T.C.
BURSA ULUDAG UNIVERSITY
INSTITUTE OF EDUCATION SCIENCES
DEPARTMENT OF ENGLISH LANGUAGE EDUCATION

INTERCULTURAL SENSITIVITY IN GAMING COMMUNITIES: AN INVESTIGATION ON THE PERCEPTIONS AND PRACTICES OF TURKISH UNIVERSITY STUDENTS

M.A. THESIS

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BURSA – 2023

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BURSA – 2023

BİLİMSEL ETİĞE UYGUNLUK

Bu çalışmada tüm bilgilerin akademik ve etik kurallara uygun bir şekilde elde edildiğini beyan ederim.

Nilüfer ERDUR-HIGASHIHARA

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OYUN TOPLULUKLARINDA KÜLTÜRLERARASI DUYARLILIK: TÜRK ÜNİVERSİTESİ ÖĞRENCİLERİNİN ALGI VE UYGULAMALARI ÜZERİNDE BİR ARAŞTIRMA

Teknolojinin hızla gelişmesi, bireylerin iş, eğitim ve eğlence gibi nedenlerle dış dünyayla eskisinden daha fazla etkileşime geçmeleri ve tüm bu gelişmelerin kültürlerarası iletişimi arttırması, kültürel bilgi edinimi ve kültürlerarası iletişimsel yeti (KİY) düzeylerinin geliştirilmesini gereksinimini gündeme getirmiştir. Hızla küreselleşen günümüz dünyasında kültürel farklılıklara bir o kadar hızla uyum sağlayabilen ve başarılı ilişkiler kurabilen bireylerin yetişmesi artık hiç olmadığı kadar önem taşımaktadır. Fakat kültürlerarası iletişimin bu önemi her ne kadar gerek akademik mecrada gerek okullardaki dil sınıflarında bilinse de çeşitli yetersizlikler sebebiyle öğretmenlerin ve müfredat ile ders kitabı yazarlarının büyük oranda görmezden geldikleri bir kavram olmaktan öteye gidememiştir. Öte yandan teknoloji çağında doğup büyümüş, özellikle de çeşitli elektronik araçlar ve video oyunlarıyla yakından ilgili olan günümüz kuşakların öğrenmedeki gereksinimlerinin karşılanamaması ve bu araçların faydalarına rağmen, bunlardan dil sınıflarında yeterince yararlanılmaması gibi sorunların olduğu da literatürde çeşitli çalışmalarda belirtilmiştir. Bu sebeple bu çalışmada KİY'in en önemli bileşenlerinden biri olan kültürlerarası duyarlılık (KD) ve kültürel bilgi edinimi ve KD'nin gelişimini sağlayabileceği düşünülen video oyunları merkeze alınmıştır. Video oyunlarının kültürel bilgi ediniminde kullanılabileceği ve KD düzeylerini yükseltebileceği yönünde bazı çalışmalar bulunsa da oyun oynayan üniversite öğrencilerinin KD düzeylerini

ölçen ve oyunlardan kültürel bilgi öğrenimi ve kültürlerarası iletişim ortamları olan video oyunları hakkındaki görüşlerini bir arada inceleyen herhangi bir çalışmaya rastlanmamıştır.

Nicel ve nitel yöntemlerin karışımını içeren bu çalışmaya, çeşitli oyun ve sosyal medya platformlarından davet edilen video oyunları oynayan 384 üniversite öğrencisi katılmıştır. Çalışmanın nicel kısmında öğrencilerin KD düzeyleri ve KD düzeylerinin üzerinde etkisi olabileceği düşünülen oyun tercihlerinin incelenmesini amaçlayan bir anketi yanıtlamaları istenmiştir. Bu anketin ilk kısmında öğrencilerin oyun oynama süreçlerindeki tercihleri hakkında bilgi toplanmışken ikinci kısmında KD'nin ölçülebilmesi için Bulduk vd.'nin (2011) Chen ve Starosta'nın (2000) kültürlerarası duyarlılık ölçeğinden çevirerek uyarladıkları Türkçe kültürlerarası duyarlılık ölçeği (TKDÖ) yer almıştır. Çalışmanın nitel kısmına ise 41 öğrenci gönüllü olmuştur. Video oyunlarından kültürel bilgi ediniminin nasıl gerçekleşebileceği ve video oyunlarının kültürlerarası bir açıdan nasıl ortamlar olduklarını keşfetmeyi amaçlayan bu kısımda ise öğrencilerle yarı yapılandırılmış görüşmeler yürütülmüştür. Elde edilen verilerden nicel olanları SPSS programına aktarılarak ilk olarak güvenilirlik ve normallik testleri yapılmıştır. Son derece güvenilir olan verinin normal bir dağılım göstermediği görülmüştür. Bu sebeple KD düzeyini ölçmede kullanılan betimleyici analizin yanı sıra non-parametrik testlerden Mann-Whitney U ve Kruskal Wallis testleri oyun faktörleri ve KD düzeyler arasında anlamlı bir ilişki olup olmadığını görmek için tercih edilmiştir. Nitel veriler ise içerik analizi yöntemiyle kodlandırılarak temalandırılmış ve analizde beliren temalar ve alt temaları görselleştirilerek sunulmuştur.

Yürütülen analizler, öğrencilerin KD düzeylerinin yüksek olduğunu ve öğrencilerin kültürel farklılıklara saygılı ve açık bir yaklaşım gösterme eğiliminde oldukları sonucunu göstermiştir. Öte yandan, her ne kadar haftalık oyun oynama süreleri, oyunlarla ilişkili dijital çevrelerde bulunuşluğun oyuncu üniversite öğrencilerinin KD düzeylerinde herhangi bir farklılık yaratmamış olsa da cinsiyet, çok oyunculu oyunlar oynama, hikayeli oyunlar tercih etme ve sesli ve yazılı iletişim kurma gibi çeşitli faktörlerin KD düzeylerini büyük oranda etkileyebilecekleri görülmüştür. Öğrencilerin yarı yapılandırılmış görüşmelere verdikleri yanıtlardan ise video oyunlarının kültürel bilgi öğrenmeye son derece elverişli ortamlar olabilecekleri yargısına ulaşılmıştır ancak, bazı öğrencilerin kendi tecrübelerinden paylaştıkları kesitler ve alan yazındaki bazı çalışmalar video oyunlarının toksik ortamlar olabilecekleri gerçeğini de akıllara getirmektedir.

Anahtar Sözcükler: *kültürel öğrenme, kültürlerarası duyarlılık, oyuncular, üniversite öğrencileri, video oyunları*

ABSTRACT

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INTERCULTURAL SENSITIVITY IN GAMING COMMUNITIES: AN INVESTIGATION ON THE PERCEPTIONS AND PRACTICES OF TURKISH UNIVERSITY STUDENTS

The rapid development of technology has led individuals to interact more with the outside world for reasons such as work, education, and entertainment, increasing intercultural communication and the need to enhance cultural knowledge learning and intercultural communicative competence (ICC) levels. In today's rapidly globalising world, fostering individuals who can adapt quickly to cultural differences and establish successful relationships is more important than ever. However, despite recognising the importance of intercultural communication in academic circles and language classes in schools, it has been overlooked mainly by teachers, curriculum, and textbook writers due to various shortcomings. On the other hand, studies in the literature have indicated multiple issues, such as the failure to meet the learning needs of generations growing up in the age of technology, especially those closely related to electronic devices and video games, and the inability to fully integrate these tools into language classes, despite their benefits. Therefore, this study focuses on intercultural sensitivity (IS), one of the essential components of ICC, and video games, which are believed to contribute to cultural knowledge learning and the development of IS. Although some studies suggest that video games can enhance cultural knowledge learning and IS levels, studies have yet to be found that examines the IS levels and views of university students who play video games on learning cultural knowledge from video games and them as intercultural communication environments together.

384 university students who played video games invited from various gaming and social media platforms participated in this study, which included a combination of quantitative and qualitative methods. In the quantitative part of the study, the students were asked to complete a questionnaire to determine their IS levels and gaming preferences that were thought to impact IS levels. The first part of the survey included the Turkish version of the intercultural sensitivity scale (TISS) by Bulduk et al. (2011), which was translated from Chen and Starosta's (2000) intercultural sensitivity scale to measure IS. 41 students participated in the qualitative part of the study. This part aimed to explore how cultural knowledge learning from video games can occur and the nature of video games as intercultural environments. Semi-structured interviews were conducted with the students. The quantitative data obtained were transferred to the SPSS program, and reliability and normality tests were performed initially. It was observed that the data, although highly reliable, did not show a normal distribution. Therefore, in addition to the descriptive analysis used to measure IS levels, non-parametric tests such as Mann-Whitney U and Kruskal Wallis tests were preferred to determine whether a significant relationship existed between gaming preferences and IS levels. The qualitative data were coded and themed using content analysis, and the emerging themes and sub-themes were visualised and presented.

The analyses indicated that the students had high IS levels and tended to be respectful and open to cultural differences. On the other hand, although the weekly gaming times and the participation in affinity spaces did not create any differences in the IS levels of university student players, various factors such as gender, playing multiplayer games, preferring games with narratives, and engaging in voice and written communication were found to influence IS levels significantly. The responses given by the students in the semi-structured interviews led to the conclusion that video games can be highly suitable environments for cultural knowledge learning. However, some excerpts shared by students based on their experiences and some studies in the literature also raise concerns about the potential toxic encounters in video games.
Keywords: *cultural learning, gamers, intercultural sensitivity, undergraduate students, video games*

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Nilüfer ERDUR-HIGASHIHARA

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CMC: Computer-Mediated Communication

DMIS: Developmental Model of Intercultural Sensitivity

ICA: Intercultural Awareness

ICC: Intercultural Communicative Competence

IS: Intercultural Sensitivity

ISS: Intercultural Sensitivity Scale

MMORPG: Massive Multiplayer Online Role-Playing Game

NML: New Media Literacy

NPC: Non-Playable Character

RPG: Role-Playing Game

TISS: Turkish Intercultural Sensitivity Scale

CHAPTER I

Introduction

This chapter presents the background of the study, the statement of the problem and purpose and the significance of the study.

1.1. Background of the Study

After first humans migrated from the African continent to the four corners of the world and started to communicate with other tribes with the language they used solely to communicate with the members of their clans, a new concept known as globalisation emerged (Cheney & Munshi, 2017). Globalisation can be briefly described as the transcendence of communication limitations through the use of the latest technologies (Chouliaraki & Fairclough, 1999). Considered as companies expanding their businesses to foreign countries in the form of internationalisation at first, globalisation now refers to both individuals' and societies' forming new networks from others across borders with the advancements in technology and means of trade (Waters, 1999; Cheney & Munshi, 2017). In today's world, people can travel to other countries often for reasons like work, education, or even entertainment, and they make close contact with people from various cultural backgrounds (Crippen & Brew, 2007). Thus, a need for the use of a common language arose, and English has taken its place in intercultural communication as a global language in both real-life settings and the internet, known as new media and become the subject of language education (Fishman, 1998; Warschauer et al., 2006; Seidlhofer, 2004; Smokotin et al., 2014; Genc & Bada, 2010).

England's establishment of colonies all over the world and then America's rise in the field of the economy made English one of the most spoken and learned languages in the world and caused the language to be used in communication not just with natives but with non-natives as well (Zerenay, 2020). Furthermore, the invention of high-speed internet further increased encounters with non-natives (Pasand et al., 2021). Therefore, the objective of language teaching, which was just simply teaching the grammar and the culture of English-speaking countries, shifted to the teaching of the non-natives' cultures and interactional competencies that would allow students to act effectively in multicultural environments (Byram, 2008; Ho, 2009). Globalisation and this shift in the status of English created a need to adapt to the sudden changes coming along with the massive production of global information and increasing numbers of intercultural contacts in order to be successful in business and social relations, and new concepts known as intercultural communication and intercultural communication competence (ICC) have emerged (Giddens, 1990; Chen, 2005; Warschauer et al., 2006; Smokotin et al., 2014).

Intercultural communication is a type of interaction in which adjustments are made to form and maintain meaningful exchanges with people from other cultures. ICC, on the other hand, is the individual process of gaining a new set of skills and knowledge required to be successful in such exchanges (Hammer, 2015; Kartarı, 2006). ICC is considered a long process consisting of many stages concerning affective and cognitive operations (Byram, 2000; Chen & Starosta, 1996; Dearforff, 2006; Fantini, 2007). One stage of the ICC's affective dimension is intercultural sensitivity (IS). IS is known as an individual's ability to accept and appreciate cultural differences and behave positively and appropriately in contexts with such differences (Chen & Starosta, 1997). Individuals with high IS levels are known to be more open to cultural differences and eager to participate in exchanges with culturally different individuals (Dong et al., 2008; Peng, 2006). Globalisation has changed the dynamics of traditional communication and has led to the birth of a new world where only individuals who are knowledgeable about cultural differences and flexible in intercultural communication can succeed. Consequently, it has become a necessity to have high IS levels in order to provide an environment of peace and tranquillity in multinational societies (Chen, 1997; Tamam, 2010).

Today, the concept of intercultural communication is not limited to real-life contexts or activities such as education, business or travelling. Even though travelling abroad or exchange programmes are beneficial for the acquisition of ICC and IS, they are not always reachable experiences for L2 learners. However, thanks to the advancements in technology in the 20th century, new media, known as the internet, entered the lives of people, and this invention accelerated globalisation and increased intercultural communication opportunities in the virtual world in return. (Lebedko, 2012; Pasand et al., 2021). This new media, which includes videos, texts and songs from different cultures, as well as many forms of communication opportunities, brings together millions of people by reducing the data flow to microseconds, digitises traditional communication practices and increases intercultural communication in the form of computer-mediated communication (CMC) (Shuter, 2012; Chen, 2012; Pfister & Soliz, 2011; Marcoccia, 2012). It is thought that CMC helps language learners to see high-quality language use in context (Kern, 1995; Warshauer, 1996). Even though there are some studies claiming that CMC is different compared to the traditional ways of communication thus, the experiences gained in the internet environment are not applicable to real-life settings (Levy, 1997; O'Dowd, 2001), it is known that the internet supports the acquisition of ICC as well as language thanks to the multimedia it contains, and, reduces the social distance by enabling individuals to express themselves away from prejudices with its simultaneous discussion feature (Chen, 2012; Belz, 2007; Ritchie, 2009; Barnett & Lee, 2002; Kramsch, 1998; Sharifian, 2018).

One of the forms in which new media can present various opportunities to establish intercultural communication is video games. Video games with little dots on a black screen in their early days now present realistic and complex experiences with their high-quality visuals, realistic characters voiced by professional actors and million-word-long story content (Chojnowski, 2016; Noon, 2021; Heritage, 2021). With their online collaborative and competitive modes and text and voice-based interactive features, these games have the ability to teach their consumers about various topics, including genders, beliefs and cultures, more than textbooks and other types of media since they present stories within a highly realistic and immersive virtual environment (Przybylski et al., 2010; Story, 2018; Kern, 2014; Leonard, 2004; Gee, 2003 Kruis et al., 2014; Chow, 2015). Furthermore, by teaching cultural knowledge from zero, video games can eliminate cultural stereotypes that are engraved in the minds of individuals (Cuhadar & Kamph, 2014; Zagal, 2009). Many studies in the literature show that video games and game-like-virtual environments can contribute to the acquisition of students' ICC and IS levels (Carino, 2018; Osorio et al., 2020; Soyoof, 2018; Sykes & Thorne, 2008). Although video games occupy a large place in the lives of today's students, studies on the use of these games in IS acquisition are few in number.

1.2. Problem Statement and Significance of the Study

Today, with the developments in technology and increases in travel and immigration, globalisation can affect the lives of both communities and individuals that live thousands of kilometres away only in seconds (Crippen & Brew, 2007; Zerenay, 2020). Even though its effects on communities and individuals vary greatly, it is an indisputable fact that globalisation increases the contact between people from different cultural backgrounds and changes the policies of modern countries' institutions (Knight & de Wit, 1997; Dai & Weng, 2016). Cultural communication that can be prevented easily by avoiding contact with foreigners by not travelling to foreign countries or simply not talking to strangers has become a necessity in this globalised world to become successful in human-led activities such as business and education (Shuter, 2012; Lebedko, 2012). Working in international companies, where conflicts may occur due to cultural differences, can become tiring occasion for an individual who does not have an intercultural stance (Earley & Ang, 2003; Molinsky, 2013; Leung & Cheng, 2014). Gaining skills and ways of thinking, such as having a high level of tolerance and empathy, being positive and respectful towards others and one's own culture, knowing and accepting differences and being willing to communicate, is only possible with the acquisition of IS (Fritz et al., 2002; Bhawuk et al., 2015; Bae & Song, 2017; Hammer et al., 2003; Chen, 2010).

Nowadays, many people are forced to immigrate to another country because of dramatic events such as wars and natural disasters and this results in the emergence of many issues related to cultural differences (United Nations High Commissioner for Refugees, 2018; Nowicka, 2018). Especially migrations caused by wars have changed the demographic structure in countries, making it compulsory for the natives, social justice workers and refugees to acquire different perspectives, learn foreign languages and become mediators (Chen & Starosta,1996; Melo, 2013). Thus, the Council of Europe, an organisation which aims the protection human rights and democracy, mentioned the importance of the teaching of ICC many times through many of their declarations (Council of Europe, 2004; 2008; 2011).

Although there are many studies stating the fact that language and culture cannot be separated from each other and ICC should be taught to language students in order to prepare them to take an active part in the globalised world theoretically, there are not sufficient effort on the integration of the culture and ICC education into the language classrooms in a practical framework (Byram, 1997; Tseng, 2002; Gonen & Sağlam, 2012; Gorski, 2006). One of the reasons why ICC has not been fully included in language classrooms is the lack of teachers who have sufficient knowledge of ICC and confidence in the integration of it into language classrooms (Hajisoteriou et al., 2018; Deardoff, 2009; Bal & Savaş, 2020). The other reason is the thought that such skills can be learned only during real-life experiences such as study abroad programmes rather than during the limited class time (Banytė & Inčiūrienė, 2012). Study abroad programmes have indeed positive effects on the students' language and culture acquisition by providing them with opportunities for multicultural interactions and raising their awareness about themselves and others (Wooly, 2013; Bloom & Miranda, 2015). However, further investigated, it was seen that studying abroad was not the sole source and practice for the teaching of culture and ICC, and it can be an expensive pursuit for students with low income (Kinginger, 2009; Kern, 2014). This has revealed the necessity for students to turn to practical options in ICC education, where they can manage this process themselves and pay less.

Another point that should be taken into account in the teaching of ICC is the changes in students' profiles. Globalisation and the use of the internet caused a lot of changes in the behaviours and preferences of the students who were brought up in the digital age and known as "digital natives" (Sharifian, 2018; Pasand et al., 2021; Prensky, 2001). This new generation is known to be interested in technological tools and their active use in all areas of their lives. Even though some studies reject their ability to use digital tools effectively, most accept that these learners are different from those who were introduced to these tools at a later age, known as digital immigrants, with their limited attention spans and preferred modes of learning and

communication and high levels of engagement with the internet and video games. Especially video games, with a revenue of nearly 300 billion dollars and approximately 3 billion players, occupy a large place in the daily lives of digital natives (NewZoo, 2020; Statista, 2020). Further studies on this subject revealed that digital natives could benefit more from the integration of video games into the classrooms than traditional teaching methods (Gee, 2007; Papastergiou, 2009; Chen & Hsu, 2013; Musa, 2015). In addition, Vygotsky's (1978) zone of proximal development theory can be discussed in the context of learning from video games. According to this theory, individuals can reach their full potential with guidance and support from more skilled individuals. It was proposed that games can create a zone of challenge and achievement and facilitate social and cultural learning through their social interaction mechanics (Plass & Homer, 2014; Steinkuehler & Duncan, 2008; Ito et al., 2008; Pearce et al., 2011). To sum up, since the rapid globalisation of the world requires interculturally and technologically competent individuals, intercultural education should aim for the utilisation of the newest technologies like video games which are fun and cheaper than other types of intercultural experiences (Fabricatore & Lopez, 2012; Zimmerman & Chaplin, 2013).

1.3. Purpose of the Study

This study aims to identify the intercultural sensitivity of university students who regularly play video games. By looking at variables such as gender, the weekly playing time they spend on games, their involvement in activities related to games, their game genre selections and in-game communication preferences, it will be investigated whether these variables have any effect on intercultural sensitivity. Additionally, in the qualitative part of the study, students' opinions on learning cultural knowledge from games and video games as environments for engagement in intercultural communication.

1.4. Research Questions

The present study aims to find answers to the following questions.

RQ1: What is the level of intercultural sensitivity of undergraduate students playing video games?

RQ2: Does the gender of the students have a significant effect on their intercultural sensitivity levels?

RQ3: Do students' intercultural sensitivity levels vary according to their gaming preferences?

a) weekly time spent on video games
b) games with vs without narratives
c) single-player games vs multiplayer games

d) communication
e) participation in affinity spaces

RQ4: What are the students' views on learning cultural knowledge from games and video games as environments for engagement in intercultural communication?

1.5. Limitations of the Study

Although this study includes some conclusions from the quantitative and qualitative data results, it has some limitations. The study's main limitation is that students' IS development could not be followed because an experimental approach was not utilised. Another limitation is that factors such as the fields in which the students study and their years were not included in the analysis since participants had reservations about their anonymity in the gaming community. Although assurances were given that their information would not be shared with third parties, the majority of the participants stated that they were uncomfortable sharing such information, especially with the researcher and that they would not be able to continue to be a participant otherwise. For this reason, these types of data were excluded from the study. Also, all the participants were from the Turkish gaming community, which was another limitation. However, the study may shed light on other researchers who will study video games and IS, as the current study took a holistic approach to the gamer community, and the participation in both the survey and the interviews was high.

CHAPTER 2
Literature Review

2.1. Culture

As many scholars have pointed out, it is challenging to make a precise definition of the concept of culture, which is an indispensable part of language and has been at the centre of anthropology and sociology studies for many years (Moran et al., 2007; Lohaj, 2018). The word culture derives from the verb "colere", which means cultivate in Latin (Cobley, 2008). However, the effort to define exactly what culture means began about 200 years ago. The first study on the definition of culture explained it as the aesthetic and artistic actions of the elite and educated (Arnold, 1875). Shortly after this definition, Edward Tylor (1871) argued in his book Primitive Culture that culture belongs to all people, not just the elite. According to him, everyone has a culture, regardless of high or low status. However, this definition also includes discrimination, just like Arnold's. According to Tylor, who examines culture from an evolutionist perspective, cultures are ranked from barbarism to high culture. Anthropology studies later argued that the values of cultures could not be measured by giving degrees such as low or high and stated that each culture has its unique and different nature (Spencer-Oatey, 2012)

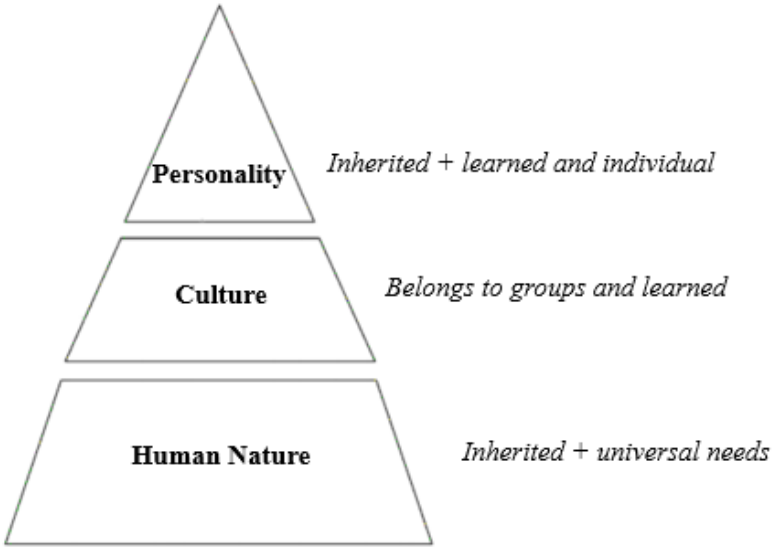
Today, the Cambridge Dictionary briefly describes culture as "the way of life, especially the general customs and beliefs, of a particular group of people at a particular time" (Cambridge Dictionary, 2023). However, more in-depth analyses of culture are needed to understand its complex structure and elements. For example, Jenks (2003) tried to explain the concept of culture with a multidimensional approach. According to him, culture is cognitive, meaning that it takes place in the minds of humans, and only humans can conceive and form different cultures. He also describes culture as a social category in which humans become a part and act accordingly. Bourdieu (1986), on the other hand, considered culture as the habitats where individuals take shelter to maintain their lives and the rules related to the daily life that develop in these habitats. Nadler et al. (1985) gave a similar definition above but highlighted its learned and shared nature. Furthermore, there are also definitions that associate culture directly with communication and language (Brown, 1994, p. 170; Tang, 1999; Samovar et al., 2013; Banytė & Inčiūrienė, 2012). In line with this definition, while Brown (1994, 170) states that language is the visible face of culture, Samovar (2013) emphasises that what lies in culture's core is mainly communication between individuals.

