



## **The Effect of Virtual Games on Learning English**

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### **Abstract**

The aim of this study is to get opinions on the effect of preferential use of English language in virtual games on individuals' learning English. In this study, in which the qualitative research method was used, case study was adopted from the qualitative research designs. The sample of the research consists of 8 students, 4 of whom live in Türkiye and 4 in Germany. Participants were determined according to the purposive sampling method. The interview technique was used in the research. A semi-structured interview form was used as a data collection tool developed by the researchers for the interviews. The codes and categories created from the answers were added to the study in terms of validity and reliability. Based on the statements created by the researchers with independent coding, the reliability of the study was calculated as 90% using the Miles and Huberman formula. The voluntary participation was taken into consideration. The participants' language options in the virtual games are "English", "German" and "Turkish" which are 3 of the codes determined in this research. It is thought that teaching foreign languages by integrating them into games will strengthen individuals' learning by increasing their interest in foreign languages.

**Keywords:** Virtual games, English language, Language option, English learning

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## **Introduction**

Technology is a concept that individuals encounter frequently in daily life. With its most general and simple definition, technology is the things we use which make our lives easier according to Haber (2020), and according to Duygun (2004), it is the information necessary for the production of a good or service and the practice of this knowledge. There are many definitions of technology in the literature, such as the definitions of the two researchers. While technology has positive aspects such as making life easier, it also has negative aspects. Examples of these negative aspects can be given as prevention of socialization and isolation of individuals. Technology is a broad concept and encompasses many topics. Under the title of technology, many words can be collected such as goods, technological tools, architectural structures (Pekmez, Yılmaz, Alaçam Akşit, & Güler, 2018). In addition to these, the expression "virtual environment" can be given under the title of technology.

The virtual environment is an environment that can be used for many purposes such as obtaining information, entertainment and education. The virtual environment also greatly affects the life we live in (Korkmaz, Usta, & Kurt, 2014).

In this regard, items such as;

- Having environments according to the interests of the new generation that can attract the new generation,
- Provide easy access,
- Provide easy sharing opportunity, can be given as examples (Korkmaz, et al., 2014).

While the virtual environment contributes positively, it can also lead to inefficient use of time. The virtual environment includes mediums such as social media, websites, educational sites and virtual games. Virtual games offer individuals many features such as sound, image and so on. Virtual games are accepted as an entertainment element by individuals and continue to take place in the field of entertainment (Doğusoy & İnal, 2006).

While virtual games can affect the individual positively, they can also affect them negatively. The negative aspects of virtual games include psychological effects such as a-socialization of the individual, becoming introverted, wanting to play games all the time (being addicted); and physical effects such as posture disorder (hunchback), obesity, and sleep disturbance. On the other hand, positive features such as improving thinking skills, reducing stress, improving attention skills can be listed. In this study, the positive features of virtual games were emphasized and the relationship between virtual games and English learning was investigated.

Ceylaner and Yanpar Yelken (2017) took the opinions of secondary school students about teaching vocabulary with digital games in their study. As a result, he observed that more than half of the students expressed positive thoughts on this subject. At the same time, this study was determined as the most similar study to present study. The difference of the current study is that, students in both Germany and Türkiye were interviewed, and a general evaluation was made on the opinions of students living in both countries. In addition, current study was conducted with qualitative research methods, while Ceylaner and Yanpar Yelken (2017) did theirs with quantitative research methods.

Hassan (2020) conducted a research on how the use of game technique in secondary school students affects students' foreign language learning anxiety. As a result, it has been proved that the game technique has positive effects on this issue.

Bekdaş (2017) investigated the effect of games used in foreign language lessons on speaking ability. He stated that the use of games instead of traditional methods makes the lesson more fun, reduces the stress and the fear of making mistakes that occurs while speaking. Consequently, he concluded that using games in foreign language teaching contributed to the speaking skill

significantly. In the same context, according to Darfilal (2014/2015, p.14), games should be fun, appropriate for the age of the student and should not contain competition.

In his research, Gömlüksiz (2005) aimed to compare the effects of teaching games with traditional methods on student success in the teaching of "Simple Present Tense" and "Present Continuous Tense" in English. As a result, it was determined that the use of games in English teaching has many positive effects such as reinforcing the subject matters, creating a more enjoyable learning environment, and ensuring that the learned information is permanent.

Children first try to perceive the world through games and try to communicate with their peers using games (Ketterlinus, 2017). Games motivate children as well as teach while entertaining them (Uberman, 1998, p.20). In this context, Işık (2016) investigated the effects of teaching English vocabulary with educational games to 3rd grade students on academic achievement. As a result, he observed that the game technique had positive effects on English vocabulary teaching and academic success.

