

Illinois State University

ISU ReD: Research and eData

Theses and Dissertations

11-13-2022

The Effects of Online Learning on Students' Anxiety and Motivation.

Andrea Iturbe Zúñiga

Illinois State University, aiturzu@gmail.com

Follow this and additional works at: <https://ir.library.illinoisstate.edu/etd>

Recommended Citation

Iturbe Zúñiga, Andrea, "The Effects of Online Learning on Students' Anxiety and Motivation." (2022). *Theses and Dissertations*. 1636.

<https://ir.library.illinoisstate.edu/etd/1636>

This Thesis is brought to you for free and open access by ISU ReD: Research and eData. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ISU ReD: Research and eData. For more information, please contact ISUREd@ilstu.edu.

THE EFFECTS OF ONLINE LEARNING ON STUDENTS' ANXIETY AND MOTIVATION

ANDREA ITURBE ZÚÑIGA

77 Pages

The purpose of this research project was to investigate the effects of online education on students' anxiety and motivation. Modified versions of the *Foreign Language Classroom Scale (FLCAS)* and the *Attitude/Motivation Test Battery (AMTB)* were administered to a group of 18 beginning-level Spanish students. Data were analyzed quantitatively to find out whether students described feeling more anxious or less motivated in the online setting versus the in-person setting and to examine what features participants identified with anxiety or motivation. Results show that lower motivation and higher anxiety were present in the online mode of instruction than in the in person setting. Several relevant factors were identified, including connection issues, the lack of visuality of non-verbal responses and the instructor's teaching style.

KEYWORDS: anxiety; L2 learning; motivation; online education

THE EFFECTS OF ONLINE LEARNING ON STUDENTS' ANXIETY AND
MOTIVATION

ANDREA ITURBE ZÚÑIGA

A Thesis Submitted in Partial
Fulfillment of the Requirements
for the Degree of

MASTER OF ARTS

Department of Languages, Literatures, and Cultures

ILLINOIS STATE UNIVERSITY

2022

Copyright 2022 Andrea Iturbe Zúñiga

THE EFFECTS OF ONLINE LEARNING ON STUDENTS' ANXIETY AND
MOTIVATION

ANDREA ITURBE ZÚÑIGA

COMMITTEE MEMBERS:

Rachel Shively, Chair

Montserrat Mir

Patxi Lascurain

ACKNOWLEDGMENTS

First and foremost, I must thank my research supervisor, Rachel Shively. Without her assistance, dedication, and involvement in every step throughout the process, this thesis would have never been accomplished. I would also like to show my gratitude to the members of my committee, Montserrat Mir and Patxi Lascurain, whose support and expertise have greatly influenced this study. I want to thank Germán, Susana, and Rebeca for their unconditional friendship, since getting through this thesis has required more than academic support. Finally, I would like to express my gratitude to my parents and to my partner for providing me with continuous encouragement.

A. I. Z

CONTENTS

	Page
AKNOWLEDGMENTS	i
TABLES	iv
CHAPTER I: INTRODUCTION	1
CHAPTER II: LITERATURE REVIEW	7
Anxiety, FLA and online learning	7
Motivation and online learning	15
CHAPTER III: RESEARCH QUESTIONS	30
CHAPTER IV: METHODS	31
Participants	31
Teaching context	31
Data collection procedures	32
Anxiety questionnaire	33
Motivation questionnaire	34
Data analysis procedures	36
CHAPTER V: RESULTS	37
L2 learners' anxiety in the Spanish course	37
L2 learners' motivation in the Spanish course	40
CHAPTER VI: DISCUSSION OF RESULTS	44
Discussion of anxiety questionnaire results	44
Discussion of motivation questionnaire results	53

CHAPTER VII: LIMITATIONS OF THE STUDY	59
CHAPTER VIII: PEDAGOGICAL IMPLICATIONS	62
CHAPTER IX: CONCLUSION	65
REFERENCES	66
APPENDIX A. ANXIETY QUESTIONNAIRE	73
APPENDIX B. MOTIVATION QUESTIONNAIRE	75

TABLES

Table	Page
1. Responses to anxiety questionnaire	37
2. First part of motivation questionnaire	40
3. Motivation in the in-person classroom	41
4. Motivation in the online classroom	42

