



# Public Speaking Anxiety: Can It Be Reduced in an Online Environment?

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**Abstract:** *This study aims to determine whether public speaking anxiety can be reduced when the oral presentation is performed in an online environment. For the purpose of the research, two groups of approximately equal numbers of university students delivered oral presentations: the control group in the classroom and the experimental group online using the MS Teams platform. Their levels of self-perceived communication anxiety and fear of negative evaluation were subsequently assessed using the Oral Presentation Anxiety Scale, which was designed specifically for this study. The results show that the online group was more relaxed when delivering oral presentations. However, other parameters did not show any significant differences in anxiety levels. The limitations of the study include a small sample size, suggesting that further research with larger samples is necessary to reach more reliable inferences.*

**Keywords:** *oral presentation, FL, public speaking anxiety*

## 1. INTRODUCTION

Incorporating activities and tasks that promote students' speaking competence in foreign language education is highly recommended, particularly in tertiary-level study programs. Modern education aims to prepare students for future professional environments where they will need to deliver presentations and engage in various speaking activities. As a result, the oral presentation is a common component of English for specific purposes curricula. Students learn to perform in front of an audience, fluently and enthusiastically without hesitations. However, since oral presentations are complex tasks performed publicly, they can induce a certain level of anxiety. In the following sections, we will explore foreign language anxiety, with a specific focus on public speaking anxiety, to provide a clearer understanding.

## 2. LITERATURE REVIEW

### 2.1. Anxiety of public speaking

One of the most important foreign language teachers' tasks is to instruct students on how to overcome public speaking anxiety which represents an affective component that can have a significant impact on the overall students' performance [1].

Public speaking is an oral production performance that implies speaking in front of an audience [2]. It includes a range of activities such as giving

instructions, holding lectures, delivering presentations, reading aloud from notes, etc. Public performance often causes distress for speakers since most people feel uncomfortable when they need to address a group of listeners [3]. Being connected with fear and anxiety, emotional reactions to public speaking can also be physical, causing speakers to sweat, feel dizzy, and the similar. Therefore, public speaking anxiety (hereinafter: PSA) usually makes speakers feel restless, distressed, uncertain and afraid of the forthcoming situation [4, 3].

Since the 1970s, with the emergence of learner-centred teaching approaches, substantial research has been conducted on PSA as it has been considered a powerful factor that can impede successful FL language learning and proficiency [5]. Generally, psychology identifies three different types of anxiety: 1) trait anxiety, 2) state anxiety and 3) situation-specific anxiety. Trait anxiety is a personal feature typical for certain people [6]. State anxiety, on the other hand, appears as a reaction on certain occasions when an individual recognises a stressful situation [5]. Finally, situation-specific anxiety is connected with a specific context in which an activity takes place. Thus, public performances, including public speaking, reciting or taking exams are frequent situations in which learners feel anxious.

In accordance with the previous discussion, Horwitz et al. mention foreign language anxiety as a set of

beliefs, feelings and behaviours related to the classroom context, encompassing communication apprehension, test anxiety and fear of negative evaluation [7]. Communication anxiety arises from a learner's apprehensions that they will not be able to participate in a communicative situation to their satisfactions [5]. Test anxiety is the fear of not performing well in an examination. Fear of negative evaluation provokes learners' anxiety since they are afraid of other peoples' judgements. Raja [3] explains that being a focus of somebody else's attention is a primary fear that can cause failure. As consequences, students can avoid live communication with their peers and teachers, and assessment tasks [5].

The previous arguments witness that foreign language anxiety (hereinafter FLA), and particularly public speaking anxiety as one of its forms, can represent a considerable obstacle in successful foreign language use. Apprehension, fear, uneasiness and restlessness are frequent negative emotions arising in foreign language classroom due to speakers' insecurity into their ability to communicate or perform well at the tests. This is the reason why FLA and PSA still appear as fruitful research field, even in technologically advanced environment.

In their study, Campbell & Larson compared the results of measuring PSA levels with students who performed face-to-face presentations and those who presented their topics to virtual audience using web-conferencing [8]. Surprisingly, they came to conclusion that there were no significant differences in the amount of anxiety expressed between these two groups of students. Almost a decade later, El Shazly [9] wanted to check the impact of AI tools on PSA level by exposing undergraduate students to implementing chatbots to practise FL communication for several weeks. In line with the previous research, El Shazly's study showed that the speaking interaction with chatbots did not lead to FLA release. On the contrary, the anxiety was slightly increased [9]. These examples imply that PSA and FLA remain the fields that require further investigation to help reduce apprehension and anxiety during live communication.

Regarding the previous inferences, this study was designed to check the effects of using e-learning platform MS Teams on regulating PSA with ESP students at academic level. The primary objective of the paper was to investigate whether there were any significant differences in students' perspectives on PSA based on their experience with traditional presentations in front of a live audience versus online presentations with a virtual audience.