Virtual games, which have entered our lives with rapidly developing technological content and devices, have been called by different names such as "video games", "mobile games" and "computer games" (Kirriemuir, 2002). In their study, Donmuş and Gürol (2015) investigated the effect of educational virtual games on the retention and achievement of knowledge in English learning. As a result, it has been observed that the lessons taught with the traditional method are also effective, but the lessons supported by educational computer games are more efficient and educational computer games have a positive effect on learning English.

In their study, Çakır, Solak and Tan (2015) investigated how the use and application of augmented reality technology in the classroom environment affects the motivation and academic achievement of students in order to improve, activate and enrich the education and training environments. As a result, they have reached the conclusion that the use of augmented reality technology in the classroom environment is more efficient than the classical lessons and positively affects the course performance of the students.

Taş and Uğurlu (2019) aimed to investigate why social media and technology should be used in teaching and learning a new language and their effects on this situation. As a result, it has been stated that technology assistance can be provided to classical learning environments, but this may also have negative consequences, and that educational environments created by the teacher in language learning in technology-supported environments are of great importance.

Games with digital content also contain elements that support the development of the brain, such as helping learning, improving attention and visual perception (Bavelier, 2012). Gündoğdu and Kartal (2021) took the opinions of 7th grade students about teaching English vocabulary with taboo game in English lesson. As a result, they observed that the taboo game enabled the students to socialize, the students learned the words they did not know from their group friends, they could express themselves better in a foreign language, they thought that it made the words they learned more memorable, and they generally stated positive thoughts about this technique.

Parlak and Zengin (2007) investigated the effects of educational computer games on students' achievement and attitudes in learning English vocabulary. As a result, it has been determined that the web-based learning environment provides students with the opportunity of numerous attempts to learn regardless of time and place and provides a different learning environment than classical learning environments

The aim of this study is to get opinions on the effect of preferential use of English language in virtual games on individuals' learning English. In accordance with the purpose, the research problems were determined as follows;

1. Which language option do the participants use in virtual games?
2. What are the participants' thoughts on the use of the English language in virtual games and the effects of it on their learning of English Language?
3. What does the use of the English language in virtual games teach the participants?
4. How do the participants think that the use of the English language in virtual games affects their interest and success in English lessons?
5. How do the families of the participants approach to foreign language learning?

## **Method**

Interviews were conducted with the individuals participating in the study outside of school hours. Before the interviews, the families and participants were informed, the participants were chosen from the volunteers, the written consent of the parents was obtained. During all interviews, families were with the participants.

### **Model of the Research**

In the present study, qualitative research method was used. According to Yıldırım and Şimşek (2011), qualitative research is a method in which data collection tools such as interview, observation and document analysis are used. Case study, one of the qualitative research methods, was used in the current study. A case study is defined as in-depth description and examination of a system with boundaries (Merriam, 2013; cited by Subaşı & Okumuş, 2017).

### **Sample of the Research**

The sample of this research is a total of 8 students, 4 of whom live in Mersin in Türkiye and 4 in Germany . Participants were determined according to the purposive sampling method. Purposeful sampling method is the detailed investigation of situations that are thought to have rich information (Duran & Kurt, 2019).

### **Data collection tool**

In this study, the interview technique, which is one of the data collection methods, was used. A semi-structured interview form was used as a data collection tool by the researchers in the study. While preparing the interview form, the following steps were followed by the researchers:

**Literature review and collection of basic information:** In the first stage, previous studies related to the subject of the research which were conducted with the same technique, (interview technique) were examined. Important parts have been noted.

**Creating the first draft of the semi-structured interview form:** The first version of the semi-structured interview form was created by the researchers.

**Obtaining expert opinions about the semi-structured interview form:** The first draft of the interview form created by the researchers was sent to experts who are experienced in the subject in order to minimize the errors in the study and to gain academic value to the study. At this stage, the form includes 10 open-ended interview questions and questions about demographic characteristics.

**Finalizing the semi-structured interview form according to expert opinions:** The arrangements suggested by the experts in the field were made and the interview form was rearranged and the interview form was given its final form.

**Determination of the participants:** Purposive sampling method was used in determining the participants. Attention was paid to the participants' ability to express their opinions about the main problems. Gender and age factors are not among the limitations.

**Conducting the interview:** The interview was held virtually due to the Covid 19 pandemic conditions. 8 open-ended interview questions and questions with demographic characteristics were asked to the participants, and the answers were noted and documented.

### **Analysis of Data**

In this section, the answers given by the participants were transcribed. Codes were created from the obtained data. Then these codes were turned into categories and themes. The obtained data were transferred to tables.

### **Credibility and Reliability**

Codes, categories and themes created from the answers were added to the study in terms of validity and reliability. In addition, the voluntary participation of the participants in the study has an important place in this regard. In addition, direct quotations from the views of the participants increase the validity and reliability.

