



Implementation of the Plotagon Application in EFL Speaking Lessons: Its Effect on Speaking Anxiety and Student Motivation

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Abstract

Teaching speaking in foreign language education has been a controversial issue because of the anxiety and motivation. Although the issue has been investigated by many researchers, it remains unclear how to decrease the speaking anxiety, and there is no study on the impact of the Plotagon, which is an interactive digital storytelling application that allows its users to create avatars, choose among scenes and shoot a film by recording their voices, on student motivation and speaking anxiety. The present article examines whether implementing Plotagon affects speaking anxiety and student motivation. 103 high school students studying in a large school in Turkey were chosen via purposive sampling, and concurrent mixed-methods research was conducted to achieve a better understanding of the target phenomenon. The quantitative data were analyzed via SPSS, and the content analysis of the qualitative data was realized via MAXQDA. Results show that implementing Plotagon in speaking classes decreased the level of speaking anxiety and motivated the students in the speaking activities by providing avatars and preparation time, contextualizing speaking, making students content creators, and allowing self-correction. The study has significant pedagogical implications for teachers who aspire to decrease speaking anxiety and motivate their students in speaking classes.

Keywords: speaking anxiety, student motivation, Plotagon, flipped classroom, English language teaching.

1. Introduction

Among all four-language skills, speaking has attracted the most attention when it comes to the factors which affect student motivation and many studies have shown that speaking anxiety affects students negatively and it is proposed that teachers should find ways to cope with speaking anxiety so that they can motivate their students (Cheng, 1997; Cheng et al., 1999; Mestan, 2017; Öztürk & Gürbüz, 2014; Punar & Uzun 2019; Tercan & Dikilitaş, 2015; Yiğit et al., 2020). Although teachers and researchers emphasized the importance of reducing speaking anxiety and suggested many various solutions, an approach or a tool that is able to meet all of those suggestions and solve the problem hasn't been established yet.

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Today we have many software programs and platforms that are specifically designed and developed to assist language learning (LL) processes, in addition to software programs and platforms, as well as thousands of websites and blogs that are not for educational purposes but can be used so with minor modifications or adjustments (Uzun, 2017). One of those platforms is Plotagon (<https://plotagon.com/>). Plotagon has a unique place among other applications since it meets almost every suggestion that's been made by stakeholders to decrease speaking anxiety and increase student motivation. It has quite intuitive software that makes it possible for students to create their movies by writing their creative scripts or to make their characters speak with the students' voices easily. The freedom of choice that the tool allows in customizing characters, deciding scenes, giving voice to characters, and making it possible to watch the result of your choices may increase the authenticity of the application and motivation of the users. It also provides students with enough thinking time and a contextualized environment as recommended in the related literature to decrease speaking anxiety.

There are many studies based on the contributions of Plotagon to educational settings focusing on its effect on writing skills (Alwasilah, 2020; Gámez, 2019; Valverde Escalante, 2020), however, there is no study focusing on its effect on speaking anxiety and/or motivation. Therefore, the present study aims to fill this gap by determining whether attending speaking activities with the help of Plotagon affects the speaking anxiety that learners face during speaking as well as their motivation in taking part during speaking classes. The results are expected to reveal if there are any noticeable changes in the learners' attitudes towards speaking and the LL process.

2. Literature Review

Anxiety, as a psychological factor, has many definitions in the literature and it is such a complex issue that there is not a consensus about its definition (Zhanibek, 2001). However, there are some common postulations by the scholars such as a state of concern, distemper, and unrest (Brown, 2007; Horwitz et al., 1986; Mestan, 2017; Scovel, 1978; Yiğit et al., 2020.).

Many studies indicate that factors related to psychology play an important role in the learning process (Chastain, 1975; Horwitz et al., 1986; Samimy & Tabuse, 1992; Young, 1990; Zhanibek, 2001). Anxiety is addressed as a state that needs to be dealt with by teachers, because it has many negative reflections such as low self-esteem, giving up activities, fear of making mistakes by students (Öztürk & Gürbüz, 2014).

LL environments are one of those fields, which are tremendously affected by human psychology. One of the psychological factors, which has huge importance in the language learning process is anxiety. Krashen (1982) in his Affective Filter hypothesis points out anxiety which causes an imaginary wall to be elevated in the learners' minds that impedes the successful LL process. The wall prevents the use of comprehensible input for acquisition when feelings such as anxiety, fear, or embarrassment are elevated. Similarly, Krashen (1985) claims that learners with a low level of anxiety are better equipped to be successful in second language acquisition.