Some studies tried to explain culture with models. Based on the computer programming framework, which describes the human mind as a computer, Hofstede et al. (2010) define culture as software that can be installed into this computer along with others. According to this

analogy, using this software, the mind can differentiate one social group from another. They also claim that culture, human nature, and people's personalities are different concepts. His mental programming model can be seen below.

Figure 1

Three levels of uniqueness in mental programming (Hofstede et al., 2010)



(Adapted from Hofstede et al., 2010)

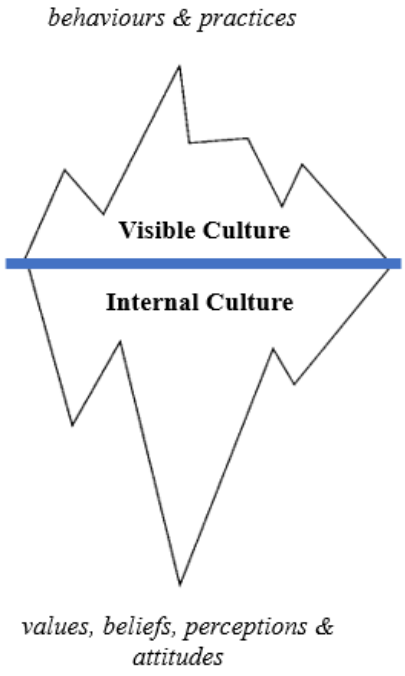
Based on Triandis' (1994) work that presents two concepts known as etics (universal cultural elements) and emics (specific cultural elements), Hofstede and his colleagues proposed this model of mental programming to explain culture from a biological framework. According to them, every individual on the planet Earth has needs such as being fed, taking shelter in a building, and communicating with others, and these needs are universal and inherited. However, taking place at just one level above, there is culture exclusive to the groups or places where they occur. Even though cultures have universal elements that come from human nature, how these needs are met differs according to different groups with distinct cultures. Finally, at the top of the model, there is the personality dimension that is unique to persons. Personality is the mixture of human nature and culture along with some genetic attributes specific to the individuals. Humans learn the culture and inherit the attributes of human nature, but how they perceive and respond to the culture differs in each person. Individuals can decide whether a cultural norm is appropriate or not. Similarly, many scholars believe that the extent to which one integrates their culture's norms into their daily lives differs in each individual (Allport, 1979)

When defining culture's elements, Hofstede et al. (2010) present another culture model with four dimensions. This model explains culture as the combination of values and practices. Practices here refer to rituals (actions), heroes (desirable character traits) and symbols (cultural artefacts like clothes). On the other hand, values are the base perceptions and belief systems that shape these three dimensions. What is good or bad or what is desirable or not are determined by the values that societies adopt.

Another well-known model of the culture is Hall's (1976) Iceberg analogy. Like an iceberg, culture has a part that appears above the sea level, known as the visible or conscious culture, and another part that extends into the depths of the sea, namely the internal or unconscious culture. Hall suggests that external culture consists of behaviours and practices, and this part can be learned explicitly by observing members of societies and can be easily changed. On the contrary, deep culture is the perceptions and beliefs like world views, religions, or ideas on the nature of relationships. This part of the culture is invisible, learned implicitly and cannot be changed.

Figure 2

Iceberg analogy of culture (Hall, 1976)



(Adapted from Hall's study)

2.2. Multiculturalism and Interculturalism

According to Neuliep (2020), every person in the world is a subject of culture and can create and change the culture and its elements, and it is impossible to think of humans without their relation to culture. Since globalisation affected how people travel and communicate and

caused mixed communities to occur, how individuals convey the notions of race and culture has also changed (Pieterse, 2004). Communities no longer exist as monoculture and multicultural environments have emerged where more than one cultures coexist and, in some cases, conflict. Changes in the understanding of culture and communities naturally affected institutions' policies regarding individuals with different cultural backgrounds. These countries started to favour individuals who could transcend their own countries' physical boundaries and become active participants in international activities (Adler, 2002). While these new policies and the ideal citizen model were discussed, two notions, multiculturalism and interculturalism, emerged. Although they are used interchangeably, these two notions relate to different concepts (Arasaratnam, 2013). Since the basis of this study is the phenomenon named intercultural communication, a brief overview of the definitions of these two concepts would be helpful in understanding the essence of the study.

2.2.1. Multiculturalism: Even though the idea of people from different cultures living in the same country and achieving harmony by preventing conflicts between minority and majority groups is not new and has been observed in great nations such as the Roman and Ottoman empires, the emergence of the term multiculturalism dates back to 1970s (Joppke & Lukes, 1999; Vertovec, 2010; Rattansi, 2011). Due to the destructions caused by the Second World War, the nations once conquered and colonised others, started to accept immigrants, namely human power, from poor countries for the reconstruction of cities. The arrival and settlement of these immigrants that became minorities caused many public issues, such as discriminating behaviours of the majority groups, rights and safety of immigrant workers and the need for new regulations in contexts with diversity, such as Canada, the USA, and the EU countries (Vertovec, 2010; Chin, 2017; Moawad & Shoura, 2017). Although the impact of the policies on countries differed, the first discussions on this concept emerged in Canada, which was relatively more democratic and tolerant than other countries, and later spread to other countries. (Taylor 1992; Juteau, 1993; Verkuyten, 2007; Wieviorka, 1998). Since it is a relatively new concept and its perception varies according to different countries' cultural backgrounds, ideologies and policies and people's beliefs and tolerance levels, setting a precise and universal definition for the term multiculturalism is a challenge on its own (Nye, 2007; Wieviorka, 1998; Hall, 2001; Baubock et al., 1996; Verkuyten, 2007; Chin, 2017; Hollinger, 1995; Hartmann & Gerteis, 2005; Parekh, 2000). However, multiculturalism can be briefly explained as the coexistence of different cultures in daily life (Pathak, 2008).

A review of the studies about multiculturalism can reveal that ideally, it is the context where both the majority population and minority population in a society can live equally with

respect and acceptance of differences and preserve their ethnic identities, regardless of cultural and linguistic differences (Moawad & Shoura, 2017; Dolce, 1973; Schalk-Soekar et al., 2004; Nye, 2007). Furthermore, some scholars indicate that the word multiculturalism can refer to the current mixed state of a community, the people's ideologies about diversity in these communities and policies that regulate the lives of different cultural groups (Van de Vijver et al., 2008; Bekker & Leilde, 2003; Tip et al., 2012; Hall, 2000). Another definition of multiculturalism suggests that this term can be used to identify not only groups of people from different races and countries but also other communities that people form with similar hobbies, occupations, religious beliefs, or sexual orientations, claiming that people of these communities share common cultural backgrounds (De Ruijter, 1997; Skrzeszewski, 1998; Kymlica, 1995; Okin, 1999; Lubisi, 2001). This definition holds a significant place by covering a much more complex but globally comprehensive identification of communities rather than simply including racial minorities in the scope.

As stated before, one of the central concepts in the definition of multiculturalism is the phenomenon of equality, which is not only aimed at protecting minorities. According to Berry (2006), a multicultural environment should provide peace in communication between all members of society. Additionally, this environment should support all groups by giving them equal rights to reach the resources and services they need (Rasmussen & Kolarik, 1981; The Working Group, 1982). Verkuyten (2007) stated that it is challenging to achieve this because different cultures have different morals and cultural values.

Another critical discussion on multiculturalism is about the characteristics of a multiculturalist individual. Many studies in literature tried to define this ideal person that can function effectively in multicultural environments. For example, Adler (2002) defines the multicultural person as someone who accepts and appreciates the diversity in the community they live in and is committed to acting accordingly to achieve a supportive environment for both the group they are involved in and others regardless of their status as the majority or minority. This person also should be able to adapt quickly to the changes happening in their environments since culture and society have a dynamic nature (Tillich, 1966). Similarly, Van Van der Zee & Van Oudenhoven (2000, 2002) suggest that a multicultural person is an open-minded and flexible individual who approaches cultural differences without prejudices and can maintain emotional stability in multicultural environments where conflicts can quickly occur by utilising the best strategy available while participating in social interactions.

2.2.2. Interculturalism: The phenomenon of multiculturalism, which shaped the policies of Western countries and aimed to offer equal rights to both minority and majority

groups in the past, has started to lose its popularity on the grounds that it causes acts of terrorism in the Western world, such as the event of 9/11, and abstracting and segregating subgroups with different cultural origins in the society rather than uniting them on a common ground (Lewis, 1997; Sivanadan, 2005; Meer & Modood, 2012; Hassan & Martin, 2015; Michalski, 2006; Santagati, 2016). Moreover, some believe that multiculturalist policies cannot meet the needs of new-age countries, which are greatly affected by migrations, intercultural interactions that have resulted from rapid globalisation, and the needs of individuals with multiple social identities, such as having different religious views or sexual orientations, as well as being of different races at the same time (Barret et al., 2014; Fanshawe & Sriskandarajah, 2010). Although it can be seen in the definition above that multiculturalism aims to reinforce the communication between individuals belonging to different cultures, according to some scholars, multiculturalist policies are insufficient to provide this interaction by claiming that it has no function other than developing tolerance against the differences between groups that creates distant and disconnected lives within the society (Bouchard, 2011; Cantle, 2012). Thus, a new approach, such as interculturalism, is needed in order to keep up with what the global age brings, tolerate the differences in societies, create policies that will provide environments in which different groups can live, and increase the communication between these individuals and enable them to take an active role in the globalising world (Wieviorka, 2012; Bouchard, 2011; Howarth & Andreoli, 2013: Berry, 2013).

Just like multiculturalism, interculturalism does not have a single definition (Knowles, 2010). It can be briefly defined as individuals establishing positive and healthy social relations and collaborations by communicating with other individuals and groups with various cultural backgrounds (Todorović, 2019; Bernecker-Musgrove, 2022; Alev, 2007; Cantle Report, 2001). According to some scholars, interculturalism is the rebranding of multiculturalism, meaning that it is an updated and improved version of multiculturalism with an emphasis on interaction (Meer & Modood, 2012; Bouchard, 2011; Zapata-Barrero, 2017).

According to the Council of Europe (2008), interculturalism is a form of dialogue formed during interaction with different cultures. On the other hand, Walsh (2015) thinks that interculturalism is a social project that is beneficial for the whole society and should be handled with a multidisciplinary approach. Interculturalism is also considered the only approach that can provide peace in society (European Commission, 2008). In addition to providing peace, according to interculturalism, cultural differences help societies develop when supported by the right policies (Farrell & Watt, 2001). According to Todorović (2019), the formation and spread of multicultural environments have become inevitable. Preventing the problems arising from

cultural differences in these environments is possible by increasing intergroup dialogue and sharing, that is, by adopting an interculturalist approach. However, although it has been accepted as a necessary skill for society, Zapata-Barrero (2017) emphasised that interculturalism should not be an imposition and should be left to the people's preferences. According to him, individuals have the right to avoid intercultural dialogue if they feel uncomfortable. However, if this reluctance stems from negative thoughts, he argues that positive environments and experience opportunities should be created to eliminate this.

2.3. Communicative Competence

Briefly defined as "the ability to do something well" in the Longman Dictionary (n.d.), the emergence of the notion of "competence", which is still a controversial topic in linguistic studies, dates back to the end of the 50s. Chomsky, one of the linguists who tried to understand the nature of language and systemise language acquisition and teaching studies into a scientific domain, argued that language consists of two dimensions, competence and performance, and proposed the linguistic competence notion (Chomsky, 1957; 1965). Approaching the topic from the generative grammar perspective, he defined linguistic competence as one's phonological, lexical, morphological, and syntactic, namely formal knowledge of their languages, which was necessary for accuracy and performance, which is the use of language in real life. However, Chomsky's language analysis created a debate among scholars due to his approach to language, which focused on its structural features while ignoring its contextual and pragmatic dimensions (Zerey, 2019). Furthermore, his theories assumed that speakers and listeners are not affected by any biological, social or linguistic constraints, such as the misuse of a grammatical component or a comprehension issue that arises from a lack of correct analysis of contextual clues, and it was projecting an ideal communication process far from the actual one (Kumaravadivelu, 2006). Moreover, some situations may require the use of ungrammatical conventions (Hymes, 1972). Therefore, a model of competence should take psychological and sociological frameworks into consideration.

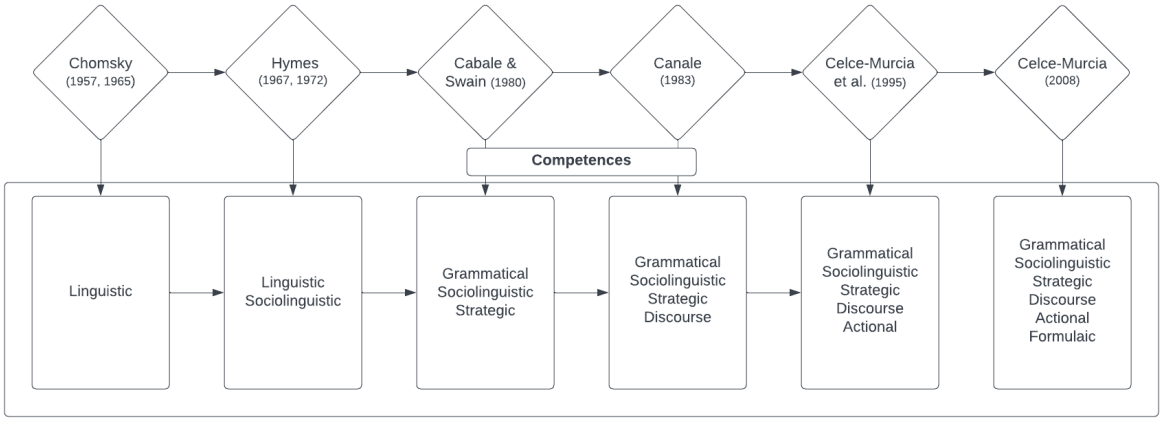
Breaking the grounds in language education, communicative language teaching's (CLT) development paved the way for the search for a communicative framework in the definition of language-related abilities, taking a communicative and sociolinguistic approach to the language, Hymes (1967, 1972) proposed the notion of communicative competence (Richards & Rodgers, 2014; Brown, 2014; Kumaravadevilu, 2006). Centring Chomsky's linguistic competence, which was the structural knowledge of the language as a sub-competence of communicative competence, he suggested that another type of sub-competence known as sociolinguistic competence was needed for appropriate and effective communication. From his

perspective, knowing the rules of the language was not enough, and one also needed to know how to use these grammatical forms appropriately in various contexts.

Intending to apply communicative competence effectively in language teaching classes, Canale and Swain (1980) expanded Hymes's model by adding a new sub-competence called strategic competence and defined all three in depth. According to them, grammatical competence, once known as linguistic competence, is simply the knowledge of grammar rules and vocabulary. Sociolinguistic competence is the appropriate use of these rules and vocabulary in context. For instance, one with high sociolinguistic competence knows which phrases can be used in formal settings or how to address a friend in a casual setting. On the other hand, strategic competence is the appropriate utilisation of various communication strategies to prevent communication breakdowns. One example of these strategies is describing something whose name has been forgotten or unknown by using other words. Later, Canale (1983) upgraded this model by adding a new sub-competence named discourse competence by taking communication's discursive features into account. Since actual communication does not consist of isolated sentences and takes place in a flow with multiple actions and ideas, he emphasised the importance of cohesion and coherence of the language used above sentence level in interaction with this new sub-competence. With its easy applicability, this model remained in use for a long time as the most applied model in foreign language teaching and assessment and teacher training programs (Bagarić & Mihaljević Djigunović, 2007; Taş & Khan, 2020).

Figure 3

Communicative competence models over the years (Celce-Murcia, 2008)



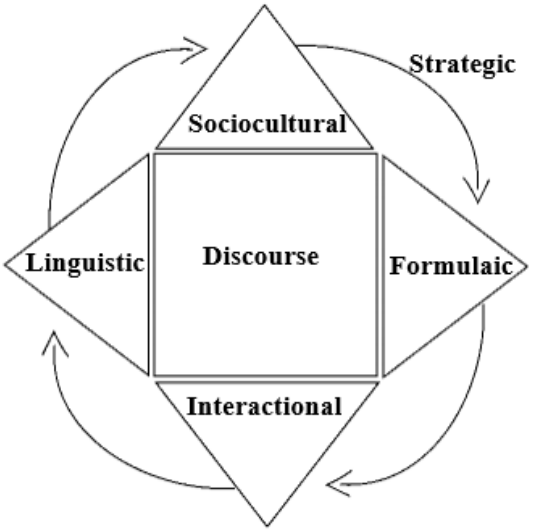
(Adapted from Celce-Murcia's study)

Another modification of communicative competence occurred when Celce-Murcia et al. (1995) introduced actional competence, which refers to the ability to understand and use speech acts and speech acts sets. They also renamed sociolinguistic competence as sociocultural

competence to put an emphasis on the cultural properties of communication and changed the name of grammatical competence back to linguistic competence, thinking the term grammatical was ignoring the morphological and syntactic properties of the language. In 2008, Celce-Murcia (2008) proposed a revision of their communicative competence model, removed actional competence from the main competencies and added interactional competence and formulaic competence, respectively.

Figure 4

Celce Murcia's (2008) communicative competence model



(Adapted from Celce-Murcia's study)

Interactional competence deals with many sub-competences, such as actional competence, which is the ability to use speech acts and speech act sets in interactions, conversational competence that can be defined as the ability to take, hold, and yield conversational turns (i.e., starting and closing conversations, waiting for others to finish their sentences, changing topics) and paralinguistic competence which is the correct comprehension and usage of non-verbal features of the language (gestures and mimics, physical distance, exclamations etc.). On the other hand, formulaic competence is briefly defined as the ability to use chunks and phrases commonly encountered in daily life, such as idioms and collocations. The last detail that attracts attention in this model is the positions of the discourse and strategic competencies. While its arrows indicate that strategic competence is in continuous interaction with the competencies that are forming the edges of the model, the centre position of the discourse competence shows that all elements of communicative competence make up the discourse.

A similar addition to Canale and Swain's communicative competence model was made by Littlewood (2011). Taking the initial model, he added sociocultural competence as the fifth sub-competence. Littlewood (2011) asserted that sociocultural competence is the ability to notice, understand, and exchange cultural knowledge during intercultural communication. He stressed that not having this competence may lead to communication breakdowns.

2.4. Intercultural Communicative Competence

Online interaction, thanks to the rapid technological developments in the 20th century, closed the distance between nations, accelerated the flow of information among groups of people, increased the possibility of meeting people from diverse cultures and turned business environments into intercultural hubs (Porter & Samovar, 1994). This led to social and cultural changes across the world. One important change is that it has enabled people from different cultural backgrounds to interact with each other. That is, people can communicate with others beyond their national borders. It is now possible, especially for young people, to experience intercultural interaction while playing video games since gaming contexts are interesting communities with various cultures (Mäyrä, 2016; Jones, 1998). As a result of these changes, the concepts of intercultural competence (IC) and intercultural communicative competence (ICC) emerged as phenomena that can ensure success in intercultural environments.

Criticised for reasons such as that it was developed around the rules established by native speakers of English and did not meet the new functioning of the globalised world, Canale and Swain's communicative competence model was dethroned by the concepts of IC and ICC, which tried to explain the intercultural side of communication (Alptekin, 2002; Acar, 2009; Bachman, 1996; Byram, 1997). The first of these concepts, IC, is generally defined as the ability to communicate with different cultures effectively and flexibly, to evaluate oneself and other cultures by observing, and the desire to initiate intercultural communication (Byram, 1997; Sercu et al., 2005; Alred, 2003; Phipss & Gonzales, 2004; Meyer, 1991). On the other hand, ICC, also known as intercultural effectiveness, is based on the use of a foreign language in intercultural communication (Byram, 1997; Usó-Juan & Martinez-Flor, 2006). Since grammatical knowledge is insufficient and social and pragmatic dimensions of communication and language should be taken into consideration during intercultural communication, ICC, which is the ability to reach a common ground with individuals with different personalities and cultures while preventing the occurrence of misunderstandings is known as a vital part of the foreign language learning processes (Byram et al., 2002; Byram & Zarate, 1997).

Many studies in the literature tried to conceptualise the nature of ICC, which has a critical place in the fields of foreign language learning and teaching. One of them is the

intercultural competence components model created by Howard-Hamilton et al. (1998). This model describes ICC as having three components: attitudes, skills, and knowledge. Attitudes can be explained by individuals' perceptions of their own and other cultures, the consequences of discrimination, and the advantages of intercultural communication. Knowledge component, on the other hand, as the name suggests, is about having information about the values, differences and social dynamics of the cultures that are the subject of intercultural communication. Finally, the skills component includes various practices that can enable and facilitate intercultural communication, such as reflecting on one's culture and other cultures, acquiring a dynamic personality that will allow one to adapt to different contexts, and standing up to discrimination.

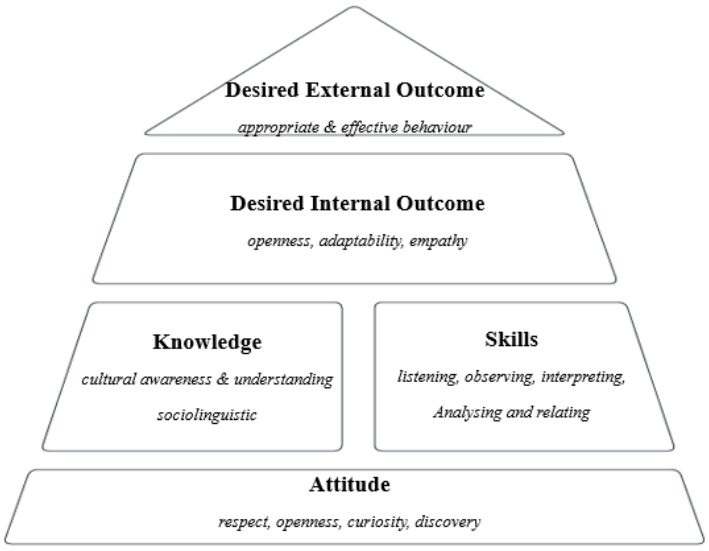
Another ICC model worth mentioning is the intercultural facework competence model developed by Ting-Toomey and Kurogi (1998), which was based on Brown and Levinson's (1987) study called politeness theory. In this model, ICC is examined by focusing on the negotiations between individuals' positive and negative faces, namely their personalities. In general, having a positive face, that is, a mediator personality, is associated with having high levels of ICC. Each competence interacts actively with the other in this model, which has four competencies: mindfulness dimension, knowledge dimension, facework competence criteria and interaction skills. The mindfulness dimension includes skills such as awareness of one's and others' inner assumptions shaped by their emotions and understandings and being open to novelty. According to the knowledge dimension, for individuals to go beyond an ethnocentric perspective and maintain effective international communication, they need to acquire information about cultural values and events through conscious learning and experience. The interactional skills dimension, which is defined as activities needed for effective and appropriate intercultural exchanges, emphasises the importance of practising activities like mindful listening, mindful observation, and collaborative dialogue, which are closely related to mindfulness and knowledge dimensions. Finally, the facework competence criteria dimension is about using all the skills mentioned earlier appropriately and effectively, increasing the agreement between the individual himself and others and reaching a result that includes mutual satisfaction.

One of the most well-known ICC models today belongs to Deardorff (2006). In her work with 23 researchers who were experts in the field of intercultural communication, Deardorff tried to create a general ICC model that could be used, especially in assessment. By bringing multiple opinions together, she proposed two similar models named the pyramid model of intercultural competence and the process model of intercultural competence. In the pyramid

form of the IC model, the components at the lower level affect the upper level and create a hierarchical order. According to this model, there are attitudes that individuals must have for IC to occur. These attitudes are to respect others' cultural values and differences, to be open to all intercultural experiences, and to be interested in the unknown. On the next level, there are the knowledge and skills components that were also mentioned in the previous models. Just like in the models mentioned above, the emphasis here is on having a deep understanding and knowledge of the individual's assumptions of their own and others' cultures and interactional and negotiation skills for an appropriate communication experience. The desired internal and external outcomes, located at the top of the pyramid, emphasise the attitudes such as adaptability, flexibility, ethnorelativity and empathy that an intercultural individual should add to his personality.

Figure 5

Deardorff's (2006) pyramid model



(Adapted from Deardorff's study)

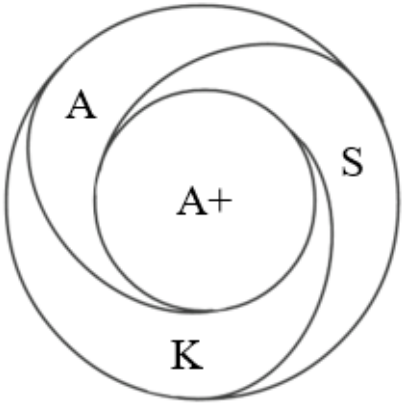
Although Deardoff's process model is similar to the pyramid one, there is no hierarchical order. According to this model, in addition to the fact that the attitudes, knowledge and skills components that make up the IC can affect each other, they can also directly affect the desired internal and external outcomes on their own. However, the outcomes may be flawed by the end of one cycle. This cycle repeatedly continues until a better outcome is obtained.

