tables (tables 4.20, 4.21, 4.22) it can be seen weak to moderate negative correlation between the number of different types of game played and FLSA ($R = .299$) and it suggests that 9% of the variance in language anxiety scores can be explained by this variable ($R^2 = .090$). According to Anova testing $F(1,139) = 13.682$, $p < .001$ these predictions are statistically significant, which means that the total amount of different games played significantly predicts FLSA. For each additional game played, the language anxiety score decreases by 1.21 points ($B = -1.210$, $p < .001$).

Finally, for better insight into the effect of variance of tested variables the effect sizes of each one are represented in the table below (table 4.23.)

Table 4.23 List of regression analysis significance and variance effect values

Predictor Variable	<i>p</i>	R^2	Effect
Frequency of gaming	.101	—	—
Speaking English during games	.030	.027	Very small
Belief that games improve English	.015	.034	Small
Length of gaming sessions (prep group)	.002	.052	Small
Number of different game types played	.001	.090	Moderate

4.2 Qualitative analysis

As mentioned above, 11 interviews were conducted with both gamers and non-gamers. Among participants 6 identified as gamers (two females and four males), while three identified as non-gamers (all females).

Following the interviews all the recordings were transcribed. The interviews originally conducted in Turkish were translated into English. The transcriptions were then carefully cross-checked with the audio recordings to ensure accuracy. Follow this, thematic analysis was conducted to identify the patterns across the responses, as discussed in detail in 3.5.2. The emerging themes, subthemes and codes are presented in table 4.24. below.

Table 4.24 Themes, subthemes and codes summary

Theme	Subtheme	Codes	n
Low FLSA in Gaming	Psychological and Emotional Safety	- Games as distraction from anxiety	17
		- Gaming as a safe environment	45
		- Safe Social Context for EFL	61
	Social Safety	- Confidence-boosting situation	15
		- Perceived social judgment (not bothered)	14
Classroom Anxiety and Self-induced Pressure	External Triggers	- Formal Education Influence	21
		- Anxiety Triggers Outside Gaming	94
		- Social Triggers of FLSA	40
	Internal Triggers	- Self-Induced Anxiety Triggers	93
		- Emotional and linguistic Self awareness	45
		- Anxiety native vs. EFL	17
		- Fluency under pressure	23
Role of Gaming in Alleviating Language Anxiety	Perceived Benefits of Gaming	-Beliefs and Identity	24
		- Perceived benefits on language development	19
		- Gaming – Social Opportunities	23
		- Anxiety coping strategies	91
		- In-game chat	24
Language Learning Through Play	Player Background	-Perceived Gaming Usefulness outside LL	4
		-Gaming Background and habits	49
	Language Learning process in games	-Gaming and Language Skill Development	38
		-Incidental Language Learning in Games	11
		-In Game TPR	3
		-Pragmatic Awareness	32
	Motivation and engagement	-Language Mimicry	9
		-Speaking practice methods	17
		-Other Language exposure	67
		-Games and Language Learning Motivation	15
		-Motivation and Engagement	32
Player Identity and Game Dynamics	Identity and Language Dynamics	-Gender dynamics in Gaming	18
		-Language Dominance Shift	11
		-In-game Sociolinguistic and Cultural Awareness	15
	Gaming Drawbacks		32
		-Gaming Language Culture	
		-Gaming drawbacks general	9
		- Limited Language Exposure	5
		- Anxiety Triggers in Gaming	22

4.2.1 Theme 1: Low Anxiety Language Use in Gaming

The main focus of this theme is to describe emotional and psychological states of gamers when speaking in English, and to interpret why gamers score lower on the anxiety scale than non-

gamers as presented in tables 4.1-4.4. In this theme two sub themes emerged: *Psychological and Emotional Safety* and *Social Safety*.

4.2.1.1 Psychological and Emotional Safety

The participants who played almost every day expressed great comfort and no higher FLSA, as they mainly stated that it is their free time, leisure time etc. Interestingly even the non-gamers expressed a positive attitude towards gaming environment as a mean for practice speaking, even though they are not players themselves:

In other words, while playing games...in computer games, you know, in chat sections, for example, maybe this can be in contact with different people...You know, practically ...So.... It can improve speech. (Olivia, high anxiety non-gamer)

To get more neutral and yet experience-relatable insights into explanation of this theme the experiences of participants that declared themselves as non-gamers but had some exposure to gaming were found to be important. For example, a participant with high anxiety on the FLSA scale who mainly engaged with single-player simulation games, reported low anxiety during gaming sessions:

No. Because I can click that and then my Sims can do it and show me, and I can see what it is. I wouldn't feel... I just... I... why would I be... Why would I feel anxious? (Zoe, high anxiety non-gamer)

Similarly, participant who showed low anxiety levels on the FLSA scale and participated in multiplayer online games, explained his lack of anxiety during gaming sessions:

I don't care cause like you know, you're playing video games, so it's your comfort zone, right? So, like, you don't care. (Ian, low anxiety gamer)

These findings suggest that gaming environments, whether they are independent of active participation levels or highly cooperation-based, contribute significantly to psychological and emotional safety. The relaxed and non-judgmental nature of these settings seems to alleviate FLSA by offering emotional reassurance and reducing social threats.

4.2.1.2 Social Safety

I feel more comfortable with strangers [unfamiliar individuals]. (Naomi, non-gamer, high anxiety)

Reflecting on this quote it can be observed that greater comfort for speaking is occurring in feeling of reduced social judgments such as talking with unfamiliar individuals. One participant summarized this feeling in online gaming environments, highlighting how anonymity can reduce language anxiety:

Especially for teenagers, because teenagers would feel more anxious about speaking English. So, in the games... You would, uh, less... You wouldn't uh, show your face to your friends in that case. So, you... you just speak, speak, speak, speak and they don't know who you are. They don't know you. You are anonymous. Yeah. So, you can speak freely. (Zoe, high anxiety non- gamer)

This sense of anonymity reduces fear of social judgment, creating a socially safer space for communication. By depersonalizing social interactions, participants feel less exposed and more willing to engage in speaking activities, despite their underlying language anxiety. In addition, there is a perceived idea that the gaming environment itself is not judgmental in their nature:

Because even in voice chats, no one is going to really judge you. (Helen, low anxiety gamer)

Even though occasional teasing or mocking in in-game chats was mentioned, it was not perceived as hurtful or personally significant:

But in gaming, if I make a mistake, maybe they will do some fairly mocking and then they will let it go. (Kenneth, low anxiety gamer)

We can conclude that there is a disassociation of the gaming environment and real-life environments, and the feeling of the judgement is not taken as personal as the ones happened in, for example, classroom environment.

Building on this, the following theme will explore how the environments outside the virtual world with their personal thoughts and perceptions affect individuals and their FLSA.

4.2.2 Theme 2: Classroom Anxiety and Self-induced Pressure

The gaming environment appears to be a safe environment for language speaking and language learning overall. On the other hand, there is an important point in this survey that needs

to be addressed, which is the difference in the effectiveness of gaming in reducing FLSA between the gamers in the ELT department and the preparatory program students, where it was found that gaming has a limited effect on pre-service teachers. This distinction can be attributed to the higher academic pressure experienced by pre-service teachers, who expressed that they feel an obligation to achieve near-native proficiency and demonstrate linguistic excellence in any type of context, whether it is formal or informal. This theme will explain the reasoning behind these triggers and how they are reflected in both preparatory program students and ELT students.

4.2.2.1 External Triggers

Most of the participants in their formal education had something out of the ordinary regarding their language education; to be precise, 9 out of 11 participants had slightly more advanced language education. Surprisingly, the two participants who rated their formal education as insignificant in their language learning path were the ones who were extremely confident and had difficulty identifying which situations made them more anxious.

Actually, I started to learn English in like 8th grade... I have never listened in class. Like, in school in high school, I never listened. I actually slept. (Ben, low anxiety gamer, preparatory class)

On the other hand, there are instances where low-anxiety gamers such as Kenneth reported difficulty feeling relaxed in front of their teachers. As he explains:

...when I feel tired at the end of the day, if I am in a classroom, my anxiety can sometimes skyrocket because I know that I am tired...I know that I will be talking in English and I will be talking in front of a professor...But in college, a professor might call out my mistake and lecture me about it: 'You shouldn't say that. I mean, you may be tired, but as a language teacher candidate, you should never say that' they might say. (Kenneth, low anxiety gamer, ELT)

Kenneth was not an isolated case about pointing out classroom and teachers as source of anxiety, surprisingly most of the participants reported the highest anxiety in the classroom, with the difference stemming from teachers or peers, where some of the participants noted that they have the biggest anxiety, speaking in front of their peers. Helen reported having trouble speaking in front of her peers because of a specific traumatic event:

I remember talking in the first year and I heard some laughter since then.... I feel really resented... You know, I feel, I don't know.... I cannot talk like I usually do. That affects me a lot. (Helen, low anxiety gamer, ELT)

All participants reported having the least anxiety talking to foreigners. Surprisingly most of them feel comfortable talking in front of people who speak English and do not share the same native language with them, with some slight differences where one participant showed reluctance speaking with natives (Amy, medium anxiety gamer, preparatory class) and the other participant would feel bad if some other foreigner who speaks English as a foreign language speaks better than her (Olivia, high anxiety non-gamer, ELT). The perceived positive attitudes that participants had toward foreigners were not entirely based on reality but rather reflected a more complex system involving personal experiences, belief systems, and individual traits. Therefore, it is important to understand this framework in more detail, which will be explained in the following subtheme.

4.2.2.2 Internal Triggers

While external factors play a crucial role in triggering FLSA, it is important to highlight that they are not isolated from internal factors such as belief systems, emotions, and individual values related to language learning. Although external elements exist in reality, their interpretation by language learners is equally important — if not more significant — in understanding FLSA triggers and determining how to respond to them. This importance can be seen in one of the statements:

...there is always that notion in my head, what if I make mistake while speaking. (Betty, medium anxiety non-gamer, ELT)

Even though there is no realistic threat or a problem for this participant if she makes a mistake while speaking still, she confirms that the fear is always there, lingering whenever she needs to speak in English. Most of participants showed they are afraid of making mistakes, some of them pointed out that it happens rarely but still in specific situations it is present. In further conversation the same participant pointed out the impact of negative self-talk:

I realize that there is a pattern... almost every day we keep telling ourselves: I'll never know English, I will never be able to speak English, I will never improve myself in English. (Betty, medium anxiety non-gamer, ELT)

This notion about fear of making mistakes, and anxiety that is stemming from their perception of their language proficiency as much as perfectionism in language speaking keeps repeating among most of the participants (9 out of 11). Again, the participants that did not show this fear and the ones that do not possess negative self-talk are the same two participants that did not point out the importance of their formal education but rather pointed out their self-study and personal path in language learning. On the other hand, when asked about this fear, to explain the reasoning behind it, Helen gave the best description:

I think it feels like... there's language police that will come to arrest you for making that mistake... makes no sense. But I don't know. I have this judgmental person in my brain...you know. Judging my accent or whatever I say. I think I'm not the only one. I have no idea why, but I think it's coded encoded in our brains to speak language in a certain way (Helen low anxiety gamer, ELT)

Zoe added another dimension to this fear, and that is teacher anxiety she is feeling. It involves all the above-mentioned factors, from fear of making mistakes, to perfectionism. She elaborates on her fears with this statement:

Because it's my biggest fear — [forgetting] a word in English [while] being an English teacher. You know, if I... if I forget a word in my classroom and my student asks me what the word means? And if I don't know [what] the meaning [is], then I [would] be dead. It's my biggest fear. (Zoe high anxiety non- gamer, ELT)

The source of this pressure participants put on themselves, even though there is no realistic risk occurring. It is mostly based on their experience, expectations and beliefs. Belief factor can be traceable in other instances as well, as stereotypes they have on foreigners and Turkish people and language learning. Some of the participants (6 out of 11) showed belief in stereotype that foreigners do not judge, and Turkish people are judgmental. Two participants added that Turkish people do not love or respect language studies:

There is a thing actually still in Turkey. If you pick language major in high school, you're seen as an idiot. You're seen. Yeah, you're not hardworking. You're just sleeping all day. You're just not studying. (David, low anxiety gamer, ELT)

Because I think Turks, that is, we judge more within ourselves, people's accent, pronunciation, etc. but foreigners do not judge at all. (Naomi, high anxiety non-gamer, ELT)

All the participants expressed that they are feeling more comfortable speaking in their native than in English, even though some of them explained that the difference is small and is usually depending on the ability to culturally express themselves confidently:

"I think it's culturally very different ... Let me give you an example in Turkish... When I talk to my friends, I say: ağabey yaaa, ufff [like saying 'bro, come on!]' ... but I can't do that in English because I don't have a good knowledge of that culture, so I've never lived in that culture. Expressing myself in English makes me much more anxious. From Turkish... (Amy, medium anxiety non-gamer, preparatory class)

As can be seen, the triggers both gamers and non-gamers experience in certain situations are layered and complex, they depend on the previous language experiences, traumas, insecurities and their own approach to language and language learning overall. For a better understanding of video games' role in this process, especially its role in reducing FLSA, it is essential to now focus on the specific benefits that gaming offers in supporting language use and emotional regulation.

4.2.3 Theme 3: Role of Gaming in Alleviating Language Anxiety

Gaming habits and background of the participants vary greatly. Some of the participants choose gaming as their main hobby and enjoy most types of the games (three male participants), some of them prefer just one or two types that are mostly online competitive games (two participants, male and female) and others choose single player games, that are mostly based on simulations or are story based (two female participants). It was concluded that there are certain gender dynamics between players and how they approach gaming, and their language learning methods but these dynamics are going to be better explained in Theme Five. The current focus is on the perceived benefits of gaming, and how participants' gaming habits and backgrounds inform those perceptions.