The reflection of anxiety in FL learning context is referred to as FL anxiety and it is defined as "the subjective feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening and learning" (Gardner & MacIntyre, 1993, p. 284). The reflections of FL anxiety have been a very popular topic among scholars. While some studies suggest that there is a positive correlation between anxiety and achievement (Chastain, 1975; Ehrman & Oxford, 1995; Kleinmann, 1977; Subaşı, 2010), there are a lot of studies indicating a negative correlation between anxiety and language achievement (Aida, 1994; Chen & Chang, 2004; Elkhafaifi, 2005; Gardner & MacIntyre, 1993; Liu & Jackson, 2008; Mestan, 2017; Noormohamadi, 2009; Şener, 2015; Yiğit et al., 2020).

Based on intensive studies on FL anxiety, researchers started to investigate the skills related to language anxiety, and among the skills, speaking attracted the most attention (Öztürk & Gürbüz, 2014). As a result, a new term, foreign language speaking anxiety, has emerged. Speaking anxiety has a significant role in the

process of LL and using the learned language. Wilson (2006) states that many learners suffer from speaking anxiety and defines it as a fear of producing the language orally.

Tercan and Dikilitaş (2015) suggest that due to various factors such as preparedness, lack of thinking time learners suffer from speaking the most among other skills. The study suggests that speaking is a skill that most students can experience difficulty which in turn causes speaking anxiety. Similarly, Young (1990) suggests that the students are worried the most when classroom activities require speaking in front of the class.

Öztürk and Gürbüz (2014) propose that speaking in the target language is the most worrying activity based on the reports of FL learners and speaking becomes even more stressful when students are not prepared to speak and when they cannot find appropriate words. They recommend teachers provide some more time to students so that they can think about the content and as a result decrease speaking anxiety. Accordingly, Mestan (2017) suggests that students in Turkey have a high degree of speaking anxiety due to various reasons and it demotivates them in the LL process. She suggests that teachers can effectively help students overcome this issue by providing enough thinking time, more practice in productive skills with the help of new contextualized activities, and by promoting peer work and group work. Reflecting on the studies, Plotagon seems to be a suitable platform to achieve these suggestions because it provides students with enough thinking time, provides them avatars and contextualizes the learning environment, and allows for peer and group work activities which in turn might help to overcome speaking anxiety.

Yiğit et al. (2020) conducted a study to reveal the reason why students fail to learn foreign languages (FL) in Turkey and the psychological reasons behind it. The results showed that although the students had positive attitudes towards learning a new language, they failed to achieve high levels of proficiency due to a high level of anxiety caused by various reasons such as lack of practice in productive skills, enjoyable activities, and realia. The study emphasized the importance of human psychology in learning environments and its effect on achievement. All these studies reveal the significant importance of anxiety in the LL process. Therefore, they suggest that we should find ways to overcome anxiety.

Implementation of technological tools helps the students to internalize the information used and provides a platform to practice what they have learned. According to Krashen (1985), linguistic proficiency develops when language items are supported by visuals, and when an authentic learning environment is provided. Integration of technology provides both meaningful and authentic context and learning opportunities for students. Furthermore, constructivism as a learning theory claims that people actively construct or make their knowledge, and learning takes place when students are actively involved in learning activities (Dalgarno, 2002; McCarthy, 2020). There are many ways that teachers can find an opportunity to have students engaged in activities that can help them to construct their knowledge by actively being involved in learning activities and motivate them to learn. According to An (2016) computer games are influential in the sense that they motivate learners and provide authentic learning environments. Therefore, teachers should make use of digital platforms and gamification in teaching activities to be able to motivate students and help them to take an active place in their learning process.

Plotagon is a platform that allows its users to create their avatars and make them speak either by recording their voices or by writing the text and making the speech engine read the text for them. It is a content creation software that can be used in education (Guzmán Gámez & Moreno Cuellar, 2019; Oktavianingtyas et al., 2018). The platform allows for role-play activities which give opportunities for communication in different contexts (Müller et al., 2010). It can be used as an interactive storytelling tool for creating short or longer films. Students can create their movies, add emotions, sound effects, choose scenes, and actions. The developers of Plotagon coined the statement “Storytelling for everyone” which reflects the overall mission of the company and the simplicity of the movie-making process.