CHAPTER I: INTRODUCTION

The use of technology to enhance learning is gaining ground worldwide, reducing the temporal and spatial problems associated with in-person learning. Although distance learning has been around for a long time, since 2020 and in response to the situation created by the COVID-19 virus, different platforms have been used for the classes to be carried out virtually. During the pandemic, language course instructors found in these tools a great help to continue teaching from home, which in addition to allowing students to keep up with their education with certain normality, also adapted well in terms of communication between students and teachers. Courses continue to be imparted online even after the pandemic and introducing students to online platforms has and continues to be a challenging task. How online learning affects students remains an important area of research that ought to be addressed.

In order to understand what the word “online” encompasses in terms of teaching it is important to understand the differences in the terminology that is used to describe the use of technology in the classroom. Bates (2005) pointed out that the terms “online learning” and “e-learning” are used interchangeably but made the distinction that “e-learning” can encompass any form of technology, while “online learning” refers specifically to using the Internet in the educational process. It can be said that “online learning” has its roots in distance education. In this way, the term “fully online” is used by Bates (2005, p. 9) to distinguish distance courses where students must have access to an Internet device to be able to undertake the entire course. There are many definitions of “online learning,” reflecting the wide diversity in terms of the practices and technologies that are in use regarding the Internet. Ally (2008) defined it in the following way: “... the use of the Internet to access materials; to interact with the

content, instructor, and other learners; and to obtain support during the learning process, in order to acquire knowledge, to construct personal meaning, and to grow from the learning experience” (p. 5). In this thesis, the term “online learning” will be used to encompass the definition offered by Ally while incorporating the distinction used by Bates. Online learning, as described in this thesis, is taken to be a form of distance education mediated by technological tools where learners are geographically separated from their institution.

Many authors have reiterated the potential benefits of online learning. Plaisance (2018) explained that online learning could be delivered synchronously or asynchronously. The synchronous mode enables real-time communication between teachers and learners (Plaisance, 2018) through applications such as Skype, Zoom, Microsoft Teams, and Google Meet. This context has been specifically relevant in terms of language learning, which requests dedication in terms of time. Online learning allows learners to learn a second language (L2) in a virtual environment at their own pace and time (Akcaoglu et al., 2016) especially in the context of the asynchronous mode. Many seemed to find the asynchronous online classroom very useful, mainly due to the flexibility that it offers.

However, aggravated by the pandemic situation, much of the online language learning has been delivered synchronously over the past years. This mode of education provides students with the opportunity to receive their education despite their location. However, it has also proven problematic for different reasons. Mondol’s and Mohiuddin’s (2020) study concerning online learning during the pandemic in Bangladesh reported that their participants faced various learning difficulties, mainly because of weak Internet connectivity at home and the unavailability of supporting

devices. The teaching-learning process being interrupted by these difficulties resulted in a motivation swing that aroused anxiety symptoms in students. Furthermore, teachers' limited ability to check learners' understanding through visual signs even in a synchronous mode of instruction can lead to learners' misconceptions being prolonged, unless they independently study further or are willing to ask questions in class (Plaisance, 2018). Hence, unless carried out mindfully, online learning could lead to possible learners' disconnection and disengagement (Plaisance, 2018). Some studies regarding students' attitudes towards online learning during the pandemic have proven that student's feelings towards education are indeed affected by the online context (e.g., Coman et al., 2020; Evişen, 2020). According to the previously mentioned studies, affective factors such as motivation or anxiety seem to be the main aspects affected by the mode of instruction. These two emotional agents have generated a considerable amount of research and used to be a focus of interest even before the pandemic started.