The reliability of the study was calculated with the formula of Consensus / (Agreement + Disagreement) x 100 (Miles & Huberman, 1994), in which similarity, called internal consistency, is conceptualized as consensus among coders, and the reliability was calculated as 90%. According to Yıldırım and Şimşek (2013), if the reliability value is 70%, it is sufficient for the study to be considered reliable.

## **Findings**

In this section, tables were created from the data obtained from the opinions of the participants. Nicknames were given to each volunteer interviewer. Students in Germany: GS1, GS2, GS3, GS4. Students in Türkiye: TS1, TS2, TS3, TS4. Codes were created from the answers of the participants and these codes were marked in tables according to the participants.

### **Demographic characteristics**

Demographic characteristics of the participants GS1, GS2, TS1, TS2, TS3, TS4 participants were female; GS3, GS4 participants were male. GS1, GS4, TS1, TS2, TS3, TS4 participants 11; GS3 participant 10; GS2 participant is 9 years old. GS4, TS1, TS2, TS3, TS4 participants were in 6th grade; GS1 participant is in the 5th grade; GS3 participant is in the 4th grade; GS2 participant continues to the 3rd grade. All the students from Germany are German citizens with Turkish background.

**Table 1**  
*Codes of the First Sub-Problem*

Codes	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
English	1		1	1	3	1	1			2	5
Turkish		1		1	2	1	1	1	1	4	6
German		1	1		2					0	2
To understand better	1				1			1		1	2
German is a mixed language	1				1					0	1
playmates	1				1					0	1
Improve the English language	1				1					0	1
to need	1				1					0	1
Native language Turkish					0	1				1	1
Living in Germany		1			1					0	1
Develop a foreign language			1	1	2					0	2
Enjoyable			1		1					0	1
Interesting			1		1					0	1
Wanting to learn better English				1	1					0	1
Learning new words				1	1					0	1
English language is the main language of the game					0	1	1			2	2
Not change					0	1				1	1
Better Turkish language option					0	1				1	1
Producers' choice					0		1			1	1
Not knowing other languages					0				1	1	1
<b>The overall total</b>					<b>19</b>					<b>14</b>	<b>33</b>

In Table 1, the codes created from the opinions of the participants about the language options they use in virtual games are given. Accordingly, the common code for students living in Germany has been determined as “English”. This code was used by 3 participants. In addition, the codes of "Develop a foreign language", "German" and "Turkish" were used by two participants. Other codes were used by only one participant. For students living in Türkiye, “Turkish” has been determined as a common code. This code was used by all 4 participants. In addition, the codes "English" and "English is the main language of the game" were used by two participants each. other codes were used by only one participant. In general, the common code is determined as "Turkish". The “English” code is also a common code used by the participants.

**Table 2**  
*Categories of the First Sub-Problem*

Categories	Germany			Türkiye			Total	
	f	In group	In general	f	In group	In general	f	%
		%	%		%	%		
Language	7	36.84%	21.21%	7	50.00%	21.21%	14	42.42%
Understand	2	10.53%	6.06%	one	7.14%	3.03%	3	9.09%
Need	2	10.53%	6.06%	one	7.14%	3.03%	3	9.09%
Learn	2	10.53%	6.06%	0	0.00%	0.00%	2	6.06%
Negative thinking	0	0.00%	0.00%	2	14.29%	6.06%	2	6.06%
Develop	3	15.79%	9.09%	0	0.00%	0.00%	3	9.09%
Fun	3	15.79%	9.09%	0	0.00%	0.00%	3	9.09%
Main language	0	0.00%	0.00%	3	21.43%	9.09%	3	9.09%
<b>Total</b>	<b>19</b>	<b>100.00%</b>	<b>57.58%</b>	<b>14</b>	<b>100.00%</b>	<b>42.42%</b>	<b>33</b>	<b>100.00%</b>

The categories related to the language options used in virtual games are shown in Table 2. “Language” was the category with the highest rates, with 21.21% of respondents in Germany and also

21.21% in participants from Türkiye. On the other hand, while the categories of "Negative thinking and Main language" were not preferred by the participants in Germany, the "Learn, Develop and Fun" categories were not created by the participants in Türkiye. In this case, the categories created jointly by the participants were determined as "Language, Understand and need".

**Table 3**

*Codes of the Second Sub-Problem*

Codes	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
Multiplayer	1	1			2					0	2
A language everyone knows	1		1		2					0	2
Different languages	1				1					0	1
Can't find a game-friend	1				1					0	1
An ubiquitous language		1			1					0	1
Common language			1		1	1			1	2	3
Helps to improve the English language				1	1					0	1
Improve english writing				1	1					0	1
Learn				1	1		1			1	2
Producers' choice					0	1				1	1
Good influence					0		1			1	1
General language					0			1	1	2	2
<b>The overall total</b>					<b>11</b>					<b>7</b>	<b>18</b>

According to the codes created from the opinions of the participants about the use of the English language in virtual games, the codes of "Multiplayer" and "A language known by everyone" were determined as common codes from the opinions of the participants living in Germany. According to the opinions of the participants in Türkiye, "Common language" and "General language" codes were determined as common codes. In general, the most used code by the participants was determined as the "Common language" code. In addition, the expressions "Multiplayer, A language everyone knows, Learning and General language" were also preferred by the participants.