Storytelling is an approach that uses words, pictures, and sounds to convey information. It is considered to be a functional and efficient instrument for learning languages. (Hur & Suh, 2012; Khalid & El-Maliki,

2020; Marzuki et al., 2016). Storytelling, particularly for language learning, is a useful and effective teaching instrument (Tsou et al., 2006). However, one of the problems with using storytelling as a language teaching tool in the classroom is that it is a time-consuming method. With today's technology, teachers have a chance to use this method without spending long hours for preparation.

Plotagon, as an interactive digital storytelling application, allows learners to create and share stories through integrating digital images, computer-generated texts, videos, music, and voice narration. Digital storytelling has a certain ability to empower the learning process by mixing images, music, narration, and voice. By doing that, it elevates the experiences of both students and teachers and thereby accelerating the awareness of students by enhancing their interest in exploring new ideas (Khalid & El-Maliki, 2020). With all these benefits of digital storytelling, it also enables teachers to mix storytelling and role-playing techniques. In the Communicative Approach, these are closely related to simulations and drama techniques. All of these strategies provide students the opportunity to practice communication in various social environments and social roles, thereby providing an authentic communication context and making the target language more real. It also ties game elements with narratives, using structural components inherent in both domains (Müller et al., 2010).

The use of Plotagon in learning environments is considered to be encouraging thanks to its game-like nature, enhancing interest and providing positive feedback (Farhan, 2019). Gurvitch and Lund, (2014) suggested using animated video clips on Plotagon because it provides differentiated learning opportunities, provides a dynamic setting to meet the attention span of the students, and increases student motivation. These studies reveal the significance of the platform in educational settings. There are other studies emphasizing the use of the platform in language teaching environments which are essential for the present paper.

Guzmán Gámez and Moreno Cuellar (2019) conducted an action research with 18 public secondary schools in Columbia to see whether the use of Plotagon enhances English writing skills. The results showed that integrating Plotagon increased students' motivation, vocabulary knowledge and students reported that they were writing in a fun and meaningful way. Similarly, Alwasilah (2020) emphasized that the use of Plotagon in writing skills creates a fun and humanistic learning environment, helps the students to learn in a real context, and is appropriate in improving the students' multiliteracy abilities.

The studies which were based on Plotagon in the LL context mainly focused on teaching writing in language teaching environments as mentioned. However, few have focused on implementing speaking activities on Plotagon. Speaking skills require special treatment as it was pointed out as the skill which causes anxiety the most.

Those aforementioned studies have signified the importance of decreasing the level of speaking anxiety. They mostly suggested using storytelling, gamification, integrating technological tools to overcome speaking anxiety, and motivating students in the language learning process to overcome the issue. Furthermore, Plotagon has the potential to be an alternative tool in teaching speaking since it possesses all these features that might help to motivate students in LL environments and decrease their anxiety levels. However, few studies have focused on the effects of Plotagon in speaking activities and there has not been any study investigating the effect of Plotagon on speaking anxiety to the researchers' knowledge. Therefore, this study seeks to address this gap in the literature by involving Plotagon in speaking activities.

This study becomes significant as it elaborates on the implementation of the tool in speaking activities in LL environments focusing on its impact on the students' motivation and speaking anxiety. The following research questions are posed:

- Do students feel anxious when they are required to speak in a foreign language?
- Does the implementation of Plotagon in speaking lessons affect the level of speaking anxiety?

- Does the implementation of Plotagon in speaking lessons affect student motivation in language learning environments?

3. Methodology

3.1. Research Model/Design

The current research was designed as a concurrent mixed-method study. Both quantitative and qualitative data were collected via triangulation design. A mixed-methods design was conducted in this study to achieve a better understanding of the target phenomenon, and to verify the set of findings against the other (Sandelowski, 2003). The corroboration of the results also increased research validity by offering various insights into the research (Jick, 1979). The students of various grades and ages were chosen to enhance the reliability. Mixed-methods research (MMR) design was also influential in our study as student motivation and speaking anxiety are complicated issues that require in-depth analysis by reflecting on various aspects of the target phenomenon.

3.2. Participants/Sampling

The participants were chosen via purposive sampling. The study was conducted at a public high school in a large city in Turkey. The participants of the study included a total number of 103 pre-intermediate (A2) level students (58 female, 45 male, 6 sections in total). The students were 9th and 10th graders whose age range was between 13 and 15. All the participants in the study shared the same school, had the same English language teacher, and had 4 hours of English language classes per week. The group was homogeneous in the sense that they had started learning the language at around the same age as a part of compulsory education in Turkey and they had been placed in the school based on their achievement levels determined by a centralized exam to enter high schools in Turkey. The researchers accessed the group with the permission of the schools' English Language Teacher and the principal.