It [gaming] is a magical world that opens many doors to interactions with such people that you may not be able to see [otherwise]. (Kenneth low anxiety gamer)

All of the participants pointed out gaming's ability to connect people across the globe. The social dimension is the main reason for positive attitude towards gaming and language learning. Many of them pointed out the convenience of meeting people abroad without leaving your house.

...it [gaming] is beneficial for your speaking level. Speaking improvement, fluency, everything. So, I think, it impacts less anxiety. (Ian, low anxiety gamer)

Participants frequently attributed the reduction in FLSA to the increased opportunities for English-speaking practice that gaming provides. They noted that frequent interaction, particularly in fast-paced situations, contributed to improved fluency and confidence, which in turn helped alleviate their anxiety.

... if I'm playing Valorant and I'm using text-based chat, and I will type so fast that I wouldn't care about the mistakes I made. But I wouldn't say, oh, I... I have to write it correctly so people would understand. I would write it like 50% right and correct and people would still understand. Like I said before, the desire to win the game actually compensates the anxiety. (David low anxiety gamer)

Fast-paced competitive games, such as Valorant or Counter Strike (first person shooters) have both in game text and voice chat. The preferences of the players go towards their personal desire for communication. Participants who tend to play online games more often showed positive attitude towards these in game chats. Some players used it solely for communication for reaching shared goals in the game, and others use it for communication and more personal connections with other gamers, whether these connections are positive or negative they can have personal notes. Additionally the players who play fast-paced games noted that they do not think about making mistakes, or their language while communicating with other players. They noted that the desire to win, and fear of losing the game match mask all other fears and anxieties, such as FLSA. Participants also pointed out the importance of emotions the gaming is triggering:

...let's say I'm anxious I got mad in the game. Somebody told me somebody, you know, said something bad about my mother or did some bad things and I got really mad. And then I started speaking. It doesn't matter what, but I start speaking... (Ben, low anxiety gamer)

Ben found that strong emotional responses, such as anger, helped override his other fears, including FLSA. He even shared this insight with a friend, who also reported feeling more

comfortable speaking English when feeling angry during gaming sessions. For several participants, emotions triggered by gaming served as unexpected facilitators for spontaneous language use.

As can be seen, in addition to linguistic and social opportunities, all the participants consistently described gaming as a means for emotional regulation and relaxation and some of them found a break from the pressures or dissatisfaction of their everyday lives. Whether through competitive gameplay or narrative engagement, gaming was perceived as a comforting and enjoyable activity. This emotional relief appeared to reduce affective barriers, thereby fostering a more supportive and low-anxiety context that also reflects language use and practice.

4.2.4 Theme 4: Language Learning Through Play

Playful environments are often associated with language learning, and creation of these types of environments is not rarely seen in formal education for fostering relaxed and enjoyable learning environment. In contrast, gaming's main purpose is entertainment, and language is not an isolated subject but a tool for interaction, progression, and social connection during play. This theme creates a picture of how games keep gamers motivated to learn, and at the same time provide meaningful input for language learning.

4.2.4.1 Language Learning process in games

All the participants that consider themselves gamers or have experiences with playing video and online games pointed out vocabulary learning as part of the gaming. They mention that just understanding the interface of the game is the main reason why they know some words in English:

Every kid that is like nine years old knows what's the meaning of win or victory or losing. They know that cause they see it in their video games. (Ian Low Anxiety Gamer)

This type of vocabulary learning is in a way related to virtual total physical response method for language learning, since some of the participants pointed out the immediate visuals of not just nouns but verbs as well:

Click on one Sims, you can click on anything and want to have some interaction so there are like bubbles with the interaction. (In the game, clicking on a character reveals a range of possible interactions with others, and once an action is selected, the characters immediately perform it.) ...So yeah. Naturally, I learned some vocabulary. (Zoe high anxiety non-gamer)

Additionally, the repetition, shadowing of different dialogs, singing songs and imitating some film and television show scenes was found to be a way of learning for most of the participants. This language mimicry is also present in gaming, participants mentioned that they tend to repeat and mimic, not only words, but accents as well:

So, if I start playing Red Dead Redemption 2 (game is fictional representation of southern parts of United States in 1899) for a month for every day, I absolutely believe that your English is gonna turn into something like a cowboy accent. (David low anxiety gamer)

Having this in mind it can be noticed that gamer participants notice how language use in game can differ and how it can change from context to context:

...you can observe how to use language in different situations. (Kenneth Gamer Low Anxiety)

Games, according to participants, provide different linguistic contexts depending on the type of the game played, from single player games that can vary greatly depending on the story, to normal in-game communication between two team players related to concurring an objective or stopping an enemy to relaxed simulations of everyday life or role plays. Gamers recognize the importance of language in these settings and the need to adapt their communication to suit different in-game situations.

4.2.4.2 Motivation and engagement

The idea that they need to communicate, the existence of certain pressure for learners to speak is seen as a beneficial by all participants, both in the game and outside of the game. Some of them mentioned trips abroad (e.g. David) or international school programs (e.g. Sarah) as important steps in their language learning journeys. Others wanted to create this need by meeting foreigners both in digital world and in their own environment by attending different speaking clubs (e.g. Betty) or finding part-time jobs that include communication with foreigners (e.g. Ian). Gaming is also one way of creating that “need”. The difference here is the engagement in the game itself, as David explained by using an example of a different, imagined person:

John has language anxiety, but he loves winning in a competitive game like Valorant, like Counter Strike. He wants to win because it's a ranked game. You have to win or you're gonna drop your rank. So, he sees a man in some place, and he has to call it like, tell his friends that he saw a

man and they have to come there. So, because he saw a man, he has to react so he cannot text it. He cannot type it because it's a long, fast-paced game. But if John uses his voice chat, he can like react fast and doesn't have to do anything but speak. (David, low anxiety gamer)

Here we can see that gaming creates authentic communicative need that learners care about (e.g., winning a game). During these time-sensitive gaming session meaningful communication becomes the goal, and fluency takes precedence over accuracy. Motivation and mental engagement directed towards the gameplay – rather than the language- can lead learners to “forget” about the language and possible mistakes that can be made during conversations.

4.2.5 Theme 5: Player Identity and Game Dynamics

Because of certain repetitions of patterns this theme emerged during the thematic analysis, since there are certain factors that can be limiting or liberating for participants. In this theme two major subthemes were constructed, identity and language dynamics and gaming drawbacks.

4.2.5.1 Identity and Language Dynamics

The participants during interviews often pointed out the cultural dimension of gaming, and how there is influence of different cultures in the gaming world. Different language structure, language usage, stereotypes and even gender dynamics were found to have the influence during the gaming sessions. The participants when asked which culture is the most dominant in the gaming world, even though sometimes hesitant, they pointed out that American (the USA) culture is the most dominant and that it influences their pronunciation and identification with language:

Definitely American. OK, cause the whole gaming culture is like using American memes, American references and everything like that... (when asked when she feels most confident). *Someone assuming that I'm American.* (Helen, low anxiety gamer)

Besides this, participants pointed out that there is a different way of talking/typing in games. The sense of urgency seems to be the main factor for shaping the sentence structure, and recklessness in typing and lack of politeness, simplified sentences seem to be the preferred way of communication in fast paced games. The appropriate example is provided by Sarah when asked how she would communicate with Germans in game:

Then. I would write directly, you know, like we do in English, for example, I would say “hurry up 'Hurry up' like 'Schnell schnell'. (Sarah/Low, anxiety non-gamer)

This simplification pattern is found to be important when talking about fast paced games, while role-playing games seem to have different language and different approaches than regular online games. For one of the participants, it was even a FLSA trigger:

If I'm playing a role-playing game that's going to change my character [speaking in game] a lot because I usually don't play those games and then I would start to feel anxious about it, because the things I'm going to say change the characters doing because it's a role-playing game, I would... How should I say pick my words more carefully. (Ben, low anxiety gamer)

In a way the games do not have the same language pattern and the game the participants are playing is changing their approaches to language which can be liberating (using simple commands that are game specific, short and easy to learn) or limiting in a way that requires a certain amount of language knowledge and gaming context.

Participants while talking about gaming culture, revealed another dimension in the gaming and that is the gender difference by looking at their experiences. The female participants tend to choose games that are less communicative or communicate with a group of friends. Not even one female participant showed great enthusiasm towards in game voice chat participations. Male participants on the other hand, showed great knowledge of the dynamics of in-game communication and they all had extensive experience in online gaming chats (both text and voice chat). The male participants acknowledged the lack of female voices during the gaming sessions, and they gave their own reasoning for this. They are mostly based on sexist attitude of gaming communities: *Cause some males don't think females should be playing the game.* (Ben Low Anxiety Gamer). It was pointed out that some games have more tolerance towards female gamers like Valorant gaming communities while other are not that pleasant when understanding that they are playing with female gamers (e.g. Counter Strike). Also, the participants pointed out that there is a difference in language in text-chats between males and females:

... there's a very high difference in female typing and male typing. You can see what the difference is in instant. I even got called out of female one. Because I typed too grammatically. (Ben, low anxiety gamer)

This dimension may lead to higher levels of foreign language speaking anxiety (FLSA) for female players compared to male players when participating in both voice and text chat during

gaming, and it can be presumed that it poses a greater limitation on foreign language practice for female gamers.

Additionally, some of the participants reported language dominance shift, that is a result of gaming:

I mean, I don't know, there was the Tentacle Sword, for example, the tentacle sword, I never called it the tentacle kılıç... I would say: Tentacle sword bulmamız lazım [we need to find]. It had a very negative impact on my mother tongue... Sometimes I can't even remember the Turkish version of tentacle...I just know it's a tentacle. (Amy, medium anxiety non-gamer)

They show worry about forgetting their mother tongue and it bothers them that they are not completely code switching between the languages. For some participants it is a great source of frustration.

4.2.5.2 Gaming Drawbacks

As mentioned before, there are some drawbacks in impact of gaming on language learning, as participants stressed the impact of high exposure of English language through games is negatively affecting their mother tongue. The other one that is also mentioned is the impact it has on vocabulary learning, and forming of registers:

Games can be sometimes harmful according to me because what I tend to notice is that Turkish people sometimes use certain words that are not supposed to be used, but they think of it as a meme or, you know, sometimes they don't know how to talk in formal settings because they think, oh, these people are talking like this. (Helen, low anxiety gamer)

Additionally, some participants thought about the lack of exposure and how games can provide an environment for FLS practice, but this is not the only truth that can be seen during the gaming seasons. Some of the participants mentioned that they did not communicate in English while playing games, but they used their native and played only with their friends (e.g. Amy) another participant mention something similar:

I was playing PUBG for a while, but I think PUBG is not a very international game, but I would like to try it. So, League of Legends is very popular, I think. (Naomi, high anxiety non-gamer)

Even though some games are played internationally, many online games are divided by different servers or are more popular in certain countries. This can lead to a feeling of playing only with people of your own nationality or feeling relaxed talking in your native language. This can subsequently cause less opportunities for FLS practice.

Finally, there are certain anxiety triggers in gaming as well. The first group of anxiety triggers is gaming ‘toxicity’. Most of the participants that were somewhat related to gaming and usage of in-game communication systems reported this as a problem:

I mean, most online places can be a little bit toxic according to their society. (Kenneth Gamer Low Anxiety)

Even though this was seen as a problem the reaction to this toxicity is different from ones occurring in the classroom or everyday life:

Interviewer: What about if they mock your pronunciation in a game or something?

Interviewee: I mock them back. That's how it works. (Ben, low anxiety gamer)

Games in their nature can be the source of anxiety, the idea of losing the game and making a mistake while playing exceeds any language anxiety. The participants reported high tensions during the fast-paced games, and some situations that could lead to more nervousness:

Are we going to lose because of me? It's more of those but of course, the language comes in a lot of places as well. Well, when a teammate calls, you're bad, you're playing bad, you know it and you understand it. It makes you feel more anxious about it. More... sad. (Ben, low anxiety gamer)

The language here that this participant is referring to is not anxiety about language performance but the freedom to tell everything without filtering. Addressing your team members could negatively affect the mood of the player. This performance anxiety is tightly related to gaming toxicity as well, more mistakes during the game the higher toxicity and the tensions are getting higher.

Finally, there is a problem with the speak-only dimension of communication during the game. The participants need to communicate similarly to phone calls. They cannot use their body language or face expressions and some of the participants reported this as a problem:

Normally I feel a little bit more anxious when I'm talking on the phone or in a video game in English specifically, not that that I have phone call anxiety, but English makes me sometimes anxious... you cannot just explain yourself with your hands or anything. Just words. (Helen, low anxiety gamer)

This could be game specific since other games, such as role-play games have their own characters that could simulate real life communication. Even though, it is a problem that occurs with some of the participants.



CHAPTER V

DISCUSSION, CONCLUSION AND SUGGESTIONS

5.1 Summary of the Study

This study aimed to investigate the relationship between FLSA and habits of playing online video games among university level English learners. Specifically, it aimed to answer the following research questions:

1. What is the FLSA level of learners who actively play online video games?
2. What is the FLSA level of learners who do not actively play online video games?
3. Is there a relationship between online gaming activity and FLSA?
4. How do online gaming and FLSA interact with each other in the language learning process?

Out of 299 participants from Akdeniz University ELT department of Faculty of Education and Preparatory Program at the School of Foreign Languages 11 participants accepted to be interviewed. The method that was used was a mixed method, meaning it included both qualitative and quantitative data collection and analysis. The quantitative data analysis incorporated descriptive statistics, independent sample *t*-tests and linear regression. For the qualitative data thematic analysis was conducted. The study explored FSLA between gamers and non-gamers, examining how frequency and duration of gaming might influence anxiety and trying to understand how gaming and language learning interact with each other. The findings indicated significant differences in anxiety levels between the two groups, with additional insights into social, emotional and cognitive dimensions of language learning and FLSA in gaming environments. The conducted thematic analysis provided better insights into gaming as a safe environment, and on the other hand it revealed its drawbacks and different dynamics that are specific to gaming context. These results contribute to the idea that video games can be more than just a tool for language practice, they are also environments where personal differences, emotions, and ways of communication all play an important role.