**Table 4**

*Categories of the Second Sub-Problem*

		Germany			Türkiye			Total	
		In group		In general	In group		In general	f	%
		f	%	%	f	%	%		
Categories	Player	3	27.27%	16.67%	0	0.00%	0.00%	3	16.67%
	Language	3	27.27%	16.67%	4	57.14%	22.22%	7	38.89%
	Choice	2	18.18%	11.11%	2	28.57%	11.11%	4	22.22%
	Develop	3	27.27%	16.67%	1	14.29%	5.56%	4	22.22%
	<b>Total</b>	<b>11</b>	<b>100.00%</b>	<b>61.11%</b>	<b>7</b>	<b>100.00%</b>	<b>38.89%</b>	<b>18</b>	<b>100.00%</b>

When the categories of the second sub-problem are examined, the expressions of "Player", "Choice", "Develop" with a rate of 16,67% for the participants in Germany, and the expression "Language" with the rate of 22.22% for the participants in Türkiye were the most common category. While the expression "Player" was preferred only by the German participants, the other expressions were used by both groups. The expression "preference" was used by both participant groups with a rate of 11,11% while the expression of "development" was found with a rate of 5.56% in participants from Türkiye and 16.67% in participants from Germany.

**Table 5**  
*Codes of the Third Sub-Problem*

Codes	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
Teaching	1	1	1	1	4					0	4
Yes		1	1		2			1		1	3
Thinking					0	1		1	1	3	3
Not knowing German very well	1				1					0	1
Develop	1				1					0	1
Knowing English	1				1					0	1
Further develop	1				1					0	1
Learning environment	1				1					0	1
Search	1				1		1			1	2
Keep in mind	1				1					0	1
Everyday words	1				1					0	1
To remember		1			1					0	1
Different words			1		1					0	1
Learn			1	1	2					0	2
Use dictionary			1		1					0	1
Vocabulary expansion			1		1					0	1
English lesson at school				1	1					0	1
To help				1	1					0	1
Subconscious					0	1				1	1
To reconcile					0	1				1	1
Turkish meanings of the words					0		1			1	1
Learning new words					0				1	1	1
Little children					0			1		1	1
Easy to learn					0			1		1	1
<b>The overall total</b>					<b>22</b>					<b>11</b>	<b>33</b>

According to the codes created from the opinions of the participants about the effect of the use of the English language in virtual games on the learning of the English language, the common code from the opinions of the students living in Germany was determined as "Teaching". This code was used by 4 participants. For the participants in Türkiye, the expressions "Yes" and "Thinking" were formed by three people each. The expressions "Search" and "Learn" were also created by two participants each. The codes produced jointly by all participants were determined as "Yes" and "Thinking". In this sub-problem, the codes were used 33 times in total, 22 for participants in Germany and 11 for participants in Türkiye.

**Table 6**  
*Categories of the Third Sub-Problem*

Categories	Germany			Türkiye			Total	
	In group		In general	In group		In general	f	%
	f	%	%	f	%	%		
Positive thinking	3	13.64%	9.09%	4	36.36%	12,12%	7	21.21%
To go forward	2	9.09%	6.06%	1	9.09%	3.03%	3	9.09%
Vocabulary	4	18.18%	12,12%	0	0.00%	0.00%	4	12,12%
Knowledge	3	13.64%	9.09%	0	0.00%	0.00%	3	9.09%
Search	1	4.55%	3.03%	2	18.18%	6.06%	3	9.09%
Learning	7	31.82%	21.21%	2	18.18%	6.06%	9	27.27%
To understand	2	9.09%	6.06%	2	18.18%	6.06%	4	12,12%
<b>Total</b>	<b>22</b>	<b>100.00%</b>	<b>66.67%</b>	<b>11</b>	<b>100.00%</b>	<b>33.33%</b>	<b>33</b>	<b>100.00%</b>



When we look at Table 6, where the categories obtained from the participants regarding the effect of the use of the English language in virtual games on English language learning, the most preferred categories were "Learning" with 21.21% in Germany participants, and "Positive thinking" with 12.12% in participants of Türkiye. "Vocabulary" and "Knowledge" categories were preferred only by participants in Germany. The categories of "Search", "Learning" and "To understand" were created by participants from Türkiye with a rate of 6.06%. In the general distribution, the category of "Learning" was in the first place with a rate of 27.27%, the category of "Positive thinking" was in the second place with a rate of 21.21%, and the categories of "Vocabulary" and "To understand" took the third place with a rate of 12,12%.