3.3. Instruments/Materials

The data were collected through a questionnaire (see Appendices) consisting of 3 sections including 21 close-ended five points Likert-scale questions and 2 open-ended questions to gain a better understanding of the phenomenon. The first section of the questionnaire aimed to assess the level of the students' speaking anxiety including 11 five points Likert-scale questions. The first section of the questionnaire was developed by Huang (2004) and later was adapted and translated into Turkish by Balemir (2009). However, the items of the questionnaire were not adopted entirely. The relevant parts of the questionnaire were selected and adapted by the researchers. The second section of the questionnaire was developed by the researchers and included 10 five-points Likert-scale items about using Plotagon and its effect on the motivation and speaking anxiety level of the students. The first two sections of the questionnaire used to collect the quantitative data. The last section of the questionnaire, which was used to collect the qualitative data, was also developed by the researchers and includes two open-ended questions that were instructed to be answered at any length and it aimed to gain a better understanding of the students' perceptions about the platform and its effect on speaking classes, since close-ended questions wouldn't enable the researchers to analyze the effect on participants' motivation on their own.

The validity of the instrument was conducted via content, face, and construct validity analysis. To enhance construct validity, the researchers ensured each question aligned precisely with the topics of speaking anxiety and motivation, avoiding overlap between them. Two experts reviewed the items to confirm they fit within the three main areas, and the survey was translated into the participants' native language to avoid misunderstandings. The researchers consulted two experts and discarded items which were evaluated to be irrelevant to the purpose of the study. The two experts also evaluated the face validity of the questionnaire and the researchers modified some items accordingly. The instrument was found to have three factors: level of speaking anxiety (Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11), the effect of Plotagon on the

students' speaking anxiety (Q12, Q14, Q21), the effect of Plotagon on the students' motivation (Q13, Q15, Q16, Q17, Q18, Q19, Q20).

The researchers made sure of that all of the participants answered all of the questions in the instrument to enhance the reliability and also the reliability coefficients of the three-factor groups were found to be .88, .87, and .79 respectively.

3.4. Procedure

The researchers contacted the English language teacher of the participants and obtained her permission to conduct the study. The researchers explained the purpose of the study to her and discussed the role of hers and the researchers during the study. The teacher was to be present in the sessions without intervening, which would both ensure students' investment to the process and researchers' liberty to carry out the process. She was given the questionnaire and she evaluated the effectiveness, validity, and applicability of the questionnaire before the study. The teacher of the participants asked the participants to come to the next lesson having downloaded the Plotagon app on their mobile phones to be able to conduct the study.

The experimental period was three weeks, with two 30-minute lessons conducted for each of the six classes. In the first week, Plotagon app was introduced to the students, in the second week, they practiced with more complex scenarios, and in the third week, they created their final movies based on selected creative contexts. These structured activities ensured students' consistent engagement with both the app and speaking practice.

During the sessions, the researchers introduced themselves, explained the purpose of the study, emphasized voluntary participation in the study, and stated that their identities will be anonymous, and collected consent forms. The researchers made the class watch a YouTube video (<https://www.youtube.com/watch?v=FlITQvxcizk&t=3s>) prepared by the researchers to introduce how to use the app. The researchers answered the participants' questions about the platform.

Once everyone grasped how to use the app, the researchers shared their screen which involved 11 creative contexts which the students were asked to pick one up to create their movie by recording their voices such as "You came across with an alien, what would you speak with him?" The students were given 30 minutes to pick up a situation and create their movies and upload them to their classes' Google Drive file link to ensure that they had completed their movies. First, students chose a scenario that interested them and designed their avatars. Then, they proceeded to create their own stories in the chosen scenarios. Since the application does not require any advanced animation skills, students created scenes and characters by simply employing user-friendly features such as drag-and-drop and scene templates. Once they set the scene, students recorded their voices and added them as voiceovers to the characters in line with the scripts they had prepared. Once the students finished creating their movies, they were given the link to the questionnaire which was prepared in Turkish to overcome any possible language difficulties and to increase the validity of the data. The researchers explained to the class that their answers would not be associated with their lesson scores and their answers would be anonymous. The students were given 15 minutes to complete the questionnaire. In the meantime, the English language teacher of the classroom was responsible for the organization of the students, and the researchers answered any questions about the study and technical issues posed by the students. Finally, the researchers thanked the class for their participation in the study and shared their contact information for any questions regarding the study.