### 3. METHODOLOGY

In line with the literature review, we designed experimental research with the aim to answer the following research questions:

- To what extent do students perceive to feel anxiety when delivering oral presentations in ESP?
- Are there differences in the estimation of anxiety levels between the group that delivered oral presentations in person and the group that presented online?

#### 3.1. Research Design

The respondents of the research represent two groups of students who attended Business English lectures at the Faculty of Technical Sciences Čačak, the University of Kragujevac. The control group consisted of 35 students who delivered their presentations in the classroom, and the experimental one consisting of almost equal number of 32 students. Both groups were exposed to the same scenario during the instructional phase in their lectures. They prepared the same task, oral presentations, following the TBL teaching approach (pre-task, task cycle, focus on form) (see [10]). The task preparation lasted for three weeks. The students had the opportunity to choose appropriate topic which they prepared for the final speech delivery. However, for the sake of the research, the oral presentation phase was different. Namely, the control group presented their topics in the classroom with live audience, while the experimental group delivered their presentations using MS Teams platform having virtual audience.

Both groups were later asked to complete the survey consisting of Oral Presentation Anxiety Scale adapted specially for the purpose of this research. The answers were collected from the beginning of April to the end of May in 2023 via online Google Forms Questionnaire.

#### 3.2. Research Instrument

For designing the PSA scale for our research, we relied on Foreign Language Classroom Anxiety Scale [7] and Public Speaking Class Anxiety Scale (PSCAS) [11]. Hence, these two scales are further elaborated in the following passages.

Horwitz, Horwitz & Cope [7] created the Foreign Language Classroom Anxiety Scale (FLCAS) encompassing 33 items rated on a five-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree". It estimates students' self-reported anxiety levels by summing up their ratings across these items. As mentioned earlier, the FLCAS is structured on three basic features: (1) fear of negative evaluation, (2) communication apprehension, and (3) test anxiety [6].

Public Speaking Class Anxiety Scale predominantly relies on Foreign Language Classroom Anxiety Scale and encompassing research [11]. It adopts

similar framework consisting of 17 items on a five-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree".

The scale used in this research was adopted and modified based on previously mentioned scales, with specific adjustments to focus on presentations as a form of public speaking activity. Also, the questions adapted for our research refer to classroom apprehension and fear of negative evaluation. It consists of 13 items. Five-point Likert scale ranging from "Strongly Agree" to "Strongly

Disagree" and was also used to check the students' self-perceived level of anxiety.

#### 4. RESULTS AND DISCUSSION

To gain the main objective of this research, descriptive statistics and t-tests were performed. Table 1 presents the means and standard deviation for 13 items for both groups (students who had oral presentation in face-to-face class and a group of students who used video-conferencing platform MS-Teams).

**Table 1.** Average levels of speaking anxiety for control group and experimental group

Items	Face-to-face/online	N	Mean	Std. Deviation
I didn't feel quite sure of myself while I was giving the presentation in English.	Face-to-face	35	2.49	0.981
	online	32	2.44	1.162
I got nervous and confused when I was giving the presentation in English.	Face-to-face	35	2.74	1.268
	online	32	2.50	1.016
I was afraid that my presentation wouldn't be enthusiastic and persuasive enough.	Face-to-face	35	2.51	0.981
	online	32	2.94	1.075
I was afraid that I would not speak fluently.	Face-to-face	35	3.06	1.235
	online	32	2.72	1.325
I was afraid that I would make errors while speaking.	Face-to-face	35	3.06	1.235
	online	32	3.20	1.080
I was afraid that other students would laugh at me while I was speaking.	Face-to-face	35	2.34	1.235
	online	32	2.53	1.217
I had no fear of presenting my topic.	Face-to-face	35	2.83	1.504
	online	32	3.37	1.070
I could feel my heart pounding when I was going to deliver my speech.	Face-to-face	35	2.80	1.346
	online	32	2.69	1.2291
I felt relaxed while I was speaking.	Face-to-face	35	2.49	0.98
	online	32	3.03	1.031
Certain parts of my body felt very tense and rigid while I was speaking English.	Face-to-face	35	2.11	1.131
	online	32	2.44	1.014
I disliked using my voice and body expressively while I was delivering my speech.	Face-to-face	35	2.40	1.116
	online	32	2.56	1.045
Even though I was well prepared, I felt anxious about giving presentation.	Face-to-face	35	2.86	1.216
	online	32	3.16	1.110
I was afraid that I wouldn't be able to adjust the pace of my presentation with the pace of presenting the video material (slides, images, animations etc.)	Face-to-face	35	2.31	1.078
	online	32	2.69	1.119

The average levels of speaking anxiety during presentations, both face-to-face and online, show that students in both groups did not experience high levels of anxiety. Only one item, which estimated the fear of making mistakes during presentations, had means above 3 for both groups ( $M=3.06$  for face-to-face and  $M=3.16$  for online). Students who gave face-to-face presentations reported a similar level of fear regarding their fluency ( $M=3.06$ ). Also, students who presented online also reported similar anxiety levels despite feeling well-prepared ( $M=3.16$ ).