5.2 Discussion of the findings

For better understanding and systematic approach to the findings the discussion of the topics related to research questions will be divided into three sub-headings:

1. Group Differences in FLSA: Gamers vs. Non-Gamers
2. Impact of Gaming Habits on FLSA
3. Gaming Environment Dynamics and Their Role in FLSA

5.2.1 Group Differences in FLSA: Gamers vs. Non-Gamers

Quantitative data analysis of this study revealed a statistically significant difference between FLSA of gamers and non-gamers in both groups ($p = .028$). Even though the results are in accordance with previous research, it should be mentioned that there is a possibility that students who already have lower FLSA are more likely to engage in games that require communication with other players. This potential bidirectional relationship should be considered while interpreting results. This aligns with the findings of Reinders and Wattana (2014) when in their research participants showed less foreign language anxiety. As Dixon and Jordan, (2022) mentioned the gaming provides a safe environment for the players. These findings were illustrated in participants' responses. For example, when asked about their language anxiety levels during the gaming sessions one of the participants replied that they do not feel anxious at all (Zoe, high anxiety non-gamer, p. 63)

Interestingly, this significant difference tends to be stronger in preparatory program alone ($p < .001$) and with ELT group alone it showed statistically insignificant differences. This shows consistency with the Botes et al. (2020) where in their meta study highlighted the importance of different factors affecting different individuals on a varying level. The factors they named as the ones that can influence the level of foreign language anxiety are among others education and fear of public speaking. One of the most common reasons for FLSA anxiety shown in ELT group was teacher anxiety that was highlighted by participants and mentioned as one of the main fears (Zoe high anxiety non- gamer, ELT, p. 67).

This aligns with results found in work made by Kobul and Saraçoğlu (2020) and Kafes (2018). Their results show the higher foreign language teacher anxiety (FLTA) among pre-service teachers than the in-service teachers. The results found in this thesis can be interpreted through these lens, where FLSA stems from their pre-service foreign language teaching anxiety, and as such

the gaming do not have higher influence in alleviating it. Even though the gaming environment is proven to be reducing FLSA, particularly by providing safe and engaging environment (Reinders & Wattana, 2014; Dixon & Jordan, 2022) it can be seen that the reduction does not always fully transfer to formal academic speaking situations. As Horwitz et al. (1986) emphasized, language anxiety is also situation specific and formal settings, such as classroom, and in this case ELT classroom, where stakes and expectations are higher for linguistic accuracy, FLSA can be occurring regardless of the gaming experiences. In other words, transferability of reduction of FLSA can be lower in high stakes, high expectation academic environments.

Another aspect of anxiety levels can be seen through the lenses of personal experiences of each individual. This brings the topic of Affective filter (Krashen, 1980) which explains the personal experience, and limitations the person puts on themselves. According to Affective filter hypothesis we can learn/acquire as much knowledge as our emotional state let us. In this way self-doubt or negative beliefs can interrupt the process of learning, even though the environment is safe and the input is comprehensible. These types of blocks are described by several participants, both gamers and non-gamers, how their internalized expectations and fears affect their FLSA. Betty for instance, reflected on how negative self-talk can impact her abilities, and how common it is by stating that convincing yourself that something is impossible limits the individual in achieving their language goals. She labels this as a negative “mantra” and according to her this is one of the main reasons of not succeeding in learning a foreign language. Similarly, Helen who is a gamer, stated she has a similar problem herself, which she described as imaginary “language police” in her head. These examples align closely with MacIntyre and Gardner’s (1988) Cognitive Attentional Theory, which defines anxiety as a cognitive interference rooted in self-blame and perfectionism. In these types of cases, even environments that seem low-stakes and low-pressure from the outside, like relaxed classroom or casual conversation, can still trigger FLSA due to learners’ internalized performance expectations. That is why this aspect should also be considered when trying to understand the effectiveness of gaming on lowering FLSA, especially when individuals have perfectionistic self-monitoring characteristics that lingers across all types of environments.

5.2.2 Impact of Gaming Habits on FLSA

Several regression analyses were conducted related to gaming habits of the participants. While many of the results were statistically significant, their variance showed a very small to moderate impact ranging from 2.7% to 9% (see table 4.23.). These effect sizes align with the

findings in the social science research, especially leaning to meta-analysis (Botes et al. 2020) where language anxiety was found to be multifactorial construct. Specifically, Botes et al. (2020) highlighted that anxiety is influenced by broad set of variables except abovementioned education and fear of public speaking including personality, classroom dynamic, social pressure and individual confidence level – factors that were not fully captured in the current quantitative method.

Furthermore, frequency of gaming was found to be insignificant in alleviating FLA with suggests that playing often isn't enough to reduce FLA. This correlates with DeHaan (2005) results where he emphasized that sole exposure is not enough, the cognitive engagement and involvement in the task have a crucial role in second language acquisition. This means that quality takes over the quantity, which implies that if the players may be playing games but not involving English as a communication tool or not communicating at all during the game. Benson and Chik (2011) emphasized this in their research on CALL where they highlighted that CALL's purpose is not learning language, but it is its secondary product, where it relies on learners' interests which often may not align with language learning goals, and consequently not interfere with FLA.

Although speaking English during games showed a statistically significant impact on FLA the effect size was very small (2.7%). There can be several reasons for that, like context and quality of speaking during the games, and transferability to formal speaking context. Gaming language usually consists of simple commands, slang and non-academic vocabulary. This was backed up with qualitative data, where one of the participants highlighted the problem of using *meme-driven* English which may reinforce undesired patterns. This implies that the actual quantity of speaking during the gaming sessions can be overestimated by reducing impact on anxiety. Adding to this pattern, the scale used for measuring FLA was based on Horwitz et al. (1986) emphasizes fear of negative evaluation and communication apprehension, both of which are primarily activated in formal, high-stakes environments such as classrooms. On the other hand, gaming occurs in more relaxed, anonymous, or socially familiar contexts, and while it may lower anxiety during gameplay, its effects may not transfer effectively to more formal, and in the first place, academic speaking situations.

Next, belief that games improve English even though has a slightly higher effect size (3.4%) it is still small effect of variance which suggests that perceptions and attitudes toward gaming as a learning tool play a subtle yet meaningful role in FLA levels. This result can be interpreted

through Krashes's Effective Filter hypothesis (1980) which implies that even though the input is comprehensible and ready to be used emotional dimensions are there to affect the level of internalization. In other words, the participants that are more open to gaming as a learning tool will be more ready to learn from it. This belief likely reduces anxiety levels by creating more relaxed and purposeful context, lowering the filter and encouraging willingness to speak. The effect size of this factor is low, which can imply that belief itself is an indirect factor, supporting emotional readiness rather than directly influencing FLSA in formal settings.

Further in this discussion, it is important to explain the length of gaming sessions which showed to be insignificant in the group as a whole but have a significance in the preparatory program group. This can be explained in two parts. The first part is explaining the difference between the preparatory program and ELT group and why one differs from another. One of possible reasons stems from the zone of proximate development (Vygotsky, 1978) where preparatory students are still in the zones, while ELT students are beyond the zone. Preparatory program students are still trying to bridge the gap between what they can do alone and what they can achieve with support. Games provide this support with establishing meaningful input through gaming chats with other players (Peterson, 2016; Dixon & Christison, 2021). Next factor is again affective factor and language identity that preparatory program students are still creating. Higher academic performance is expected from pre-service teachers, which creates different types of anxiety that was examined previously. These factors could influence the flow (Csikszentmihalyi, 1990) where the process of entering the flow, and its duration depends on many variables. In the gaming framework longer gaming sessions may increase the likelihood of entering the flow and enhancing spontaneous language use. On the other hand, for ELT students, the conditions for entering the flow (such as moderate challenge, low pressure and high intrinsic motivation) may be less easily met in gaming environments or even the flow itself is not related at all to their academic goals and as such does not reflect on their FLSA, not even indirectly.

Another result that was interesting for this research was the impact of type of video games on FLSA (table 4.14.). In this analysis it was revealed that Role-Playing Games (RPG), Action/Adventure, First-Person Shooter (FPS), Simulation, Sport, Puzzle, Fighting, Horror, Open World, Massively Multiplayer Online Role-Playing Games (MMORPG), and Multiplayer Online Battle Arena (MOBA) experienced significantly lower levels of FLSA than the ones who did not play these games. However, genres such as Battle Royale, Racing, Real-Time Strategy (RTS),

Turn-Based Strategy (TBS), and other unspecified games did not demonstrate a significant relationship with FLSA.

These findings are aligned with the theoretical framework of previous research, where some of the genre showed significant impact on lowering FLSA by providing emotionally safe, socially supportive, and communicatively rich environments for foreign language speaking. For example, MMORPGs were repeatedly highlighted as the environments that support language learning and create safe spaces for language use (Jabbari & Eslami, 2019; Peterson, 2010; Rama et al., 2012). Horwitz et al. (1986) argued that fear of negative evaluation is one of the core sources of language anxiety, and MMORPGs are environments that can provide spaces with low-pressure and that are peer-supported, where speaking errors/mistakes are tolerated and the main focus is on the meaning. Another reason for these types of games can be extended play time, which consequently can lead to a state of flow. With the average game time of 1.9 hours, where passionate players could play even for 10 hours 20 days straight which shows that these types of games keep players engaged, focused and motivated- conditions that match Csikszentmihalyi's (1990) Flow Theory.

Similarly, Action/Adventure games impact on FLSA are in accordance with the results of Ünlü and Aydın (2023), where they discovered that students who play these types of games have lower levels of nervousness and fear of negative evaluation. The interactive nature of these games likely encourages players' frequent language use and spontaneous decision making which may have an impact on reducing sensitivity or anxiety towards speaking situation (Reinders & Wattana, 2014). In other words, these types of games may serve as a distraction from fear of making mistakes, allowing players to focus more on meaning rather than form, which consequently reduces FLSA.

First-Person Shooter (FPS), MOBA, and Open World games also showed significant reduction in anxiety probably due to fast paced communication and team cooperation during the game. These types of games usually demand immediate response from players which may cause lowering speaking apprehension since it encourages spontaneous and task-based communication (Dixon & Jordan, 2022) that usually stems from simple commands and repetitive phrases (Sarah/Low, anxiety non- gamer, p.73)

As Thornbury (2005) pointed out, emotional and cognitive condition can significantly influence language speaking performance, and these types of games create an environment where

learners can focus more on gameplay and feel more confident about their speaking since the commands they are using are repetitive, simple and short, and the reaction of other players are focused more on the meaning than on the pronunciation or language performance.

On the other hand, in this research simulation games showed significant impact on lowering FLSA. This is in contradiction with previous research done on relationship between language proficiency and games where it was discovered that simulation games have the lowest impact on foreign language development (Yang & Chen, 2012; Marsh & Tainio, 2009; Turgut & Irgin, 2009). The reduction of FLSA in this case probably stems from controlled and predictable environments that simulation games provide, which may serve as a safe environment where players can control the pace of language input and feel less pressured to communicate with others. However, this characteristic can also have its downsides, where its contribution to language fluency may be limited compared to fast paced communicative games mentioned above.

In contrast, games such as Battle Royale, Racing, Real-Time Strategy (RTS), and TBS (Turn-Base Strategy) did not show significant associations with FLSA. This can be explained by the lower need for interaction in these games. These genres are often characterized by more mechanical performance, fast reaction times or strategic planning rather than communicating. This can be seen in some participant statements where they emphasized that they did not use English to communicate with other teammates but their native language, and characterizing some of the games, like PUBG as “*not a very international game*” (Naomi, in chapter IV theme V) highlighting the limitation of language exposure in these games. This reliance on native language can also explain the lack of impact on FLSA.

Overall, these findings suggest that the genre of games played can significantly determine the effect on FLSA. While some games can serve as a positive environment for alleviating FLSA, other types can be less effective, since they provide limited language input exposure and low opportunities for speaking. It is also important to note that even internationally played games can differ significantly across regional servers, shaping distinct linguistic communities and learning environments. In conclusion, it is not whether the student plays games that matters, but also which types of games they are playing and in which linguistic context, which adds to the complexity of this topic.

5.2.3 Gaming Environment Dynamics and Their Role in FLSA

While the quantitative analysis confirmed the difference between the levels of FLSA between gamers and non-gamers to get deeper insights into how and why there is a need to use the results found using qualitative analysis. The previous discussion was more focused on quantitative results, slightly relying on the data gathered with qualitative methods, but to get the answers to questions about *how* and *why*, there is a need to delve into the personal experiences of language learners in and outside of gaming environments. Participants' experience reveals more details behind the statistics, they unveil factors such as for example emotional safety, type of interaction, and cultural perceptions of judgment and how they can shape FLSA. They provide insights where it can be seen to which extent gaming and environment outside of gaming interact with each other and alleviate and/or reinforce FLSA and highlight the conditions in which gaming environment can be used in full potential regarding nuanced sociological and psychological conditions of learners.

One of the themes emerged from qualitative analysis highlighted the importance of anonymity as one of the main factors in feeling safe while speaking, which aligns with previous studies (Reinders & Wattana, 2014; Dixon & Jordan, 2022; Grimshaw & Cardoso, 2018; Ünlü & Aydın, 2023; Jabbari & Eslami, 2019; Peterson, 2010; Rama et al., 2012). For example, Zoe highlighted that as one of the most important factors to feel free to speak is to be “anonymous” while speaking. This in a way provides an environment which can foster the absence of fear of negative evaluation- which directly reflects Horwitz et al. (1986) concept of social evaluative anxiety. Furthermore, the anonymity was not the only factor highlighted as important, the perception of feeling safe is the other one. For example, Helen noted that “even in voice chats, no one is going to really judge you” which reflects her belief that the gaming environment is a safe environment. The safety of the environment can be overturned with Kenneth's reflection where he highlights that other players may sometimes judge and from time to time even comment in a mocking way, but he disregards this by mentioning that they will stop this eventually. It can be concluded that the perception that gaming is a safe environment develops because of the three main factors: anonymity, belief that there is absence of judgment, and depersonalization of the judgment. The line can be drawn between the real-life situations where the participants face similar situations but their reactions to the events are different. For example, Helen claims that she has sort of a language speaking trauma in the classroom because she believes that someone was laughing at her pronunciation during the lesson.