**Table 7**  
*Codes of the Fourth Sub-Problem*

Codes	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
Daily expressions	1		1	1	3	1	1			2	5
Search	1				1				1	1	2
Keep in mind	1				1					0	1
Introduce yourself		1			1					0	1
Making correct sentences			1		1					0	1
Increase in self-confidence			1		1					0	1
To talk				1	1					0	1
Real life				1	1					0	1
Frequently used commands in the game	1		1		2					0	2
English equivalents of the words					0	1				1	1
New words				1	1	1	1		1	2	3
Foods					0	1		1		1	1
Names					0	1		1		1	1
To accept					0	1		1		1	1
To refuse					0	1		1		1	1
<b>The overall total</b>					<b>13</b>					<b>10</b>	<b>23</b>

According to the codes created from the opinions of the participants about what the use of the English language in virtual games taught them, the common code from the opinions of the participants living in Germany was determined as "Daily expressions". 3 participants used this code. According to the opinions of the participants in Türkiye, "daily expressions" and "New words" codes were determined as common codes. These codes were created by two participants each. In general terms, the "daily expressions" code was used the most by all participants. A total of 5 participants used this code. "New words" code was the second most used code. This code was also used by 3 participants. "Daily expressions, Search and New words" codes were created jointly by all participants.

**Table 8**  
*Categories of the Fourth Sub-Problem*

	Germany				Türkiye				Total	
	In group		In general		In group		In general		f	%
	f	%	%	f	%	%	f			
Life	4	30.77%	17.39%	4	40.00%	17.39%	8	34.78%		
Search	2	15.38%	8.70%	3	30.00%	13,04%	5	21.74%		
Keep in mind	1	7.69%	4.35%	1	10.00%	4.35%	2	8.70%		
Self-Confidence	4	30.77%	17.39%	0	0.00%	0.00%	4	17.39%		
The game	2	15.38%	8.70%	2	20.00%	8.70%	4	17.39%		
<b>Total</b>	<b>13</b>	<b>100.00%</b>	<b>56.52%</b>	<b>10</b>	<b>100.00%</b>	<b>43.48%</b>	<b>23</b>	<b>100.00%</b>		

Table 8 exhibits the categories belonging to the fourth sub-problem. While the expression "Life" was determined jointly by the participants of Germany and Türkiye with a rate of 17.39%, it is seen that the expression of "Self-confidence" was preferred only by the participants of Germany with a rate of 17.39%. "Research" was the second common category used by all participants with a rate of 21.74%, and the category of "Keep in mind" was determined as the least preferred expression with a rate of 8.70%. In the fourth sub-problem, a total of 5 categories were created.

**Table 9**  
Codes of the Fifth Sub-Problem

	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
Using	1			1	2			1		1	3
Joke in English	1				1					0	1
Sometimes		1	1		2	1				1	3
Occasionally					0		1			1	1
English Lesson					0	1				1	1
Using certain words					0				1	1	1
<b>The overall total</b>					<b>5</b>					<b>5</b>	<b>10</b>

When the codes created from the opinions of the participants about using/not using the words they learned in daily life were examined, the common codes from the opinions of the participants living in Germany were determined as "Using" and "Sometimes". Participants in Türkiye, on the other hand, could not find a common code and gave different answers. However, in terms of meaning, it can be said that the codes "Sometimes" and "Occasionally" mean almost the same, that these codes are the common code. In general, the participants mostly used the code "Sometimes". The code "Jokes in English" was preferred only by the participants in Türkiye, and the codes "Occasionally, English lesson and Using certain words" were preferred only by the participants of Germany. In the fifth sub-problem, the codes were repeated 10 times, 5 for participants in Germany and 5 for participants in Türkiye.

**Table 10**  
Categories of the Fifth Sub-Problem

	Germany			Türkiye			Total	
	In group		In general	In group		In general	f	%
	f	%	%	f	%	%		
Using	2	40.00%	20.00%	1	20.00%	10.00%	3	30.00%
Time	2	40.00%	20.00%	2	40.00%	20.00%	4	40.00%
English	1	20.00%	10.00%	1	20.00%	10.00%	2	20.00%
Word	0	0.00%	0.00%	1	20.00%	10.00%	1	10.00%
<b>Total</b>	<b>5</b>	<b>100.00%</b>	<b>50.00%</b>	<b>5</b>	<b>100.00%</b>	<b>50.00%</b>	<b>10</b>	<b>100.00%</b>

The categories belonging to the fifth sub-problem in Table 10 are related to the participants' use of the words they learned in daily life. When Table 10 is examined, the expression "Time" given with a rate of 20.00% is a common category for both groups, while the category of "Using" with a rate of 20.00% was preferred by the participants from Germany. The expression "Word" was used only by participants from Türkiye with a rate of 10.00%. A total of 4 categories were created for the fifth sub-problem, and three of them were accepted as common.