However, the item that received the highest evaluation from students in the online mode referred to their lack of fear during presentations ( $M=3.38$ ), while the fear of not being fluent enough and the fear of making errors in front of the audience were the greatest sources of anxiety for the control group ( $M=3.06$ ).

The items rated with the lowest scores were body tension for the group who had face-to-face presentations ( $M=2.11$ ), and the possibility of

other students laughing at presenters for the experimental group ( $M=2.53$ ).

In order to evaluate potential differences in measured speaking anxiety between those two groups of students, t-test was conducted.

The overview of the results presented in Table 2 show that the only statistically significant difference in anxiety scores between the two groups of students is related to how relaxed they felt during face-to-face or online presentations. The group who presented in person reported feeling less relaxed ( $M=2.49$ ) compared to the group who presented online ( $M=3.03$ ),  $t(65) = -2.22$ ,  $p=0.03$ . Therefore, the findings reveal a difference in how relaxed students felt during their presentations, depending on the mode of delivery. Namely, students who presented face-to-face reported feeling significantly less relaxed compared to those who presented online. This suggests that the traditional classroom setting may contribute to higher anxiety levels, possibly due to the immediate presence and scrutiny of peers and

instructors. On the other hand, several factors could explain why students felt more relaxed presenting online. The online environment might provide a sense of physical separation and anonymity, reducing the perceived pressure of public speaking. Apart from this conclusion, we can notice that the overall results of this survey are in line with the findings of the study presented by

Campbell & Larson [8], who also showed that there were no significant differences in the self-perceived levels of anxiety between in-person presenters and online presenters. Thus, we reach the conclusion that the instructors should persist in searching for more suitable methods to reduce public speaking anxiety of their students.

**Table 2.** *T-tests for evaluating differences in speaking anxiety*

Independent Samples Test					
Items	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
I didn't feel quite sure of myself while I was giving the presentation in English.	0.607	0.44	0.12	65	0.85
I got nervous and confused when I was giving the presentation in English.	4.971	0.03	0.86	65	0.34
I was afraid that my presentation wouldn't be enthusiastic and persuasive enough.	0.005	0.94	-1.68	65	0.10
I was afraid that I would not speak fluently.	0.271	0.60	1.08	65	0.28
I was afraid that I would make errors while speaking.	0.148	0.70	-0.35	65	0.73
I was afraid that other students would laugh at me while I was speaking.	0.003	0.95	-0.63	65	0.53
I had no fear of presenting my topic.	6.890	0.01	-1.72	61	0.09
I could feel my heart pounding when I was going to deliver my speech.	1.205	0.28	0.36	65	0.72
I felt relaxed while I was speaking.	0.004	0.95	-2.22	65	0.03
Certain parts of my body felt very tense and rigid while I was speaking English.	0.379	0.54	-1.23	65	0.22
I disliked using my voice and body expressively while I was delivering my speech.	0.156	0.70	-0.61	65	0.54
Even though I was well prepared, I felt anxious about giving presentation.	1.103	0.30	-1.05	65	0.30
I was afraid that I wouldn't be able to adjust the pace of my presentation with the pace of presenting the video material (slides, images, animations etc.)	0.103	0.75	-1.39	65	0.17

## 5. CONCLUSION

This survey aimed to determine how students of Business English felt while delivering oral presentations and which parts of the presentation made them feel nervous. We were eager to find out whether presenting in an online environment could reduce the anxiety and tension associated with public speaking.

The results revealed that both in-person and online groups showed moderate degree of anxiety concerning the levels of their self-confidence, nervousness and confusion during their performance. They were also equally worried about whether the presentation would be enthusiastic and persuasive or whether they would make speech errors. Also, the students of both groups were equally anxious about whether their peers would laugh at them while they were presenting. Both groups could feel physical signs of anxiety in almost the same measure regarding heart beat rate, tension of certain parts of the body or quality of voice. Finally, both groups were moderately apprehensive about whether they would be able to adjust the pace of speech delivery with the presentation of video material on the slides. However, the online group was significantly more relaxed and less anxious when giving presentation when compared to the students who performed in the classroom. This implies that the online oral presentations could serve as a good preparatory task for public speaking tasks.

To obtain more reliable results, the study should have encompassed a larger sample of participants. Additionally, the control and experimental groups did not contain an equal number of participants, which represents a shortcoming of the research. Possible implications could direct future research toward finding more suitable methods for relieving public speaking anxiety that occurs when students deliver their speeches, regardless of the presentation context

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