Another model of ICC is Fantini's (2000) A+ASK quartet. Consisting of five dimensions, this model deals with awareness, attitude, skills, and knowledge components like the others. However, awareness, located in the centre of the model, is discussed here as the primary control mechanism ensuring the success and effectiveness of intercultural

communication. Additionally, "proficiency in the host language", accepted as the fifth dimension, is a new proposition specific to this model. Like Deardorff's process model, Fantini's A+ASK quartet model conceptualises a long-term cycle.

Figure 6

Fantini's (2000) A+ASK quartet



(Adapted from Fantini's Study)

Based on other models in the literature, Byram and his friends proposed a comprehensive identity negotiation model of ICC that deals with the context called "space", which refers to a state of cultural negotiation with comparisons (Byram, 1997, 2003; Byram et al., 2001; Kramsch, 1993, 2009; Kramsch & Uryu, 2020). In addition to developing a detailed ICC assessment tool for researchers and foreign language teachers interested in intercultural communication, Byram criticised the previous models of ICC as being limited to only bicultural spaces. According to him, being intercultural means adapting to more than two different cultures and being motivated to be a mediator between different cultures. Thus, he believed that the ICC is fed by sub-competences of communicative competence, such as linguistic, sociolinguistic, and discourse competence.

According to this model, an intercultural speaker has five essential characteristics. Attitudes (savoir être) can be defined as rejecting prejudices about other cultures and being open and ready to learn about cultural differences. Knowledge (savoirs) means knowing about the speaker's culture and interactional differences in other cultures at the individual and societal levels. Skills of interpreting and relating (savoir comprende) are the ability to interpret and compare products related to cultures. The skills of discovery and interaction (savoir faire) consist of the communicative skills required to process the acquired cultural information, manage emotions and behaviours towards the novelty, and engage in intercultural interaction.

Finally, critical cultural awareness (savoir s'engager) is a high level of ICC where the speaker can critically evaluate their own culture and others from a multicultural perspective.

Another contributor to the concept of ICC is Will Baker. Although Byram's ICC model was detailed and comprehensive, Baker (2011) asserted that it was generally aimed at interactions with natives in Western countries and did not fully cover a context in which English is a global language and used to communicate with non-natives as well. For this reason, Baker (2012) developed a new ICC model, intercultural awareness (ICA), focusing on global interaction. According to him, intercultural awareness refers to the ability to be conscious of cultural norms and practices and use this awareness to establish successful intercultural communication. Contrary to other models, Baker has gathered the behaviours and skills related to intercultural communication under the domain of awareness.

The ICA model consists of three levels: basic cultural awareness, advanced cultural awareness, and intercultural awareness. In the first level, an individual has a general awareness and knowledge about their own culture and other cultures, can develop a stance on cultural issues and make intercultural comparisons at a basic level. At the second level, a higher multicultural awareness, the avoidance of generalisations and stereotypes, which deals with the behaviours and mindsets of individuals within groups rather than the general group, and behaviours aimed at resolving conflicts and establishing successful interaction can be seen. The last level is where the individual reaches intercultural awareness and becomes a successful mediator who has acquired different perspectives in intercultural communication and can act dynamically. According to Baker, the third level is about using English as a global language. Baker also thinks that each learner can reach level three at different speeds and by following different developmental paths.

The last model discussed in this section is Chen and Starosta's (1997) ICC model. According to them, ICC comprises three dimensions: cognitive, affective and behavioural. Intercultural awareness, which is a cognitive dimension, refers to the awareness of differences in intercultural interactions (Chen & Starosta, 1998). This awareness pushes individuals to think and behave differently by leaving their comfort zone. Inspired by the intercultural awareness instrument developed by Chen (1995), this dimension has three sub-levels: prejudice against cultural differences, making comparisons and empathising. On the other hand, intercultural sensitivity, which expresses the willingness and motivation to understand, accept and interact with different cultures, is accepted as the prerequisite of ICC as its affective dimension (Chen & Starosta, 1998; Hammer et al., 2003). It is based on emotional states such as enjoying intercultural encounters, avoiding prejudices, developing positive attitudes and respecting

others (Chen & Starosta, 1997). Finally, intercultural adroitness refers to behaviours, as the name suggests. (Chen & Starosta, 1997). It covers the linguistic, social and interactional skills required to communicate. According to Chen and Starosta, whether the behaviours are appropriate is closely related to individuals' awareness and sensitivity levels.

2.5. Intercultural Sensitivity

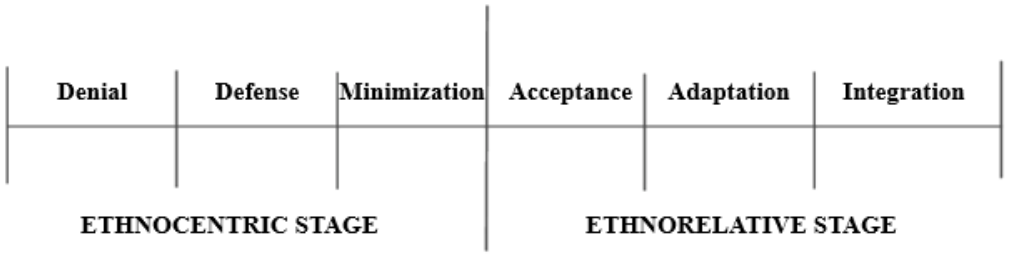
As stated in the previous sections, the world is globalising, and many new multicultural environments are emerging rapidly. Thus, the need to learn about other cultures, rediscover oneself, and acquire the skills required to operate in this new world has become an indispensable necessity of life (Broch et al., 2013; Feast et al., 2011). Therefore, the acquisition of the affective dimension of ICC, namely IS, is as vital as ICC itself.

Chen and Starosta define IS as "an individual's ability to develop a positive emotion towards understanding and appreciating cultural differences that promote an appropriate and effective behaviour in intercultural communication" (1997, p.5). They also believe that acquiring IS is the first step in acquiring ICC. Bahawuk and Brislin (1992), on the other hand, suggest that an effective and appropriate intercultural communication attempt can only be possible if a person has an interest and awareness, namely IS, towards cultural differences. Similarly, many studies reported that individuals who are successful in intercultural communication settings have high levels of IS (Dong et al., 2008; Peng, 2006).

The work that best reflects the nature of IS belongs to Bennett. To explain the development of intercultural competence, Bennett observed how students behave in intercultural communication contexts and presented the developmental model of intercultural sensitivity (DMIS), which consists of six stages (Bennett, 1986, 1993, 2004). According to his framework, each stage is the embodiment of individuals' opinions on their own and other's cultures and can be associated with some expected behaviour sets. In the first three stages, also known as the ethnocentric stages, individuals' thoughts are shaped mainly by their views on their cultures. Gradually increasing their intercultural sensitivity, individuals can reach the last three stages, known as the ethnorelative stages, where their interaction with the outside world and different cultures becomes more effective and harmonious and intercultural communication competence is gained.

Figure 7

DMIS (Bennett, 1993)



(Adapted from Bennett's study)

In the denial stage, individuals keep physical and psychological distance between themselves and other cultures and live entirely in isolation from cultural differences. For a person in this stage, their culture is the only truth, and it cannot be challenged by comparing it with other cultures since such a comparison is not possible in this isolated state. In the defence stage, which is less ethnocentric than the previous one, there is no isolation anymore, and individuals start to observe, analyse, and compare the cultural differences based on their perceptions. Something different in another culture can be seen as a threat; thus, individuals may employ some defence strategies to protect themselves from the threats. One example of such a strategy can be negative stereotyping, assigning negative values and behaviours to the target culture's community and accusing all members of undesirable attributes. Another strategy is simply proclaiming that one's own culture is superior to the others. In the final one, which is called the reversal strategy, individuals can begin seeing other cultures ~~as~~ superior to their own cultures, and they may even show signs of excessive admiration for the host culture. In the minimisation stage, individuals start to accept the fact that every culture is unique and cultural differences are the universal feature of this uniqueness and adopt a new effort to embrace cultural similarities while ignoring the differences. Starting from the acceptance stage, individuals gain ethnorelativist views of different cultures. In the acceptance stage, one stops ignoring the differences in operations, such as the use of language, interaction methods and daily routines and admits that they are present in each culture and should be acknowledged. In the adaptation stage, one abandons evaluation of the cultural differences from their own culture's perspectives and develops an understanding of the target cultures' values and actions with empathy or cultural pluralism. Unlike the previous stage, wherein individuals only accept the differences and stick to their cultures, they adopt a new identity to comprehend the differences and fit in the target culture's community. However, it should be noted that the acquisition of this new identity is not equal to losing one's own identity and replacing it with

the new one. However, it is the coexistence of the new identity with the main one. Finally, in the integration stage, one becomes an individual with a multicultural identity who is ready to adapt to different cultures and utilise effective strategies to overcome cultural barriers.

Criticising Bennett's DMIS for taking IS as a cognitive developmental process rather than an affective one, Chen and Starosta (2000) tried to explain factors affecting the development of IS and proposed different factors affecting the IS levels as intercultural engagement, respect for cultural differences, 'interaction confidence', 'interaction enjoyment' and 'interaction attentiveness'. Even though the attitudes associated with the rest are evident, the first and last concepts should be explained briefly. While 'intercultural engagement' is the degree to which individuals participate in intercultural communication, 'intercultural attentiveness' refers to how individuals operate during intercultural communication processes and their ability to make sense of cultural messages.

2.6. Video Games

With the spread of the Internet and advances in technology, video games have become a million-dollar industry (Dillon, 2011; Shane et al., 2012; McNaughton & Light, 2013). Video games, which differ from other media with their interactive structures, are not only popular leisure time activities preferred by young people for entertainment but also virtual worlds inspired by real life that have social and cultural aspects and can improve critical thinking skills (Shaffer et al., 2005; Granic et al., 2014). Unlike schools, these games, which are also accepted as educational tools, provide entertainment and education opportunities outside their contexts with their gaming communities created with shared values. For this reason, video games and the IS concept form the core of the current study. This section briefly mentions the structure of video games, the activities related to video games, the possible contributions of video games to education, and some issues that may arise from playing video games. However, video game genres like action, role-playing games (RPG), and adventure are not included in the study because the games contain elements from more than one genre, and the differences between genres are now unclear (Li & Zhang, 2020; Clarke et al., 2017). Instead, games were introduced as single-player vs multiplayer games and games with a narrative vs games without a narrative.

Games can be either single-player, in which only one player alone plays the game or multiplayer, in which more than one player plays the game either collaboratively or competitively, and some games can include both options together in a single pack (Harteveld & Bekebrede, 2011; Granic et al., 2014). When analysed theoretically, each type of game is found to be imposing rules and data in the form of texts, sounds and images to its players in a digitalised way (Juul, 2011; Salen & Zimmerman, 2004; Crawford, 2003). Single-player games,

also known as data-intensive games, are ones in which the players do not have much control over the predefined rules and outcomes of these rules (Crawford, 2003). On the other hand, multiplayer games, known as process-intensive games, in which the players' choices shape gameplay, present non-linear and emergent gaming experiences (Rollings & Adams, 2003). Furthermore, multiplayer games are known to be composed of social rules determined by gamers, and these rules are generally subconscious. In these types of games, players interact with others to follow the implicit rules created by human interaction to become successful in the game (Salen & Zimmerman, 2004). However, single-player games have scripted and formal rules imposed by the game developers, and players have to follow these rules strictly to get a satisfying ending.

From a practical point of view, as the name suggests, single-player games are modes in which the player experiences the game entirely alone. However, multiplayer games are highly social contexts. Multiplayer games present authentic communication experiences (Snodgrass et al., 2016; Molyneux et al., 2015). These games can transform traditional communication into a modern and digitalised one in which gamers can express themselves freely and effectively by offering meaningful contexts, high levels of anonymity, and a sense of control (Griffiths et al., 2011; Pena & Hancock, 2006). Players who prefer this mode can communicate about gameplay using voice or text chat features (Araki & Carliner, 2008). Furthermore, the fact that the games become increasingly challenging has resulted in the players seeking help from other players. These calls for help have led to the formation of online gaming communities called guilds (Jakobsson & Taylor, 2003). Thanks to these guilds, weak players can communicate by receiving help from strong, advanced players in the game (Jakobsson & Taylor, 2003). Additionally, players can take various roles such as hunter, magician, archer, knight and merchant in multiplayer games, and players adopt the roles and cultures identified with these classes, as well as acquire and use general information about the game controls (such as keys, menus, etc.) Gamers in guilds can establish interpersonal and intercultural exchanges by using the chat system (Gee, 2006).

Although communication seems to occur only in multiplayer games, it can also occur outside of the game if players prefer. Non-official and official wikis and forums enable players to share information and experience (Mason, 2013). Especially game forums are such platforms where gamers get in touch with other gamers for various purposes like chatting about the game, creating rules, forming communities for online gaming, and helping new gamers adapt to the game (Ang et al., 2010; Steinkuehler, 2010; Molyneux et al., 2015). Gee (2004) describes these video game-related formations, communities, as affinity spaces. Gee believes that just like

physical spaces, users of the internet can enter the virtual world and form communities by chatting or exchanging information with other users of the same interests.

Gee (2004) gave information about the nature of these affinity spaces in his study. According to him, gaming communities comprise common interests rather than gender, race, or age. In addition to gaining proficiency in existing knowledge in the field of interest, they are also good platforms for learning from scratch. He assumes that anyone who joins the community can get what they want, like asking for help, meeting new people, or learning about the game. Furthermore, community members produce content, and this community shows a dynamic change depending on both the developments in the game and the members' participation. Gee also explains that each player has access to specific information about the game and universal information about all games. In addition to their thoughts, people can access and share the thoughts and information of others from different sources (such as social media). At the same time, extra information can be shared beyond the boundaries of the game. For example, players can share further information about the mythology that inspired the game's story. Players also share practical knowledge and learn (knowledge of how to play the game). The most important aspect of these spaces is that members can use these portals in their way and preferences at the time they determine. Finally, participants have various roles, such as just player or admin. There is no leader; the portal owner cannot establish a chain of command with the participants.

Considering the contributions that games can provide to learning, firstly, the idea that single-player and multiplayer modes can cause different types of learning can be discussed. It is thought that while single-player games cause learning of predetermined and measurable objectives called "direct transfer learning" in an individual way, multiplayer games can cause social learning called "open-ended" without definite boundaries and objectives (Harteveld & Bekebrede, 2011). However, considering the nature of communication beyond the boundaries of the game, affinity spaces and friendships established in these contexts are also on the agenda. For example, video games, which have an essential place in today's world, provide dynamic communication and learning opportunities that are not available in classrooms (Gee, 2000; 2004; Rifkin, 2000). Shaffer et al. (2005) also think that communities in video games can be helpful in education because they provide social practice experiences. Some studies claim that friendships formed in the games can also contribute to the gamers' real-life social skills (Ross & Collister, 2014; Pena & Hancock, 2006).

When it comes to the structure of video games, it was seen that there are two types of games, games with narrative and games without narrative, in addition to the difference between

single-player and multiplayer. Game designers may choose to include or not include narrative elements in their games. Narratives, in short, are cognitive tools that people create by being influenced by real lives, and they are used to remember and transfer thoughts and experiences in life to future generations (Krawczyk & Novak, 2006; Bruner, 1991; Dickey, 2011). The narrative alone can make complex scientific and pedagogical content meaningful, entertaining and engaging (Gros, 2007; Negrete & Lartigue, 2004; Barab et al., 2007). Narratives in highly interactive video games may contain real-life or fantasy contexts (Barab et al., 2007; Parker & Lepper, 1992; Qin et al., 2009). For this reason, there are opinions that narratives in video games can also contribute to learning. Since learning requires an engaging and meaningful approach, it is thought that narratives can compensate for these needs (Hirsh-Pasek et al., 2015; Parsayi & Soyoof, 2018).

It has been suggested in the light of various studies that video games can cause social learning. This type of learning can be explained with the zone of proximal development theory by Vygotsky (1978), which proposes that individuals can reach their full potential when they receive guidance and support from more skilled individuals. This theory highlights the importance of a "zone" where individuals can stretch their abilities beyond what they can accomplish independently with the help of a knowledgeable mentor. It emphasises the collaborative nature of learning, where learners are scaffolded to acquire new skills and knowledge through guided interaction with more experienced peers or adults. This theory is also known to apply to learning from video games. Plass and Homer (2014) suggest that carefully designed good games can create a zone between the player and the desired gaming aim, like completing a quest successfully with some degree of challenge. Furthermore, they suggest that games can lead to learning social and cultural knowledge with a specific type of engagement known as social/cultural engagement. Since it is known that learning has a social structure and is related to motivation, games can reinforce learning with their social interaction mechanics (Wenger, 1998, 2000; Bandura, 2002; Barab & Duffy, 2000). Much of the motivational value of games lies in the expected social interaction. In particular, players of multiplayer games participate in group activities and quests by interacting with others to achieve success in the game. (Steinkuehler & Duncan, 2008). The fact that the players' reasons for playing games are mainly being engaged in social communication may result in social learning and individuals' learning of cultural norms through these games (Ito et al., 2008; Pearce et al., 2011).

Although it has been mentioned in this section that video games positively affect learning, there are also opposing views on this subject. Gee (2006) argued that video games are not magic wands on their own, and their contribution to learning is directly proportional to the quality of the game's content and how it is utilised in the educational context. Similarly, Harteveld & Bekebrede (2011) believe that sometimes learning with others in games might not be the best way, thinking that everyone in a group has different contributions, performances and reactions. Games may not change players' behaviours and knowledge about a particular thing or result in learners being exposed to unwanted behaviours among the groups they participate in. For example, it is thought that games that do not contain human interactions like the ones in online games may not result in a change in intercultural communication levels since they lack real-world-like complex communication opportunities (Bucker & Korzilus, 2015; Behm-Moravitz et al., 2016).

Others stated that although they are socially beneficial, negative behaviours can also develop in online games (Yee, 2014; Kuznejiff & Rose, 2013). One of the most encountered issues in video games is sexism. A study on gender and video game tastes claimed that women preferred to play video games less than men due to games' violent natures (Malone, 1981). Similarly, some studies tried to make sense of this difference by pointing out cognitive differences between the two genders, favouring male players (Smith & Stander, 1981; Mandinach & Corno, 1985; Subrahmanyam & Greenfield, 1994). However, although playing video games continues to be associated with the male gender, it is known that the number of female gamers is close to that of males (Shaw, 2012; Chalk, 2014). However, this does not prevent women from being excluded from the context of video games. Regardless of cooperative or competitive games, the researches show that female players are the subject of sexual harassment by hardcore male players called toxic gamers who despise women gamers with the allegations that they cannot play games properly or play to attract men's attention (Fox & Tang, 2016; Ballard & Welch,2015; Brehm, 2013; Richard, 2017). As a result, women either stopped playing games or tried to hide their gender by using male avatars and character names, and most of them decided not to communicate with other players. Another toxic condition seen in the gaming community is racism. When players realise they are playing with people who are not from their regions, they may show some unwanted and toxic behaviours towards them, such as harassing the other gamers by bringing up stereotypes about their cultures and countries, insulting and finally making them stop playing the game (Costa et al., 2020; Şengün et al., 2019).

2.7. Studies on Intercultural Sensitivity and Video Games

Many studies evaluated individuals' intercultural sensitivity (IS) levels in light of various variables and factors in the literature. Previous studies on IS and video games are discussed in this section. These studies generally include information about IS levels of students studying in different fields, their views on IS acquisition, and their cultural knowledge learning processes. First, studies showing the effects of various variables such as gender, engagement with different cultures and the department studied at the university on IS levels are included. In the continuation of the section, studies investigating the relationship between study abroad programs and the use of different types of materials with IS are discussed. Finally, the contribution of various virtual platforms and exchanges and video games to IS is discussed.

When the studies in the literature were reviewed, it was researched if demographic and cultural background differences such as gender, university departments, and coexistence with individuals from other cultures cause a significant difference in IS levels. For example, Kuluşaklı (2020) measured the IS levels of tourism students studying at a state university in Turkey. Conducting a study with 60 students specialising in different fields, such as cooking and hotel management, Kuluşaklı collected the data with Öğüt and Olkun's (2018) Turkish adaptation of Chen and Starosta's (2000) ISS scale. When students' IS levels were examined, it was determined that their interaction enjoyment levels were higher than other dimensions. Students' interaction attentiveness, interaction enjoyment, and interaction confidence levels were also found to be relatively high. Gender did not cause any significant difference in IS levels. Similarly, Adili and Xhambazi (2021) thought that gender would make a significant difference in IS levels. Looking at the IS levels of 217 primary school teachers within the framework of DMIS, they found that the IS levels of teachers were generally high. However, when the teachers at the ethnocentrism stage were examined, the ethnocentrism levels of male teachers were found to be lower than that of female teachers. On the other hand, no gender-related differences were observed at high IS levels, that is, at the ethnorelativism stage.

As mentioned before, it was thought that the department studied at the university could create differences in IS levels. Based on this thought, the IS levels of 484 prospective English Language teachers, social sciences teachers and primary school teachers were compared (Demir & Kiran, 2016). They investigated whether reading in different departments affected students' IS levels. Researchers reported that ELT students had higher IS levels than students from the other two majors by using Chen and Starosta's (2000) ISS. It was also stated that the reason for this difference lies in the ELT area itself. According to them, having knowledge about different cultures and a high level of IS is a requirement for language teachers; thus, they are expected

to score higher than other departments' students. When the IS levels of the students were compared with the gender variable, although the mean scores of female students were higher than that of male students, no significant difference was found between genders.

Theology department students became the subject of IS studies as well. Erdoğan and Okumuşlar (2020) evaluated theology students' IS levels in the light of various variables such as gender and whether students establish contact with individuals from other cultures by using Chen and Starosta's (2000) ISS. The results showed that theology students' general IS levels were high, and there was no significant difference between genders. However, when the mean scores were examined, it was found that the IS levels of male students were higher than that of female students. On the other hand, exposure to other cultures caused a significant difference in IS levels. Having interaction experience with individuals from different cultures increased the IS levels of students.

The level of interaction with other cultures has also been the focus of IS levels studies. Using the intercultural sensitivity scale (ISS) developed by Chen and Starosta (2000), Şekerci and Doğan (2020) measured the IS levels of 387 primary school teacher candidates studying at three universities in Turkey. They examined whether the level of relationships that students established with different cultures affected IS levels. Results showed that the IS levels of university students were moderate. It was also reported that living together with other individuals from different cultures could positively affect IS levels.

Similarly, Zhou & Griffiths (2011) examined the ICC levels of EFL students studying at a university in China. In this qualitative study, students were asked questions about the difficulties and issues they experienced in establishing and maintaining intercultural communication. Students generally complained about their insufficient English and stated that they were afraid to communicate with foreigners. In addition to discussing the issues, the students expressed their opinions about the approaches their teachers should use in the lessons. Almost all students thought their teachers should introduce more material about Western cultures. On the other hand, some students argued that digital materials that provide information about different cultures could be helpful.

Study abroad programs are also one of the most preferred ways to interact with different cultures. Thus, Bloom and Miranda (2015) investigated the effects of a four-week study abroad experience on 12 university students from different departments. Before their arrival, the students had some background information about the host country's culture, Spain, since they had taken intensive Spanish courses. After they returned to their own country, their IS levels were measured with Olson and Kroeger's (2001) intercultural sensitivity index (ISI), and

researchers evaluated the results according to DMIS. The pre-test results indicated that students were already at the beginning of the ethnorelative stages as they had intercultural encounters before or had intercultural families. Additionally, the post-test results showed no significant difference in terms of IS levels. To further explore this, researchers grouped participants as students with less intercultural experience and those with more. This analysis, which was supported by qualitative findings," showed that the group with less intercultural experience was actually in the defence stage, and they were still comparing their own culture with that of the host country either negatively or positively. On the other hand, the group with more experience had more ethnorelativist perspectives. According to Bloom and Miranda, the reason both analyses showed different results could be students' tendency to report higher IS while self-assessing themselves. Furthermore, they suggest that the participants of the group with less experience were not aware that they needed to improve themselves, so they showed almost no improvement in IS levels compared to the other students who were aware of their strengths and weaknesses.

Tools that can provide intercultural experiences and result in the acquisition of cultural information and IS, both directly and indirectly, have also been the subject of IC studies. Short stories, new media tools such as Facebook and YouTube, virtual simulations and video games were prominent among these tools. For instance, to see whether the use of short stories contributed to the acquisition of ICC, Gómez Rodríguez (2012) picked five short stories as lesson materials and used them during his classes with EFL students who were training to become English teachers in the future. Students read stories about people from other cultures and the hardships they face in their daily lives. Student journals and interviews showed that students learned to compare their cultures with others' objectively. However, some students mentioned that the language used in the literary texts was above their levels, and they had some issues with comprehension. Luckily, these students reported getting used to the language in the later stages. Some students even talked about using dictionaries to look up unknown words, which they had never done before.