3.5. Data Analysis

The study included a 5-points Likert scale for the first two parts of the study to collect quantitative data comprising 21 questions. The quantitative sections of the study were analyzed using SPSS through descriptive statistics. Skewness and Kurtosis values were calculated to identify data distribution. The data was found to be normally distributed, being within the interval of +1 and -1. The last part of the study included two open-ended questions to collect qualitative data to gain an in-depth understanding of the phenomenon. The qualitative part of the study was analyzed through inductive content analysis via

MAXQDA 2020. The content analysis began importing the students' open-ended responses into MAXQDA. Coding categories related to themes such as speaking anxiety, the effect of Plotagon, and motivation were created through analyzing the data. Recurrent themes and codes were identified in the data using the software's "Coding" function and thus, researchers placed them into groups and subgroups. The analysis was conducted independently by the researchers to ensure reliability, and any discrepancies were resolved through discussions. Once the blind coding process was realized, 10% of the coded data were cross-checked via MAXQDA and it was found that the agreement between the coders was slightly above 80%, which is a sufficient ratio for two or more inter-coders (Braun et al., 2019). The reason behind testing the 10% of the data was that it is expected to be enough (Lombard et al., 2012) since testing the data would not yield any further benefits beyond a certain point (Mouter et al., 2012). Finally, the codes were categorized and frequency counts were taken for each question.

4. Results

The first research question of the study aims to explore whether the students in the present context feel anxious when they are required to speak in a FL. A set of SPSS analyses were done to reach a possible answer to the question. Accordingly, the factor group named "speaking anxiety level of the students" found to have a 2,95 (SD = .84) item-total mean which displays that students have a moderate level of speaking anxiety. The mean scores of each item in the related factor are presented in Table 1.

Table 1.

Items related to the speaking anxiety level of the students

Items	N	M	SD
8) I get anxious when I cannot express my thoughts effectively when I speak English.	103	3,6311	1,25237
6) I feel embarrassed when I speak English in front of the class.	103	3,2913	1,51224
4) I fear giving a wrong answer while answering questions in English class.	103	3,2816	1,50436
7) I feel anxious when I take part in a group discussion that requires speaking English in the class.	103	3,2136	1,37663
1) I feel anxious when I speak English in class.	103	3,0874	1,35839
10) Going to English class makes me more nervous than going to other classes when I know that speaking activities will take part during the lesson.	103	3,0388	1,59609
11) Even if I am well prepared for the planned content, I feel anxious about speaking English.	103	2,9903	1,49833
2) I feel less nervous about speaking English in front of others when I know them. *	103	2,9223	1,28100
5) I enjoy English speaking activities.*	103	2,6796	1,37351
3) I feel more confident about speaking English class when I study the planned contents before the class.*	103	2,2233	1,34261
9) I am more willing to speak English in class when I know the scheduled oral activities beforehand.*	103	2,1942	1,39367

(Items marked with "*" are reverse items)

The second research question aims to find out whether the implementation of Plotagon in speaking lessons affects the level of the students' speaking anxiety. Accordingly, the item-total mean of the factor related to

the effect of Plotagon on decreasing the students' speaking anxiety was found to be 2,78 (SD = 1,08). The quantitative results show that the implementation of Plotagon slightly decreased the students' speaking anxiety. The mean scores of each item to the related factor are presented in Table 2.

Table 2.

The effect of Plotagon on the students' speaking anxiety level

Items	N	M	SD
14) Talking through the Plotagon rather than in front of the classroom reduced my anxiety level.*	103	2,6019	1,36007
21) Attending a speaking class using Plotagon made me feel less anxious.*	103	2,6311	1,26018
12) Using the Plotagon application in speaking classes reduced my anxiety level.*	103	3,1165	1,22315

(Items marked with "*" are reverse items)

However, there is a mismatch between the analysis of close-ended questionnaire items and the content analysis of the open-ended questions. When the students were directed to the question "*How did using Plotagon affect your speaking anxiety level?*" 71 students reported that using Plotagon in speaking classes decreased their speaking anxiety level, 25 students reported that they were neutral, and only 4 students reported that using Plotagon increased their level of speaking anxiety. Participant 71 mentioned how Plotagon decreased his level of speaking anxiety by saying:

Plotagon positively affected my level of anxiety in speaking because when I spoke in front of my friends in class, I was worried if I got it wrong and I had some mistakes, but nothing like that happened in Plotagon and I felt comfortable speaking in Plotagon.