Anxiety has been one of the main areas of interest in educational contexts during the past two decades. Horwitz et. al (1986) defined anxiety as “the subjective feeling of tension, apprehension, nervousness, and worry associated with the arousal of the autonomic nervous system” (p. 125). When considering anxiety, a distinction has been made between “general anxiety” and “L2 anxiety”, making this affective factor an even more relevant element in the research related to *Instructed Second Language Acquisition* (ISLA). Horwitz et al. (1986) pioneered the term *Foreign Language Anxiety* (FLA) as a specific syndrome from which three other forms of anxieties emerge: communication apprehension, fear of negative evaluation, and test anxiety. In addition, Pae (2013) argued that there are specific L2 skills that are more anxiety provoking than others, considering speaking one of the most influential in this regard. Such anxiety may

result, as Horwitz et al. (1986) mentioned, in inability to speak from the fear of making a mistake or in a lack of self-efficacy. Foreign language theorists and educators know that anxiety and stress are obstacles for foreign language students, and therefore, it has been a well-researched topic, studied by numerous educational theorists (e.g., Krashen, 1981; Horwitz, et al., 1986; Von Wörde, 2003; Blake, 2008; Pichette, 2009; Chametzky, 2013a, 2017, 2019). While anxiety has been researched in face-to-face learning environments, it is not yet evident that it manifests in the same manner in an online environment, leaving a gap in research that must be regarded.

Even though there has been a recent shift towards the study of more positive emotions in the classroom (McIntyre et al, 2019), such as enjoyment or resilience, anxiety seems to have regained some attention due to the pandemic. Just as motivation and online contexts seem to be deeply interrelated, anxiety also appears to be more and more present as education changes towards a virtual setting. Saadé et al. (2017) found that 30% of students experienced anxiety when receiving online courses, and their performance seemed to be compromised, which makes the presence of this affective factor a preoccupying issue worth paying attention to. Moreover, although there are many technology and Internet related anxiety studies (Stowell & Bemmet, 2010; Bolliger et al., 2011; Saadé et al. 2017; Cueva & Terrones, 2020), those related to second language acquisition are relatively scarce.

Motivation, in simple terms, is the stimulus that pushes students to initiate and sustain the L2 process (Dörnyei, 2005). In practice, teachers and learners normally use motivation to explain “what causes success and failure in learning” (Guilloteaux & Dörnyei, 2008, p. 55). Motivation can influence what we learn, how we learn and when we choose to learn (Schunk & Usher, 2012). Spolsky (1990) affirms that motivated

students are likely to learn more information more quickly than students who are less motivated, as well as to participate actively and pay more attention to tasks or activities. Consequently, many researchers have been concerned with the question of how to increase motivation in the classroom, with considerable research dedicated to L2 acquisition and its relationship with motivation itself and with the implementation of several motivational techniques, most of them signaling a positive correlation with learning (Masgoret & Gardner, 2003; Guilloteaux & Dörnyei, 2008).

Given the important and reciprocal relationship between motivation and learning, this affective factor has been actively researched across a wide range of traditional educational settings (Schunk, Meece & Pintrich, 2014). However, studies that explore motivation in an online context are rather limited in number and scope, and even less when concerning L2 online learning, even though physical condition has been long considered a factor that affects learner's motivation (Harmer, 1991). What is noticeable is that higher dropout rates are associated with online courses compared with face-to-face ones (Park & Choi, 2009), with poor motivation as a decisive factor contributing to this. These results point to the need to reconsider motivation in online learning contexts as an important factor to study.

As has been mentioned before, how anxiety and motivation might affect education has been given attention for decades. However, the COVID-19 pandemic led many around the world to use online platforms to continue with education, and some have maintained online learning even as pandemic-related restrictions have disappeared. Many institutions are still coping with online classes nowadays, and how the virtual situation affects motivation and anxiety is an area that has received little attention so far, specifically when concerning ISLA. Therefore, this project aims to examine how

motivation and anxiety are affected by the online language teaching context. This study will add to previous literature in one primary way: it will collect students' perceptions in an L2 classroom, adding information to the scarce research on affective factors in language learning online settings. The results of this study will help future researchers as well as school administrators in the control of triggering factors for motivation and anxiety on the online context at a university level.

CHAPTER II: LITERATURE REVIEW

This literature review will be organized in two parts, differentiating the two factors that concern this study. The first section will deal with anxiety and the second section with motivation. Research on anxiety and FLA in the online learning context will be explored first. Secondly, the studies concerning motivation in the online classroom will be presented. Previous research on both themes will be developed following a chronological order.

Anxiety, FLA and online learning

In this section, research on the relationship between the use of technology and FLA will be synthesized, as well as existing research on anxiety in other disciplines. For this purpose, studies on e-learning, *Computer Mediated Communication* (CMC), distance learning and other online-related factors have been considered relevant, as well as their impact on anxiety related to several areas such as testing, feedback, speaking, reading, writing, and learning outcomes.