With the development of new media and it is taking an essential place in intercultural exchanges; new media, social and cultural literacy have begun to be studied under the same roof. Based on the work of Jenkins et al. (2006), who gathered social and cultural competencies in the framework of new media literacy (NML), Literat (2014) investigated the NML levels of 327 volunteers using the NML scale. Instead of traditional media like newspapers and television, platforms and products like social media and video games were included in the study. It was found that higher exposure to social media increased NML levels. Also, Facebook and

YouTube were found to be the most influential social media platforms on the NML levels due to their highly interactive social and visually rich interfaces.

Thinking that it can contribute to cultural learning by enabling people to share and meet with others, Hassan et al. (2020) investigated the effects of the new media on IS. By measuring the IS levels of 210 foreign university students living in Malaysia with Chen and Starosta's (2000) ISS, they sought to answer whether Facebook impacted IS levels. The analysis showed that the use of Facebook indeed increased IS levels. Furthermore, students stated that they find using Facebook beneficial in adapting to the host culture and helping them improve their foreign language and intercultural skills.

Bekiroğlu and Balcı (2014) measured the IS levels of communication faculty students and tried to explain it with different variables using ISS. In the study conducted with the participation of 302 university students, the question of whether the students' new media usage habits affect their IS levels was tried to be answered. The analysis showed that as the frequency of following foreign media increased, IS levels and the frequency of communication with strangers through social media increased. Bekiroğlu and Balcı argued that new media could provide accurate and effective information about different cultures and social mechanics.

YouTube, which is one of the most popular media platforms, became the subject of action research from Páez Castellanos (2022), which aimed to investigate its effects on the development of IS. Ten 9th class students watched YouTube videos about cultural and individual differences and participated in discussions about the contents of the videos with their peers right after the viewings. Mini quizzes and interviews were also used for the analysis. The analysis of this three-cycle intervention showed positive changes in students' IS levels. Students were seen to be more emphatic and open to cultural and individual differences after the intervention. Almost all students reported being willing to communicate with people from other cultures. However, some students were worried that their low English proficiencies would affect their communication attempts negatively.

Thinking that providing students with an environment for experiencing intercultural communication is a challenge on its own, Hall et al. (2014) looked for other methods for teaching intercultural skills. They tried to utilise a virtual learning tool called Traveller, in which students are engaged in various activities about different cultures and intercultural communication situations. During the one-month-long intervention, some students interacted with the Traveller and experienced many different intercultural scenarios, while others followed a traditional curriculum. Pre-tests and post-test results showed that students using the Traveller had higher IS levels and awareness than those who did not.

Another virtual tool study was from Hagley (2020), who believed that the internet increases the chances for meaningful and authentic intercultural exchanges. He also thought that virtual exchange environments are the only options for the occurrence of authentic intercultural communication for classes with time and economic constraints. Thus, he conducted an International Virtual Exchange Project in which 644 EFL students from different majors participated. Students interacted with their foreign partners by exchanging messages about pre-defined cultural subjects and themes for eight weeks. He issued exchange surveys developed by taking items from ISS (Chen & Starosta, 2000) and the Knowledge and Competence Value Rubric (Rhodes, 2009) on Moodle platform before and after the intervention. Students were also asked to share their ideas about exchange processes by filling out another survey. The results showed that students learned more about their and their partners' cultures and gained self-confidence in explaining them to others. No significant differences were found in their IS levels, but they moved closer to ethnorelativist stages.

Coffey et al. (2013) conducted a study to see the effects of new media on the acquisition of IS and chose a virtual 3D environment called Second Life for the experiment. To teach Chinese culture, professionals built a virtual version of China (Second China) in Second Life with its cultural artefacts, including items and buildings. They placed many artificial humans, known as bots, capable of interacting with the users by presenting many intercultural scenarios and challenges. Furthermore, to test how the traditional web affects students' IS levels, they also created a website in which the participants had access to various 2D materials taken from Second China. To measure students' IS levels, they used a modified version of ISS (Chen & Starosta, 2000). After the pre-tests, participants were divided into two groups Second China users and web users. Post-tests showed that the IS levels of the participants who took part in Second China were higher than those of web users. Moreover, Second China users maintained this increase in IS levels even after two weeks. Coffey believes that Second China presented more realistic, lasting and interactive intercultural opportunities to its users.

Another virtual platform that is similar to Second China is Croquelandia. By adopting this virtual environment to Spanish classes, Sykes and Thorne (2008) aimed to teach Spanish pragmatics to 53 university students. Just like in Second China, Croquelandia had many culture-related artefacts and interactive bots acting like natives that were presenting a virtual study abroad story. Analyses of discourse completion tasks and interviews showed that even though there was not a significant gain in pragmatics, students reported feeling confident about future interactions with natives.

CMC, known as communication in new media, provides socialisation in the context of the internet. To see how CMC's use in chatting with foreigners affects students' IS levels, Pasand et al. worked with 45 EFL learners who were undergraduate students at an English Language and Literature department. The study included four groups: The first CMC group, in which some of the students communicated with four non-native foreigner participants from the international group, the second CMC group, which communicated only with their peers and a control group which had no access to foreign participants and had no cultural focus during the classes. The intervention lasted three months, and students from the CMC and international groups exchanged messages about various cultural topics. ISS (Chen & Starosta, 2000) was used as a pre-test and post-tests; after the analysis, it was found that. The first CMC group had higher IS levels than the second CMC group and the control group, respectively. Furthermore, students of the CMC groups reported feeling more social and self-confident in their interactions. Even though virtual interactions with foreigners can greatly enhance IS, this study showed that CMC could be an excellent tool for improving IS levels and acquiring intercultural skills even without interaction with individuals from other cultures.

Video games mentioned in the previous section have also recently been at the centre of learning and intercultural communication studies. For example, Matijević & Topolovčan (2019) aimed to investigate the effect of video games on the informal learning processes of teenagers. In this case, the study made with interviews and introspections, 30 video gamers shared their views on the pedagogical aspects of 25 different video games and their experiences with these games. When the researchers examined the players' opinions, they found that the games reinforced multiculturalism and pedagogical values such as creativity, cooperation, and critical thinking. According to the players' accounts, players are interested in playing games not only because of their visual quality but also their structure which enables intercultural communication with different players worldwide. The findings of this research have also supported the fact that video games can contribute to language acquisition and increase empathy towards others. Similarly, asserting that traditional classrooms are insufficient for teaching intercultural competencies in terms of time and resources, Soyoof (2018) interviewed undergraduate EFL learners who were proficient in playing video games about the acquisition of culture through video games. Students stated that there was not enough intercultural stimulus in their traditional classrooms, and video games could provide such exposure in a motivating and fun way with their real-world, like intercultural environments. Soyoof thinks that video games positively impact the ICC's affective dimensions.

Osorio et al. (2020) examined whether video games impacted the knowledge dimension of ICC and ran an experimental study with 14 university students taking English classes at a Colombian university. Students in the experiment group played the games Immigration Nation and Branches of Power, which were developed to teach about issues related to immigration and how the US governmental system works. Pre-tests and post-tests were designed for students' answers to questions related to specific cultural elements. The post-test analysis showed that using these games increased participants' knowledge about intercultural topics. A significant difference between genders was also spotted. It was seen that women students scored higher than males during the pre-test. On the other hand, male students' post-test scores were higher than those of female students. It is thought that the reason for this difference could be that male students were more accustomed to video games than females.

Emin (2021) thought that video games and weekly playing time could significantly affect IS levels. In his thesis, he collected data from 210 university students studying in the field of ELT by utilising a Turkish version of ISS (Chen & Starosta, 2000) and through interviews. He looked at whether the time spent in video games, communicating with other players and the frequency of this communication affected students' IS levels. When the weekly playing time was examined, the highest IS levels were seen in the group that played the least. On the other hand, IS levels increased as the frequency of communication with other players increased. Furthermore, the participants mentioned that the online features of the games have an important place in the acquisition of culture and IS.

Based on the arguments that gamers may participate in gaming communities to gain achievements related to the gameplay and show no difference associated with IS, Carino (2018) interviewed thirteen gamer students who played a game called Warframe for more than three months to investigate their gaming experiences. Analyses on how interaction in video games affects the levels of IS, empathy and feelings towards the outgroups showed that even though gamers were not aware of the changes, communicating with others playing the same game made them more aware of others and the cultural and psychological issues they face in their daily lives. Some gamers even reported that they formed new friendships with people from other cultures by using third-party applications like social media platforms. This experience of some gamers showed that games could help individuals increase skills needed in intercultural communication.

Finally, in their case study, Wadley et al. (2015) asked 15 participants to play a game called Dungeons and Dragons Online and use its voice chat feature while playing it. Gamers played the game by voice chat with other players for two months and kept diaries about their

gaming experiences. Diaries, individual and focus group interview analyses have revealed that gamers think that voice chat is more functional than text chat in terms of playing the game and that voice chat is more enjoyable, natural and social. Although the players did not personally know the other players they played with, they also stated that they could share information about daily life and cultural differences and establish intimate bonds. However, the criticism they heard in voice chat also affected the players emotionally, just like positive conversations.

When the studies in the literature were examined, it was seen that digital environments such as virtual environments, social media platforms and video games, and mechanics such as CMC could support the development of IS and ICC and facilitate the acquisition of cultural knowledge. However, there still needs to be a holistic study examining the effect of video games on IS and cultural knowledge acquisition by measuring IS levels and considering students' perceptions of this issue.

CHAPTER III

Methodology

3.1. Introduction

This thesis has three main aims: to measure the average IS levels of university students who play video games, to determine whether various gaming preferences affect students' IS levels, and to investigate students' perceptions of learning cultural knowledge from games and video games as environments for engagement in intercultural communication.

This section of the study presents detailed information about the research design, participants, data collection tools and data analysis procedures.

3.2. Research design

In order to investigate the IS levels of university students who are playing video games, the effect of their gaming preferences on IS levels and their thoughts on the learning of culture-related information and games as intercultural environments, this study adopted an explanatory sequential mixed research methodology.

Burns and Grove (2005) describe quantitative research as "a systematic process in which numerical data are used to obtain information about the world" (p. 23). The use of statistical methods to examine more than one variable and participant makes scientific objectivity, generalisation and hypothesis testing possible (Antonius, 2003; Denscombe, 2010; Carr, 1994; Creswell & Creswell, 2018). Qualitative research, on the other hand, is a type of research used to make sense of social or individual phenomena and the nature of human behaviour by examining them in detail (Minichiello, 1992). However, using these methods alone is insufficient to look at a phenomenon from a broad framework. Although qualitative and quantitative methods are thought of as opposites, they express different ways that can be used in supporting structures (Creswell, 2021; Newman et al., 1998). The fact that both methods are insufficient but complementary has led to the emergence of the mixed method by revealing the idea of using a method that combines these two. The use of mixed methods is one of the best ways to answer questions that other methods alone cannot explain, to offer a more comprehensive and different perspective to the researcher, and to increase the implacability of the study and the validity of the results (Poth & Munce, 2020; Shorten & Smith, 2017; Maxwell, 2016; Dörnyei, 2007).

3.3. Participants

The population of this study consists of 384 university students who actively play games and participate in various game forums and social media groups related to games. The common point of all these students is that they are gamers who prefer different platforms and genres and

have active participation in the gaming community. Participants eligible for the study were reached by repeatedly sharing the survey link on social media by various users using snowball sampling, a non-probability sampling method (Cohen et al., 2017). Due to the highly anonymous use of the social media accounts of the gamers, the school and department and other personal information were not collected in order not to disturb them. However, due to the nature of the study, only their gender was asked, with the promise of anonymity.

Table 1

Genders of the participants

Gender	N	%
Female	96	25.3
Male	284	74.7
Total	380	100

As shown in Table 1, 25.3% of the participants were female (N=96), while 74.4% were male (N=284). Although recent studies on this subject show that women gamers play video games as much as male gamers and their numbers are almost equal to men, the abusive behaviour of some male players results in female players taking a more passive role in communities or not participating in these environments at all (Fox & Tang, 2016; Ballard & Welch,2015; Burne, 2022).

Table 2

Interview participants' genders

Gender	N	%
Female	12	29.3
Male	29	70.7
Total	41	100

3.4. Data Collection Tools

This section contains information about the quantitative and qualitative data collection tools used in the study.

3.4.1. Quantitative Data Collection Tools: A questionnaire aimed at collecting quantitative data was used to examine the gamer students' IS levels and the effect of their gameplay preferences on IS levels. The first part of the questionnaire was designed to collect data about students' genders and information on their gaming preferences. The variables specified as gaming preferences are the weekly time students spend on games, engagement in

affinity spaces, game type preference as games with narratives or without narratives, single-player or multiplayer mode choices, and communication preferences during the gameplay. The second part of the questionnaire included the Turkish intercultural sensitivity scale (TISS), a 5-point Likert scale (Bulduk et al., 2011). TISS is the Turkish adaptation of the intercultural sensitivity scale (ISS) developed by Chen and Starosta (2000). Permissions required to use the scale were obtained by contacting the researchers who developed it via e-mail.

Consisting of five sub-dimensions that describe the different components of IS, this scale has 24 items. Items 1, 11, 13, 21, 22, 23, and 24 are for interaction engagement. Items 2, 7, 8, 16, 18 and 20 are about respect for cultural differences. Furthermore, items 3, 4, 5, 6, and 10 show interaction confidence while 9, 12 and 15 are items of interaction enjoyment dimension. Finally, items 14, 17, and 19 describe interaction attentiveness. Some of these items (items 2, 4, 7, 9, 12, 15, 18, 20 and 22) require reverse coding. In addition, this Likert-type scale includes a 5-point rating as "strongly disagree", "disagree", "undecided", "agree", and "strongly agree".

Chen and Starosta (2000) conducted a validity analysis of ISS with 162 university students and concluded that the concurrent and predictive validity of the scale was high enough. Similarly, Bulduk et al. (2010) stated in their study with nursing students that the reliability and validity of TISS are incredibly high, and it is suitable to use in the Turkish context. In this study, reliability was measured using an application called SPSS. As a result of this analysis, Cronbach's Alpha value was found to be 0.87. This result showed that the scale used is highly reliable.

3.4.2. Qualitative Data Collection Tools: Semi-structured interviews were conducted in order to examine the university student gamers' views on video games as intercultural environments and learning of cultural knowledge from video games in detail. Semi-structured interviews provide great flexibility to the participant and researcher, allowing both parties to make more comprehensive and open comments (Cohen et al., 2007; Bryman, 2008; Merriam, 1991). In the interview, which was created based on this idea, the participants were asked five questions. In addition, the questions were prepared in Turkish, the mother tongue of the participants, so that the participants could express themselves freely without any language restrictions. The interview questions can be seen below.

1. What are your views on learning cultural knowledge from video games?
2. How do you feel when you encounter different cultural elements while playing video games? Have you ever had international communication experience in the context of video games? If so, with whom and how?

3. Have you ever encountered any intercultural communication issues while playing games? Describe them if you have.
4. If you encounter any intercultural communication issues while playing video games, how do you overcome them?

3.5. Data Collection Procedures

This section contains detailed information about data collection procedures. It is mentioned how quantitative data and then qualitative data were collected, respectively.

As the first step, Bursa Uludag University Research Ethics Committee was applied to obtain the necessary permissions to conduct the study. Data collection procedures started after obtaining the institution's permission. Later, an invitation was posted to the members of various gaming communities. The questionnaire, which was created via Google Forms, was shared, and participants who met the objectives of the study were asked to fill out the form. Also, thanks to the efforts of the participants and a famous YouTuber, the study was shared multiple times in gaming communities, attracting many gamer participants to the study.

3.5.1. Quantitative Data Collection Procedures: The gamers who decided to participate in the study were asked to give their permission by reading the questionnaire description first, which contains information about the purpose and content of the study, as well as anonymity, precautions for the protection of personal information and the assurance that the study does not have any harmful purpose like presenting the gamers in a negative. After filling in the information about their ages and gaming preferences in the first part of the questionnaire, they answered questions about TISS in the second part. At the end of the questionnaire, the participants were asked whether they wanted to participate in the interview. Those who wanted to participate were asked to share their social media usernames. This process and the qualitative data collection procedure took two months.

3.5.2. Qualitative Data Collection Procedures: Forty-one participants who completed the questionnaire agreed to participate in the interview. Ten interviews were done using an app called Discord (DC) in the form of voice chat, and the remaining thirty-one were conducted by messaging from various platforms such as WhatsApp and Twitter. At the beginning of the interview, each user was informed about the purpose and course of the interview, and their consent was retaken. Since some participants were reluctant to share their ideas in the beginning as they thought that this study was designed to reach false prejudices about gamers, they were informed about the purpose of the study a second time. Furthermore, the researcher tried to form a positive environment by informing the participants about her gaming background. They had also been assured that their names or answers would not be shared with third parties and

anonymity would be protected. Each interview session lasted an average of 5-10 minutes and was conducted in Turkish to make sure that participants felt comfortable while sharing their thoughts. Voice chat sessions were recorded, and their transcriptions were written by the researcher later. The chat history of other participants was copied and stored in a word processor along with the transcriptions. The researcher then translated the Turkish data into English for coding. Furthermore, each participant was given pseudonyms to ensure anonymity.

3.6. Data Analysis

The collected quantitative data was transferred to SPSS 27 for analysis. The first step for the tests to give correct results was to assign new values to the data of the items that require reverse coding by using SPSS. Then, the Shapiro-Wilk test was conducted to see if the data showed a normal distribution to make a choice between parametric and non-parametric tests. According to the results of the Shapiro-Wilk test, the p-value was <0.001. This value obtained showed that the data did not have a normal distribution. Thus, the non-parametric test, Mann Whitney U utilised to measure the effect of gender, story preference and game mode preferences on IS levels, while Kruskal Wallis tests were used to see if variables such as weekly game playing times, engagement in non-game activities and communication preferences affected students' IS level. Furthermore, in order to determine students' IS levels, the scoring criteria that can be seen in Table 3 were used.

Table 3

IS levels

Mean	Level
0 - 2.75	Low
2.76 - 3.75	Moderate
3.75 - 5.00	High

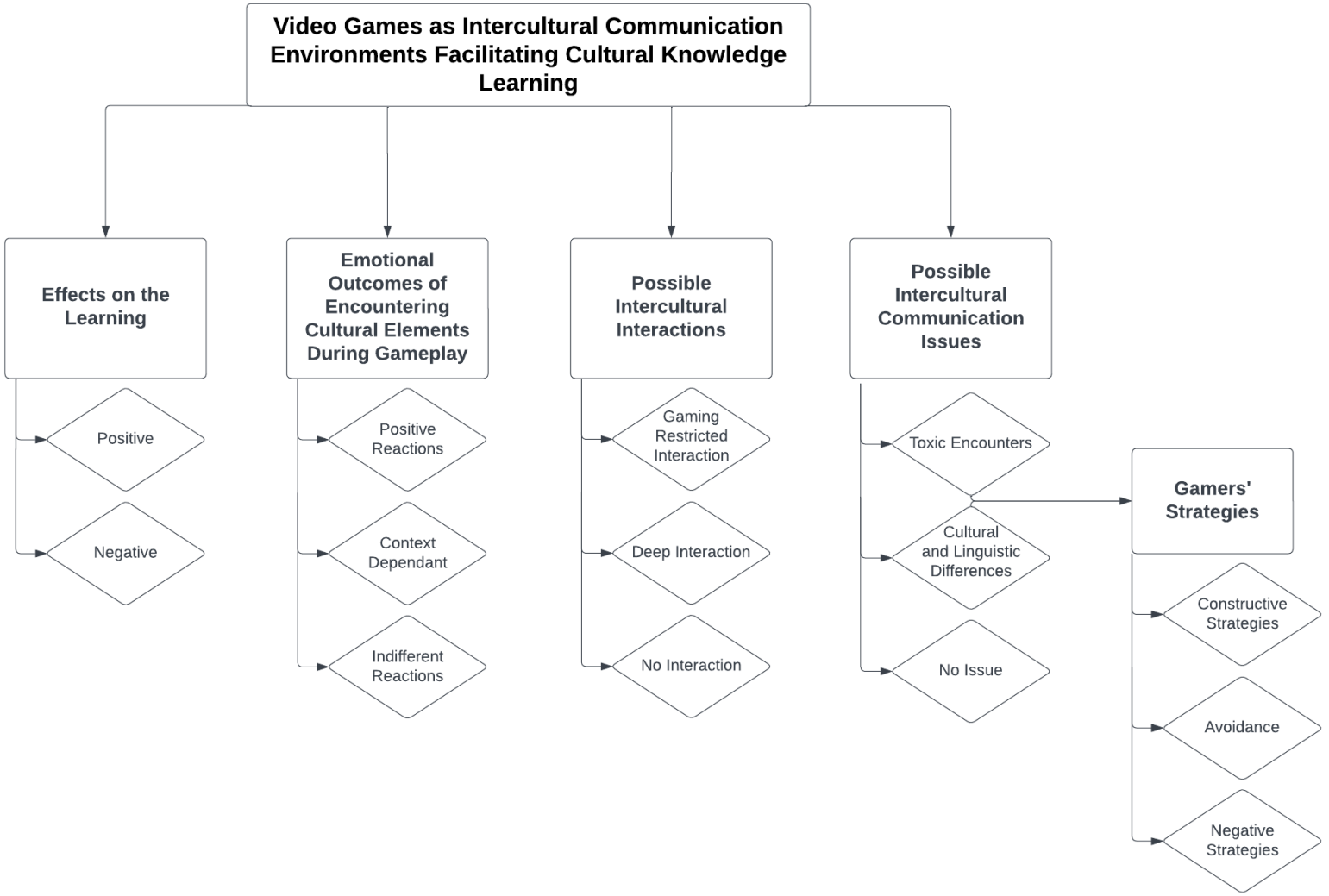
A semi-structured interview was conducted to learn about the players' ideas about learning of cultural knowledge from video games and the current state of video games as an intercultural environment. The qualitative data gathered from the interview sessions were analysed by utilising the content analysis method. According to Downe-Wambolt (1992), "Content analysis is a research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena" (p. 314). By applying the content analysis method, the common ideas in the participants' comments were identified and highlighted. According to Hsieh and Shannon (2005), when performing qualitative content analysis, codes known as categories can appear

during the analysis (inductive content analysis) or can be created with predetermined frameworks such as interview questions (directed content analysis). While the directed content analysis method was chosen for the first four interview questions, inductive content analysis was applied to the last question. The emerging themes as a result of the content analysis and the explanations on the topic were presented via excerpts from the interview data. Hsieh and Shannon (2005) also proposed the summative content analysis method, arguing that some keywords that frequently appear in the answers of the participants can be specified quantitatively. For this reason, the frequencies of the themes that emerged in the analysis are also shown in the tables.

Furthermore, to ensure the qualitative analysis' reliability, the researcher contacted two professionals from an ELT department who are knowledgeable about video games and asked them to code the data for intercoder reliability. Intercoder reliability, also known as the intercoder agreement, is a method to "the extent to which the different judges tend to assign exactly the same rating to each object" (Tinsley & Weiss, 2000, p. 98). Intercoder reliability plays an essential role in determining the validity and reliability of the content analysis, and low intercoder reliability can indicate that key themes uncovered in the analysis are flawed or out of logic (Mao, 2017). Thus, the invited coders were informed about the study and the coding scheme and 30% of the data were sent to them for intercoder agreement check. The coding of both coders was compared with the one made by the researcher, and the percentages of the agreement were calculated with Holsti's formula. The agreements were found to be 0.98 for the first coder and 0.90 for the second coder. The formula proposed by Holsti is one of the simplest methods that can be used to measure the intercoder agreement. In this formula, 0.0 corresponds to no agreement, while 1.0 indicates perfect agreement. (Holsti, 1970). The agreement rates obtained in this analysis show that both coders highly agreed with the researcher's coding scheme. The themes that emerged during the coding phase were visualised and presented in Figure 8 below.

Figure 8

Video Games as Intercultural Communication Environments Facilitating Cultural Knowledge Learning



CHAPTER IV

Results

This part of the study seeks answers to research questions. The quantitative and qualitative analysis results were presented in tables, and relevant explanations were provided.

4.1. What Is the Level of Intercultural Sensitivity of Undergraduate Students Playing Video Games?

This question aimed to measure the IS levels of gamer university students. The general IS levels and their sub-dimension scores are presented in Table 4.

Table 4

Gamer student's general IS levels and sub-dimension scores

ISS	N	Mean	SD
Respect for Cultural Differences	380	4.03	0.611
Interaction Enjoyment	380	4.00	0.815
Interaction Engagement	380	3.90	0.773
Interaction Attentiveness	380	3.56	0.871
Interaction Confidence	380	3.55	0.813
General IS	380	3.81	0.521

The mean scores of gamer participants' general IS and sub-dimension scores were measured by descriptive analysis. These analyses showed that the general IS scores of the students were high (MR=3.81). Similar results were found when the IS levels of the participants were examined on the basis of sub-dimensions. As can be seen in Table 3, the highest score belonged to the respect for cultural differences dimension (MR= 4.03). This dimension was followed by interaction enjoyment (MR=4.00), interaction engagement (MR=3.90), interaction attentiveness (MR= 3.56), and finally, interaction confidence (MR= 3.55). While the dimensions of respect for cultural differences, interaction enjoyment and interaction engagement were high, the levels of interaction attentiveness and interaction confidence were moderate.