It can also be explained with the belief that foreigners do not judge while the natives (Turkish people) are branded as judgmental by more than half of the participants (6 out of 11). This shows how real-time sociocultural perceptions can shape FLSA and how they can shape anxiety within the gaming environment. For example, many of participants claim that their direct, real-life communication with foreigners helped them develop their skills, like Erasmus program, traveling or working, and their experience carries out to online gaming environments, since both environments involve speaking with foreigners. It can be argued what is the source of positive experience with foreigners, gaming or real life since it depends on individual circumstances.

These dynamics also reflect Nowicka and Wilczynska's (2011) theory of individual communicative competence. According to them language learning is not only shaped by internal ability of the individual, but also it is shaped by norms and expectations of the discourse communities and continuous interaction between the individual and the group. In this context, participants belief in emotional safety of intercultural interactions spill over into gaming environment and mold them into non-threatening and supportive spaces for language learning.

While emotional safety and perceived judgment is highlighted as an important factor for participants to practice their speaking skills and for alleviating FLSA they also isolated the way of communication during a gameplay as a significant element to shaping language learning experience. Specifically, it was found that not only the structure and demands of in-game communication (whether fast-paced and command-driven or narrative and role-based) influence not only how the language is used, but how much users feel comfortable using it. The participants noted that in game communication is not uniformed but it depends on the genre, pace and context of the game. These findings point out the need to explore more the type of language used in games, the modality of communication (text or voice) and linguistic expectations in different gaming environments, all of which influence the language learning experience and as such shape FLSA of players. That is why it is important to explore gaming communicative dynamics and how they operate in different contexts, in other words how they interact with fluency, language confidence and perceived language identity.

As seen previously in fast-paced games such as FPS or Action/Adventure genres, participants had described that they adopted simplified and direct sentence structures due to the urgency of in-game actions. This is according to findings by Dixon and Jordan (2022). They

emphasized that the rapid tempo of FPS games can encourage spontaneous, meaning-driven interaction, and that they are often reducing attention to language itself. Similar findings were exhibited in Thornbury (2005) work where he highlights that emotional and cognitive pressure in real-time situations can both limit and enhance fluency depending on the focus on the task in the game. Reinders and Wattana (2014) support this, they note that learners often shift their focus from grammatical accuracy to in-game performance, therefore reducing their FLSA.

However, some of the participants reported that some of the game genres a different emotional or linguistic safety. Role-playing games (RPGs), for example, were reported as a type of game that requires more careful language construction due to their linguistic demands. This is seen in the report by Ben who said that he experiences increased anxiety when playing such games in an online multiplayer environment, as he has to "pick [his] words more carefully," since the dialog affects the outcome of the game, indicating that linguistic pressure re-emerges when the communicative context becomes slower and more complex with higher stakes risks. These genre-based differences were found in the work of Rama et al. (2012), Peterson (2010), and Jabbari and Eslami (2019). They found that MMORPGs support the development of pragmatic and sociolinguistic competence, but may also demand more structured discourse, which can become a potential source of anxiety for some learners.

The modality of communication, e.g. voice chat and text chat also play a critical role. Female participants in the study reported that they usually avoid voice chats and preferred more controlled, text-based interaction, usually within trusted and familiar social circles, such as friend groups. On the other hand, male participants engaged more frequently with open voice and text communication, not worrying about the familiarity of group they interact with. They also showed fluency in genre-specific communicative norms, such as familiarity with different jargon used with different games. Even though Zariski (2010) highlights this distinction by concluding that text chat improves all language skills because of its complexity and spontaneity it should not be disregarded the lack of medium used by female participants, that can reflect the average gaming community. This can be especially important if we take into consideration of Ünlü and Aydın (2023) where they argue that game genre and its communicative mode can directly influence the level of anxiety experienced by learners, and as such there can be debated about the opportunities gaming environments provide to female users compared to male ones.

Looking at these findings it can be seen that the type of communication modality while gaming, in a sense if the users use voice chats, or text chats, actively affect the language experience and emotional response of users, and as such determines whether the users are going to actively use these communicative options and to which extent. It can be concluded that gaming fosters safe environments for language use or reinforces FLSA depends heavily on the communicative demands of the game, the users' familiarity with genre-specific discourse, and their comfort with the interaction medium that are in some dimensions gender specific. These factors should be taken into consideration when exploring digital tools for language learning.

Another interesting insight was reported by one of the participants that stated that gaming does not only eliminate the presence of FLSA, but it can transform it into another emotion due to performance related tensions. Namely, one participant, Ben, described his emotions during in-game communication challenges stating: "I don't feel anxious. I get mad." According to him, instead of experiencing anxiety while speaking, he transformed the emotional response to anger or irritation. This can be compared with Csikszentmihalyi's flow theory (1990), where emotional arousal can be seen as motivating rather than paralyzing. In Ben's case, his high engagement and immediacy of gaming appeared to redirect the affective load away from anxiety and into a different form that can be described as task-oriented intensity. This is according to the idea that gaming does not always reduce the presence of high-arousal emotions such as anxiety (Csikszentmihalyi, 1990; DeHaan, 2005), but it can recontextualize them in ways that may still support language use and persistence (Malliarakis et al., 2013; MacIntyre & Gardner, 1994). It can be concluded that emotional states like "getting mad" may indicate that learner is more focused and motivated to succeed rather than being a sign of something negative. This reveals the need to expand how we frame emotions in language learning, especially in dynamic environments such as gaming, where it is necessary to move beyond binary "anxious/not-anxious" frameworks and to pay attention to a more nuanced understanding of how learners emotionally navigate language obstacles while speaking in these kinds of environments.

Finally, there is a need to admit the aspects of characteristics of gaming environments that foster FLSA instead of promoting the safe environment. According to testimonies of participants gaming environments can be highly toxic, focusing on winning, and disregarding emotional confidence of the players. The toxicity of the environment tends to differ from game to game and even from server to server. They can be hostile towards certain nationalities and females. The

sexism is present in that amount that it can deter female players to participate in team communications. Gaming environment and gaming communities develop certain language, system of values and as such certain belief systems that include negative stereotypes. Ben mentioned this distinction to be occurring in same genre, just different games, when mentioning that female players are more likely to use voice chat in game called *Valorant* than in *Counter Strike* which tends to be more hostile towards women while both games belong to FPS genre.

To summarize, the relationship between gaming environments and foreign language speaking anxiety is shaped by many different factors that are interrelated. These factors are communicative modality, emotional framing, game genre, and the social dynamics within gaming communities and they are defined by their own discourse, language use beliefs and values as any other community. While certain configurations of these factors can facilitate low stakes environment that fosters emotional safety and reduce anxiety for certain people, others may worsen existing tensions or introduce new barriers, particularly for marginalized groups. That is why it is important to highlight that video games cannot be viewed as one-dimensional and universally beneficial space, but it must be observed as contextually sensitive environment whose benefits depend on design, discourse and the learner's own identity and its positioning within the gaming community.

5.3 Conclusion

Language anxiety is a topic that has been present in the scientific world for more than half a century, yet it is still a topic that provides questions and needs further exploration. In the case of this study focus was on FLSA for English as a foreign language among tertiary level Turkish students and the impact of video games have on it. The main aim was to understand whether video games impact language anxiety and to delve deeper into the topic on how it affects at and understand the nuances that influence this relationship.

In examining the speaking anxiety levels of learners who actively play online games, it is found that there is a negative relationship between playing video games and FLSA, where non-gamers showed higher levels of FLSA while gamers showed lower levels of FLSA. However, a low percentage of variance was found in many stances. This shows the complexity of video games and that we cannot look at its impact one-dimensionally. That is why the qualitative part revealed many aspects of games that could influence the alleviation of FLSA such as emotional safety,

anonymity, and informal peer interaction in gaming environments. It is also important to mention that the gaming environment cannot be observed solely as a safe environment and as such an environment that allows users to use their foreign language skills freely and without any strong emotions. In contrast with the participants' statements, it was revealed that gaming can be a highly hostile environment, especially to marginalized groups.

Interestingly in-game hostility did not always lead to increased anxiety. Instead, a shift in emotional response was observed - many participants described transitioning from anxiety to anger, developing high levels of goal-oriented focus, and cultivating emotional detachment from toxic interactions. This coping mechanism rather than absence of the negative experiences appears to contribute to reduced FLSA in gaming environments.

These findings highlight the strength of mix-methods and why it was important to approach this problem in both quantitative and qualitative method analysis. FLSA has a multidimensional nature and with this study it was seen that the gaming world shows similar characteristics - multidimensional and multifactorial. While quantitative data established the strength of relationships between the gaming and FLSA the qualitative data captured the emotional and social dynamics that shaped participants' experiences. These findings align with Krashen's Affective Filter Hypothesis and Flow Theory as a theoretical framework, by suggesting that emotional engagement, immersion, and resilience in task-based environments can lower emotional barriers of language use, even when those environments are imperfect.

To summarize, this study contributes to a more layered view of the impact of video games in FLSA; by not portraying games as naturally beneficial but it enhances the importance of emotional regulations, context and personal preferences in shaping learners experience. This study opens the doors for exploring the potential of video gaming environments from a different perspective.

Overall, these findings directly respond to the study's research questions by comparing FLSA between gamers and non-gamers in the first place (RQ1 and RQ2). Next, by identifying a negative relationship between online video games and FLSA (RQ3) and finally, by revealing how online gaming environments' dynamics interact with social, psychological and emotional dimensions of oral language use (RQ4).

5.4 Pedagogical Implications

The findings in this study offer several pedagogical implications, especially for language educators who are seeking alternative approaches that can alleviate foreign language speaking anxiety (FLSA) and are more interested in informal, interest-based learning tools. The use of commercial video games, as opposed to serious or educational games, has been shown as a relevant and underappreciated medium for fostering spontaneous language use, which can be especially important for anxiety-prone learners.

Firstly, it can be said that commercial multiplayer games such as World of Warcraft, Among Us, or GTA Online have a potential to provide learners with authentic, safe environments where speaking English has more functional role. Online player vs player (PVP) games naturally require users to communicate in real time, where they need to negotiate meaning, and collaborate with others in often fast-paced, goal-oriented contexts. This functional use of language (free from the traditional classroom focus on accuracy and evaluation) can offer a context where anxiety can be significantly reduced, particularly for learners whose fear of negative evaluation is higher than others.

One of the main reasons why these games reduce FLSA appears to be anonymity of the players. This study, as much as in others (Kaplan & Haenlein, 2009; Reinders and Wattana, 2014; Dixon & Jordan, 2022; Güzel & Aydin, 2019) got to the findings where participants frequently reported feeling less judged when staying anonymous, which allowed them to dissociate their real-life identities from their L2 performance. This sense of psychological safety made participants feel freer to express themselves in L2. In this sense language instructors may draw inspiration from this dynamic by trying to design classroom tasks that include identity-masking features, such as pseudonymous role-play, virtual avatars, or collaborative writing and speaking platforms that hide their personal identity.

Additionally, in this study it is revealed that while gaming environments can be emotionally intense and at times even hostile, where learners often reported a shift of their emotional state from anxiety to goal-oriented focus or even frustration or anger. Surprisingly, these shifts showed that they can facilitate better language performance. These findings are in contrast to traditional speaking tasks which center on correctness and self-monitoring while game-based interactions prioritize progress, shared objectives, and efficiency in language use to reach gaming goals. This

can be used by educators where they could try to emulate the gaming structure by designing classroom speaking activities that are outcome-driven and cooperative rather than evaluative, which can serve as a channel for students to focus away from self-evaluation and toward task completion.

Another important pedagogical implication is highlighting the importance of encouraging learners to engage in out-of-class gaming in English. In this study participants who frequently played online games outside school contexts reported increased speaking confidence and fluency. That is why it can be recommended to teachers to consider encouraging age-appropriate, multiplayer English-language games to students. They could give brief reflective assignments, such as keeping a “gaming language log” or discussing in-game interactions, that could help bridge the gap between informal language use and formal learning goals while not compromising the spontaneous nature of the gaming experience.

Finally, this study brings attention to the need for teachers to be aware that commercial gaming environments (e.g. video games) are not safe or beneficial for everyone. It was shown that hostile language, exclusion, and gender-based discrimination can appear in certain gaming communities. However, the findings of this study show that many learners by developing coping strategies like emotional distancing or focusing on game goals, reduce these negative effects of gaming. According to this, it can be suggested to language teachers to prepare their students for these possibilities by teaching them about online communication etiquette, showing the possible self-protection strategies (e.g., muting, reporting), and having an open dialogue about students’ emotional experiences in digital spaces.

In summary, commercial video games hold, probably, not enough exploited pedagogical potential for reducing FLSA and for supporting communicative competence development. Their use in language education should not be seen as a one-size-fits-all solution but rather as a complementary tool, that can be particularly effective when used to foster autonomy, fluency, and emotional safety in speaking practice.

5.5 Recommendations for Future Research

In the findings, it is offered a deep understanding of how online gaming can influence FLSA, however, certain limitations for further exploration exist. That is why several recommendations for future research are proposed below.

Firstly, future studies could adopt a more longitudinal research design. By observing this process for a longer period of time it can be better observed how regular exposure to gaming can affect FLSA over time. By doing so the researchers could investigate whether any observed reductions in anxiety are permanent or temporal, and if they correspond with meaningful improvements in speaking proficiency.