One of the earliest studies, done by Joohae (2005), aimed to investigate the existence of FLA in e-learning situations with the purpose of identifying learners' background factors and anxiety levels. The Horwitz et al. (1986) *Foreign Language Classroom Anxiety Scale* (FLCAS) was administered to 162 *English as a Foreign Language* (EFL) learners. The findings indicated that EFL learners did not experience FLA in e-learning classes. However, results showed some concern over test anxiety in online environments and learning style conflicts. In addition, the levels of e-learning anxiety were found to be correlated with the proficiency level in the target language, as well as with the academic background and gender of the participants.

As has been mentioned before, speaking tends to be one of the most anxiety provoking tasks for a language student, and therefore, it has received plenty of attention. Finding a way for students to communicate in the target language online has been a main concern in the teaching community. In response to this need, CMC has been pivotal in the language courses in the last decade. CMC is defined as any human communication that occurs using two or more electronic devices. Some examples of CMC are videoconferencing or communicating via email. Research has also shown that CMC has beneficial effects on students, mainly because it reduces anxiety in the foreign language-learning context. In one of the earlier studies, Arnold (2007) examined how CMC apprehension levels were affected by synchronous and asynchronous communication. After 56 foreign language learners were assigned to control and experimental groups, they were asked to self-report and do pre- and post-test questionnaires. The control group (n=12) completed the discussions face-to-face while the two experimental groups used synchronous (n=21) or asynchronous CMC (n=23). Findings showed that learners experienced a lower level of communication anxiety during CMC sessions compared to the in-person setting, again showing that the online context can aid students that find learning a language an anxiety provoking situation.

Research has also focused on how distance learning, encompassing both synchronous and asynchronous teaching, influences foreign language learners' anxiety levels, although results are contradictory. Distance learning is understood as method of study where teachers and students do not meet in a classroom but use the Internet, email, and other CMC tools, to have classes either synchronously or asynchronously. In an earlier study that aimed to compare foreign language learners' anxiety levels in distance learning and face-to-face environments, Pichette (2009) found no significant

difference between the two. Pichette administered different questionnaires to 186 university-level French speakers who were learning English or Spanish in Canada. He used the FLCAS to measure general anxiety, the *Foreign Language Reading Anxiety Scale* (FLRAS) (Saito et al., 1999) to assess reading anxiety, and the Daly-Miller Writing Apprehension Test (Daly & Miller, 1975) to measure writing anxiety. His analysis showed, as mentioned before, no differences in perceived anxiety levels between face-to-face and online learning, although it was noticed that anxiety levels tended to drop among students that were more advanced in the online environment. After spending time in the new context and becoming comfortable with the learning platform and instructional technologies, online learning students showed an advantage, indicating some benefits of this specific context versus a face-to-face environment.

Research has also hypothesized that test anxiety might be reduced by the online setting. Stowell and Bennett (2010) administered regular course exams in an online format to 69 participants from a psychology course. They found that students who normally experience high levels of test anxiety in the classroom had reduced test anxiety when taking online exams, while the contrary was only applicable for those with low in classroom anxiety. Furthermore, the relationship between test anxiety and exam performance was weaker in an online setting than in the in-person classroom. Therefore, they recommended that instructors should evaluate the potential impact of offering examinations online on the performance of their students.

Online learning allows teachers to incorporate a wide variety of new tools that can, in fact, reduce the anxiety felt by students in their process of learning a language. In an attempt to investigate the positive effects that online tools might have on foreign language students, Grant et al. (2012) examined whether or not learners felt less FLA in

an online multiuser 3D virtual world simulation than in the face-to-face classroom, attempting to establish what impacts these demands had on learner performance and FLA. It was found that students felt the virtual environment was less stressful in terms of language use and that there was not a significant inherent level of technology related anxiety.