Table 5

Gamer student's IS levels per item

Sub-Dimension	Item	Mean	SD	Frequencies (%)		
				Disagree	Neutral	Agree
Interaction Engagement	1. I enjoy interacting with people from different cultures.	4.05	1.090	11.6	8.4	80.0
	11. I tend to wait before forming an impression of culturally-distinct counterparts.	3.82	1.129	14.2	11.1	74.7
	13. I am open-minded to people from different cultures.	4.06	1.059	10.0	8.2	81.8
	21. I often give positive responses to my culturally different counterpart during our interaction.	3.92	1.029	10.3	15.0	86.4
	22. I avoid those situations where I will have to deal with culturally-distinct persons.	2.18	1.094	68.7	15.8	15.5
	23. I often show my culturally-distinct counterpart my	3.72	1.077	8.7	17.1	69.2

	understanding through verbal or non-verbal cues.					
	24. I have a feeling of enjoyment towards differences between my culturally-distinct counterpart and me.	3.92	1.107	11.4	15.5	73.2
Respect for Cultural Differences	2. I think people from other cultures are narrow-minded.	1.94	.925	78.4	15.5	6.1
	7. I don’t like to be with people from different cultures.	1.77	1.027	84.7	6.8	8.4
	8. I respect the values of people from different cultures.	4.19	1.113	10.2	6.6	83.2
	16. I respect the ways people from different cultures behave.	3.88	1.079	11.6	12.6	75.8
	18. I would not accept the opinions of people from different cultures.	1.75	.823	85.3	11.1	3.7
	20. I think my culture is better than other cultures.	2.40	1.225	57.6	23.7	18.7

Interaction Confidence	3. I am pretty sure of myself in interacting with people from different cultures.	3.53	1.058	17.7	23.7	58.6
	4. I find it very hard to talk in front of people from different cultures.	2.21	1.024	71.2	17.1	13.7
	5. I always know what to say when interacting with people from different cultures.	3.25	1.0429	25.0	30.8	45.2
	6. I can be as sociable as I want to be when interacting with people from different cultures.	3.51	1.102	19.0	22.4	58.7
	10. I feel confident when interacting with people from different cultures.	3.66	1.036	13.7	21.6	64.7
Interaction Enjoyment	9. I get upset easily when interacting with people from different cultures.	2.30	1.092	61	22.4	16.6
	12. I often get discouraged when I am with people from different cultures.	1.89	.893	80.3	12.9	6.8

	15. I often feel useless when interacting with people from different cultures.	1.77	.927	81.9	11.3	6.9
Interaction Attentiveness	14. I am very observant when interacting with people from different cultures.	3.93	1.174	13.5	13.7	72.9
	17. I try to obtain as much information as I can when interacting with people from different cultures.	3.87	1.108	13.4	13.9	72.6
	19. I am sensitive to my culturally-distinct counterpart's subtle meanings during our interaction.	2.87	1.274	41.0	20.8	38.1

For a more detailed analysis of the IS levels of gamer students, the answers given to the ISS with 24 questions were analysed on an item basis, and the results were presented in Table 5. In this table, which shows the means and standard deviations of the participants' answers, the titles strongly disagree and disagree and strongly agree and agree were presented under the headings of disagree and agree, respectively, to understand the frequencies better.

Descriptive analysis results revealed that students' IS levels were generally high. When examined in detail, 86.4% of the participants gave positive answers when they communicated with people from different cultures (item 21), 83.2% were respectful to other cultures (item 8), 81.8% were open-minded towards people from different cultures (item 13), and 80.0% of them enjoyed communicating with individuals from different cultures (item 1). On the other hand, when the disagreements were examined, it appeared that 85.3% of the participants disagreed with the statement that they did not accept the ideas of people from other cultures (item 18). Similarly, 84.7% disagreed with the statement that they avoid people from different cultures (item 7). 81.9% of the participants also rejected the statement that they felt useless in such communications (item 15), and 80.3% did not agree with the statement assuming that they felt less confident during interaction with people from different cultures.

4.2. Does the Gender of the Students Have a Significant Effect on Their Intercultural Sensitivity Levels?

In order to investigate whether there was a gender-related difference in the IS levels of university students playing video games, participants were asked to indicate their genders. The obtained data were analysed with the Mann-Whitney U test, which is one of the non-parametric tests. The results of this analysis can be seen in Table 6.

Table 6

IS levels of female and male students

	Gender	**N**	**Mean Rank**	**Sig.**
General IS Level	Female	96	202.98	0.198
	Male	284	186.28	
	Total	380		
Interaction Engagement	Female	96	219.84	0.002
	Male	284	180.58	
	Total	380		

Respect for Cultural Differences	Female	96	221.53	0.001
	Male	284	180.01	
	Total	380		
Interaction Confidence	Female	96	184.30	0.521
	Male	284	192.60	
	Total	380		
Interaction Enjoyment	Female	96	161.17	0.002
	Male	284	200.41	
	Total	380		
Interaction Attentiveness	Female	96	223.54	<0.001
	Male	284	179.33	
	Total	380		

The analysis showed no statistically significant gender-related difference between the general IS levels of the participants. Although there was no difference in general, five sub-dimensions were examined on the basis of gender, considering that there might be a difference in IS sub-dimensions. This analysis showed statistically significant differences in the dimension of interaction engagement (p=.002). Additionally, the mean scores illustrated that female students (MR= 219.84) had a higher score than male students (MR= 180.58). Another significant difference was found with respect to cultural differences dimension (p=.001). The mean scores illustrated that female students (MR=221.53) had a higher level of respect compared to male students (MR=180.01). On the other hand, the analysis showed no statistically significant difference between female and male students in the interaction confidence dimension (p=.521). Similarly, the analysis of mean scores showed that female (MR=184.30) and male students (MR=192.60) got almost similar scores. Another statistically significant difference was between the two groups of students in the interaction enjoyment dimension (p=.002). Unlike the other sub-dimensions, males (MR=200.41) showed higher satisfaction from intercultural communication than their female (MR=161.17) counterparts. One more difference was found in the interaction attentiveness levels of the two groups (p=<.001). Female students (MR=223.54) had a higher score than male students (MR=179.33).

4.3. Do Students' Intercultural Sensitivity Levels Vary According to Their Gaming Preferences?

This question aimed to determine whether various gaming preferences affected IS levels of the participants playing video games. Participants were asked to indicate how many hours they play video games in a week, whether they prefer playing games with or without narratives and single-player or multiplayer games the most, their preferred choice of communication and whether they chose attending affinity spaces. Mann-Whitney U and Kruskal Wallis tests were utilised since the data did not show normality. The analysis results were presented in tables.

4.3.1. Weekly Playing Time: The results of the analysis to find out whether there is a significant difference between the weekly playing times on the IS levels of the participants are given in Table 7.

Table 7

Weekly playing time and IS levels

	Time	N	Mean Rank	Sig.
General IS Level	Less than 30 hours	287	189.53	
	30-40 hours	55	184.35	
	40-50 hours	19	181.74	0.981
	50-60 hours	8	256.81	
	Over 60 hours	11	196.85	
	Total	380		
Interaction Engagement	Less than 30 hours	287	189.53	
	30-40 hours	55	184.35	
	40-50 hours	19	181.74	0.637
	50-60 hours	8	256.81	
	Over 60 hours	11	196.85	
	Total	380		
Respect for Cultural Differences	Less than 30 hours	287	194.04	
	30-40 hours	55	172.75	
	40-50 hours	19	168.32	0.443

	50-60 hours	8	239.13	
	Over 60 hours	11	170.90	
	Total	380		
Interaction Confidence	Less than 30 hours	287	190.65	
	30-40 hours	55	181.71	
	40-50 hours	19	200.87	0.886
	50-60 hours	8	216.63	
	Over 60 hours	11	174.95	
	Total	380		
Interaction Enjoyment	Less than 30 hours	287	184.56	
	30-40 hours	55	203.74	
	40-50 hours	19	211.53	0.412
	50-60 hours	8	208.19	
	Over 60 hours	11	215.00	
	Total	380		
Interaction Attentiveness	Less than 30 hours	287	191.57	
	30-40 hours	55	198.15	
	40-50 hours	19	164.55	0.649
	50-60 hours	8	167.63	
	Over 60 hours	11	166.45	
	Total	380		

Table 7 was presented to reveal whether participants' weekly playing time preferences created a difference in participants' IS levels. The Kruskal-Wallis test did not show a significant difference in general IS levels and sub-dimension scores ($p>.05$).

4.3.2. Games with vs without Narratives: Examination results regarding the choice of games with or without narrative on IS can be seen below (Table 8).

Table 8

Narrative choice and IS levels

	Narrative Preference	N	Mean Rank	Sig.
General IS Level	Games with Narrative	281	194.85	0.193
	Games without Narrative	99	178.15	
	Total	380		
Interaction Engagement	Games with Narrative	281	192.57	0.535
	Games without Narrative	99	184.63	
	Total	380		
Respect for Cultural Differences	Games with Narrative	281	194.84	0.193
	Games without Narrative	99	178.19	
	Total	380		
Interaction Confidence	Games with Narrative	281	191.29	0.813
	Games without Narrative	99	188.27	
	Total	380		
Interaction Enjoyment	Games with Narrative	281	190.34	0.962
	Games without Narrative	99	190.94	
	Total	380		
Interaction Attentiveness	Games with Narrative	281	197.33	0.039
	Games without Narrative	99	171.11	
	Total	380		

As seen in Table 8, the choice of games with or without a narrative did not cause a statistically significant difference in the general IS levels of participants (p=.193). In a more detailed analysis of this research question, the sub-dimensions of IS were examined just like in other questions. The Mann-Whitney U test performed indicated no statistically significant difference between the two groups in the dimensions of interaction engagement (p=.535), respect for cultural differences (p=.193), interaction confidence (p=.813) and interaction

enjoyment (p=.962). However, there was a difference between the two groups in the dimension of interaction attentiveness (p=.039). After looking at the means, it was found that participants who preferred playing games with narratives (MR=197.33) had higher levels of attentiveness than participants who chose games without narratives (MR=171.11).

4.3.3. Single-player vs Multiplayer Games: Mann-Whitney U test results on whether single-player and multiplayer game preferences have an effect on IS levels are given below (Table 9).

Table 9

Game Mode Preference and IS Levels

	Game Mode Preference	N	Mean Rank	Sig.
General IS Level	Single-player Games	281	194.85	0.896
	Multiplayer Games	99	178.15	
	Total	380		
Interaction Engagement	Single-player Games	281	192.46	0.610
	Multiplayer Games	99	186.31	
	Total	380		
Respect for Cultural Difference	Single-player Games	281	197.03	0.089
	Multiplayer Games	99	176.53	
	Total	380		
Interaction Confidence	Single-player Games	281	187.51	0.436
	Multiplayer Games	99	196.89	
	Total	380		
Interaction Enjoyment	Single-player Games	281	181.17	0.014
	Multiplayer Games	99	210.48	
	Total	380		

Interaction Attentiveness	Single-player Games	281	173.68	0.039
	Multiplayer Games	99	198.36	
	Total	380		

Table 9 was to indicate whether the choice of game mode affected participants' overall IS levels. Analysis revealed no statistically significant difference in IS levels in these two groups (p=0.896). For this reason, the data was re-examined by descending into sub-dimensions. According to the results, game mode selection did not create statistically significant differences in the sub-dimensions of interaction engagement, respect for cultural differences and interaction confidence (p>.05). On the other hand, a distinction was found in the dimensions of interaction enjoyment (p=.14) and interaction attentiveness (p=.39). When the mean ranks were examined, it was concluded that participants who preferred multiplayer games (MR=210.48) enjoyed intercultural communication more than participants who preferred single-player games (MR=181.17) and participants who play multiplayer games (MR=198.36) were more careful in their communication than participants who prefer single-player games (MR=173.68) in the context of intercultural communication.

4.3.4. Communication: It was asked whether the participants communicate while playing the game, and if they do, which type of communication they prefer. The analysis results for this question can be seen in Table 10.

Table 10

Preferred communication modes and IS levels

	Communication Mode Preference	**N**	**Mean Rank**	**Sig.**
General IS Level	No communication	62	146.60	
	Written communication	226	186.33	<0.001
	Voice communication	92	230.32	
	Total	380		
Interaction Engagement	No communication	62	137.31	
	Written communication	226	192.84	<0.001

	Voice communication	92	220.60	
	Total	380		
Respect for Cultural Differences	No communication	62	171.48	
	Written communication	226	192.62	0.301
	Voice communication	92	198.10	
	Total	380		
Interaction Confidence	No communication	62	142.23	
	Written communication	226	184.85	<0.001
	Voice communication	92	236.91	
	Total	380		
Interaction Enjoyment	No communication	62	174.77	
	Written communication	226	176.17	<0.001
	Voice communication	92	236.30	
	Total	380		
Interaction Attentiveness	No communication	62	183.83	
	Written communication	226	194.77	0.650
	Voice communication	92	184.50	
	Total	380		

According to the results in Table 10, communication preferences caused a statistically significant difference in the general IS levels of gamer students (p=<.001). To make sense of this difference, mean ranks were examined. According to this analysis, the highest overall IS level belongs to the participants who establish voice communication (MR=230.32). This group was followed by participants who preferred written communication (MR=186.33). The general

IS scores of the participants who did not prefer engaging in any communication (MR=146.60) were found to be the lowest. To provide a more detailed answer to this research question, the sub-dimensions of IS were examined, and the data were analysed with the Kruskal-Wallis test. A statistically significant difference was found in the dimension of interaction engagement (p<.001). Like the general IS level, the lowest score was seen in the no communication group (MR=137.31). This group was followed by the written communication group (MR=192.84) and the voice communication (MR=220.60) group. On the other hand, no difference was observed with respect for cultural differences dimension (p=.301). Another difference emerged in the dimension of interaction confidence (p<.001). Groups were ranked from lowest to highest as no communication (MR=142.23), written communication (MR=184.85), and voice communication (MR=236.91). Similarly, a significant difference was found in the dimension of Interaction Enjoyment (p<.001). Like in other dimensions, the highest levels belonged to the voice communication group (MR=236.30). This group was followed by the written communication (MR=176.17) and no communication (MR=174.77) groups, respectively. Finally, no statistically significant difference was found in interaction attentiveness (p=.650).

4.3.5. Participation in Affinity Spaces: It was thought that participation in affinity spaces associated also has an impact on IS levels, and the participants were asked whether they participated in affinity spaces. Analysis results for this question are presented in the table below (Table 11).

Table 11

Affinity space participation and IS levels

	Activity Type	N	Mean Rank	Sig.
General IS	No Participation	33	176.97	0.459
	Participation	347	191.79	
	Total	380		
Interaction Engagement	No Participation	33	168.42	0.226
	Participation	347	192.60	
	Total	380		
Respect for Cultural Differences	No Participation	33	185.50	0.784
	Participation	347	190.98	

	Total	380		
Interaction Confidence	No Participation	33	200.08	0.599
	Participation	347	189.59	
	Total	380		
Interaction Enjoyment	No Participation	33	205.74	0.398
	Participation	347	189.05	
	Total	380		
Interaction Attentiveness	No Participation	33	157.52	0.068
	Participation	347	193.64	
	Total	380		

The results in Table 11 presented that engagement with affinity spaces did not cause any significant difference in IS levels ($p>.05$).

4.4. What Are the Students' Views on Learning Cultural Knowledge from Games and Video Games as Environments for Engagement in Intercultural Communication?

An interview protocol consisting of four questions was applied to 41 participants to find answers to this question. The transcriptions of the responses obtained in the interview were uploaded to the program called NVivo, and content analysis was applied. These interview questions and answers are presented in this section.

The first interview question aimed to reveal the opinions of gamer students about whether the games they play could benefit the learning of cultural knowledge. Excerpts of the answers given by the participants to this question can be seen in Table 12

Table 12

Effects on the learning of cultural knowledge

Interview Question	Theme	N	Student Answer
What are your views on learning cultural knowledge from video games?	Positive	38	*"It definitely has an important place. I can say that games provide me with some historical events and cultural knowledge."* **-P29**

		"Although introducing different cultures is not the main purpose, because of their content, video games lead the people who play the game to get to know different cultures." **-P30**
Negative	3	*" I don't think video games make a cultural contribution to people."* **-P15** *"I think they... (games) make learning more difficult."* **-P13**
Total	41	

When Table 12 was examined, it was concluded that the majority of the participants thought that video games could be helpful in learning cultural knowledge. When these comments about the benefits of the games in this regard were examined in detail, opinions were reached on what aspects the players benefit from video games.

> "A product produced in a specific geography, including video games, necessarily contains the cultural information of that region. Therefore, I think the possibility of the acquisition of cultural knowledge from video games is relatively high." **-P1**
>
> "Although video games are imaginary platforms, they carry the developer team's cultural traces, and people curious about different cultures do not miss these details. It encourages curious people to research and gain knowledge." **-P2**
>
> "Although most games contain fictional environments and worlds, the materials they are often inspired from are real cultures and languages. For example, while playing Witcher, you can learn about Slavic beliefs, or when you go to Genshin's Liyue region, you can be exposed to an enormous flow of information about Chinese culture and beliefs. The motifs, names, and myths on the clothes are reflections of real cultures. If you are curious about the subject, a Google search can offer you an in-depth analysis of this subject." **-P3**

When the above participant comments were examined, it was seen that all three participants agreed that video games are fictional productions but that they carry traces of authentic cultures and that these games can contribute to the learning of cultural knowledge.

Especially in the detailed description of P3, examples of how cultural elements can be included in the games can be seen. Another critical point was the fact that this learning could pass the boundaries of video games. P2 and P3 stated that the players could learn cultural information about the cultural elements they encountered in the games by researching.

Another thing that the participants emphasised is the communication possibilities created by the games. Sample comments on this subject can be seen below.

> "Thanks to games, I can learn about the cultures of countries I would not be able to visit in real life." **-P4**
>
> "The cheapest and easiest way to get to know different cultures in a country like Turkey with a lousy economy." **-P5**
>
> "Thanks to video games, I have seen countries I could never physically go to, especially if we talk about games that take place not in a futuristic age but in a period close to today." **-P6**

All three participants focused on the power of the games to create intercultural occurrences by going beyond physical boundaries. They think that countries and cultures they cannot visit can be seen virtually by playing games. However, the participant has mentioned that this is possible with games that reflect today's cultures.

Another benefit that was emphasised is the contribution of video games to language acquisition. The participants' opinions on this subject can be seen in the two comments below.

> "I am of the opinion that video games play an important role not only in the learning of culture but also in the acquisition of foreign languages, and as long as this situation lasts with mutual respect, I think that it contributes to the personal and cognitive development of individuals." **-P7**
>
> "Especially in multi-player games, communicating in English can make intercultural interaction both fun and informative. Sometimes I try to communicate more with people, even if I get nervous when speaking English." **-P10**

Some participants tried to explain the effect of playing games on acquiring cultural knowledge with game types.

> "I generally think cultural information exchange happens more in multiplayer games. Because more people means more possibility of having cultural exchanges"**-P9**
>
> "Especially in multiplayer games, it is very easy to obtain information as we can communicate with people from different cultures. Apart from that, in single-player games, information can also be obtained from cultural elements that appear in the game." **-P8**

> “I usually watch games with stories from streamers, but I think I gain more cultural knowledge from these games. Because I see a lifestyle and things different from mine, I think games with stories are more suitable for cultural learning.” **-P11**
>
> “Video games, especially games with a story, are very valuable for me to interact with different cultures.” **-P12**

The participants, whose comments can be seen above, tried to explain the impact of playing games on cultural exchange based on the comparisons between single-player and multi-player games and games with or without narratives. P9 has stated that multiplayer online games are the best for cultural exchanges because they host players from different cultural backgrounds. P8, on the other hand, argued that multi-player games could contribute to the learning of cultural knowledge by having individuals from different cultures, while single-player games included different cultural elements. On the other hand, P11 and P12 think that games with narratives can be more effective in the transfer of cultural knowledge. Particularly, P12 mentioned that watching the streamers who play games with stories can be helpful in observing and learning about other cultures.

Although there are not many, some participants think that video games do not contribute to the learning of cultural knowledge.

> “Video games are often inspired by real cultures, but most of the time, they tend to reflect the developers' personal beliefs about culture. In doing so, I think they make learning more difficult.” **-P13**
>
> “You won't learn much because they (developers) usually show their good side or not at all.” **-P14**
>
> “I don't think video games make a cultural contribution to people.” **-P15**

In all three comments above, there are opinions that video games do not contribute to the learning of cultural knowledge. Although P13 acknowledges that there are cultural elements in the games, he is of the opinion that the game developers manipulate these elements and that the correct cultural representations are not given, thus making it challenging to learn cultural knowledge. P14 has a similar view, stating that developers hinder the cultural knowledge learning process by reflecting only the positive things about their cultures and ignoring others.

The second interview question was asked to find out how gamer students feel about the cultural elements they encounter while playing video games. The answers given to this question are exemplified in the table below.

Table 13

Emotional outcomes of encountering cultural elements during gameplay

Interview Question	Theme	N	Student Answer
How do you feel when you encounter different cultural elements while playing video games?	Positive Reactions	30	*"I become curious, and my desire to learn more about it (the cultural element) increases."* **-P4**
			"I find them interesting and wonder what kind of a contribution it (the cultural element) has on the game. This curiosity leads me to research that cultural element." **-P20**
	Reactions Depending on the Context	6	*"If something catches my eye, I get curious and start researching it. If it's not, I don't feel anything, and I act as if it's something usual and continue to play the game."* **-P1**
			"I enjoy games with stories based on Scandinavian mythology… My enjoyment increases directly to how similar the culture is to mine." **-P25**
	Indifferent Reactions	5	*"I don't feel much."* **-P11**
			"I usually don't pay attention and forget quickly." **-P31**
	Total	41	

As seen from the table above, the analysis of participants' answers to the second interview question resulted in three themes. These are positive reactions, reactions depending on the context and indifferent reactions. Above, all three themes are described with respective interview excerpts.

> "I get excited when I meet an individual from a different culture in games, but this is not like panicking but happiness. I support the view that every person has a different

story and is the main character of different books, so getting to know other people and cultures has always been exciting for me." -P7

"I am a person who likes to travel and go to museums in real life. I like to get to know new places and cultures, so I am happy when I encounter different and unique cultural elements in games. I have had a new experience." -P28

The majority of the participants appear to be experiencing different cultural elements and communicating with people from various cultures while playing video games. Moreover, this enjoyment leads to a higher level of curiosity, resulting in learning more about other cultures. In addition, in both answers, it is seen that these players are open to novelty and ready to learn even in their everyday lives. That is, video games become a tool to satisfy their desire to learn.

"It depends on my interests... If I see a country or culture that interests me in a history game, I enjoy and follow it with curiosity. I usually get bored when I see things that don't interest me." **-P18**

"As long as these cultural elements contribute to my knowledge of general culture, I like it very much. The absurd ones are engraved in my mind to be told in a friendly environment. If it is a different cultural element in terms of belief, it usually does not attract my attention." **-P6**

In the second theme, reactions depending on the context, as the name suggests, participants mentioned that the cultural elements in the games give them a pleasure as long as they are within the boundaries of their interests. For example, while P18 reported encountering cultural items that did not interest him or caused him to get bored, P6 divided cultural items into those he liked and those he found absurd. He said he shared what he found absurd with his friends. On the other hand, he said that subjects such as beliefs are not generally within his area of interest, so it can be said that he does not feel any pleasure when he encounters such elements during his gameplay.

"Since I got into playing video games at a very young age, I am very used to cultural elements now. Maybe I just don't notice." **-P27**

"Since I have been playing video games for a long time, I now feel neutral when encountering elements of different cultures. There aren't left many popular cultural elements that we (gamers) have not seen, as most video game elements are developed with specific patterns. **-P26**

The excerpts from the student responses above describe the third theme, indifferent reactions. Both participants mention that they no longer react to the cultural elements they

encounter because they have been playing video games since a young age. While P27 said he is no longer aware of cultural elements, P26 claimed that each video game is generally developed on similar foundations. Therefore, they contain very few unknown cultural elements, and he became indifferent to them over time.

The third interview question aimed to obtain information about whether the participants had any intercultural interaction in the context of video games. The answers given by the participants to this question were presented in Table 13 in quantitative form, along with some sample comments.

Table 14

Possible intercultural interactions

Interview Question	Theme	N	Student Answer
Have you ever had international communication experience in the context of video games? If so, with whom and how?	Gaming-Restricted Interaction	26	*"There were many people I met and communicated with while playing games."* **-P34** *"I contacted other players many times when I couldn't solve something or needed a teammate in online games."* **-P22**
	Deep Interaction	13	*"Yes, I made friends. I met many people on the discord channels of various games I played and made friends I keep in touch with for years."* **-P7** *"Although he (another gamer) lives abroad, we had the opportunity to meet as our friendship progressed over time. We both stopped*

			playing the game, but our interaction continued." **-P17**
	No Interaction	2	*"I have never had such communication."* **-P32** *"That didn't happen."* **-P33**
Total		40	

When the answers given by the participants to this interview question were examined, three different intercultural experience types were encountered. These are encoded as gaming-restricted interactions, deep interactions, and no interaction, respectively. While the content analysis revealed that the most experienced form of communication was gaming-restricted interaction, it was seen that the number of participants who did not communicate during the game was only two. Interaction themes are explained in order with excerpts below.