**Table 11**  
*Codes of the Sixth Sub-Problem*

Codes	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
To ensure	1				1						1
Learn by heart	1				1						1
To remember	1				1						1
Confront	1				1						1
Sometimes		1			1						1
Fluency of speech			1		1						1
Using correct sentences			1		1						1
Increasing self-confidence			1		1						1
Using what has been learned in the English lesson				1	1						1
To be successful				1	1						1
To influence positively					0	1			1	2	2
Using words					0		1			1	1
Keep in mind					0		1			1	1
To influence Learning English words					0			1	1	2	2
English Lesson					0				1	1	1
Love					0				1	1	1
Increasing desire to learn English					0				1	1	1
<b>The overall total</b>					<b>10</b>					<b>10</b>	<b>20</b>

When the codes created from the views of the participants on how the use of the English language in virtual games affect their interest and success in English lessons in the Table 11, a common code could not be determined from the opinions of the students in Germany. However, there are codes that are similar in meaning. According to the opinions of the participants living in Türkiye, the code of “Learning English words” was determined as the common code. In general, only the "Learning English words" code was used by 2 participants. Only one participant each used the other codes. In the sixth sub-problem, the codes were used a total of 20 times, 10 for participants in Germany and 10 for participants in Türkiye.

**Table 12**  
*Categories of the Sixth Sub-Problem*

categories	Germany			Türkiye			Total	
	In group		In general	In group		In general	f	%
	f	%	%	f	%	%		
Memorize	2	20.00%	10.00%	1	10.00%	5.00%	3	15.00%
Self-confidence	2	20.00%	10.00%	2	20.00%	10.00%	4	20.00%
Using Time	2	20.00%	10.00%	1	10.00%	5.00%	3	15.00%
Request	2	20.00%	10.00%	1	0.00%	0.00%	2	10.00%
Success	0	0.00%	0.00%	3	30.00%	15.00%	3	15.00%
	2	20.00%	10.00%	3	30.00%	15.00%	5	25.00%
<b>Total</b>	<b>10</b>	<b>100.00%</b>	<b>50.00%</b>	<b>10</b>	<b>100.00%</b>	<b>50.00%</b>	<b>20</b>	<b>%</b>

The categories related to how the use of the English language in virtual games affect their interest and success in English lessons are given in Table 12. 10.00% of the participants from Germany and 15.00% of the participants of Türkiye stated the expression “Success”; it is seen that the

expression “Self-confidence” stands out as the most preferred common category for the participants of Germany and Türkiye with a rate of 10.00%. In addition, while the expression "Time" was preferred by 10,00% only by the participants in Germany; the expression “Request”, with a rate of 15.00%, was preferred only by the participants in Türkiye. While the codes obtained from the participants from Germany are equal to 10.00%, the categories obtained from the participants of Türkiye vary in proportion. A total of 6 categories were created in the sixth sub-problem, four of which were accepted as common.

**Table 13**  
*Codes of the Seventh Sub-Problem*

Codes	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
Yes	1	1	1	1	4	1				1	5
To continue					0		1			1	1
Learning German first	1				1					0	1
Foreign language story books			1		1					0	1
Alien cartoons			1		1					0	1
Learning					0	1			1	2	2
Wanting					0	1			1	2	2
Common language					0	1				1	1
No					0			1		1	1
<b>The overall total</b>					<b>7</b>					<b>8</b>	<b>15</b>

Considering the codes created from the opinions of the participants about their families encouraging/not encouraging them to learn a foreign language, the “Yes” code from the opinions of the students living in Germany was determined as the common code. According to the opinions of the participants in Türkiye, the codes of “Learning” and “Wanting” were determined as common codes. When the overall table is evaluated, only the "Yes" statement was created jointly by all the participants.

**Table 14**  
*Categories of the Seventh Sub-Problem*

	Germany			Türkiye			Total	
	In group		In general	In group		In general	f	%
	f	%	%	f	%	%		
Request	1	14.29%	6.67%	3	37,50%	20.00%	4	26.67%
Positive thinking	4	57.14%	26.67%	1	12.50%	6.67%	5	33.33%
Negative thinking	0	0.00%	0.00%	1	12.50%	6.67%	1	6.67%
Learning	2	28.57%	13.33%	3	37,50%	20.00%	5	33.33%
<b>Total</b>	<b>7</b>	<b>100.00%</b>	<b>46.67%</b>	<b>8</b>	<b>100.00%</b>	<b>53.33%</b>	<b>15</b>	<b>100.00%</b>

Considering the categories created by the participants' opinions about their families encouraging/not encouraging them to learn a foreign language, the German participants mostly preferred the "Positive thinking" category with 26.67%, while the Turkish participants preferred the "Learning" category with 20.00%. While it is seen that another category preferred by the Turkish participants with a rate of 20.00% is “Wanting”; It is also seen that the category of “Negative thinking” is preferred only by the participants in Türkiye. The second priority category of students participating from Germany was the expression "Learning" with a rate of 13,33%. In this table, more categories were created with the rate of 53.33% from the students participating from Türkiye. 4 categories were obtained according to the participants opinions.