Secondly, replication of this study but in different educational contexts across different age groups could contribute to the generalizability of the findings. The present study focused on university students in Türkiye who are somewhat related to language studies; it would be valuable to investigate if similar results would emerge in secondary school learners, tertiary level student of non-linguistic studies, or in multilingual classrooms in other cultural and regional settings.

Another important note that could involve more detailed qualitative investigations could include semi-structured interviews or discourse analysis of in-game communication. These approaches could discover more nuanced emotional and psychological dimensions of gaming and how it reflects on FLSA. This approach could allow researchers to explore more personal, inner experiences of learners and their identity constructions in gaming environments.

An especially interesting area of research could be the experiences of marginalized learners in gaming, particularly women. While gaming can often be perceived as a democratic and safe digital space, this study showed that female players could face exclusion, harassment, and for that reason the lack of motivation for participating in in-gaming video and text chats. This dynamic can not only affect their gaming experience but potentially it can also limit their opportunities for L2 language practice, self-expression, and identity development. For these reasons, it is important to investigate how online gaming dynamics affect FLSA and explore what kinds of support or changes could help build a more inclusive and empowering environment for all learners.

Furthermore, it could be of great value to conduct research that would use different logic that is usually used in gaming studies. Instead of designing a game to fit a curriculum or a lesson it could be interesting to see a classroom design around a particular online game with an emphasis on anonymity. This approach would represent a reversal of traditional gamification practices - not bringing the game into the classroom but bringing the classroom into the game. Creating options that allows anonymity for students such as avatars and nicknames could potentially foster a safer space and alleviate fear of negative evaluation.

Finally, considering that emotional regulation plays a critical role in both language acquisition and gameplay, it can be suggested that future studies might also focus on emotional regulation strategies employed during gaming sessions and how these strategies interact with learners' levels of FLSA.

Overall, this study has contributed to a steadily increasing academic interest in the aspect of how video games can influence FLSA, but as seen in previous chapters the complexity of both domains demonstrates that there is still much to be discovered. By approaching these topics from different methodological and sociocultural perspectives, future research could offer even more detailed understandings into how digital spaces such as video games can serve as powerful tools for language development.

REFERENCES

- Abdullah, S., Altun, M., & Hama, F. (2022). The effect of language learning anxiety on English oral performance. *International Journal of Social Sciences & Educational Studies*, 9(3), 337-347. <https://doi.org/10.23918/ijsses.v9i3p337>
- Ahmed, A. A. A., Ampy, E. S., Komariah, A., Hassan, I., Thahir, I., Hussein Ali, M., Fawzi Faisal, A., & Zafarani, P. (2022). Investigating the effect of using game-based learning on EFL learners' motivation and anxiety. *Education Research International*, 2022, 1-9. <https://doi.org/10.1155/2022/6503139>
- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, 78(2), 155-168. <https://doi.org/10.2307/329005>
- Alatis, J. E. (Ed.). (1980). *Current issues in bilingual education: Proceedings of the Georgetown University Round Table on Languages and Linguistics*. Georgetown University Press.
- Alamri, W., & Qasem, F. (2024). Foreign language speaking anxiety in relation to gender: Students and teachers' perceptions. *Cogent Education*, 11(1), 1-14. <https://doi.org/10.1080/2331186X.2024.2423440>
- American Psychological Association. (n.d.). *APA Dictionary of Psychology*. <https://dictionary.apa.org/>
- Alrajhi, S. A. (2020). EFL learners' beliefs concerning the effects of accumulative gaming experiences on the development of their linguistic competence. *Electronic Journal of Foreign Language Teaching*, 17(2), 367-380.
- Ashraf, H., Motlagh, F. G., & Salami, M. (2014). The impact of online games on learning English vocabulary by Iranian (Low-intermediate) EFL Learners. *Procedia - Social and Behavioral Sciences*, 98, 286-291. <https://doi.org/10.1016/j.sbspro.2014.03.418>
- Azizifar, A., & Fariadian, E. (2015). The effect of anxiety on Iranian EFL learners' speaking skill. *International Journal of English Language and Linguistics Research*, 3(7), 19-30.
- Baharuddin, S. S., & Rashid, S. M. (2014). English Language Learning Anxiety and Oral Performance Among Undergraduate ESL Learners. *Journal of Language and Communication* 1 (2), 205-221.
- Bakan, U., Han, T., & Bakan, U. (2022). Learner perceptions and effectiveness of using a massively multiplayer online role-playing game to improve EFL communicative competence. *Knowledge Management and E-Learning*, 14(3), 286-303. <https://doi.org/10.34105/j.kmel.2022.14.016>
- Barnes, S., & Prescott, J. (2018). Empirical evidence for the outcomes of therapeutic video games for adolescents with anxiety disorders: Systematic review. *JMIR Serious Games*, 6(1), e3. <https://doi.org/10.2196/games.9530>
- Bartlett, M. S. (1954). A note on the multiplying factors for various chi-square approximations. *Journal of the Royal Statistical Society. Series B (Methodological)*, 16, 296-298.

- Beard, K. S. (2015). Theoretically speaking: An interview with Mihaly Csikszentmihalyi on flow theory development and its usefulness in addressing contemporary challenges in education. *Educational Psychology Review*, 27(2), 353–364. <https://doi.org/10.1007/s10648-014-9291-1>
- Beavis, C. (2012). Video games in the classroom: Developing digital literacies. *Practically Primary*, 17(1), 17. doi:10.1598/JAAL.54.1.7
- Bennacer, F. (2022). Playing online video games as a learning strategy to enhance EFL learners' speaking skill. *Milev Journal of Research & Studies*, 8(1), 391–402. DOI: 10.58205/mjrs.v8i1.924
- Benson, P., & Chik, A. (2011). Towards a more naturalistic CALL. *International Journal of Computer-Assisted Language Learning and Teaching*, 1(3), 1–13. <https://doi.org/10.4018/ijcallt.2011070101>
- Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The foreign language classroom anxiety scale and academic achievement: An overview of the prevailing literature and a meta-analysis. *Journal for the Psychology of Language Learning*, 2(1), 26–56. <https://doi.org/10.52598/jpll/2/1/3>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brown, G., & Yule, G. (1983). *Discourse analysis*. Cambridge: Cambridge University Press.
- Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–47. <https://doi.org/10.1093/applin/I.1.1>
- Chen, M. H., Tseng, W. T., & Hsiao, T. Y. (2018). The effectiveness of digital game-based vocabulary learning: A framework-based view of meta-analysis. *British Journal of Educational Technology*, 49(1), 69–77. <https://doi.org/10.1111/bjet.12526>
- Cheng, Y. S., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning*, 49(3), 417–446. <https://doi.org/10.1111/0023-8333.00095>
- Cole, C., Parada, R. H., & Mackenzie, E. (2024). A scoping review of video games and learning in secondary classrooms. *Journal of Research on Technology in Education* 56, (5), 544–577. Routledge. <https://doi.org/10.1080/15391523.2023.2186546>
- Creswell, J. W. (2008). *Research design qualitative, quantitative and mixed methods approaches* (3rd ed.). SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Designing and conducting mixed methods research*. SAGE Publications.
- Crystal, D. (2003). *English as a global language*. Cambridge University Press.
- Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. Jossey-Bass
- Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. New York: Harper & Row.

- Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Biomedica*, 91(1), 157–160. <https://doi.org/10.23750/abm.v91i1.9397>
- Curtis, R. (2012). “Einfühlung and Abstraction in the moving image: Historical and contemporary reflections.” *Science in Context* 25, 425–46. <https://doi.org/10.1017/S0269889712000178>
- De Souza, B. B., e Silva, L. X., & Roazzi, A. (2010). MMORPGS and cognitive performance: A study with 1280 Brazilian high school students. *Computers in Human Behavior*, 26(6), 1564–1573. <http://doi.org/10.1016/j.chb.2010.06.001>
- DeHaan, J. (2005). Learning language through video games: A theoretical framework, an evaluation of game genres and questions for future research. In S. P. Schaffer & M. L. Price (Eds.), *Interactive convergence: Critical issues in multimedia* (Vol. 10, pp. 229–239). Interdisciplinary Press.
- Dixon, D. H., & Christison, M. A. (2021). L2 gamers’ use of learning and communication strategies in massively multiplayer online games (MMOs): An analysis of L2 interaction in virtual online environments. In K. Kelch, P. Byun, S. Safavi, & S. Cervantes (Eds.), *CALL theory applications for online TESOL education* (pp. 296–321). IGI Global. <https://doi.org/10.4018/978-1-7998-6609-1.ch013>
- Dixon, D. H., Dixon, T., & Jordan, E. (2022). Second language (L2) gains through digital game-based language learning (DGBLL): A meta-analysis. *Language Learning & Technology*, 26(1), 1–25.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Drossel, K., Eickelmann, B., & Gerick, J. (2017). Predictors of teachers’ use of ICT in school – the relevance of school characteristics, teachers’ attitudes and teacher collaboration. *Education and Information Technologies*, 22(2), 551–573. <https://doi.org/10.1007/s10639-016-9476-y>
- Dunkel, H. B. (1947). The effect of personality on language achievement. *Journal of Educational Psychology*, 38(4), 177–182.
- Esposito, N. (2005). A short and simple definition of what a videogame is. In *Proceedings of the DiGRA 2005 Conference: Changing Views – Worlds in Play*. <https://doi.org/10.26503/dl.v2005i1.177>
- Fetters, M. D., & Freshwater, D. (2015). The 1 + 1 = 3 Integration Challenge. *Journal of Mixed Methods Research* 9(2), 115–117. SAGE Publications. <https://doi.org/10.1177/1558689815581222>
- Field, A. P. (2012). *Discovering statistics using SPSS (and sex and drugs and rock “n” roll)*. SAGE Publications.
- Franceschini, S., Trevisan, P., Ronconi, L., Bertoni, S., Colmar, S., Double, K., Facchetti, A., & Gori, S. (2017). Action video games improve reading abilities and visual-to-auditory attentional shifting in English-speaking children with dyslexia. *Scientific Reports*, 7, 5863. <https://doi.org/10.1038/s41598-017-05826-8>
- Ganschow, L., Sparks, R. L., Anderson, R., Javorshy, J., Skinner, S., Program, G., & Patton, J. (1994). Differences in language performance among high-, average-, and low-anxious college

- foreign language learners. *Modern Language Journal*, 78, 41-55.
<http://doi.org/10.1111/j.1540-4781.1994.tb02013.x>
- Gao, Y. T., & Liu, Y. S. (2007). On soft power and online games—from the perspective of moral education for minors. *Foreign Education Research*, 6, 72-76.
- Gardner, R. C. (1985). *Social Psychology and second language learning: The role of attitudes and motivation*. Edward Arnold.
- Gee, J. P. (2003). What video games have to teach us about learning and literacy. *Computers in Entertainment 1 (1)*, Article 20. <https://doi.org/10.1145/950566.950595>
- Girard, C., Ecalle, J., & Magnan, A. (2013). Serious games as new educational tools: How effective are they? A meta-analysis of recent studies. *Journal of Computer Assisted Learning*, 29, 207–219. <https://doi.org/10.1111/j.1365-2729.2012.00489.x>
- Grimshaw, J., & Cardoso, W. (2018). Activate space rats! Fluency development in a mobile game-assisted environment. *Language Learning & Technology ISSN*, 22, 159-175.
<https://doi.org/10.125/44662>
- Güzel, S., & Aydın, S. (2019). The effect of Second Life as a virtual language learning environment on speaking anxiety: Second Life and anxiety. In M. Kruk (Ed.), *Assessing the effectiveness of virtual technologies in foreign and second language instruction* (pp. 115–146). IGI Global.
<https://doi.org/10.4018/978-1-5225-7286-2.ch005>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Pearson Prentice Hall.
- Hewitt, E., & Stephenson, J. (2012). Foreign language anxiety and oral exam performance: A replication of Phillips's MLJ study. *Modern Language Journal*, 96(2), 170–189.
<https://doi.org/10.1111/j.1540-4781.2011.01174.x>
- Horowitz, K. S. (2019). Video games and English as a second language: The effect of massive multiplayer online video games on the willingness to communicate and communicative anxiety of college students in Puerto Rico. *American Journal of Play* 11(3), 379-410.
- Horwitz, E. K. (2000). Horwitz comments: It ain't over 'til it's over: On foreign language anxiety, first language deficits, and the confounding of variables. *The Modern Language Journal*, 84(2), 256-259.
- Horwitz, E. K. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112-126. <http://doi.org/10.1017/S0267190501000071>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal* 70 (2), 125-132. <https://doi.org/10.2307/327317>
- Horwitz, E. K., & Young, D.J. eds. (1991). *Language anxiety: From theory and research to classroom implications*. Prentice-Hall.
- Howard, S. K. (2013). Risk-aversion: Understanding teachers' resistance to technology integration. *Technology, Pedagogy and Education*, 22(3), 357–372.
<https://doi.org/10.1080/1475939X.2013.802995>