> "I had the chance to join international battles in Pokemon. Since the platform we attended didn't give us many opportunities in terms of communication, the communication was quite limited." **-P35**
>
> "I communicate with others when helping people who are higher (has higher levels) than me." **-P15**

Student responses given to this interview question provided information about the nature of gaming-restricted interaction. Communication in this category is mainly done to complete game quests, help each other and become stronger and better players. Even though the rules of the game heavily limited this type of interaction, there also have been cultural exchanges between the players. The following excerpts illustrate such discussions.

> "I experienced this, especially in MMORPG games, but they were short-term ones. We would ask questions about our countries and try to get along during the quests." **-P19**
>
> "In Don't Starve Together... Although the conversation is a gameplay-focused one when the game is played for a long time, people start to ask questions about personal lives and cultural prejudices they had before." **-P25**

Although they were gameplay-directed, in the comments of both participants, there were indications that the players were in cultural exchanges by asking questions about each other's countries to some extent. On the other hand, it has been reported that there were also participants who engaged in deep interactions, although their number was almost half of the ones who engaged in gaming-restricted interactions. Student gamers formed long-term

friendships in such exchanges, where they intensely shared intercultural knowledge. Below are student comments exemplifying such intercultural experiences.

> "I had a friendship experience with a 17-year-old Egyptian high school student where we played together and continued to talk after we quit the game. While playing games, we often stopped and texted using the in-game chat. We talked a lot about family, school problems and social problems. This experience made me realise that we have very similar problems as young people, albeit in a different culture. But I have also seen these common problems occur in different ways in different cultures."-**P20.**
>
> "While reading an article on Total War: Shogun 2, I met a Korean who made references to Japanese mythology. We had a very informative conversation with him about Turkish mythology. Later, a friend of his living in Chile joined our group. He was from a shamanistic family. This time, we made comparisons with Turkish shamanism. Finally, 13 people gathered, and we discussed our shamanistic beliefs as people from different countries and cultures. I did not want to make friends from other countries at that time, but now I am studying international relations." **-P2**

In the example of P20, players established close friendship ties in both in-game and out-of-game interactions. She learned about her friend's culture by sharing family, education and social issues and gained awareness by making intercultural comparisons. Similarly, participant P2 had a chat experience that extended the boundaries of the game. Thanks to the phenomenon of shamanism, a cultural element that he saw in the game, this participant found other players from different cultures interested in this subject through social media, established a small community with his friends and conducted virtual panels on cultural differences and similarities. In addition to all these, P2 also mentioned that this experience had guided his choice of job in real life.

Another point to be considered in the context of interactions participants establish is their preferred communication channels.

> "Since I usually prefer single-player games, I do not communicate much during the game. But apart from the game, I communicate a lot with people from different cultures who follow the same game on social media." **-P4**
>
> "I joined the Discord (DC) server of a game established by an artist whose fan art I follow on social media and made many friends there. It (the friendship) continued after I left that server." **-P16**

When the above two interpretations are examined, it is seen that intercultural experiences can also occur outside the game's boundaries. For example, the first player can

communicate via social media with other players, called "fans", who love the games they play. Similarly, participant P16 joined the community of a content producer by using the chat application DC and made friends with other players from different cultures there.

The fourth interview question aimed to determine whether the participants experienced intercultural communication issues during their game experiences. This question also seeks to answer whether video game environments are appropriate contexts for intercultural sensitivity and intercultural knowledge learning. Some excerpts of the answers given by the informants to this question can be seen in Table 14 below.

Table 15

Possible intercultural communication issues

Interview Question	Theme	N	Student Answer
Have you encountered any intercultural communication issues while playing games? Describe them if you have.	Toxic Encounters	21	*"Things get worse when some people from different backgrounds display racist attitudes."* **-P36**
	Cultural and Linguistic Differences		*"I usually have problems with my English knowledge. Since I don't know the language enough, I have difficulty understanding."* **-P12**
	No Issue	20	*"No, such a thing doesn't happen."* **-P37** *"I have never argued with people from other cultures."* **-P5**
	Total	41	

As can be seen in the table above, it was determined that the numbers of those who have intercultural communication issues while playing video games and those who do not are very close to each other. Detailed descriptions of the game experiences of gamer students can be seen in interview excerpts.

> “I have not had a problem because the people playing these games are usually young. Since they grew up with social media and globalisation, I think there are not many problems apart from certain stereotypes and prejudices.” **-P22**
>
> “I have yet to encounter any problems so far. This may be because the environments I enter are decent, and people respect each other.” **-P7**

When the excerpts from the participants' answers were examined, it was seen that some participants did not encounter any intercultural communication issues while playing the game. Although they have different opinions about this, they stated that the gaming environments they participate in are the reasons for this positive communication. For example, P22 argued that social media and globalisation reduced the intercultural communication issues during the game to the level of certain stereotypes and prejudices so that there is not much of a problem anymore. On the other hand, P7 stated that people in virtual environments tend to show respect for each other.

In addition to the positive intercultural experiences, negative ones also occurred while playing the games. In the interview, the participants complained about the intercultural conflicts they experienced. Below are excerpts showing the troubles of the participants.

> “As a Turk, unfortunately, I come across very negative and prejudiced comments. Especially western players, for some reason, see us as dark-skinned people who live in deserts, ride camels, and speak Arabic. However, I am a fair-skinned person residing at the foot of a green mountain. They are unaware of Anatolian history, culture, and genetic diversity. When we talk about our culture, they object by saying, "No, it's not like that". **-P3**
>
> “I think most of these problems are based on misogyny or religion. Whenever an argument broke out, the male players would immediately respond to me, saying things like, "Go to the kitchen, serve your husband. Women are terrible players". The situation would worsen if I told them which country I am from.” **-P23**
>
> “In this regard, I have problems with the players we usually describe as toxic. Toxic people have no language, religion, or race. That's why I don't target any specific country or culture. If a foreign and toxic person stumbles upon the game session and finds out I am Turkish, they can sometimes use hate speech.” **-P6**

When the participant comments were examined, traces of some behaviours that are considered problematic were found. For example, while playing games, P3 came across racist discourses based on ethnic identity and stereotypes. P23, on the other hand, has been subjected to sexist behaviour. Since she is female, the other players harass and disturb her during her

gameplay. Just like P3, she also came across some racist statements. P6 commented on the source of problematic behaviours. According to him, the group he calls toxic can be from any social group, regardless of race and religion. Similarly, this participant was also faced with hate speech.

The issues experienced in the games were not only caused by racism and sexism. In the excerpts below, there are comments for some other situations that make intercultural communication difficult.

> "Sometimes I find that people from different cultures understand things differently than I do. For example, a European person's ideas about romantic relationships sometimes do not fit my ideas." **-P4**

> "It is almost impossible to communicate with languages other than English. We use English as the common language, but when both parties are not native speakers, the possibility of occurrence of a misunderstanding increase." **-P24**

P4 thinks that cultural differences make understanding other players and their ways of thinking difficult. P24 drew attention to language differences believing that not knowing the language causes issues and breakdowns in understanding and communicating. He mentioned that misunderstandings could occur if both parties are not native speakers of English.

In the continuation of this interview question, the question of what kind of strategies they developed for the issues they encountered was asked of the participants. In the interview, the participants stated only 25 strategies. The strategies mentioned by the participants in their comments can be seen in the table below.

Table 16

Gamers' strategies

Interview Question	Theme	N	Student Answer
If you encounter any intercultural communication issues while playing video games, how do you overcome them?	Constructive Strategies	12	*"I am trying to learn the language at a better level."* **-P12**
			"When I encounter cultural elements, I think I may have misunderstood, I try to get more information by researching." **-P38**

		"In such situations, I usually try to be understanding and, if possible, explain my culture and perspective to them (other players)." **-P4**
Avoidance	7	*"Now, I stay away from such discussions because whatever I say is futile. They (the other players) don't believe me."* **-P3** *"My friends and I are used to it, so we usually don't react. Frankly, there is no need to argue with someone you meet online."* **-P27**
Negative Strategies	6	*"If they don't understand, I'll fight. I'm not Jesus Christ. I don't have to forgive."* **-P20** *"You had to hide that you were Turkish… When I played with Russian players, I would also hide that I was a woman."* **-P40** *"I leave the team to find another one."* **-P25**
Total	25	

When the participants' strategies for the issues they encountered during their gaming experiences were examined, it was seen that they preferred constructive strategies the most. These strategies include constructive behaviours such as learning English, the lingua franca of the games, researching the cultural differences that confuse them, and trying to settle the conflict by communicating. The other common strategy suggested by the participants is the avoidance of the issues. Participants in this group remain passive rather than giving constructive or negative reactions. Although there is not much difference in number, the least preferred method is negative strategies. These strategies include various sub-strategies, such as fighting

verbally with other players, hiding ethnic and gender identities that cause intercultural conflict, and changing the problematic environment.

CHAPTER 5

Discussion, Conclusion and Suggestions

5.1. Discussion

In this chapter, the results obtained through quantitative and qualitative analyses are sequentially presented below the headings of related research questions. The findings have been discussed and illustrated in light of previous research available in the literature. Furthermore, definite judgments have been avoided regarding the possible reasons behind the results.

5.1.1. What is the Level of Intercultural Sensitivity of Undergraduate Students Playing Video Games?: The first research question aimed to measure the intercultural sensitivity levels of undergraduate students who play video games. The participants' responses to the Turkish intercultural sensitivity scale (Bulduk et al., 2011) were subjected to descriptive analysis to determine their overall IS levels and sub-dimensions (Table 4). The analysis revealed that the students had a high level of intercultural sensitivity, with a mean score of 3.81. When examining the sub-dimensions, it was found that the levels of respect for cultural differences (MR= 4.03), interaction enjoyment (MR=4.00), and interaction engagement (MR=3.90) were high. On the other hand, the levels of interaction attentiveness (MR= 3.56) and interaction confidence (MR= 3.55) were moderate. Upon further examination of the ISS items (Table 5), it was observed that certain items (items 1, 7, 8, 13, 15, 18, and 21) indicated significantly higher levels compared to others. According to this analysis, the university students showed a strong willingness to communicate and were open-minded towards individuals from different cultures. Additionally, they demonstrated respect for others' cultures.

The results obtained from the analysis of this research question are consistent with some previous studies in the literature (Balcıoğlu & Bekir, 2014; Bosuwon, 2017; Chen & Hu, 2023; Demir & Kiran, 2016). For example, Demir and Kiran (2016) found that university students majoring in an English language teaching (ELT) department exhibited high levels of IS. Similarly, Balcıoğlu and Bekir (2014) reported high IS levels among undergraduate communication students. In Mao's study (2022) with 132 university students, although the IS sub-dimensions were at a moderate level, the respect for cultural differences dimension was found to be the highest, similar to the findings of this study.

Chen and Hu (2023) conducted a study with 375 undergraduate students studying in a culturally diverse region in China, using an adaptation of Chen and Starosta's intercultural sensitivity scale (ISS). They reported high levels of IS among university students. However, the levels of interaction confidence and interaction enjoyment were found to be moderate, in contrast to the other dimensions. Chen and Hu suggested that students' exposure to learning and

working with individuals from different cultures in a multicultural environment filled with cultural elements might contribute to the development of their IS levels. They also explained the lower levels of interaction confidence and interaction enjoyment compared to other dimensions, with students losing their confidence due to poor language skills and losing interest in communication consequently.

Bosuwon (2017) measured the IS levels of 269 international undergraduate students studying in different departments of private and state universities using Chen and Starosta's (2000) ISS. The IS levels of the students in Bosuwon's study were found to be high, similar to the IS levels of the gamer students in this study. When examining the sub-dimensions, the levels of interaction engagement, respect for cultural differences, and interaction confidence were found to be high, while the levels of interaction enjoyment and interaction attentiveness were moderate. The only difference between the two studies was observed in the dimensions of interaction enjoyment and interaction confidence. While interaction confidence was found to be high among university students in a real-life international context, interaction enjoyment was found to be high in the context of video games.

There are studies in the literature that indicate different results regarding the overall IS levels of students compared to the findings of this study. Şekerci and Doğan (2020) stated that the IS levels of 387 students studying in the field of primary school education were at a moderate level, and they suggested that this could be attributed to the frequency of communication with individuals from different cultures. Similarly, Liu (2022) found that 439 bilingual undergraduates had moderate levels of IS. A similar result was observed in Akın's (2016) study, which revealed that Turkish language teaching students had moderate levels of IS. On the other hand, Nameni and Dowlatabadi (2019) measured the IS levels of 400 medical students from four different ethnicities (Fars, Turkish, Kurdish, and Lor) using Chen and Starosta's ISS (2000). The analyses showed that the IS levels of the students were moderate, with the lowest level observed among Lor students and the highest among Turkish students.

In the studies mentioned above, the overall IS levels of university students were generally high. When looking at these studies, it can be inferred that the intercultural characteristics of the environments in which students interact may have an impact on their IS levels, especially in terms of interaction attentiveness, interaction confidence, and intercultural enjoyment (Bosuwon, 2017; Chen & Hui, 2023). However, examining overall IS levels is insufficient to explain the relationship between IS and video games. Thus, participants' IS levels were analysed according to different gaming preferences, and the results were discussed with respective research questions.

5.1.2. Does the Gender of the Students Have a Significant Effect on Their Intercultural Sensitivity Levels?: It has been hypothesised that various variables may lead to significant differences in the IS levels of university students who play video games. One of these variables is gender. Therefore, participants were requested to indicate their gender. The analyses revealed no significant difference in the overall IS levels of students based on gender (Table 6). However, some differences were observed in IS sub-dimensions. Female students scored higher than male students in the dimensions of interaction engagement ($p=.002$, $MR^f= 219.84$, $MR^m= 180.58$), respect for cultural differences ($p=.001$, $MR^f=221.53$, $MR^m=180.01$), and interaction attentiveness ($p<0.001$, $MR^f= 223.54$, $MR^m= 179.33$). On the other hand, the analysis showed a statistically significant difference between the two groups of students in terms of interaction enjoyment in favour of male students ($p=.002$, $MR^m=200.41$, $MR^f=161.17$). However, no significant difference was found between the two genders in the interaction confidence dimension ($p=.521$, $MR^f=184.30$, $MR^m=192.60$).

Various studies in the literature yield similar results to the findings of the current study (Adili & Xhambazi, 2021; Demir & Kiran, 2016; Erdoğan & Okumuşlar, 2020; Kuluşaklı, 2020). For example, in Kuluşaklı's (2020) study, the IS levels of 60 tourism students were measured using an adaptation of Chen and Starosta's (2000) ISS, and the impact of various variables on IS was examined. The analyses did not show any significant differences in IS levels of the students. In their study with 484 prospective English language teachers, Demir and Kiran (2016) also investigated whether IS levels changed according to students' genders using the ISS (Chen & Starosta, 2000). No statistically significant difference was found between the two genders. Similarly, Erdoğan and Okumuşlar (2020) measured the IS of theology department students using the ISS (Chen & Starosta, 2000), and no gender-related difference was found in general IS levels. Adili and Xhambazi (2021) were among those who believed that gender could create a difference in IS levels. Interpreting the intercultural sensitivity index on the framework of the developmental model of intercultural sensitivity (1993), Adili and Xhambazi showed that there was only a difference in favour of males in low levels of IS among 217 primary school teachers. On the other hand, no significant statistical difference was found between the two genders at high IS levels.

Another study aimed at measuring the impact of gender on IS was conducted by Emin (2021). In this study, which involved 210 English language teaching students, Emin stated that there was no difference in the overall IS levels based on gender. Choosing to conduct a sub-theme level analysis to examine the topic in more detail, Emin later reported that female students showed more respect for different cultures compared to male students. This finding in

Emin's thesis is similar to the result of the current study, which indicates that female students are more respectful towards cultural differences.

The findings in this thesis closely align with a study by Tompkins et al. (2017). This study explored the impact of gender on study-abroad participation rates and intercultural competence levels, including IS, which is a prerequisite for intercultural competence. In this study with 2490 undergraduate students, female students scored higher than male students in overall IS levels. Although this result does not fully coincide with the current study when looking at the IS dimensions, parallels to the current study were found. It was seen that women scored higher than men in interaction engagement, respect for cultural differences, and interaction attentiveness dimensions. Similarly, just like in the current study, no statistically significant difference was found between the two genders in the interaction confidence dimension. However, unlike the current study, no difference was observed in the interaction enjoyment dimension. According to Tompkins et al. (2017), women are more open to cultural differences and more willing to learn.

Coffey et al. (2013) conducted an experimental study in a virtual reality environment titled “Second China”, and a web environment investigated the relationship between gender and IS. Responses of 159 undergraduate students to ISS (Chen & Starosta, 2000) were analysed, and significant differences were seen in IS dimensions. When the interaction enjoyment dimension was examined, it was found that men scored higher than women. On the other hand, it was reported that female students were prominent in the interaction attentiveness dimension.

It is argued that women are more empathetic towards cultural differences and people from other cultures, and therefore, they engage more in intercultural interactions (Cundiff et al., 2009; Holm et al., 2009; Nieto & Booth, 2010). It is thought that this may have led to female students in the current study scoring higher in interaction engagement, respect for cultural differences, and interaction attentiveness dimensions. On the other hand, men scoring higher than women in the interaction enjoyment dimension can be explained in terms of the issues women face in video games. Studies focusing on video games show that female players avoid communication in games by hiding their identity or not engaging in communication due to harassment from male players, which is often labelled as toxic gamers (Fox & Tang, 2016; Ballard & Welch, 2015; Brehm, 2013; Richard, 2017). The perception of women as invaders rather than participants in video games and the acceptance of video games as male-dominated environments can expose female players to sexist behaviours (Taylor, 2009). It is thought that this may be related to the lower interaction engagement scores of females (Jenson & de Castell, 2010).

5.1.3. Do Students' Intercultural Sensitivity Levels Vary According to Their Gaming Preferences?: The third question in the study aimed to investigate the impact of students' gaming preferences on their intercultural sensitivity levels. The analysis of each preference was discussed in the related subheading.

5.1.3.1. Weekly Playing Time: Participants were asked how many hours they played games per week. The responses were categorised into five groups: less than 30 hours, 30-40 hours, 40-50 hours, 50-60 hours, and over 60 hours. Since the data did not follow a normal distribution, the Kruskal-Wallis test was conducted. The results of this analysis are presented in Table 7. It was seen that the duration of gameplaying did not create any statistically significant difference in the overall IS level. Similarly, no significant difference was found when looking at the sub-dimensions.

Although there are limited studies on the duration of video gameplay and IS in the literature, the topic of how the frequency of playing video games can affect individuals has been the focus of various fields. Playing games for an extended period has been significantly associated with low academic performance multiple times (Anand, 2007; Anderson & Dill, 2000; Chiu et al., 2004; Weaver et al., 2013). Anand (2007) determined the academic performance of 245 university students using the Scholastic Aptitude Test (SAT) and overall GPA and investigated the impact of weekly video game playing duration on these two variables. Anand stated that playing video games could lead to a decrease in GPA and SAT scores. Similarly, Weaver et al. (2013) examined the relationship between gameplay duration and GPAs in surveys conducted with 193 university students. The results indicated that their GPAs decreased as students' weekly gameplay duration increased.

There are also studies suggesting that video games can have positive effects on student achievement and behaviours (Chick, 2011; Griffiths, 2011; Holmes et al., 2009; Horowitz, 2019; Kim, 2010; Pasfield-Neofitou, 2011; Young et al., 2012). In the condition known as Game Transfer Phenomena, players establish connections with the elements encountered in the game, and their real-life behaviours and thought structures can be influenced by the stimuli they encounter in the game (De Gortari et al., 2015). Thus, besides being used in the treatment of certain psychiatric disorders, video games are believed to be beneficial in situations such as socialisation, language learning, and cultural learning due to their interactive nature (Chick, 2011; Griffiths, 2011; Holmes et al., 2009; Pasfield-Neofitou, 2011). For example, Horowitz (2019) hypothesised that as the duration of playing video games increased, the willingness to communicate would increase, and communication anxiety would decrease. He collected data through a survey from 76 university students to prove this hypothesis. The analysis provided

evidence supporting Horowitz's hypothesis and yielded a significant result. Similarly, Young et al. (2012) reported that spending time in video games can be rewarding for language learning and can reduce anxiety, as video games provide authentic environments. Additionally, Kim (2010) stated that as the amount of time spent playing video games increased, students became more motivated to speak in the target language.

In addition, a study has been found in the literature suggesting that excessive video game playing times do not affect students' academic achievement. Skoric et al. (2009) investigated whether high engagement with video games affects primary school students' performance. 333 Students' midyear grades showing their academic performance were collected from their teachers, and addiction surveys were utilised. They reported that time spent playing video games did not affect students' English scores. Thus, they rejected the hypothesis that games can be detrimental to students' academic performance. Although this study is not directly related to intercultural sensitivity, it is similar to the current study in that it shows that weekly play times do not cause any change in students.

5.1.3.2. Games with vs without Narratives: Another variable that was thought to affect the gamer students' IS levels was the narrative choices in the games they played. Because the data did not show a normal distribution, the Mann-Whitney U test was preferred in the analysis. This analysis showed that this game selection did not cause any statistically significant difference in the IS levels of the players, except for the interaction attentiveness dimension ($p=0.039$), in both the general IS and the sub-dimensions of IS (Table 8). When the interaction attentiveness dimension was examined, it was seen that the participants who played games with narrative ($MR=197.33$) had higher attentiveness levels than the participants who preferred games without narrative ($MR=171.11$).

According to Sell (2017), stories can provide the acquisition of all kinds of cognitive and subconscious knowledge. Regarding intercultural sensitivity, stories are thought to facilitate the acquisition of IS by increasing attention as "eye-openers" and teaching information about cultures. Similarly, Angelis (2017) thinks that stories increase attention to anything. Schank (1995) stated that storytelling could be more effective in cognitive processes such as recognising, acquiring, and retaining information by highlighting various dimensions of information such as environment, behaviours, and memories that constitute it. Another view is that narratives can positively affect all types of attention due to their goal-oriented and subjective nature (Schmeichel & Baumeister, 2010; Schank & Abelson, 1979; Schank & Berman, 2002). Considering that video games were the participants' hobbies in this study, the fact that the stories they played were within their goals may have resulted in high levels of

interaction attentiveness in games with narratives. Kromka and Goodboy (2019), in their experimental study with 194 university students, exposed one group of students to classical instruction and the other group of students to instructions reinforced by narratives. Post-tests showed that students who experienced narrative instruction had higher attention levels. It is generally accepted that narratives in video games present all kinds of complex information entertainingly and engagingly (Salvat, 2007; Negrete & Lartigue, 2004; Barab et al., 2007). It is also possible that this may cause differences in attentiveness.

5.1.3.3. Single-player vs Multiplayer Games: The participants were asked which game mode they preferred to play, and the data obtained were analysed with the Mann-Whitney U test because it did not show normality. When the results in Table 9 were examined, no significant difference was found in the general IS levels between the two groups of participants ($p=0.896$). Similarly, when IS was analysed by its sub-dimensions, no statistically significant difference was observed in the interaction engagement, respect for cultural differences and interaction confidence dimensions ($p>.05$). However, a difference was found in the dimensions of interaction enjoyment ($p=.14$, $MR^{multi}=210.48$, $MR^{single}=181.17$) and interaction attentiveness ($p=.39$, $MR^{multi}=198.36$, $MR^{single}=173.68$) in favour of those who prefer multiplayer mode.

Multiplayer environments in video games offer intercultural communication opportunities by bringing various cultural and ethnic differences together, just like multicultural environments in real life. Although this is an entirely new finding, the results can be explained by taking a similar situation into account from real-life environments: engagement with different cultures within multicultural environments. Armfield (2004) examined 60 undergraduate students participating in study abroad programs and their interactions with the host culture in his thesis. Based on the hypothesis that participating in Study abroad programs will increase students' IS levels, he used Chen and Starosta's (2000) ISS to measure students' IS levels. It was observed that being in a different cultural context significantly increased the interaction enjoyment and interaction attentiveness levels of the students. Similarly, Segura-Robles and Parra-González (2019) compared students' IS levels in multicultural and non-multicultural cities. While 190 of the participants lived in multicultural contexts, 174 of them lived in monocultural cities. In this study, which was conducted using the ISS scale developed and validated by the researchers, the general IS, interaction enjoyment and interaction attentiveness levels of the participants in multicultural contexts were found to be very high compared to those living in monocultural cities. On the other hand, Tamam and Krauss (2017) aimed to measure the IS levels of 417 university students studying at a multicultural state

university and interacting with ethnically different individuals. They used Chen and Starosta's (2000) ISS and found that interaction attentiveness and respect for the cultural differences levels of the students increased as they interacted with ethnic diversity. In another case study, Hong (2013) compared the IS levels of international Chinese and American students studying in the U.S. and Chinese university students studying in China. In this study, in which 128 students participated, Chen and Starosta's (2000) ISS was utilised. The analyses did not show a statistically significant difference in the interaction attentiveness levels of these three groups.