How assessment is affected by online education has also been studied. In an investigation of anxiety during communication in the L2 in the online context, Terantino's (2014) aim was to compare the levels of FLA during oral assessments. The focus of his study was to compare levels of FLA in a face-to-face class and a Skype video conferencing class. After gathering data by administering the FLCAS (Horwitz et al., 1986) to 81 university students enrolled in a Russian as a foreign language class and conducting interviews with eight students, he found that there was not a significant difference regarding anxiety levels between the face-to-face and the Skype educational context. In other words, findings showed that students' anxiety levels increased while taking an exam regardless of exam delivery mode, with no distinction between online and face-to-face contexts.

Since the online courses seemed to be a successful environment for instruction, hybrid education started to seem like a plausible option for many. Scida and Jones (2016) examined the effects of hybrid courses of elementary level Spanish courses on foreign language learners' self-reported levels of anxiety. Prior to 2003, the three Spanish courses used for this study were offered in the face-to-face format, meeting five days a week in the classroom with no online work. In 2003, they adopted a hybrid model for the beginning-level Spanish program to make better use of instructional resources, increase the number of sections to meet an increasing demand for Spanish

courses, and improve student learning. In this study, 39 students completed their courses in an existing hybrid format, whereas 70 participants completed the courses in a redesigned hybrid format, which included adaptive learning activities, online video grammar tutorials, online video clips of a scripted newscast for listening comprehension, interactive, sequenced, task-based cultural activities and an E-Textbook. The participants were told to complete pre- and post-tests of listening comprehension and linguistic knowledge, which provided the necessary data, and the learners' perceptions of the courses were considered as another data source. Findings indicated that participants in the redesigned hybrid courses experienced a significant decrease in anxiety levels and improvement in listening comprehension skills and linguistic levels. There were only two items where students reported increased anxiety levels, technical issues (e.g., glitches when using the online tools for the first time) and the amount of work. However, it is uncertain whether the higher scores on these items were indicative of anxiety or some other factor, such as "students' lack of motivation" (Scida and Jones, 2016).

Another key element in language learning that can affect anxiety levels is feedback. As the relationship between corrective feedback and anxiety had been mostly researched in face-to-face environments, Martin and Valdivia (2017) aimed to investigate the relationship between speaking anxiety and feedback in an online oral synchronous communication task. In this study, 50 Spanish-speaking EFL learners enrolled in an intermediate online course were administered the *Corrective Feedback Belief Scale* (CFBS) (Fukunda, 2014) and the FLCAS (Horwitz et al. 1986). Students were asked to rate different methods: Explicit correction, Metalinguistic feedback, Repetition by the teacher, Clarification, Elicitation and Recast. The researchers found

that recast and metalinguistic feedback were better rated by the participants who experienced a high level of anxiety. Therefore, and interestingly, the study suggested that feedback in an online oral synchronous communication is better received by anxious learners, showing again that this context might have more benefits than drawbacks in terms of anxiety in the language classroom.

Chametzky (2019) did similar research to the previously mentioned studies by Pichette (2009) and Horwitz et al. (1986), in which he drew a somewhat different conclusion. For his qualitative, descriptive pilot study, the researcher developed 37 questions adapted from the FLCAS (Horwitz et al., 1986). The newly created instrument was called *Online World Languages Anxiety Scale (OWLAS)* and was distributed to seven students. According to his research results, foreign language learners were generally comfortable using online technology but were not comfortable speaking; they did not want to make mistakes and felt embarrassed, which raised the anxiety levels of the learners. As with all in-person classes, learners did not want to fall behind and fail, and this fear was even more acute in an online foreign language class.

Since the pandemic triggered changes in the educational context and teaching modes, research on anxiety has received more attention with regards to the online setting since 2020. Cueva and Terrones (2020) sought to analyze the repercussions of online teaching on the mental health of students at the *Pontificia Universidad Católica del Perú (PUCP)* in the context of the COVID-19 quarantine. With this purpose, the study gathered the perceptions of a sample of 74 students from the Faculty of General Studies and Letters based on their experience with online classes during the pandemic. The sample was divided into two groups: the first group with adequate technological resources and the second group lacking quality technology. The results showed that the

main consequence for the first group was stress and anxiety due to academic overload, and for the second group, apart from stress and anxiety, frustration, and university dropout. This study points to the online setting as one of the main anxiety provoking aspects of the pandemic.