**Table 15**  
*Codes of the Eighth Sub-Problem*

Codes	GS1	GS2	GS3	GS4	GST	TS1	TS2	TS3	TS4	TST	Total
Make happy	1			1	2					0	2
Learning foreign language	1				1					0	1
Not playing a lot of games		1			1					0	1
Make the video more instructive		1			1					0	1
Think positively			1		1				1	1	2
Participate with pleasure			1		1					0	1
Speak English faster			1		1					0	1
English word				1	1					0	1
Daily expression				1	1					0	1
Learn				1	1		1			1	2
Affect well					0	1	1			2	2
Not thinking					0			1		1	1
Supporting new language learning					0				1	1	1
<b>The overall total</b>					<b>11</b>					<b>6</b>	<b>17</b>

In Table 15, the codes, which were determined as the eighth sub-problem, were formed from the opinions of the participants about how their families think that their use of the English language in virtual games affects their interest and success in English lessons. When we look at the table, the common code from the views of the students in Germany is "Make happy", and the code from the views of the students in Türkiye is "Affect well". In general, each of the "Thinking positive" and "Learning" codes were used by two participant groups, while the other codes were used by only one participant. In this table, it was determined that a total of 13 codes were created.

**Table 16**  
*Categories of the Eighth Sub-Problem*

categories	Germany			Türkiye			Total	
	In group		In general	In group		In general	f	%
	f	%	%	f	%	%		
Emotion	3	27,27%	17.65%	0	0.00%	0.00%	3	17.65%
Positive thinking	2	18,18%	11.76%	4	66.67%	23.53%	6	35.29%
Instructive	2	18,18%	11.76%	1	16.67%	5.88%	3	17.65%
To speak	3	27,27%	17.65%	0	0.00%	0.00%	3	17.65%
Learn	1	9,09%	5.88%	0	0.00%	0.00%	1	5.88%
Negative thinking	0	0,00%	0.00%	1	16.67%	5.88%	1	5.88%
<b>Total</b>	<b>11</b>	<b>100,00%</b>	<b>64.71%</b>	<b>6</b>	<b>100.00%</b>	<b>35.29%</b>	<b>17</b>	<b>100.00%</b>

When the categories created from the opinions of the participants about how their families think that their use of the English language in virtual games affects their interest and success in English lessons, it is seen that a total of 6 categories were created. When Table 16 is examined, it is seen that participants from Türkiye mostly preferred the "Positive thinking" category with a rate of 23.53%. The categories that stood out among the participants from Germany were "Emotion" and "Speak" with 17.65%. When we look at the table in general, "Positive thinking" and "Instructive" expressions were determined as common categories by the participant groups.

### Discussion, Conclusion and Recommendations

When the categories created from the opinions of the participants about the language options they use in virtual games are examined, the "Language" category came to the fore the most among the

opinions obtained from the students living in Germany. When the discourses of the participants are examined in the context of the category, it can be interpreted that most of the participants in Germany use English as a language option in the games. In addition, the codes of "developing a foreign language", "German" and "Turkish" were used by two participants each. This can be interpreted as the students use German and Turkish language options in addition to the English option in the games and improve their foreign language in the games. For students living in Türkiye, "Turkish" has been determined as a common code. This code was used by 4 participants. In addition to these codes, "English" and "English being the main language of the game" codes were used by two participants each. In these situations, students living in Türkiye use the Turkish language in the games because their mother tongue is Turkish. However, since the main language of the game is English, there are also participants who use the English language option in the games. In general, the "Turkish" code is the most used code by the participants. In addition, the English code was also widely used. This situation can be interpreted as that the participants generally use the Turkish language, but there are also participants who use the English language. Ceylaner and Yanpar Yelken (2017) stated in their study, partially similar to this, that the participants mostly use the English language in virtual games.

The categories created from the opinions of the participants about the use of the English language in virtual games are given. Accordingly, "player", "preference" and "development" codes were determined as common categories from the opinions of the participants living in Germany. This can be interpreted as the fact that English is a language known to everyone, allowing this language to be used in virtual games, and the participants use the English language to communicate with the players in multiplayer games. Ceylaner and Yanpar Yelken (2017) stated in their study similarly that the participants used speech programs in the games. According to the opinions of the participants in Türkiye, "common language" and "general language" codes were determined as common codes. This situation can be deduced that the participants think that the use of the English language in the games is due to the fact that the English language is a common language, that is, used worldwide. In general, the most used code by the participants used the "common language" code. This can be interpreted as the participants think that English language is used in the games since it is the common language.