Other students also had similar comments related to Plotagon. For instance, Participant 21 expressed similar feelings about Plotagon by saying "*If we compare it to speaking in front of people, I can say I did not worry at all, so it was good in this way*".

Participant 25 pointed to another aspect of using the platform by pointing out creating avatars and not showing her face by saying: "*It's nice to create a character and have it played with our voices, and I didn't worry because I didn't show my face*."

Another aspect pointed out by the students was seeing the content that they have created. "*Even though I was afraid of making mistakes, it was a relief to watch the video I prepared myself after doing it*." (Participant 82).

The students who reported the effect of Plotagon on their level of speaking anxiety as neutral (n = 25) were mainly the ones who reported that they had not had speaking anxiety. Therefore, Plotagon did not affect their level of speaking anxiety. For instance, "*It did not have much effect personally, as I already love English and I am not afraid of making mistakes*." (Participant 2). Similarly, Participant 33 had similar comments: "*I did not have much speaking anxiety anyway. I still have no speaking anxiety*."

The students who reported that Plotagon increased their speaking anxiety (n = 4) all mentioned that they had had technical issues using the platform. Therefore, they said that not being able to use it appropriately increased their speaking anxiety.

The third research question aims to find out if the implementation of Plotagon in speaking classes affects student motivation in language classes. Factor group named “the effect of Plotagon on the students’ motivation” was found to have an item-total mean of 3,72 (SD = .92) which indicates that using Plotagon in speaking classes motivates the students. The mean scores of each item in the related factor are presented in Table 3.

Table 3.

The effect of Plotagon on the students’ motivation

Items	N	M	SD
19) Placing my character in a context that I chose in Plotagon helped me to visualize the scene.	103	4,1359	1,08509
18) I liked having an avatar in Plotagon.	103	3,9320	1,22284
15) Having time to prepare my speech while I was preparing content on Plotagon motivated me.	103	3,8155	1,25047
13) I liked knowing the subject of the video that I would prepare via Plotagon beforehand.	103	3,7379	1,25214
17) I liked seeing the movie which I prepared at the end of the lesson.	103	3,7184	1,33150
20) It was more appealing for me to attend a speaking activity that Plotagon is used.	103	3,4369	1,27318
16) Preparing my speech on Plotagon motivated me more than our speaking lessons, where we don't use the application.	103	3,3301	1,14093

The result of the open-ended questions, which was content analyzed, was in line with the results of the questionnaire. When the students were asked to report their views related to using Plotagon in speaking classes, 83 out of 103 participants reported positive views, 9 students reported that they were neutral, and 9 students reported negative views.

However, in open-ended questions, the majority of the students tended to talk about different aspects of using the platform. They stated that they felt comfortable using the platform, it was fun, made them content creators, gave them space for self-correction, let them choose a scene and create their characters, improved their imagination, provided them preparation time, and it was easy to use. This is significant since even though the quantitative results of the present study show an increase in their speaking motivation, students didn’t prioritize this when they have an opportunity to talk about the platform freely. This shows that the 3rd section of the questionnaire, which was developed by the researchers in order to collect the qualitative data, served its purpose and gave us a deeper understanding regarding students’ expectations from the platform. The following examples show some of the statements from students.

“I think speaking on Plotagon is more motivating than speaking in the classroom.” (Participant 7)

“It really helps me to talk.” (Participant 5)

“I liked being able to watch my movie afterward. I've seen my mistakes easily. Additionally, it is a fun app.” (Participant 83)

“I think we should use this app frequently in our lessons because I liked seeing an animation with my own voice.” (Participant 23)

“When I look at my finished video, I can understand my mistakes and this motivates me.” (Participant 16)

“I think using the Plotagon application in speaking lessons is really positive because we both use our own imagination and turn it into our lesson. I think it is a very effective study strategy and I am really positively impressed. I intend to use it often outside the classroom.” (Participant 62).

These expressions can also be interpreted as students lost some of their speaking anxiety, if not all, thanks to the certain features of the platform.