- Hutcheson, G. D., & Sofroniou, N. (1999). *The multivariate social scientist: Introductory statistics using generalized linear models*. SAGE Publications
- Hymes, D. H. (Ed.). (1971). *Pidginization and creolization of languages* (Proceedings of a 1968 conference). Cambridge University Press.
- Ishaq, A., & Omar, B. (2021). *The impact of using video games on reducing Algerian EFL learners' speaking anxiety* (Master's thesis). University of Mohamed Seddik Ben Yahia.
- Jabbari, N., & Eslami, Z. R. (2019). Second language learning in the context of massively multiplayer online games: A scoping review. *ReCALL*, 31(1), 92–113. <https://doi.org/10.1017/S0958344018000058>
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31–36.
- Kaplan, A. M., & Haenlein, M. (2010). The fairyland of Second Life: Virtual social worlds and how to use them. *Business Horizons*, 52(6), 563–572. <https://doi.org/10.1016/j.bushor.2009.07.002>
- Kafes, H. (2018). A study on pronunciation anxiety of pre-service ELT teachers. *Journal of Graduate School of Social Sciences*, 22, 1813–1827.
- Sylvén, L. K., & Sundqvist, P. (2012). Gaming as extramural English L2 learning and L2 proficiency among young learners. *ReCALL*, 24(3), 302–321. <https://doi.org/10.1017/S095834401200016X>
- Klee, C. (1994). *Faces in a crowd: The individual learner in multisection courses*. Heinle & Heinle.
- Kobul, M. K., Saraçoğlu, İ. N. (2020). Foreign language teaching anxiety of non-native preservice and in-service EFL teachers. *Journal of History Culture and Art Research*, 9(3), 350-365. <http://doi.org/10.7596/taksad.v9i3.2143>
- Krashen, S. D. (1980). *The input hypothesis: Issues and implications*. Longman.
- Kuo, F. R., Hsu, C. C., Fang, W. C., & Chen, N. S. (2014). The effects of embodiment-based TPR approach on student English vocabulary learning achievement, retention and acceptance. *Journal of King Saud University-Computer and Information Sciences*, 26(1), 63-70. <https://doi.org/10.1016/j.jksuci.2013.10.003>
- Levelt, W. J. M. (1995). The ability to speak: From intentions to spoken words. *European Review*, 3(1), 13–23. <https://doi.org/10.1017/S1062798700001290>
- MacIntyre, P. D., & Gardner, R. C. (1988). *The measurement of anxiety and applications to second language learning: An annotated bibliography* (Research Bulletin No. 672). University of Western Ontario.
- MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44, 283-305. <http://dx.doi.org/10.1111/j.1467-1770.1994.tb01103.x>
- Malliarakis, C., Satratzemi, M. & Xinogalos, S. (2013). A holistic framework for the development of an educational game aiming to teach computer programming. In P. Escudeiro & C. V. de

- Carvalho (Eds.), *Proceedings of the European conference on games-based learning* (pp. 359–368). Academic Conferences and Publishing International Limited.
- Marsh, A. P., & Tainio, L. (2009). Other-repetition as a resource for participation in the activity of playing a video game. *Modern Language Journal*, 93(2), 153–169. <https://doi.org/10.1111/j.1540-4781.2009.00853.x>
- McCall, J. (2022). *Gaming the past using video games to teach secondary history* (second edition). Routledge.
- Miller, L.M., Chang, C.-I., Wang, S., Beier M.E., & Klisch, Y. (2011) Learning and motivational impacts of a multimedia science game. *Computers & Education* 57, 1425–1433. <https://doi.org/10.1016/j.compedu.2011.01.016>
- Neely, E. L. (2019). The ethics of choice in single-player video games. In D. Berkich & M. V. d'Alfonso (Eds.), *On the cognitive, ethical, and scientific dimensions of artificial intelligence* (Vol. 134, pp. 291–308). Springer. https://doi.org/10.1007/978-3-030-01800-9_19
- Nunan, D. (1999). *Second language teaching & learning*. Heinle & Heinle.
- Nowicka, A., & Wilczyńska, W. (2011). Authenticity in oral communication of instructed L2 learners. In Pawlak, J. M. M., & Waniek-Klimczak, E. (Ed.), *Speaking and instructed foreign language acquisition* (pp. 24–41). Multilingual Matters. <https://doi.org/10.21832/9781847694126-004>
- Orbeta, E. D., & San Jose, A. E. (2013). Apprehension in language learning anxiety as significant correlate of oral performance in English of college freshmen. *IAMURE International Journal of Multidisciplinary Research*, 5(1) 155-184. <https://doi.org/10.7718/iamure.v5i1.622>
- Ortiz de Gortari, A. B., & Griffiths, M. D. (2015). Game transfer phenomena and its associated factors: An exploratory empirical online survey study. *Computers in Human Behavior*, 51, 195–202.
- Palandrani, P. (2021). Video games & esports: Building on 2020's rapid growth. *Global X*. <https://www.globalxetfs.com/video-games-esports-building-on-2020s-rapid-growth>
- Pallavicini, F., Pepe, A., & Mantovani, F. (2022). The effects of playing video games on stress, anxiety, depression, loneliness, and gaming disorder during the early stages of the COVID-19 pandemic: PRISMA systematic review. *Cyberpsychology, Behavior, and Social Networking*, 25(6), 334–354. <https://doi.org/10.1089/cyber.2021.0252>
- Peterson, M. (2010). Massively multiplayer online role-playing games as arenas for second language learning. *Computer Assisted Language Learning*, 23(5), 429–439. <https://doi.org/10.1080/09588221.2010.520673>
- Phillips, E. M. (1992). The effects of language anxiety on students' oral test performance and attitudes. *Modern Language Journal*, 76(1), 14–26. <https://doi.org/10.2307/329894>
- Rama, P. S., Black, R. W., Van Es, E., & Warschauer, M. (2012). Affordances for second language learning in World of Warcraft. *ReCALL*, 24(3), 322–338. <https://doi.org/10.1017/S0958344012000171>

- Reinders, H. & Wattana, S. (2014). Can I say something? The effects of digital gameplay on willingness to communicate. *Language Learning & Technology*, 18(2), 101–123. <http://doi.org/10.125/44372>
- Reinders, H. and Wattana, S. (2011) Learn English or die: the effects of digital games on interaction and willingness to communicate in a foreign language. *Digital Culture & Education*, 3, 3-29.
- Reinhardt, J. & Thorne, S. (2016). Metaphors for digital games and language learning. In F. Farr & L. Murray (Eds.), *Routledge handbook of language learning and technology* (pp. 415–430). Routledge.
- Reyes-de-Cózar, S., Ramírez-Moreno, C., & Barroso-Tristán, J. M. (2022). A qualitative analysis of the educational value of commercial video games. *Education Sciences*, 12(9), 584. <https://doi.org/10.3390/educsci12090584>
- Robinson, P. (2001). Task complexity, cognitive resources, and syllabus design: A triadic framework for examining task influences on SLA. P. Robinson (Ed.), *Cognition and second language instruction* (pp. 287–318). Cambridge University Press.
- Robinson, P. (2005). Cognitive complexity and task sequencing: Studies in a componential framework for second language task design. *International Review of Applied Linguistics in Language Teaching*, 43, 1–32. <https://doi.org/10.1515/iral.2005.43.1.1>
- Robinson, P. (2007). Criteria for classifying and sequencing pedagogic tasks. In M. P. García Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 7–26). Multilingual Matters.
- Robinson, P. (2011a). Task-based language learning: A review of issues. *Language Learning*, 61 (Supplement 1), 1–36. <https://doi.org/10.1111/j.1467-9922.2011.00641.x>
- Robinson, P. (2011b). Second language task complexity, the cognition hypothesis, language learning, and performance. P. Robinson (Ed.), *Second language task complexity: Researching the Cognition Hypothesis of language learning and performance* (pp. 3–37). John Benjamins.
- Robinson, P., & Gilabert, R. (2007). Task complexity, the Cognition Hypothesis, and second language learning and performance. *International Review of Applied Linguistics in Language Teaching*, 45, 161–176.
- Ružić-Baf, M., Strnak, H., & Debeljuh, A. (2016). Online video games and young people. *International Journal of Research in Education and Science (IJRES)*, 2(1), 95–104.
- Satar, H. M., & Özdener, N. (2008). The effects of synchronous CMC on speaking proficiency and anxiety: Text versus voice chat. *Modern Language Journal*, 92(4), 595–613. <https://doi.org/10.1111/j.1540-4781.2008.00789.x>
- Savignon, S. J. (2002). *Interpreting communicative language teaching: Contexts and concerns in teacher education*. Yale University Press.
- Seidlhofer, B. (2013). *Understanding English as a lingua franca*. Oxford University Press.
- Shirazi, M., Ahmadi, S. D., & Mehrdad, A. G. (2016). the effect of using video games on EFL learners' acquisition of speech acts of apology and request. *Theory and Practice in Language Studies*, 6(5), 1019–1026. <http://doi.org/10.17507/tpls.0605.16>

- Shumin, K. (2002). Factors to consider: Developing adult EFL students' speaking abilities. In J. C. Richards & W. A. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 204–211). Cambridge University Press. <https://doi.org/10.1017/CBO9780511667190>
- Soyoof, A. (2018). Video game and culture: A case study of EFL student players' views on their acquisition of cultural knowledge and sensitivity. *International Journal of Pedagogies and Learning*, 13(2), 93–104.
- Soyoof, A., & Mclay, K. F. (2019). The Impact of video game intervention on reducing stress and enhancing language achievement and communication skills. *International Journal of Pedagogies & Learning* 14(1), 45–58.
- Subekti, A. S. (2018). Investigating the relationship between foreign language anxiety and oral performance of non-English major university students in Indonesia. *Dinamika Ilmu*, 18(1), 15–36. <https://doi.org/10.21093/di.v18i1.880>
- Thornbury, S. (2005). *How to teach speaking*. Longman.
- Thorne, S. L., Black, R. W., & Sykes, J. M. (2009). Second language use, socialization, and learning in internet interest communities and online gaming. *Modern Language Journal*, 93(SUPPL. 1), 802–821. <https://doi.org/10.1111/j.1540-4781.2009.00974.x>
- Tarng, P.-Y., Chen, K.-T., & Huang, P. (2008,). An analysis of World of Warcraft players' game hours. In *Proceedings of the 7th ACM SIGCOMM Workshop on Network and System Support for Games (NetGames '08)* (pp. 47–52). Association for Computing Machinery. <https://doi.org/10.1145/1517494.1517504>
- Triberti, S., Milani, L., Villani, D., Grumi, S., Pagnini, F., & Riva, G. (2018). What matters is when you play: Investigating the relationship between online video games use and psychological functioning. *Computers in Human Behavior*, 84, 210–216. <https://doi.org/10.1016/j.chb.2018.02.007>
- Toh, Y., & Lim, C. P. (2022). Learning in digital play: A dual case study of video gamers' independent play. *Research and Practice in Technology Enhanced Learning*, 17, Article 7. <https://doi.org/10.1186/s41039-022-00182-2>
- Tóth, Z. (2008). A foreign language anxiety scale for Hungarian learners of English. *Working Papers in Language Pedagogy*, 2, 55–78. <https://doi.org/10.61425/wplp.2008.02.55.78>
- Tran, T. T. T. (2012). A review of Horwitz, Horwitz and Cope's theory of foreign language anxiety and the challenges to the theory. *English Language Teaching*, 5(1), 69–75. <https://doi.org/10.5539/elt.v5n1p69>
- Turgut, Y., & Irgin, P. (2009). Young learners' language learning via computer games. *Procedia - Social and Behavioral Sciences*, 1(1), 760–764. <https://doi.org/10.1016/j.sbspro.2009.01.135>
- Unlu, S., & Aydin, S. (2023). Speaking anxiety and playing online games among adolescent EFL learners. *FIRE: Futuristic Implementations of Research in Education*, 4(1), 2-15.
- Vazquez, C., Xia, L., Aikawa, T., & Maes, P. (2018). Words in motion: Kinesthetic language learning in virtual reality. *Proceedings - IEEE 18th International Conference on Advanced Learning Technologies, ICAALT 2018*, 272–276. <https://doi.org/10.1109/ICALT.2018.00069>

- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly*, 34(3), 511-535. <https://doi.org/10.2307/3587741>
- Wittenborn, J. R., Larsen, R. P., & Mogil, R. L. (1945). An empirical evaluation of study habits for college courses in French and Spanish. *Journal of Educational Psychology*, 36(6), 449-474.
- Wouters, P., Van Nimwegen, C., Van Oostendorp, H., & Van Der Spek, E. D. (2013). A meta-analysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, 105(2), 249-265. <http://doi.org/10.1037/a0031311>
- Wu, Y. (1992). *First and second language writing relationship: Chinese and English* (Doctoral dissertation). Texas A&M University.
- Yang, C. T.-Y., & Chen, H. H.-J. (2012). Learners' perceptions of a commercial adventure video game for learning English as a second/foreign language. *Proceedings of the 20th International Conference on Computers in Education ICCE*, 529-536. <https://doi.org/10.58459/icce.2012.877>
- Young, D. J. (1986). The Relationship between anxiety and foreign language oral proficiency ratings. *Foreign Language Annals* 19, 439-45.
- Young, D. J. (1990). An investigation of students' perspectives on anxiety and speaking. *Foreign Language Annals* 23, 539-53.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: What does the language anxiety research suggest? *Modern Language Journal* 75, 426-37.
- Young, D. J. (1992). Language anxiety from the foreign language specialist's perspective: Interviews with Krashen, Omaggio, Terrell, and Rardin. *Foreign Language Annals* 25, 157-72.
- Young, D. J., & Oxford, L.R. (1993). Attending to learner reactions to introductory Spanish textbooks. *Hispania* 76, 593-605.
- Zariski, R. (2010). *World of Warcraft as a medium for intermediate-level English language acquisition: Leveling up accuracy, fluency, and lexical complexity* (Master's thesis). University of Victoria.
- Zhang, H. (2018). *A literature review and meta-analysis of digital games and second language learning*. (Major Papers No. 33). University of Windsor. <https://uwindsor.scholaris.ca/items/ab53e0ed-b836-4232-8967-4de21492e504>
- Zheng, D., Young, M. F., Wagner, M. M., & Brewer, R. A. (2009). Negotiation for action: English language learning in game-based virtual worlds. *Modern Language Journal*, 93(4), 489-511. <https://doi.org/10.1111/j.1540-4781.2009.00927.x>
- Zyda, M. (2005). From visual simulation to virtual reality to games. *Computer*, 38(9), 25-32. <https://doi.org/10.1109/MC.2005.297>

APPENDIX 1: ADAPTED FLCAS (PILOT FOR RELIABILITY TESTING)