The categories created from the opinions of the participants about the effect of using the English language in virtual games on English language learning are given. Accordingly, the common category from the opinions of the students living in Germany was determined as "Learning". In addition, it is seen that the categories of "Vocabulary" and "Knowing" are used only by German participants. These situations can be interpreted as the English language in virtual games teaches the participants the English language/helps them learn English. From the opinions of the participants in Türkiye, the "Positive thinking" category was determined as the common category. This situation can be interpreted as the participants think that the use of English language in virtual games has an effect on English language learning. In general, the "Teaching" code is the most used code by the participants. This can be interpreted as the use of English language in virtual games taught/helped the participants in teaching English. Similarly, Hassan (2020), Bekdaş (2017), Donmuş and Gürol (2015) stated in their studies that the use of educational games in foreign language teaching has positive effects.

When the categories created from the opinions of the participants about what the use of the English language in virtual games taught them were considered, "Life" was determined as a common category among the participants from Germany and Türkiye. From the opinions of the participants in Türkiye, the category of "Self-confidence" became the most prominent category. When the participants' discourses on these situations are examined, it can be concluded that daily expressions in English the participants learn from the games contribute to their English vocabulary learning. In general, the "Life" category was used the most. In this case, it can be interpreted that the participants learned daily expressions in English from the games. As another result, Ceylaner and Yanpar Yelken (2017) stated in their study that the participants mostly remembered the noun word group in the relationship between digital games and English.

The categories created from the codes related to the participants' use/not use of the words they learned in daily life were included. From the codes obtained from the opinions of the participants living in Germany and Türkiye, the categories of "time" and "use" were determined as common

categories. This situation can be interpreted as that some of the participants use the words they learned in daily life and some of the participants sometimes use the words they learned. When the codes and opinions of the participants in the "time" category were analyzed, it was seen that the participants in general mostly used the "sometimes" code. This situation can be interpreted as the participants generally use the words they have learned sometimes in daily life. Partly similar to this, Bekdaş (2017) concluded in his study that the games used in foreign language teaching greatly contribute to speaking skills.

When the categories created from the views of the participants on how the use of the English language in virtual games affect their interest and success in English lessons, a common code could not be determined in the views of the students in Germany. This situation can be interpreted as students living in Germany presented different opinions. From the opinions of the participants living in Türkiye, the code of "learning English words" was determined as the common code. This can be interpreted as the use of the English language in virtual games contributes to the learning of new English words by the participants. Donmuş and Gürol (2015) stated in their study that educational virtual games have positive contributions to learning English and they found similar results to the results from the present study. In general, the "learning English words" code can be evaluated as the most preferred expression by the participants in digital games and learning English.

Considering the categories created from the views of the participants about their families encouraging/not encouraging them to learn a foreign language, the "yes" category from the opinions of the students living in Germany, and the "learning" and "wanting" categories from the opinions of the participants in Türkiye were determined as the common categories. Generally, the participants used the "yes" code the most. These findings can be interpreted as students' families encouraging them to learn English and wanting them to learn English, which is apparently one of the effects that the participants using the English language option in Virtual games. Similarly, Engin (2006) stated in his study that social support from the family is one of the most important factors for an individual to be successful in learning a second language.

The codes created from the opinions of the participants about how their families think that their use of the English language in virtual games affects their interest and success in English lessons are given. Accordingly, the "positive thinking" category was determined depending on the codes obtained from the opinions of the participants in Türkiye. Adhering to the participant's views on this situation, it can be interpreted as the use of English language in virtual games positively affects the course performance of the students and this situation makes the students' families happy. From the codes of the participants in Germany, "emotion" and "speaking" were determined as categories. In general, the codes of "thinking positively", "learning" and "affecting well" were used by the participants. This can be interpreted as the participants using different codes but expressing positive thoughts.

Virtual games have both positive and negative features. In this study, the effect of using the English language in the language option in virtual games, which can be brought in addition to the positive features of virtual games, on learning English was investigated. From this perspective:

- Using the English language option in virtual games
- Recognizing that the English language is frequently used in daily life
- Careful and effective use of time in digital games
- Developing digital games in which more English language is used, as digital games played by choosing the English language contribute to the learning of English in the lessons at school,
- Families supporting their children during their English learning and raising awareness of families on this issue,
- Emphasizing the positive effects of virtual games in learning English.

This study unearthed findings pointing the listed situations above and it is thought to make important contributions to the individuals' learning English. It can also provoke further studies in the field of learning English through Virtual Games. We suggest further research on the language option (in virtual games) preferences of individuals with different mother tongues.

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