Other studies that can explain the relationship between different environments and IS levels are on virtual environments with pre-programmed virtual characters called non-player characters (NPCs). For instance, Hall et al. (2014) introduced Traveller, a virtual learning tool where students engaged in activities related to diverse cultures and intercultural communication scenarios, similar to playing a multiplayer game. Results from pre-tests and post-tests indicated that students using Traveler exhibited higher levels of IS and increased awareness compared to those in the traditional curriculum. Likewise, Coffey et al. (2013) created a virtual environment called Second China in Second Life, enabling students to interact with pre-programmed bots. Participants were divided into two groups: Second China users and web users. Post-test results revealed that the IS levels of participants engaged in Second China were higher than those of web users. Another platform, Croquelandia, resembling Second China, was utilised by Sykes and Thorne (2008) to teach Spanish pragmatics to university students. Croquelandia featured cultural artefacts and interactive bots simulating native speakers. While pragmatic skills did not significantly improve, as seen from the analyses of discourse completion tasks and interviews, students reported increased confidence in future interactions with native speakers. These findings highlight the potential of virtual environments with NPCs, such as Traveler, Second China, and Croquelandia, in enhancing intercultural sensitivity and fostering cultural understanding.

There have also been some studies that raise the idea that interaction enjoyment may be related to the enjoyment experienced from multiplayer games in general. Studies on single-player and multiplayer game modes have defined the main reason why players choose multiplayer games, and it was found that these games increase enjoyment by fostering communication with individuals from different cultures and countries (Klimmt & Hartmann, 2008; Quandt & Kröger, 2013; Trepte. et al., 2012; Lopes & Bryce, 2012). As mentioned in the previous sections, multiplayer games are extremely dynamic and social environments that offer authentic communication and consist of community rules determined jointly by the players (Snodgrass et al., 2016; Molyneux et al., 2015). Based on this, Lopes and Bryce (2012)

suggested that enjoyment from games can increase in direct proportion to social interaction. Similarly, in the case studies conducted by Harteveld and Bekebrede (2008) based on the hypothesis that learning will develop differently in single-player and multiplayer games, they concluded that the participants enjoyed playing multiplayer games more due to their social and communicative nature. Regarding interaction attentiveness, Pereira (2019) suggested that communicating with other players for a common goal, especially in collaborative video games, can increase the players' social attention level.

5.1.3.4. Communication: Considering that students' IS levels may change according to the type of communication they prefer during online gameplay, participants were presented with three options: no communication, written communication and voice communication, and they were told to choose the option that best suited them. Because the data did not show normality, the Kruskal-Wallis test was used, and the results were visualised in Table 10. Analysis results of the participants' general IS ($p=<.001$, $MR^{noCommunication}=146.60$, $MR^{written}=186.33$, $MR^{voice}=230.32$), interaction engagement ($p=<.001$, $MR^{noCommunication}=137.31$, $MR^{written}=192.84$, $MR^{voice}=220.60$), interaction confidence ($p=<.001$, $MR^{noCommunication}=142.23$, $MR^{written}=184.85$, $MR^{voice}=236.91$) and interaction enjoyment ($p=<.001$, $MR^{noCommunication}=174.77$, $MR^{written}=176.17$, $MR^{voice}=236.30$) levels showed statistically significant differences between the three groups. Accordingly, the lowest IS scores belonged to the participants who did not communicate with others while playing the game; meanwhile, the gamer participants who preferred the voice communication option had the highest IS scores. However, no differences were observed in the dimensions of respect for cultural differences ($p=0.301$) and interaction attentiveness ($p=0.650$).

There are opinions that CMC creates interactive environments close to face-to-face settings and can cause changes in attitude and motivation in addition to increasing language proficiency (Abrahams, 2003; Hirotani, 2013; Hung & Higgins, 2016). For this reason, many studies in the literature questioned the effect of CMC in areas such as language acquisition, sociolinguistic competence and ICC (Ashe, 2020; Erben, 2007; Garrett-Rucks,2013; Hagley, 2020; Ritche, 2009). For example, Ritchie (2009) aimed to investigate the effect of intercultural CMC exchanges on the development of sociolinguistic competence. For this reason, 53 university students, divided into two groups, native and non-native French speakers, came together for nine months on the Moodle platform and exchanged information about cultural issues. Students participated in discussions about different cultures by texting and talking. The discourse analysis of the interviews and the chat messages showed that the CMC developed sociolinguistic competence by being highly authentic exchanges. Furthermore, non-native

students became more sensitive to different cultures and shared their ideas on this subject in their conversations with native students.

Similarly, Hagley (2020) aimed to encourage students studying at a university in Japan to communicate with students at another university in Colombia with the Virtual Exchange Project he carried out. For this purpose, the Moodle platform was used, and students were provided with intercultural exchanges in various formats (text, audio, visual etc.). Pre-exchange and post-exchange surveys were carried out to measure how much knowledge the students learned about the cultures of their partners' countries and their IS levels. Analyses have shown that students in the virtual exchange group learned more about their partners and their own cultures, and their interaction confidence levels increased.

Another study investigating the impact of CMC and IS was conducted by Ashe (2020). In her thesis, Ashe explored the effect of WhatsApp usage on IS levels among 20 students learning Spanish in Spain as part of a study abroad program. After culture-oriented lessons, the students engaged in discussions and information exchange with other students and host families using the WhatsApp application. When analysing the students' self-reflection journals with Bennett's (1993) DMIS framework, it was found that the students perceived the use of WhatsApp as a fun and comfortable experience in their communication with friends and host families. The students also mentioned that accessing other online resources was easy during their WhatsApp usage. This facilitated their access to various cultural sources during collaborative activities. Furthermore, an improvement in IS levels was observed, indicating that living in the host country and integrating into society benefited the students. In their study, Jin and Erben (2007) discussed the instant messenger interaction's effect on IS. 7 American and 8 native Chinese speaker students learning Chinese in their studies came together with students from another culture and communicated through an instant Messenger application for two months. When the interviews, surveys and chat logs were examined, it was seen that the American students' IS levels, especially interaction engagement and interaction attentiveness, increased.

Garrett-Rucks (2013) is among those who believe that IS can be developed through online discussions. 11 beginner-level French language students shared their thoughts on culture-focused authentic texts they read in class during a 16-week intervention. They engaged in interactions with their peers through discussions on online platforms during their free time. By examining the students' posts and responses in interviews within the DMIS (1993) framework, their IS development was analysed. Although the students engaged in intracultural communication using their native languages, the results indicated improved intercultural

understanding and IS levels. Finally, Pasand et al. (2021) conducted an experimental study by dividing 45 EFL students into three groups: those who communicate with foreign participants, communicate with peers, and receive classical instruction to question the effect of CMC use on IS. IS development was higher in the groups that engaged in CMC than in the traditional instruction group.

The studies above support the current study's findings as they share similarities. These studies suggest that CMC leads to positive changes in individuals. Specifically, in studies focusing on CMC and IS, similar to the current study, it was seen that CMC engagement was associated with higher IS levels compared to groups without CMC engagement. However, studies explaining the difference between text and voice chat are scarce in the literature.

Some have defined the difference between text and voice chat as closeness (Kraus, 2017; Kumar & Epley, 2021). Similarly, Kraus (2017), in his experimental study, found that choosing voice chat increases empathy levels and contributes to acquiring linguistic and social attention needed to communicate and reflect emotions. Moreover, Schroeder et al. (2017) stated that the preferred communication medium may lead to different results in understanding other individuals. According to them, the human voice includes various social clues and positively influences individuals' thoughts and feelings. On the other hand, the text lacks these clues, and it can result in individuals dehumanising other individuals. Although it is thought that text chat is an inadequate option compared to voice chat, text chat is a chat format in which feedback and rereading are possible due to its written nature, so the use of it can provide various reflections (Warschauer, 1997). Smith (2003) suggested that communications in written form may also have the feeling and flow of face-to-face communication.

Although no study directly explains the difference between written communication and voice communication in the current study, some studies suggest that voice chat is more effective than text chat (Emin, 2021; Nordlander, 2018; Wadley et al., 2015). Nordlander (2018) discussed the difference between text chat and voice chat within the framework of video games and mentioned that voice chat has more positive results in both gameplay and social relations. Participants in Wadley et al.'s (2015) study played the game Dungeons and Dragons Online for two months and interacted with other players they had never met. The players, who recorded their thoughts and experiences in diaries throughout this process, mentioned that voice chat offers a more natural and enjoyable communication experience compared to text chat and that such chats are good tools for exchanges on cultural issues. Emin (2021) also noted in his thesis that there was an improvement in IS levels as the time for students to interact with other players increased.

5.1.3.5. Participation in Affinity Spaces: It was in investigated whether video game-related affinity space participation, such as the use of social media, would affect the IS levels of gamer students. For this reason, participants were asked whether they spent time in such affinity spaces. Since the data did not show a normal distribution, the Mann-Whitney U test was used, and the analysis results were presented in Table 11. The analyses did not indicate any statistically significant difference in the overall IS or IS subdimensions ($p>.05$).

Past studies have produced results that contradict this finding. For example, Zhou and Sun (2020) conducted an action research study using various social media tools to establish a cultural bridge between Chinese and American university students. Sixty students participated in collaborative activities with their partners from another country through wikis, blogs, podcasts, and messaging, focusing on cultural aspects. The students became aware of cultural differences through these technology-enhanced activities, gained awareness of their own and their partners' cultures, exhibited more open and understanding reactions towards differences, and developed critical thinking for problem-solving in the target culture. Zhou and Sun emphasised that collaborative activities prepared within the social media environment with a cultural focus were more suitable for meeting the needs of the students and were highly influential in acquiring language and cultural knowledge and skills.

Building on the work of Jenkins et al. (2006) in the field of new media literacy (NML), Literat (2014) examined the NML levels of 327 participants using the NML Scale. The study included social media and video games rather than traditional media. The findings indicated that higher exposure to social media correlated with increased NML levels. Specifically, Facebook and YouTube were identified as the most influential social media platforms for increasing NML levels due to their highly interactive and visually rich interfaces. Furthermore, to explore the potential of new media in fostering cultural learning and interaction, Hassan et al. (2020) investigated the effects of Facebook on IS. They measured the IS levels of 210 international university students residing in Malaysia using Chen and Starosta's (2000) intercultural sensitivity scale (ISS) to determine the impact of Facebook usage. The analysis revealed a positive association between Facebook usage and IS levels. Moreover, students reported that Facebook was beneficial in adapting to the host culture and improving their foreign language and intercultural skills. Similarly, Páez Castellanos (2022) investigated the effect of YouTube on IS development. Ten 9th-grade students watched YouTube videos addressing cultural and individual differences and engaged in discussions with their peers immediately afterwards. The analysis, which involved mini quizzes and interviews, demonstrated positive changes in the students' IS levels throughout the three-cycle intervention.

Students exhibited increased empathy and openness towards cultural and individual differences after the intervention, with almost all expressing a willingness to communicate with people from other cultures. In summary, although the previous studies highlighted the potential influence of social media on IS development, the current study did not find a significant relationship between social media usage and IS levels.

5.1.4. What Are The Students' Views on Learning Cultural Knowledge from Games and Video Games as Environments for Engagement in Intercultural Communication?: This study employed an interview protocol consisting of four questions to obtain answers regarding the learning of cultural knowledge through video games and how these games are viewed in terms of the intercultural environment. The 41 participants' answers were collected through various online platforms, and the transcriptions of the interview responses were uploaded to the NVivo program for content analysis. Four themes and their sub-themes were found and explained with quotes from the participant's accounts.

The first interview question aimed to explore the opinions of gamer students regarding the potential benefits of video games in acquiring cultural knowledge. According to the participants' accounts, most believed that video games could be helpful in acquiring cultural knowledge. Further analysis of these comments revealed specific aspects in which players benefit from video games. Participants thought video games were fictional productions, yet they contained traces of authentic cultures, making them valuable for acquiring cultural knowledge. Participants also emphasised the communication possibilities facilitated by games. They suggested that video games have the ability to create intercultural encounters that surpass physical boundaries. They believed playing games could help them virtually explore countries and cultures they could not visit. Another highlighted benefit was the contribution of video games to language acquisition. The participants also sought to explain the impact of games on cultural knowledge learning by comparing single-player and multiplayer games and games with and without narratives. Multiplayer online games were described by their nature that can provide the best opportunity for acquiring cultural knowledge due to their diverse player base and participants from different cultures. In contrast, single-player games were taught to include various cultural elements. Also, some participants stated that games with narratives can be more effective in acquiring cultural knowledge. However, despite the prevailing opinions, a few participants expressed the view that video games do not contribute significantly to the learning of cultural knowledge. They shared the belief that while cultural elements may be presented in games, they are often manipulated by game developers who presents false cultural representations.

The analyses made on the answers to this interview question produced findings similar to many studies in the literature. Video games have been described by various scholars as virtual intercultural environments in which players are exposed to roles reflecting real-life social relations and cultural elements (Shaffer et al., 2005; Granic et al., 2014; Gee, 2006), which means that players experience the feeling of travelling without going to other countries. Another benefit of the games discussed is that they can provide real-life skills that exceed the limits of the game and cannot be acquired in classrooms (Ross & Collister, 2014; Pena & Hancock, 2006; Gee, 2000; 2004; Rifkin, 2000). Ross and Collister (2014) mentioned that building engagement in international communication and intercultural friendships, which are challenging to attain in the classroom, is possible with video games.

The contribution of video games to language acquisition has also been studied many times in the literature (Calvo-Ferrer & Belda-Medina, 2021; Hitosugi et al., 2014; Kronenberg, 2012). According to these studies, video games provide an authentic and fun way to acquire language, increase motivation to learn, give agency to the learner and increase language proficiency due to their controllable multimedia nature. There are also studies confirming the fact that video games are more effective in acquiring languages compared to traditional language lectures (Mifsud et al., 2013; Hitosugi et al., 2014; Vasquez & Ovalle, 2019; Rudis & Postic, 2018).

Furthermore, multiplayer mode games, known as process-intensive games, have a dynamic and social structure and mainly involve human interactions shaped around social rules (Rollings & Adams, 2003; Salen & Zimmerman, 2004). These modes, which have mechanics such as using text or voice chat, participating in guilds, and performing collaborative actions to gain game achievements, are known to offer meaningful and authentic intercultural communication experiences (Molyneux et al., 2015; Pena & Hancock, 2006; Araki & Carliner, 2008; Gee, 2006; Jakobsson & Taylor, 2003). On the other hand, single-player games are data-intensive experiences that present pre-defined rules and information, including cultural knowledge and enable the direct transfer learning process to occur. (Harteveld & Bekebrede, 2011; Crawford, 2003). Moreover, although the contribution of video game narratives to cultural knowledge learning has never been discussed in the literature, it is known that narratives are cognitive tools that transfer fundamental cultural and communicative mechanics to future generations (Krawczyk & Novak, 2006; Bruner, 1991; Dickey, 2011). According to some, narratives, by presenting complex information types entertainingly and engagingly, meet the needs of learning and facilitate the process (Salvat, 2007; Negrete & Lartigue, 2004; Barab et al., 2007; Hirsh-Pasek et al., 2015; Parsayi & Soyoof, 2018). Just like in the current study,

participants in Parsayi and Soyoof's (2018) study stated that narratives in video games also contribute to the acquisition of cultural knowledge for previously stated reasons.

Although they are few, there are also studies confirming the opinions of the participants who stated that there was no cultural knowledge gain from video games. According to Harteveld & Bekebrede (2011), each player's experience during the game, reactions to the elements they encounter, and thoughts are different, so games alone may not provide a cultural knowledge gain. On the other hand, Gee (2006) stated that just playing the game is not enough for any learning, and the quality of the content offered in the game is also essential.

The second interview question aimed to gauge the sentiments of gamer students towards the cultural elements they encounter while playing video games. The analysis of these answers revealed three themes: positive reactions, reactions depending on the context, and indifference. It was found that most of the gamer participants enjoyed encountering different cultural elements and people from diverse cultures while playing video games. This enjoyment often sparked curiosity, leading them to research and learn about other cultures. Furthermore, these players exhibit openness to novelty and learning in their daily lives, with video games serving as a tool to satisfy their desire for knowledge. Many studies on the effects of video games and game-like virtual environments on cultural knowledge acquisition point to similar findings (Coffey et al., 2013; Hagley, 2020; Hall et al., 2014; Matijević & Topolovčan, 2019; Soyoof, 2018). In their studies, Matijević and Topolovčan (2019) asked teenagers to comment on games they play and their ideas on learning from them informally. Many of the participants stated cultural gains from video games, whether they are multiplayer or single-player games. Participants thought they could learn about other cultures by playing games with historical and cultural elements and multiplayer interactions. Another notable finding of this study was that teenagers pick a game to play not just for fun but for cultural and learning gains. Similarly, the participants in Soyoof's (2018) study mentioned that they were learning about others' cultures, and these games fuelled their interest to learn more about them.

In the second sub-theme, reactions depending on the context, participants expressed that cultural elements in games are enjoyable as long as they align with their interests. For instance, some participants reported encountering cultural items that did not interest them or caused boredom. In contrast, others differentiated cultural items into those they liked and those they found absurd. Thus, they ignored the things that did not interest them and focused on things they liked instead. This can be explained by the concept of interest and its relationship with learning. According to scholars who studied interest, motivation and learning, individuals enjoy doing things they like more than things they do not like, and they become intrinsically motivated

and learn better when they engage in activities or subjects they like (Deci & Ryan, 1990; Renninger et al., 1992; Tobias, 1994).

The excerpts from the student responses described the third theme, indifference. Both participants mentioned that they no longer react to the cultural elements they encounter in games due to their extensive gaming experience since childhood. One participant expressed a lack of awareness regarding cultural elements, while the other mentioned that most video games are developed based on similar foundations, resulting in a few unknown cultural elements and subsequent indifference. This situation can also be explained with the abovementioned concepts (Deci & Ryan, 1990; Renninger et al., 1992; Tobias, 1994). Experiencing the same thing repeatedly, participants may have lost the sense of freshness and thus lose their focus and motivation on the cultural elements they encounter while playing the game.

The third interview question aimed to gather information about the participants' intercultural interactions within the context of video games. Upon examining the students' answers, three different types of intercultural experiences were identified: gaming-restricted interactions, deep interactions, and no interaction. Responses to this interview question provided insights into the nature of both types of interactions mentioned above. Communication in the first category primarily revolved around completing game quests, assisting one another, and becoming stronger and better players. Although the game's rules limited this interaction, some cultural exchanges between players were also observed. Additionally, it was reported that some participants engaged in deep interactions, albeit in smaller numbers than those involved in gaming-restricted interactions. In these deep interactions, student gamers formed long-term friendships by sharing intercultural knowledge extensively. They learn about their friends' cultures by discussing issues around social constitutions like family and school or common belief systems like shamanism both in and beyond game environments like social media and fan communities, and this interaction affects their real-world identities.

It has been repeatedly stated in previous studies that video games, especially multiplayer games, are social environments where players can express themselves freely (Araki & Carliner, 2008; Molyneux et al., 2015; Pena & Hancock, 2006). Players can choose to communicate both in the in-game chat system, social media and third-party chat platforms to survive in the game, level up by completing tasks, as well as meeting people from different countries and establishing friendship bonds (Jakobsson & Taylor, 2003; Gee, 2004, 2006; Steinkuehler, 2010; Molyneux et al., 2015; Ross & Collister, 2014; Pena & Hancock, 2006). It has been clearly stated that gaming-restricted and deep interactions can occur in game-related environments, which Gee (2004) defines as affinity spaces. Similarly, in a study by Wadley et al. (2015),

participants mentioned that although they were not close with the people they were playing the game, they could interact and share their knowledge about cultural differences. Furthermore, in Carino's (2018) study, the participants' comments confirmed that some gamers established deep friendship bonds while playing games, and they continued to communicate with them in the real world too.

The fourth interview question aimed to determine whether the participants encountered intercultural communication issues during their gaming experiences. This question also sought to evaluate whether video game environments provide suitable contexts for intercultural sensitivity and the acquisition of intercultural knowledge. Analysis of the participants' answers revealed a nearly equal distribution between those who encountered intercultural communication issues while playing video games and those who did not. Some participants reported no issues while playing games. According to them, the reason for not experiencing any problems is that gamers live in the era of globalisation. However, half of the participants reported negative experiences originated from some gamers' sexist and racist rhetoric (Yee, 2014; Kuznekoff & Rose, 2013). The fact that this type of gamer, which is described as a toxic gamer, exhibits all kinds of toxic behaviours, from bullying to sexual harassment to other gamers who are not from their own country and to the female gamers that are thought not to belong to the game world and playing games to attract male attention (Fox & Tang, 2017 Costa et al., 2020; Şengün et al., 2019; Richard, 2017).

However, not all intercultural communication difficulties are related to toxic behaviours. Some participants mentioned cultural differences and language proficiency as a hindrance to understanding other players. This finding is similar to the study of Chen and Hu (2023). When the IS levels of the students living in an environment of cultural diversity in China were examined, the levels of all dimensions except the interaction confidence and interaction enjoyment dimensions were found to be high. According to them, refraining from interacting or not taking pleasure from interaction, in general, may be caused by linguistic constraints. Similarly, the participants in Gómez Rodríguez's (2014) short story use study aimed at acquiring the ICC also talked about the problems arising from not knowing the language. According to Bernstein (2015), when it comes to the gaming world, not knowing the lingua franca of video games, namely English, has already been an issue for gamers for many years, and in some cases, this language constraint becomes not only a barrier for intercultural communication but also the success of a game in countries do not speak English.

In the last interview question, participants were asked about the strategies they developed to solve the issues they encountered. The interview yielded 25 strategies.

Examination of these strategies developed by the participants revealed a preference for constructive strategy approaches. These approaches included constructive behaviours such as learning English, the lingua franca of games, researching cultural differences to overcome confusion, and resolving conflicts through communication. The fact that most of the gamer participants in this study tend to choose constructive strategies can be associated with their high intercultural sensitivities. According to Chen and Starosta (2000), individuals' respecting differences in intercultural communication and producing tolerance to emerging problems are associated with high IS levels. Furthermore, people with high IS levels were described as successful individuals who are more sensitive to the problems that may arise in intercultural environments and have a harmonious relationship attitude (Bennett, 1986; Dong et al., 2008; Peng, 2006).

Avoiding the issues was another frequently chosen strategy. These participants opted not to accept the situation and refrained from reacting positively or negatively. Negative strategies were the least preferred, involving strategies such as verbal fights with other players, hiding ethnic and gender identities that could lead to intercultural conflict, and changing the problematic environment. Especially women players in this group were protecting themselves from the harassment of toxic players by hiding their female identities. Some studies on toxic gamer behaviours can shed light on these two strategies. For example, Turkay et al. (2020) focused on how players deal with toxic behaviour during gameplay and conducted interviews with 19 esports players. The analysis revealed results that confirmed the two sub-themes identified in this study. Players either got used to the toxic behaviour and ignored the harassment or left the game to flee the toxic situation. Since most games punish their players for early leaves, leaving the game is considered a negative strategy. They also stated that female gamers chose not to contact others to protect themselves from toxic male players. Similar to the gamers who ignored toxicity in Turkay's study, participants in a study conducted by Beres et al. (2021) reported that they normalised toxic behaviours at some point and ignored them, accepting that they occur naturally in multiplayer games.

5.2. Conclusion

In this sub-heading, the conclusions derived from the views of gamer players on the games as intercultural environments and cultural knowledge learning provided by video games, as well as the discussion on the IS levels of gamer players and the impact of various factors on their IS levels, which were discussed in the previous chapter, are summarised and presented. Finally, based on the findings of the study, pedagogical implications and recommendations for future research were provided.

5.2.1. Summary: Globalisation, arising from the migration of early humans, has undergone significant transformations due to advancements in communication technologies (Cheney & Munshi, 2017; Chouliaraki & Fairclough, 1999). In today's interconnected world, extensive travel and interactions with diverse cultures necessitate the use of a common language for effective communication in both real-life and new media contexts (Fishman, 1998; Warschauer et al., 2006; Seidlhofer, 2004; Smokotin et al., 2014; Genc & Bada, 2010). Therefore, not only language acquisition but also the teaching of non-native cultures and the development of interactional competences, namely ICC and its prerequisite, IS, have become crucial for success in multicultural environments (Byram, 2008; Chen, 1997; Ho, 2009).

The increased intercultural encounters facilitated by high-speed internet have also led to the growing significance of ICC and IS in virtual environments, including video games (Pasand et al., 2021; Chen, 2005; Warschauer et al., 2006; Smokotin et al., 2014). The internet and videogames enable individuals to acquire cultural knowledge and bridge social distance, allowing them to express themselves without preconceived biases (Chen, 2012; Belz, 2007; Ritchie, 2009; Barnett & Lee, 2002; Kramsch, 1998; Sharifian, 2018). Primarily, video games offer immersive and realistic experiences that can educate players about different cultures, challenge cultural stereotypes, and contribute to the acquisition of ICC and intercultural sensitivity (Przybylski et al., 2010; Story, 2018; Gee, 2003; Kruis et al., 2014; Chow, 2015; Carino, 2018; Osorio et al., 2020). Furthermore, the impact of globalisation and technology on the emergence of diverse student models has necessitated a shift in traditional instructional methods towards a more modern and technology-enhanced approach (Sharifian, 2018; Pasand et al., 2021; Prensky, 2001). Therefore, the role of traditional classroom instruction in teaching ICC has been questioned, and there has been a growing discussion about the potential of video games as interactive, highly engaging, and multicultural platforms that replicate real-life social dynamics, serving as a more affordable and virtual alternative to study abroad experiences. (Shaffer et al., 2005; Granic et al., 2014; Gee, 2000, 2006; Ross & Collister, 2014; Pena & Hancock, 2006).