Yabancı Dil Sınıfı Kaygı Ölçeği (Horwitz et al., 1986)		Tamamen katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Hiç katılmıyorum
1.	İngilizce konuşurken kendimden asla tam olarak emin olamıyorum.					
2.	Konuşurken hata yapmaktan endişe etmiyorum.					
3.	İngilizce konuşacağımı bildiğimde ürperiyorum.					
4.	Konuşmacının İngilizce söylediklerini anlamadığımda korkuyorum.					
5.	Daha fazla İngilizce konuşmaktan rahatsızlık duymazdım.					
6.	Sürekli diğer öğrencilerin İngilizce'de benden daha iyi olduğunu düşünürüm.					
7.	İngilizce konuşurken genellikle kendime rahat hissedirim.					
8.	Hazırlıksız İngilizce konuşmak zorunda kaldığımda paniğe kapılmaya başlarım.					
9.	Bazı insanların İngilizce konuşurken neden çok sıkıntı duyduklarını anlamıyorum.					
10.	İngilizce konuşmam gerektiğinde, bildiğim şeyleri unutacak kadar gergin olabiliyorum.					
11.	Arkadaşlarım yanımdayken İngilizce konuşmaktan utanırım.					
12.	Ana dili İngilizce olan kişilerle İngilizce konuşmam gerekirse gergin olmazdım.					
13.	Konuşmacının ne söylediğini anlamadığımda bozuluyorum.					
14.	Başkaların önünde İngilizce konuşmam gerektiğinde iyi hazırlanmış olsam bile kendime endişeli hissedirim.					
15.	Biri bana İngilizce bir soru sorduğunda, oradan kaçmak isterim.					
16.	İngilizce konuşurken emin hissedirim.					
17.	İngilizce öğretmenimin yapacağım her hatayı düzetmek için hazır beklediğinden korkuyorum.					
18.	İngilizce konuşmam gerektiğinde kalbimin hızlı atığını hissedirim.					
19.	Her zaman diğer öğrencilerin İngilizce'yi benden daha iyi konuştuğunu düşünürüm.					
20.	Diğer öğrencilerin önünde İngilizce konuşurken çok utanırım.					
21.	İngilizce dersimde konuşurken gergin hissedirim ve kafam karışır.					
22.	Diğer konuşmacının söylediği her kelimeyi anlamadığımda gergin olurum.					
23.	İngilizce konuşmak için öğrenmeniz gereken o kadar çok kural var ki kendime bunalmış hissedirim.					
24.	İngilizce konuştuğumda başkalarının bana güleceğinden korkarım.					
25.	Muhtemelen anadili İngilizce olan kişilerle İngilizce konuşurken rahat hissedirdim.					

Bu anketin amacı, belirli bir konuya dair görüşlerinizi ve deneyimlerinizi daha iyi anlayabilmektir. Yukarıda yer alan sorulardan bazıları kafa karıştırıcı veya belirsiz olabilir. Bu nedenle, lütfen cevap verirken herhangi bir sorunun anlamını zor bulduysanız veya soruların ifadelerinde karışıklık yaşadıysanız, bunu bize bildirmenizi rica ediyoruz. Geri bildirimleriniz, ölçeği daha anlaşılır ve etkili hale getirebilmemiz için son derece önemlidir. Sorulara dair yaşadığınız herhangi bir zorluk, ölçeği geliştirmemize yardımcı olacaktır.

Katılımınız ve değerli görüşleriniz için teşekkür ederiz!

1. Bu ölçek üzerindeki sorular sizin için anlaşılır mıydı?	
☐ Evet	☐ Hayır
2. Anlamadığınız veya belirsiz bulduğunuz herhangi bir soru oldu mu?	
☐ Evet	☐ Hayır
3. Evet cevabı verdiyseniz hangi sorular karmaşık buldunuz?	
4. Bu ölçekle ilgili herhangi bir öneriniz veya yorumunuz var mı?	

APPENDIX 2: STUDENT QUESTIONNAIRE- GAMING HABITS SECTION

Çevrimiçi Oyunların Dil Kaygısı Üzerindeki Etkisi: Karma Yöntem Çalışması

Sayın Katılımcı,

Bu ankete katılmaya zaman ayırdığınız için teşekkür ederiz. Katkılarınız paha biçilmezdir ve bu önemli araştırmaya yaptığınız katkıyı çok takdir ediyoruz.

Bu anket, çevrimiçi oyunların özellikle iletişim ve dil öğrenimi bağlamında dil kaygısı üzerindeki potansiyel etkisini araştırmayı amaçlamaktadır. Çevrimiçi oyunlar giderek daha popüler hale geldikçe, bireylerin etkileşime girmesi ve dinamik, sürükleyici ortamlarda dil becerilerini geliştirebilmesi için benzersiz fırsatlar sunuyor. Ancak bu etkileşimlerin yabancı dil konuşma kaygısını hem olumlu hem de olumsuz olarak nasıl etkileyebileceği tam olarak anlaşılamamıştır.

Yanıtlarınız, çevrimiçi oyunların, ister öğrenme amaçlı ister sosyal etkileşim amaçlı olsun, dil kullanımına ilişkin güveni, iletişimi ve kaygıyı nasıl etkileyebileceğini daha derinlemesine anlamamıza yardımcı olacaktır.

Bu anket, İngilizce konuşma kaygısını anlamak amacıyla kullanılacaktır, bu nedenle dürüst yanıtlarınız büyük önem taşımaktadır. Doğru veya yanlış yanıt yoktur ve yanıtlarınız gizli kalacaktır. Araştırmacı dışında hiçbir kişi yanıtlarınıza erişemeyecektir.

Herhangi bir sorunuz olursa, lütfen [numaralı telefondan](#) benimle iletişime geçebilirsiniz. Zaman ayırdığınız ve katkılarınız için tekrar teşekkür ederiz!

Saygılarımla,
Biljana Ünverdi

[Switch account](#)



Not shared

* Indicates required question

Video oyunlarının İngilizce becerileri üzerindeki etkisine ilişkin bir görüşme yapmak ister misiniz? *

- ☐ Evet
- ☐ Hayır

Bu çalışma için görüşme yapmak kabul ederseniz, adınız, soyadınız ve e-posta adresinizi aşağıya yazmanızı rica ederim. Uygun bir görüşme zamanı belirlemek için sizinle iletişime geçeceğim.

Your answer _____

Video oyunları oynuyor musunuz? *

- ☐ Evet
- ☐ Hayır

Evet ise soruları yanıtlamaya devam edin, hayır ise diğer bölüme geçebilirsiniz.

Hangi tür oyunlar oynarsınız?

(Lütfen, geçerli olan tüm oyunları işaretleyin)

- ☐ FPS (First Person Shooter, örneğin Counter Strike)
- ☐ Action-Adventure (örneğin God of War, The Legend of Zelda)
- ☐ RPG (Role-Playing Games örneğin Witcher)
- ☐ Battle Royale Games (örneğin Fortnite, PUBG)
- ☐ Simulation Games (örneğin Sims)
- ☐ Sports Games (örneğin FIFA, NBA)
- ☐ Puzzle Games (örneğin Portal)
- ☐ Fighting Games (örneğin Mortal Kombat)
- ☐ Racing Games (örneğin Need For Speed)
- ☐ Horror Games (örneğin Resident Evil)
- ☐ Open World Games (örneğin Cyber Punk, Red Dead Redemption)
- ☐ MMORPG (Massively Multiplayer Online Role-Playing Games örneğin World of Warcraft/WOW)
- ☐ Real-Time Strategy Games (örneğin Age of Empire)
- ☐ Turn-base Strategy Games (örneğin Total War)
- ☐ MOBA (Multiplayer Online Battle Arena, örneğin LoL, Dota)
- ☐ Other: _____

Ne sıklıkla oyun oynarsınız?

- ☐ Ayda bir kereden az
- ☐ Ayda bir
- ☐ Haftada bir
- ☐ Haftada iki-üç kez
- ☐ Her gün

Oyun oynarken genellikle ne kadar süre oynarsınız?

- ☐ Bir saatten az
- ☐ Bir-iki saat
- ☐ İki-üç saat
- ☐ Üç-dört saat
- ☐ Dört-Beş saat
- ☐ Beş saatten fazla

Oyun oynarken diğ er oyuncularla İngilizce konuřur musunuz?

- ☐ Her zaman
- ☐ Sık sık
- ☐ Bazen
- ☐ Nadiren
- ☐ Asla

Video oyunlarının İngilizce becerilerinizi geliřtirmenize yardımcı olduđunu d ř n yor musunuz?

- ☐ Evet,  ok yardımcı oldu
- ☐ Evet, biraz yardımcı oldu
- ☐ Bilmiyorum
- ☐ Hayır, pek yardımcı olmadı
- ☐ Hayır, hi  yardımcı olmadı

**APPENDIX 2: APPLIED VERSION OF ADAPTED FOREIGN LANGUAGE
CLASSROOM ANXIETY SCALE**

Yabancı Dil Sınıfı Kaygı Ölçeği (Horwitz ve ark., 1986) Uyarlanmış Versiyonu

Bu ölçek, yabancı dil konuşma kaygınızı değerlendirmek amacıyla 21 adet 5 dereceli Likert tipi sorudan oluşmaktadır.

Lütfen her bir soruyu dikkatlice okuyun ve size en uygun olan cevabı işaretleyin. Cevaplarınız, yabancı dil konuşma kaygınızı ölçmek için kullanılacaktır.

1. İngilizce konuşurken kendimden asla tam olarak emin olamıyorum. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

2. Konuşurken hata yapmaktan endişe etmiyorum. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

3. İngilizce konuşacağımı bildiğimde ürperiyorum. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

4. Konuşmacının İngilizce söylediklerini anlamadığımda korkuyorum. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

5. Daha fazla İngilizce konuşmaktan rahatsızlık duymazdım. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

6. İngilizce konuşurken genellikle kendimi rahat hissederim. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

7. Hazırlıksız İngilizce konuşmak zorunda kaldığımda paniğe kapılmaya başlarım. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

8. Bazı insanların İngilizce konuşurken neden çok sıkıntı duyduklarını anlamıyorum *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

9. İngilizce konuşmam gerektiğinde, bildiğim şeyleri unutacak kadar gergin olabiliyorum. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

10. Arkadaşlarım yanımdayken İngilizce konuşmaktan utanırım. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

11. Ana dili İngilizce olan kişilerle İngilizce konuşmam gerekirse gergin olmazdım. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

12. Başkalarının önünde İngilizce konuşmam gerektiğinde iyi hazırlanmış olsam bile kendimi endişeli hissedirim. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

13. Biri bana İngilizce bir soru sorduğunda, oradan kaçmak isterim. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

14. İngilizce konuşurken emin hissedirim. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

15. İngilizce öğretmenimin yapacağım her hatayı düzeltmek için hazır beklediğinden korkuyorum. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

16. İngilizce konuşmam gerektiğinde kalbimin hızlı atığını hissederim. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

17. Her zaman diğer öğrencilerin İngilizce'yi benden daha iyi konuştuğunu düşünürüm. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

18. Diğer öğrencilerin önünde İngilizce konuşurken çok utanırım. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

19. İngilizce dersimde konuşurken gergin hissederim ve kafam karışır. *

	1	2	3	4	5	
Hiç Katılmıyorum	☐	☐	☐	☐	☐	Tamamen Katılıyorum

20. Diğer konuşmacının söylediği her kelimeyi anlamadığımda gergin olurum. *

Hiç Katılmıyorum 1 2 3 4 5 Tamamen Katılıyorum

21. İngilizce konuştuğumda başkalarının bana güleceğinden korkarım. *

Hiç Katılmıyorum 1 2 3 4 5 Tamamen Katılıyorum

**APENDIX 3: FINAL VERSION OF FOREIGN LANGUAGE SPEAKING
CLASSROOM ANXIETY SCALE (ADAPTED FLCAS)**

1. İngilizce konuşurken kendimden asla tam olarak emin olamıyorum.
2. Konuşurken hata yapmaktan endişe etmiyorum.
3. İngilizce konuşacağımı bildiğimde ürperiyorum.
4. Konuşmacının İngilizce söylediklerini anlamadığımda korkuyorum.
5. Daha fazla İngilizce konuşmaktan rahatsızlık duymazdım.
6. İngilizce konuşurken genellikle kendime rahat hissedirim.
7. Hazırlıksız İngilizce konuşmak zorunda kaldığımda paniğe kapılmaya başlarım.
8. Bazı insanların İngilizce konuşurken neden çok sıkıntı duyduklarını anlamıyorum.
9. İngilizce konuşmam gerektiğinde, bildiğim şeyleri unutacak kadar gergin olabiliyorum.
10. Arkadaşlarım yanımdayken İngilizce konuşmaktan utanırım.
11. Ana dili İngilizce olan kişilerle İngilizce konuşmam gerekirse gergin olmazdım.
12. Başkaların önünde İngilizce konuşmam gerektiğinde iyi hazırlanmış olsam bile kendime endişeli hissedirim.
13. Biri bana İngilizce bir soru sorduğunda, oradan kaçmak isterim.
14. İngilizce konuşurken emin hissedirim.
15. İngilizce konuşmam gerektiğinde kalbimin hızlı atışını hissedirim.
16. Her zaman diğer öğrencilerin İngilizce'yi benden daha iyi konuştuğunu düşünürüm.
17. Diğer öğrencilerin önünde İngilizce konuşurken çok utanırım.
18. İngilizce dersimde konuşurken gergin hissedirim ve kafam karışır.
19. Diğer konuşmacının söylediği her kelimeyi anlamadığımda gergin olurum.
20. İngilizce konuştuğumda başkalarının bana güleceğinden korkarım.

APPENDIX 4: SEMI-STRUCTURED INTERVIEW QUESTIONS (ENGLISH)

1. Can you briefly describe your experiences with language learning? Which type of media do you typically use?
2. G (Gamers): How often do you play computer games? What types of games do you play?

NG (Non-Gamers): Do you engage in any activities to practice speaking in English?
3. How do you feel, generally, about speaking in English? Can you describe a situation that can make you feel anxious?
4. G: Do you think your gaming experience affects your anxiety levels while speaking in English? If yes, how? Can you describe situations that boost your confidence?