Also six students mentioned that they were neutral to the Platform in terms of its effect on their motivation since they had not practiced enough to affect them yet. Furthermore, six students who reported that the platform affected them negatively mentioned that either they found the Platform difficult to use or the app demotivated them because some of the scenes and costumes they liked required them to purchase the items.

4.1. The Summary of the Quantitative and Qualitative Findings

According to both quantitative and qualitative findings of the present study, the majority of the students reported that they suffered from speaking anxiety. They also reported that the use of the Plotagon app in their speaking classes helped them to overcome speaking anxiety and motivated them to take active participation in speaking classes by letting them hide their identities by providing avatars, contextualizing the learning environment, giving space for self-correction, providing fun activities, making them content creators and making them active participants in LL process.

5. Discussion

The questionnaire in the current study aimed to find out the level of speaking anxiety of the students in the present context, to see if the integration of Plotagon affected the level of speaking anxiety, and to see if it affects the students' motivation. In line with this aim, the questionnaire includes items that allowed the researchers to conduct a mixed-method research by collecting both quantitative and qualitative data. Both types of the data gave similar results from different aspects, enabling to interpret the findings of the study thoroughly.

The first research question aimed to find out the level of speaking anxiety of the students in the present context. In the light of the collected data, it was found that students in the present context had a moderate level of speaking anxiety with a mean score of 2.95 (SD = 0.84) related to the first question. In accordance with previous studies (Mestan, 2017; Öztürk & Gürbüz, 2014; Tercan & Dikilitaş, 2015; Yiğit et al., 2020), students were found to be most anxious when they cannot express themselves effectively, when they are required to speak in front of the class, and they feared giving wrong answers in speaking classes. Although the students were not found to suffer from speaking anxiety at extreme levels, the results show that they still suffer from it moderately which needs to be dealt with by teachers because previous studies mainly found a negative correlation between anxiety and achievement (Cheng, 1997; Cheng et al., 1999; Krashen, 1985; Mestan, 2017; Öztürk & Gürbüz, 2014; Punar & Uzun, 2019; Tercan & Dikilitaş, 2015; Yiğit et al., 2020).

The second research question aimed to investigate if the implementation of Plotagon affects the speaking anxiety level of the students. The results of the quantitative data showed that using the platform in speaking classes slightly decreased the students' level of speaking anxiety (mean = 2.78, SD = 1.08). In line with this finding, the content analysis of the qualitative data also showed the majority of the students reported that using Plotagon significantly decreased their level of speaking anxiety by presenting interesting and desired opportunities. The slight difference between quantitative data results and qualitative data results might be due to the social-desirability bias of the students where the students tend to answer the questionnaire in a manner that will be viewed favorably by the researchers (Fisher, 1993). Nevertheless,

the overall results show that implementing speaking activities on Plotagon decreases the existing level of speaking anxiety. The factors that were mentioned in the 3rd section of the questionnaire by the students to help them decrease their anxiety level are that the students do not need to show their faces and therefore, able to disguise their identities by providing avatars, contextualizing the speech by providing various options to choose scenes for their movies, helping the students to see their mistakes and allowing to self-correct rather than teacher correcting the student as in traditional classes. Similarly, Young (1990) suggested that students are worried the most when classroom activities require speaking in front of the class. Therefore, using Plotagon might eliminate this factor as the reports of the current study support. The reason why a minority of students remained neutral and negative was reported to be due to a lack of practice to use the platform which can be reversed by making the activity become a routine for the students.

Finally, the quantitative and qualitative results related to the effect of Plotagon on student motivation revealed that using Plotagon in speaking activities increases student motivation with a mean score of 3.72 (SD = 0.92). The factors which help students to be motivated are listed as being able to visualize scenes, helping them create their avatars, providing fun and easiness in use, increasing language proficiency, and providing preparation time. The results are in line with the previous studies which show that Plotagon increases student motivation and provides a meaningful context for the students (Alwasilah, 2020; Farhan, 2019; Guzmán Gámez & Moreno Cuellar 2019; Gurvitch & Lund, 2014). Using Plotagon in speaking activities helps students become content creators by actively engaging them in the process of creating their films. Piaget's constructivist theory claims that learning takes place when students actively construct their knowledge and suggests using teaching methods that actively involve students and present challenges (Dalgarno, 2002). Therefore, Plotagon seems to be an influential platform in terms of helping students to actively construct their knowledge according to the results of the current study.