However, while there have been studies examining the acquisition of ICC within the context of video games which also mentioned that the use of video games could increase IS levels of students and may contribute to the acquisition of cultural knowledge, there is a lack of comprehensive research that delves into students' experiences and explores their IS levels and how their gaming preferences affect their IS levels. Therefore, this study aimed to fill this gap in the literature by measuring the IS levels of students who play video games and examining the impact of video games, which are intercultural environments, on ICC. A total of 380

participants invited through various social media platforms were asked to complete a survey to measure their IS levels and the influence of various gameplay preferences on IS. Additionally, semi-structured interviews were conducted with 41 participants. The collected data were analysed using descriptive, statistical, and content analysis methods.

The analyses revealed that students had high levels of general IS, interaction engagement, respect for cultural differences, and interaction enjoyment, while their interaction attentiveness and interaction confidence levels were average. Furthermore, when examining the IS items, it was found that participants were willing to communicate with individuals from different cultures and had positive attitudes towards intercultural communication. Previous studies in the literature have reported varying levels of IS among university students. However, some studies argue that there is a positive correlation between the high level of IS and the multicultural nature of the educational environment or the multicultural content of students' majors (Balcıoğlu & Bekir, 2014; Bosuwon, 2017; Chen & Hu, 2023; Demir & Kiran, 2016).

When examining the differences between genders, it was found that gender did not significantly affect IS levels. This finding is supported by previous studies in the literature (Adili & Xhambazi, 2021; Demir & Kiran, 2016; Erdoğan & Okumuşlar, 2020; Kuluşaklı, 2020). However, in the current study, significant gender differences were observed in the sub-dimensions of IS, except for interaction confidence. Female students scored higher than males in the dimensions of interaction engagement, respect for cultural differences, and interaction attentiveness. In contrast, males only scored higher than females in the dimension of interaction enjoyment. It was speculated that this could be due to women being targets of sexual harassment in video games. In fact, the position of women in the gaming world and the problems they face due to sexism have been discussed in many studies (Fox & Tang, 2016; Ballard & Welch, 2015; Brehm, 2013). On the other hand, previous studies have also shown that women generally have a higher awareness of intercultural differences, empathy levels, and interaction participation than men (Cundiff et al., 2009; Holm et al., 2009; Nieto & Booth, 2010).

Another factor examined was the weekly gameplay duration. Although it was thought that this factor would significantly affect IS levels, it was found that it did not create any differences in general IS and IS dimensions. While playing games for excessive periods leading to addiction is known to decrease students' academic achievements (Anand, 2007; Anderson & Dill, 2000; Chiu et al., 2004; Weaver et al., 2013), it is an exciting result that it did not have a negative impact on IS in this study.

Narratives that make classic instructions and complex structures engaging and fun (Kromka & Goodboy, 2019; Negrete & Lartigue, 2004; Barab et al., 2007) were another factor

that could influence IS. Therefore, participants were asked to indicate whether they engaged in communication during gameplay and, if so, which type of communication they preferred. It was reported that participants who preferred voice communication had higher overall IS, interaction engagement, interaction confidence, and interaction enjoyment than those in the written and no communication groups. It is known that CMC, mainly when it provides audio-visual access, can lead to gains in both language and sociolinguistic aspects (Hagley, 2020; Ashe, 2020; Erben, 2007; Pasand et al., 2021). The differences in IS levels between the groups in this study can be attributed to the nature of the IS concept, which involves communication, as well as the social cues conveyed by voice chat and the structure of text chat, which allows for repeated reading and comprehension (Chen & Starosta, 1997; Kumar & Epley, 2021; Schroeder et al., 2017; Warschauer, 1997; Smith, 2003)

Another factor examined in the study was the concept of affinity spaces, as defined by Gee (2004), which refers to communities that extend beyond the boundaries of video games. Therefore, participants were asked if they spent time on social media platforms related to video games apart from gameplay. Although there are studies in the literature suggesting that social media usage can enhance IS levels (Zhou & Sun, 2020; Literat, 2014; Hassan et al., 2020; Páez Castellanos, 2022), no statistically significant differences were found in either overall IS or its sub-dimensions in the current study.

During the interviews conducted to explore the potential of video games as multicultural environments for cultural knowledge learning and intercultural interaction, notable participant comments were obtained. Most students stated that video games, with their adapted stories and elements from real cultures, could support intercultural knowledge learning. Some students also believed games could compensate for the lack of intercultural experiences abroad and improve their language skills. Another topic emphasised was the potential contribution of multiplayer games and games with narratives. The perspective of students that emerged from the interview data strongly aligns with the findings of the quantitative part of the study. Moreover, the comments made by the students in this regard are consistent with existing studies in the literature (Gee, 2000, 2006; Pena & Hancock, 2006; Hitosugi et al., 2014; Molyneux et al., 2015; Parsayi & Soyoof, 2018).

Furthermore, participants mentioned their reactions to cultural elements encountered in games. When examining their responses to the second interview question, three types of reactions were identified: positive reactions, reactions depending on the context, and staying indifferent. Participants in the first group enjoyed encountering cultural elements and stated that these elements sparked further exploration. On the other hand, participants in the second group

mentioned that they only paid attention to the cultural elements which they found interesting. Students who were indifferent reported being accustomed to cultural elements in video games, and they do not find them novel anymore. The theme of positive reactions aligns with previous studies suggesting that video games can contribute to gaining historical and cultural knowledge (Coffey et al., 2013; Hagley, 2020; Hall et al., 2014; Matijević & Topolovčan, 2019; Soyoof, 2018). When examining the comments of the last two groups of students, the concept of motivation comes to mind. According to studies on motivation, individuals tend to direct their attention and become motivated intrinsically towards things that interest them, that they enjoy, and that are novel (Deci & Ryan, 1990; Renninger et al., 1992; Tobias, 1994).

The interviews conducted with students provided information about the potential types of communication that could occur in the context of video games. Analyses of the students' responses indicated three types of interactions: gaming-restricted interactions, deep interactions, and no interactions. The first type of interaction focused on achieving success in the game, while deep interactions involved students forming friendships and engaging in intercultural sharing beyond the boundaries of the game. It is known that communication in multiplayer games has the potential to facilitate friendship formation and cultural exchanges (Wadley et al., 2015; Carino, 2018). Furthermore, although the focus was different, the students in the current study also mentioned experiencing some degree of cultural exchange in gaming-restricted interactions, which is consistent with previous studies suggesting that interaction in video games can be beneficial for intercultural competence development (Jakobsson & Taylor, 2003; Gee, 2004, 2006; Steinkuehler, 2010; Molyneux et al., 2015).

To better understand the nature of intercultural interactions established in video games, students were also asked if they encountered any communication issues during gameplay and how they overcame them. Half of the responses to the first question indicated no issues. In contrast, the other half revealed the presence of situations hindering positive communication, such as sexist and racist behaviours, lack of knowledge about others' cultures, and low language proficiency. The strategies developed to address these issues consisted of three different approaches: constructive strategies, which involved language learning and understanding others through dialogue; avoidance, which allowed for avoiding the issue; and negative strategies, which included abandoning the game, facing in-game punishments, or engaging in verbal fights. The potential for video games to become toxic environments for individuals or the challenges of language deficiencies during intercultural communication has been popular topics of debate for years (Fox & Tang, 2017; Costa et al., 2020; Şengün et al., 2019; Richard, 2017; Bernstein, 2015). The constructive approaches taken by gamer students aligning with high

levels of IS were found in the current study and the studies that identify profiles of individuals with high IS (Bennett, 1986; Dong et al., 2008; Peng, 2006). On the other hand, the strategies like leaving the game or simply avoiding the problems can be associated with the perceptions of toxic encounters as unavoidable mechanics in the gaming community (Beres et al., 2021; Turkay et al., 2020). Additionally, incidents where female players are harassed by toxic players, leading them to mute chat or leave game sessions, can result in lower levels of interaction enjoyment than male players, as observed in the quantitative part of the study.

In conclusion, the high levels of IS reported by gamer students and their responses to the interview questions indicate that video games can create environments that foster intercultural communication and facilitate cultural knowledge learning. While it was found that some factors in this study did not significantly affect IS levels, it should be acknowledged that video games combine all these factors and provide players with highly interactive and authentic tools with a high level of agency. However, it is essential not to overlook that, when not controlled, video games can lead to adverse outcomes caused by toxic communities.

5.2.2 Pedagogical Implications: In today's rapidly globalising world, it has become the responsibility of language teachers to educate interculturally competent individuals who can adapt to new communication mechanisms. Teachers are expected to equip themselves with high-end technology and intercultural knowledge (Castro, 1999; Edelhoff, 1993; Willems, 2002). Although teaching intercultural skills is critical in language acquisition, it is often overlooked in language instruction due to the teacher's lack of experience in the subject and curriculum-related deficiencies (Alismail, 2016; Gorski, 2006; Nieto & Bode, 2008). On the other hand, digital natives, who have different desires, needs, and learning styles compared to the previous generation, present a significant challenge. Growing up with technological advancements, these students learn better by integrating technological tools such as video games into lessons, unlike traditional instruction (Gee, 2007; Papastergiou, 2009; Chen & Hsu, 2013; Musa, 2015).

Examining authentic tools in lessons, such as photos, magazines, videos, and audio recordings containing cultural elements, it has been repeatedly stated that it contributes to intercultural learning (Sun, 2013; Tomlison, 2003; Rico Troncoso, 2010). These tools, created with references from the real world and equipped with fast internet connections and chat capabilities, come bundled with video games and become excellent resources for both in-class and out-of-class learning. Especially free games with low system requirements can be brought to classrooms as activities or assigned as homework for collaborative activities among students. It should not be forgotten that not only video games themselves but also affinity spaces

associated with video games and even third-party users' videos, such as streaming videos (Sjöblom, 2015), can serve as tools for intercultural education. However, before integrating video games into their teaching, teachers should also consider the toxic aspects of video games mentioned in this study and be cautious in their material choices and make adaptations if necessary.

5.3. Suggestions

This study aimed to shed light on future research by measuring students' levels of IS and reporting their opinions on the intercultural aspects of games. In the future, various experimental studies can be conducted, such as measuring improvements in IS levels and exploring the cultural knowledge learning in video games through experimental studies in which students play games that are integrated into instruction, as well as measuring the outcomes of single-player and multiplayer modes and the use of different communication modes on IS for a more extended period. However, in cases where integrating games into lessons is challenging, the use of affinity spaces and streaming videos where publishers play video games can also be beneficial. On the other hand, although this study did not make a distinction in terms of game genres, games that include RPG elements and those that do not can be included in the scope of the study.

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APPENDICES

Appendix 1: Research Ethics Committee Approval

BURSA ULUDAĞ ÜNİVERSİTESİ
ARAŞTIRMA VE YAYIN ETİK KURULLARI
(Sosyal ve Beşeri Bilimler Araştırma ve Yayın Etik Kurulu)
TOPLANTISI

OTURUM TARİHİ	OTURUM SAYISI
30 EYLÜL 2022	2022-08

KARAR NO 10: Eğitim Bilimleri Enstitüsü Müdürlüğü'nden alınan Yabancı Diller Eğitimi Ana Bilim Dalı İngiliz Dili Eğitimi Bilim Dalı Dr. Öğr. Üyesi Çiğdem KARATEPE' nin tez danışmanlığında yürüttüğü yüksek lisans programı öğrencisi Nilüfer ERDUR'un "Video Oyunu Oynayan Lisans Öğrencilerinin Kültürlerarası Duyarlılık Düzeyleri ve Video Oyunlarından Kültürel Bilgi Edinimine İlişkin Görüşlerinin İncelenmesi" konulu tez çalışması kapsamında uygulanacak görüşme sorularının değerlendirilmesine geçildi.

Yapılan görüşmeler sonunda; Eğitim Bilimleri Enstitüsü, Yabancı Diller Eğitimi Ana Bilim Dalı İngiliz Dili Eğitimi Bilim Dalı Dr. Öğr. Üyesi Çiğdem KARATEPE' nin tez danışmanlığında yürüttüğü yüksek lisans programı öğrencisi Nilüfer ERDUR'un "Video Oyunu Oynayan Lisans Öğrencilerinin Kültürlerarası Duyarlılık Düzeyleri ve Video Oyunlarından Kültürel Bilgi Edinimine İlişkin Görüşlerinin İncelenmesi" konulu tez çalışması kapsamında uygulanacak görüşme sorularının fikri, hukuki ve telif hakları bakımından metot ve ölçeğine ilişkin sorumluluğu başvurucuya ait olmak üzere uygun olduğuna oybirliği ile karar verildi.

Prof. Dr. Feridun YILMAZ
Kurul Başkanı

Prof. Dr. Abamüslim AKDEMİR
Üye

Prof. Dr. Doğan ŞENYÜZ
Üye

Prof. Dr. Ayşe OĞUZLAR
Üye

Prof. Dr. Vejdi BİLGİN
Üye

Prof. Gülay GÖĞÜŞ
Üye

Prof. Dr. Álev SİNAR UĞURLU
Üye

Appendix 2: Permission to use TISS

KDÖ Çalışmanız Hk.

NILUFER ERDUR 26 Ağu 2022 Cum 21:35

Alıcı: serapbulduk

Serap Hocam merhabalar,

Öncelikle kısaca kendimden bahsetmek istiyorum. Ben Nilüfer Erdur, Uludağ Üniversitesi İngiliz Dili Eğitimi yüksek lisans programında tez dönemi öğrencisiyim. Tez çalışmamda dil öğreniminde çok önemli bir yeri olan video oyunlarının kültür edinimi ve kültürler arası duyarlılık düzeyleri üzerindeki etkisini araştırıyorum. Yaptığım taramalar sonucunda sizin çalışmanızdaki ölçeğin amacıma en uygun ölçek olduğunu gördüm. Sizin için de uygunsa ölçeğinizi tezimde kullanabilmem mümkün müdür?

Saygılarımla.

--

Nilüfer ERDUR
MA Student

Fwd: Kültürlerarası Duyarlık Ölçeği izin Harici Gelen Kutusu ×

Serap BULDUK 26 Eyl 2022 Pzt 13:10

Alıcı: ben

Sayın Nilüfer Erdur,

Türkçe geçerlik ve güvenirlik çalışmasını yaptığımız Kültürlerarası Duyarlık Ölçeği'ni çalışmanızda kullanabilmeniz için gerekli dokümanları gönderiyorum. Başarılar dilerim.

Doç. Dr. Serap BAYRAM

5 Ek • Gmail tarafından tarandı


Kültürlerarası Du...

Let's Learn Toget...


Türkçe Kültürler ...


kd-survey-son.rtf

Appendix 3: Questionnaire

Video Oyunları Oynayan Lisans Öğrencilerinin Kültürlerarası Duyarlılık Düzeyleri ve Video Oyunlarından Kültürel Bilgi Edinimine İlişkin Görüşleri

Sayın katılımcı;

Bu çalışma Bursa Uludağ Üniversitesi İngiliz Dili Eğitimi Yüksek Lisans programı kapsamında ve Dr. Çiğdem KARATEPE danışmanlığında, yüksek lisans tez öğrencisi Nilüfer ERDUR tarafından yürütülmektedir. Çalışma Bursa Uludağ Üniversitesi Araştırma ve Yayın Etik Kurulu'nun 30 Eylül 2022 tarihli oturumunda onaylanmıştır.

Bu anketi doldurarak çalışmaya katılmayı onaylamaktasınız. Çalışmaya katılım ve devam etme tamamen gönüllüdür. Araştırma süresi ve sonrasında çalışmadan ayrılma hakkına sahipsiniz.

Araştırma iki bölümden oluşmaktadır. İlk bölümde kültürlerarası duyarlılık düzeyini ölçmeyi amaçlayan bir anket bulunmaktadır. Vereceğiniz her yanıt çalışmanın gidişatı için çok büyük önem taşımaktadır. Lütfen soruları dikkatlice okuyarak size en uygun gelen cevabı işaretleyiniz. Ankette kimlik belirleyici herhangi bir soru bulunmamaktadır. İkinci bölümde ise konuyla ilgili görüşlerinizi belirtebileceğiniz açık uçlu sorular bulunmaktadır. Bu bölümü cevaplamak zorunlu değildir.

Verdiğiniz yanıtlar üçüncü şahıslarla paylaşılmayacak ve amacı dışında kullanılmayacaktır. Anketi yanıtlama süresi kısıtlanmamış olup yaklaşık 20 dakika sürmesi beklenmektedir.

Çalışmaya katılımınız süresince araştırmayla ilgili herhangi bir sorunuz olması durumunda aşağıda yer alan e-posta adresi yoluyla araştırmacıyla iletişime geçebilirsiniz. Katılımınız için çok teşekkür ederiz.

Nilüfer ERDUR

* Zorunlu soruyu belirtir

Anket

1. Cinsiyet *

   Yalnızca bir şıkkı işaretleyin.

   - ◯ Kadın
   - ◯ Erkek

2. Bir haftada yaklaşık olarak kaç saatinizi oyunlara harcamaktasınız? *

   _____

3. Oynadığınız oyunlarla ilgili oyun dışı aktivitelerde bulunur musunuz? (yayıncıları izlemek, fanfiction okumak/yazmak, sosyal medya içerikleri takip etmek/oluşturmak, fuarlara gitmek vb.) *

   Yalnızca bir şıkkı işaretleyin.

   - ◯ Evet
   - ◯ Hayır

4. En çok hangi tür oyunları oynarsınız? *

   Yalnızca bir şıkkı işaretleyin.

   - ◯ Hikayeli (Story mode içeren, Elden Ring, Genshin Impact, RDR gibi oyunlar)
   - ◯ Hikayesiz (Story mode içermeyen, CS:GO, Fifa, Candy Crush vb. oyunlar)

5. En çok tercih ettiğiniz oyun modu aşağıdakilerden hangisidir *

   Yalnızca bir şıkkı işaretleyin.

   - ◯ Tek oyunculu (single-player)
   - ◯ Çok oyunculu (multi-player)

6. Oyun oynarken farklı kültürler ve ülkelerden diğer oyuncularla iletişim kurar mısınız? *

Yalnızca bir şıkkı işaretleyin.

- ◯ Yazılı iletişim kurarım
- ◯ Sözlü iletişim kurarım
- ◯ İletişim kurmam

7. Kültürlerarası Duyarlılık Düzeyi Ölçeği (See page 4)

Lisans Öğrencilerinin Video Oyunlarından Kültürel Bilgi Edinimine İlişkin Görüşleri

Çalışmanın bu bölümünde katılımcıların video oyunlarından kültür öğrenimi ve oyunlardaki kültürel etkileşim hakkındaki görüşleri toplanmaktadır. 10-15 dakikalık bir Discord veya WhatsApp görüşmesi ile bu bölüme katkıda bulunabilirsiniz. Görüşmeyle ilgilenen katılımcıların ilgili kısıma DC ya da mail bilgilerini girmeleri, DC tercih etmeleri durumunda ve **Nilüfer#** adlı kullanıcıyı eklemeleri rica olunur.

	Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle katılıyorum
1.Farklı kültürlerden olan insanlarla iletişimde bulunmaktan hoşlanırım.					
2. Diğer kültürlerden olan insanların dar görüşlü olduğunu düşünürüm.					
3. Farklı kültürlerden olan insanlarla iletişim kurarken kendimden oldukça eminimdir.					
4. Farklı kültürlerden olan insanların karşısında konuşmakta çok zorlanırım.					
5. Farklı kültürlerden olan insanlarla iletişim kurarken her zaman ne söyleyeceğimi bilirim.					
6. Farklı kültürlerden olan insanlarla iletişim kurarken oldukça sosyal olabilirim.					
7. Farklı kültürlerden olan insanlarla birlikte olmaktan hoşlanmam.					
8. Farklı kültürlerden olan insanların değerlerine saygı duyarım.					
9. Farklı kültürlerden olan insanlarla iletişim kurarken kolayca telaşlanırım.					
10. Farklı kültürlerden olan insanlarla iletişim kurarken kendime güvenirim.					
11. Farklı kültürdeki akranlarım hakkında bir kanıya varmadan önce beklemeyi tercih ederim.					
12. Farklı kültürlerden olan insanlarla birlikteyken genellikle cesaretim kırılır.					
13. Farklı kültürlerden olan insanlara karşı açık fikirliyimdir.					
14. Farklı kültürlerden olan insanlarla iletişim kurarken nezaket kurallarına daha dikkat ederim.					
15. Farklı kültürlerden olan insanlarla iletişim kurarken genellikle kendimi yararsız hissederim.					
16. Farklı kültürlerden olan insanların davranış biçimlerine saygı duyarım.					
17. Farklı kültürlerden olan insanlarla iletişim kurarken olabildiğince çok bilgi edinmeye çalışırım.					
18. Farklı kültürlerden olan insanların görüşlerini kabul edemem.					
19. İletişimimiz boyunca kültürel olarak farklı olan akranlarımın imalı yorumlarına karşı hassasımdır.					
20. Kendi kültürümün diğer kültürlerden daha iyi olduğunu düşünürüm.					
21. İletişimimiz boyunca kültürel olarak farklı olan akranlarıma genellikle olumlu yaklaşırım.					
22. Kültürel olarak farklı insanlarla uğraşmak zorunda kalacağım durumlardan kaçınırım.					
23. Kültürel olarak farklı olan akranlarıma karşı anlayışımı, genellikle sözlü/sözsüz iletişi ile belli ederim.					
24. Kültürel olarak farklı olan akranlarımla aramızdaki farklılıktan keyif alırım.					

Appendix 4: Interview Questions

Turkish

1. Video oyunlarından kültürel bilgi öğrenimi hakkındaki görüşleriniz nelerdir?
2. Video oyunlarında farklı kültürel ögelerle karşılaştığınızda neler hissedersiniz?
3. Video oyunları bağlamında kültürlerarası bir iletişim tecrübesi yaşadınız mı? Yaşadıysanız kimlerle ve nasıldı?
4. Video oyunları bağlamında kültürlerarası iletişim sorunu yaşıyor musunuz? Eğer yaşıyorsanız biraz bunlardan bahsedebilir misiniz?
5. Oyun oynarken kültürlerarası iletişim sorunları yaşıyorsanız bunları aşmak için neler yapıyorsunuz?

English

1. What are your views on learning cultural knowledge from video games?
2. How do you feel when you encounter different cultural elements while playing video games?
3. Have you ever had international communication experience in the context of video games? If so, with whom and how?
4. Have you encountered any intercultural communication issues while playing games? Describe them if you have.
5. If you encounter any intercultural communication issues while playing video games, how do you overcome them?

ÖZ GEÇMİŞ			
Adı-Soyadı	Nilüfer ERDUR-HIGASHIHARA		
Bildiği Yabancı Diller	İngilizce Japonca		
Eğitim Durumu	**Başlama- Bitirme**		**Kurum Adı**
Lise	2012	2016	Bursa Yıldırım Beyazıt Anadolu Lisesi-Açık Öğretim Lisesi
Lisans	2017	2021	Bursa Uludağ Üniversitesi
Yüksek Lisans	2021	2023	Bursa Uludağ Üniversitesi
Çalıştığı Kurum	**Başlama- Ayrılma**		**Çalışılan Kurumun Adı**
	2023/08 2023/01	- 2023/07	Çakır Okulları GoStudent
Katıldığı Proje ve Toplantılar	Erdur, N., Karatepe, Ç. (2022). "Move Analysis of Turkish and English Game Reviews on Steam Platform." Uluslararası Dünya Dilleri ve Edebiyatları Araştırmaları Sempozyumu, Haziran 1-3, 2022, Denizli, Türkiye Dijital Teknoloji Tabanlı İngilizce Dil Becerilerinin Öğretimin İlişkin Güncel Araştırmaların Meta Analizi – TÜBİTAK (2022) Uzaktan Eğitim Bilgi ve Beceri Kursu – TÜBİTAK (2021)		
Yayınlar:	Erdur, N. (2022). Gender in Genshin Impact: A Corpus-Assisted Discourse Analysis. *Language Education and Technology*, 2(1). Erdur, N. (2022). Language, Gender, and Videogames: Using Corpora to Analyse the Representation of Gender in Fantasy Videogames: Book Review.		
Burslar:	TÜBİTAK-2210A Yurt İçi Genel Yüksek Lisans Bursu (2021-2023) MEB Öğretmenlik Bursu (2017-2021) Uludağ Üniversitesi Yüksek Başarı Bursu (2017-2021)		
Tarih **İmza** **Adı-Soyadı**			