NG: Have you noticed any particular activities that help reduce your English-speaking anxiety? If yes, how?
5. Do you experience higher anxiety while speaking in a foreign language compared to your native language? Why do you think it's happening?
6. Do you think your environment (classroom, casual conversation, games, formal settings etc.) can affect your language speaking anxiety levels? How?
7. G: Does speaking during gaming sessions with other gamers in English cause more or less speaking anxiety than in real life? How?

NG: Do you feel anxious while speaking in English? If so, what helps you reduce it?
8. G: Have you noticed any skills or strategies you have developed through gaming that helped you with foreign language speaking? If yes, which?

NG: Do you think there is some special activity that helped you develop your speaking skills? If so, how?

9. If you could offer advice to others about managing language anxiety (through gaming or other methods) what would it be?
10. In your opinion do you believe gaming is beneficial or harmful for developing speaking skills? Can you explain it?
11. Do you feel more nervous speaking with your peers or with foreigners?
12. Do you think in-game chat can compensate for speaking? If so, why?
13. Do you think gaming provides conditions for developing cultural knowledge in English? If so how? Which culture is the most present?
14. Can games influence formality of speaking in English? If so, how?

APPENDIX 5: SEMI-STRUCTURED INTERVIEW QUESTIONS (TURKISH)

1. Dil öğrenme deneyimlerinizi kısaca anlatabilir misiniz? Genellikle hangi tür medyayı kullanırsınız?
2. G (Oyuncular): Bilgisayar oyunu ne sıklıkla oynarsınız? Hangi tür oyunları tercih edersiniz?

NG (Oyuncu olmayanlar): İngilizce konuşma pratiği yapmak için herhangi bir etkinliğe katılıyor musunuz?
3. Genel olarak İngilizce konuşma konusunda nasıl hissediyorsunuz? Sizi kaygılandırabilecek bir durumu tarif edebilir misiniz?
4. G: Oyun oynama deneyiminizin İngilizce konuşma kaygınızı etkilediğini düşünüyor musunuz? Evetse, nasıl? Size güven veren durumları anlatabilir misiniz?

NG: İngilizce konuşma kaygınızı azaltan belirli bir etkinlik fark ettiniz mi? Varsa, nasıl yardımcı oluyor?
5. Yabancı dil konuşurken, ana dilinize kıyasla daha fazla kaygı hissediyor musunuz? Bunun neden olduğunu düşünüyorsunuz?
6. Çevrenizin (sınıf ortamı, günlük sohbet, oyunlar, resmi durumlar vb.) İngilizce konuşma kaygınızı etkileyebileceğini düşünüyor musunuz? Nasıl?
7. G: Oyun oynarken diğer oyuncularla İngilizce konuşmak, gerçek hayattaki konuşmalara göre daha fazla mı yoksa daha az mı kaygı yaratıyor? Nasıl?

NG: İngilizce konuşurken kendinizi kaygılı hissediyor musunuz? Eğer öyleyse, bunu azaltan şey nedir?
8. G: Oyun oynarken geliştirdiğiniz ve İngilizce konuşmanıza yardımcı olan beceri veya stratejiler fark ettiniz mi? Varsa, hangileri?

NG: İngilizce konuşma becerilerinizi geliştirmenize yardımcı olan özel bir etkinlik olduğunu düşünüyor musunuz? Varsa, nasıl yardımcı oldu?

9. Dil kaygısıyla başa çıkma konusunda (oyun yoluyla ya da başka yöntemlerle) başkalarına bir tavsiye verecek olsanız, bu ne olurdu?
10. Sizce oyunlar İngilizce konuşma becerilerinin gelişimi açısından yararlı mı yoksa zararlı mı? Açıklayabilir misiniz?
11. Akranlarınızla mı yoksa yabancılarla mı İngilizce konuşurken daha gergin hissediyorsunuz?
12. Oyun içi sohbetin (chat) konuşma pratiğinin yerini tutabileceğini düşünüyor musunuz? Evetse, neden?
13. Oyunların İngilizce dilinde kültürel bilgi geliştirmeye katkı sağlayabileceğini düşünüyor musunuz? Varsa, nasıl? En çok hangi kültür öne çıkıyor?
14. Oyunlar, İngilizce konuşmanın resmiyet düzeyini etkileyebilir mi? Evetse, nasıl?

APPENDIX 6: ETHICS COMITEE APPROVAL

Evrak Tarih ve Sayısı: 23.10.2024-1045888



T.C
AKDENİZ ÜNİVERSİTESİ REKTÖRLÜĞÜ
Sosyal ve Beşeri Bilimler Bilimsel Araştırma ve Yayın Etiği Kurulu
KURUL KARARI



TOPLANTI TARİHİ : 22.10.2024
TOPLANTI SAYISI : 21
KARAR SAYISI : 441

Üniversitemiz Eğitim Fakültesi Yabancı Dil Eğitimi Bölümü **Dr. Öğr. Üyesi Simla COURSE**'nin danışmanlığını, **Biljana UNVERDI**'nin araştırmacılığını üstlendiği, "*Çevrimiçi Oyunların Dil Kaygısı Üzerindeki Etkisi: Karma Yöntem Çalışması*" konulu çalışmanın, fikri hukuki ve telif hakları bakımından metot ve ölçeğine ilişkin sorumluluğun başvurucaya ait olmak üzere, proje süresince uygulanmasının etik olarak **uygun olduğuna** oy birliği ile karar verilmiştir.

Prof. Dr. Hilmi DEMİRKAYA
Kurul Başkanı

Başkan
Prof. Dr.
Hilmi DEMİRKAYA

Başkan Yrd.
Prof. Dr.
Sibel PAŞAOĞLU YÖNDEM

Üye
Prof. Dr.
Ebru İÇİGEN

Üye
Prof. Dr.
Nurşen ADAK

Üye
Prof. Dr.
Taner KORKUT

Üye
Prof. Dr.
Gökhan AKYÜZ

Üye
Prof.
Ceren HEPYÜCEL

Belge Takip Adresi : <https://turkiye.gov.tr/ebd?cK=5543&cD=BS42KD3JK2&cS=1045888>

APPENDIX 7: OFFICIAL PERMISSION FOR DATA COLLECTION

Approval from the Institute of Educational Sciences (dated 17.12.2024)

Evrak Tarih ve Sayısı: 17.12.2024-1088363



T.C.
AKDENİZ ÜNİVERSİTESİ REKTÖRLÜĞÜ
Eğitim Bilimleri Enstitüsü Müdürlüğü

Sayı : F-36380087-045 99-1088363
Konu : Bilimsel ve Eğitim Amaçlı/Biljana
ÜNVERDİ

17.12.2024

DAĞITIM YERLERİNE

Enstitümüz Yabancı Diller Eğitimi Ana Bilim Dalı İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı Dr. Öğr. Üyesi Simla COURSE danışmanlığındaki 202354011501 numaralı öğrencisi Biljana ÜNVERDİ'nin, "**Çevrimiçi Oyunların Dil Kaygısı Üzerindeki Etkisi: Karma Yöntem Çalışması**" isimli tez konusu kapsamında Üniversitemiz Yabancı Diller Meslek Yüksekokulunda öğrenim gören öğrencilere uygulama yapma isteğinin uygun görüldüğüne ilişkin Yabancı Diller Meslek Yüksekokulu Müdürlüğü'nün yazısı ekte gönderilmiştir.

Bilgilerini ve gereğini rica ederim.

Doç. Dr. Güçlü ŞEKERCİOĞLU
Müdür

Dağıtım:
Yabancı Diller Eğitimi Anabilim Dalı Başkanlığına
Sayın Dr. Öğr. Üyesi Simla COURSE

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Doğrulama Kodu :BSL2HPU333 Pln Kodu :88242

Belge Takip Adresi : <https://turkiye.gov.tr/ebd?eK=5543&eD=BSL2HPU333&eS=1088363>

Bu belge, güvenli elektronik imza ile imzalanmıştır..

Permission from the School of Foreign Languages (dated 16.12.2024)

Evrak Tarih ve Sayısı: 16.12.2024-1087520



T.C.
AKDENİZ ÜNİVERSİTESİ REKTÖRLÜĞÜ
Yabancı Diller Yüksekokulu Müdürlüğü

Sayı : E-70227394-302.08.01-1087520
Konu : Bilimsel ve Eğitim Amaçlı/Biljana
ÜNVERDİ

16.12.2024

EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : 13.12.2024 tarihli ve 36380087-302.08.01-1086688 sayılı yazı,

İlgi sayılı yazı ile Yüksekokulumuzda öğrenim gören öğrencilere "Çevrimiçi Oyunların Dil Kaygısı Üzerindeki Etkisi: Karma Yöntem Çalışması" isimli tez konusu kapsamında uygulanmak istenen çalışma Yüksekokulumuzca uygun görülmüştür.

Bilgilerini ve gereğini arz ederim.

Doç. Dr. Kemal DEMİR
Müdür

Doğrulama Kodu :BS42HFZ2L2 Pin Kodu :03652

Bu belge, güvenli elektronik imza ile imzalanmıştır.

Belge Takip Adresi : <https://turkiye.gov.tr/ebd?eK=5543&eD=BS42HFZ2L2&eS=1087520>

Bu belge, güvenli elektronik imza ile imzalanmıştır..

APENDIX 8: ÖZGEÇMİŞ SAYFASI

ÖZGEÇMİŞ

Kişisel Bilgiler

Adı Soyadı : BILJANA UNVERDI

Eğitim Durumu

Lisans Öğrenimi : Yabancı Diller Eğitimi, İngilizce Öğretmenliği
Bildiği Yabancı Diller : İngilizce ve Türkçe

Tarih : 31.07.2025.

APPENDIX 9: ORIGINALITY REPORT

8/1/25, 2:17 PM

Turnitin - Originality Report - THE IMPACT OF ONLINE GAMING ON FOREIGN LANGUAGE SPEAKING ANXIETY.docx

Turnitin Originality Report

Processed on: 01-Aug-2025 12:58 +03
ID: 2723682711
Word Count: 39737
Submitted: 1

THE IMPACT OF ONLINE GAMING ON FOREIGN
LANGUAGE SPEAKING ANXIETY.docx By Biljana
UNVERDI

Similarity Index

10%

Similarity by Source

Internet Sources: 7%
Publications: 8%
Student Papers: 3%

< 1% match (Internet from 14-Oct-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/40093/yokAcikBilim_10275683.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 16-Oct-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/249567/yokAcikBilim_10280653.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 12-Oct-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/71663/yokAcikBilim_10168896.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 10-Jan-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/110391/yokAcikBilim_10047561.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 16-Oct-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/348453/yokAcikBilim_10279811.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 14-Oct-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/127913/yokAcikBilim_10117660.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 05-Oct-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/433606/yokAcikBilim_10267614.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 04-Oct-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/228830/yokAcikBilim_10160096.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 15-Dec-2022)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/97951/yokAcikBilim_10150045.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 28-Nov-2024)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/63930/yokAcikBilim_459579.pdf?sequence=-1

< 1% match (Internet from 02-Dec-2024)

https://acikbilim.yok.gov.tr/bitstream/handle/20.500.12812/71926/yokAcikBilim_10030395.pdf?isAllowed=y&sequence=-1

< 1% match (Internet from 01-May-2024)

<https://mail.mjltm.org/article-1-256-en.pdf>

< 1% match (Internet from 16-Sep-2024)

https://mail.mjltm.org/browse.php?_id=53&fxt=1&sid=1&slc_lang=en

< 1% match (Internet from 26-Nov-2022)

<http://mail.mjltm.org/article-1-58-en.pdf>

< 1% match (Internet from 26-Nov-2022)

http://mail.mjltm.org/browse.php?_id=65&fxt=1

< 1% match (student papers from 18-Jul-2024)

[Submitted to Akdeniz University on 2024-07-18](#)

< 1% match (Internet from 11-Oct-2017)

<https://ojsdoc.um.ac.ir/articles/a/1028181.pdf>

< 1% match (Internet from 07-Dec-2022)

<https://ojsdoc.um.ac.ir/articles/a/1035265.pdf>

< 1% match (Internet from 24-Dec-2022)

https://archive.org/stream/ERIC_ED482487/ERIC_ED482487_djvu.txt

< 1% match (Batu, Veliye. "The Relationship Among Foreign Language Speaking Anxiety, English-Speaking Skills Self-Efficacy Beliefs, and English-Speaking Performance of Turkish ELT Students.", Bilkent Universitesi (Turkey))

[Batu, Veliye. "The Relationship Among Foreign Language Speaking Anxiety, English-Speaking Skills Self-Efficacy Beliefs, and English-Speaking Performance of Turkish ELT Students.", Bilkent Universitesi \(Turkey\)](#)

< 1% match (Internet from 26-Jun-2018)

http://mjltm.org/files/cd_papers/r_20_170607222554.pdf

< 1% match (Internet from 11-Sep-2017)

http://mjltm.org/files/cd_papers/r_24_170607224328.pdf

< 1% match (Internet from 31-Oct-2024)

https://www.turnitin.com/newreport_printview.asp?eq=1&eb=1&esm=5&oid=2723682711&sid=0&n=0&m=2&svr=39&r=27.265909144423496&lang=e... 1/39

BİLDİRİM

Hazırladığım tezin tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin kâğıt ve elektronik kopyalarının Akdeniz Üniversitesi Eğitim Bilimleri Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım:

X Tezimin tamamı her yerden erişime açılabilir.

☐ Tezim sadece Akdeniz Üniversitesi yerleşkelerinden erişime açılabilir. Tezimin 1 yıl süreyle erişime açılmasını istemiyorum. Bu sürenin sonunda uzatma için başvuruda bulunmadığım takdirde, tezimin tamamı her yerden erişime açılabilir.

23.07.2025.

Biljana UNVERDI