In conclusion, the integration of Plotagon in speaking lessons not only decreased students' speaking anxiety but also increased their motivation by making speaking activities fun, more engaging, and personally meaningful. These findings underscore the importance of incorporating innovative tools as Plotagon to create a more motivating and comfortable learning environment for students.

6. Conclusion

The research presented in this paper examined the students' level of speaking anxiety and investigated if the implementation of the platform named Plotagon, which is an interactive digital storytelling app, in English speaking classes affects the level of speaking anxiety, and if it affects student motivation. In the light of the collected data via a survey that contains 5-point Likert scale items and open-ended questions, it was found that participants had a moderate level of speaking anxiety. However, the use of Plotagon in speaking activities decreased the level of their speaking anxiety and motivated them for speaking activities.

The current study is significant because it fills the gap in the literature. Although many studies emphasize the importance of decreasing speaking anxiety, there is a lack of empirical study on how to decrease it. Also, there is no study investigating the effect of Plotagon on speaking anxiety to the researchers' knowledge, and few studies are focusing on the effects of Plotagon in speaking classes. Furthermore, there are barely any studies that investigate the possible results of implementation of Plotagon in learning environments. However, a larger participant number is needed to establish how far the results can be generalized. Furthermore, the study collected data in a relatively short period of time. Therefore, the research could have obtained more accurate results if the participants had been given more time to practice the platform.

7. Limitations and Suggestions for further Research

Further research might replicate the study with a larger number of participants to generalize the findings and increase the external validity of the study or implement an experimental study in a larger time period. A study based on comparison of two groups or the anxiety level of the participants before and after using the Plotagon would help to further understand its effect. Moreover, a future research might also look into the favored features of the platform by the participants separately, to help establishing a clearer understanding if any of the features of the platform is more effective than others in decreasing the speaking anxiety. The findings of this study have a number of practical implications for teachers who are willing to decrease their students' speaking anxiety levels and to motivate their students towards speaking activities. Teachers may do so by integrating Plotagon into their speaking classes. Teachers can create a variety of activities to practice speaking on Plotagon by helping their students to become content creators. For instance, they may provide a context and ask their students to create a film on Plotagon by using their voices. Another activity could be implemented to integrate receptive and productive skills. For example, teachers may provide an incomplete story in a reading text and ask students to finish the story by creating their films on Plotagon recording their voices in pairs or individually which will facilitate both reading skills and speaking skills. Therefore, it is important to bear in mind for teachers that these kinds of activities prepared on Plotagon will decrease the speaking anxiety level of the students, and increase their motivation which in turn will enhance the efficiency of the speaking classes.

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Appendices

Table 4

Questionnaire, Section 1

	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)
1) I feel anxious when I speak English in class.					
2) I feel less nervous about speaking English in front of others when I know them. *					
3) I feel more confident about speaking in English class when I study the planned contents before the class. *					
4) I fear giving a wrong answer while answering questions in English class.					
5) I enjoy English-speaking activities. *					
6) I feel embarrassed when I speak English in front of the class.					
7) I feel anxious when I take part in a group discussion that requires speaking English in class.					
8) I get anxious when I cannot express my thoughts effectively when I speak English.					
9) I am more willing to speak English in class when I know the scheduled oral activities beforehand. *					
10) Going to English class makes me more nervous than going to other classes when I know that speaking activities will take part during the lesson.					
11) Even if I am well prepared for the planned content, I feel anxious about speaking English.					

(Items marked with “*” are reverse items)

Table 5

Questionnaire, Section 2

	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)
12) Using the Plotagon application in speaking classes reduced my anxiety level.*					
13) I liked knowing the subject of the video that I would prepare via Plotagon beforehand.					
14) Talking through the Plotagon rather than in front of the classroom reduced my anxiety level.*					
15) Having time to prepare my speech while I was preparing content on Plotagon motivated me.					
16) Preparing my speech on Plotagon motivated me more than our speaking lessons, where we don't use the application.					
17) I liked seeing the movie which I prepared at the end of the lesson.					
18) I liked having an avatar in Plotagon.					
19) Placing my character in a context that I chose in Plotagon helped me to visualize the scene.					
20) It was more appealing for me to participate in a speaking activity when Plotagon is used.					
21) Attending a speaking class using Plotagon made me feel less anxious.*					

(Items marked with “*” are reverse items)

Table 6

Questionnaire, Section 3

22) What are your views about using Plotagon during speaking classes?
23) How did using Plotagon affect your speaking anxiety level?