Kaisar and Chowdhury's (2020) study investigated whether the virtual classroom situation created or decreased FLA. The in-house *Foreign Language Virtual Classroom Anxiety Scale* (FLVCAS) was conducted with participation by 104 students from three public and three private universities of Bangladesh who experienced virtual language classes. Eighteen participants from the questionnaire survey were interviewed with eight open-ended questions to elicit qualitative data. One student from each university was invited to virtual focus group discussions. The research indicated that virtual classes provided students with the opportunity to sit relaxed, which decreased their anxiety levels. The physical classroom, however, was considered norm dependent and rigid. An examination of focus group discussion resulted in the idea that the virtual language class brought flexibility to the class schedule. Since it saved energy and time due to its flexibility in terms of class schedule, it helped students to concentrate only on class. The features offered by digital technology made it easy to prepare for language activities. However, it lacked the necessary components of language class, for example, real-life practice, group work, pair work, and necessary interaction, making the learners feel isolated, uneasy, bored, and thus become anxious about their language achievement.

Valizadeh (2021), in his mixed-methods study, investigated FLA in virtual EFL classrooms during the COVID-19 pandemic in Turkey. Data were gathered from 212 online learners via a questionnaire including both open-ended and close-ended

questions. A large number of the students felt less anxious than in a face-to-face classroom. Over half of the respondents felt anxious thinking that others might see their home settings or hear the voices in their homes, recorded for every activity, or thinking that their physical and mental health could be affected by long-time use of technology. The online classroom setting made many of the participants feel more suffocated and isolated. In terms of the benefits of the online classes, several learners felt comfortable answering questions because others were not looking at them and because others could not see their physical appearance. In contrast, the direct presence of eye contact with the teachers in face-to-face classrooms made several students more nervous. Some also referred to the COVID-19 pandemic, mainly noting the fact that it was risky for their health to be in face-to-face classrooms.

Tóth (2021) decided to study how anxiety could impede a variety of learning outcomes. Keeping in mind that language educators and their students were required to make the transition to the online environment rapidly without being given the sufficient time or preparation for it, she aimed to investigate students' attitudes towards acquiring a second/foreign language in the online space. She used questionnaire-based research among university students studying in online English language courses at different universities and colleges in the United States. The results partly match with the few previous studies examining language learners' anxiety levels in the online space. Participants did not seem to show considerable anxiety levels during the online English lessons, but one-third of them were concerned about their English knowledge not developing as much as it would develop in in-person language classes.

Even though it seems like recent studies show a more detrimental effect of the online setting in language learning, the benefits that it can provide for student anxiety

have also been a new focus of study. Pakpahan and Gultom (2022) examined how the use of websites helped students feel comfortable to speak. The objective of the research was to investigate students' self-rated degrees of FLA and the effect of using a conversation partner exchange website in overcoming this anxiety. They examined 100 undergraduate students of 4th and 6th semester majoring in English education in Indonesia, and they used an adaptation of the FLCAS (Horwitz et al., 1986) to find the state of language speaking anxiety before and after using the website. It was found that the number of students that felt anxiety decreased after using an online tool, showing again the benefits of an online context in the speaking aspect of the second language class. However, some students believed that, if they had the chance to see their conversation partners face to face, it would have helped them in improving their speaking skills even more.

Although anxiety has been studied in in-person foreign language environments for decades, research on language anxiety in the context of the online learning environment is not as abundant. As can be observed from this literature review, students have experienced problems with regards to their anxiety in the online environment, but there are also many positive aspects for their education in this new and increasingly used instructional mode. Anxiety in the online class must therefore continue to be studied.

Motivation and online learning

This section will deal with research that has focused on the effects of online learning on the motivation of students, both in L2 classrooms and other educational contexts. For this purpose, it will include studies that focus on a range of topics related with the dynamics of motivation, such as intrinsic and extrinsic motivation, attitudes of

students, interest, or engagement with the course, the role of the teacher, among others, as well as with various aspects of online learning that can affect motivation, such as CMC, distance learning and different online tools.

In one of the earliest studies regarding online education and motivation, Ushida (2005) investigated the role of motivation in L2 students in an online language course context. Students' learning behavior and outcomes were used as predictors and variables in the quantitative analysis, in addition to data examined qualitatively. Ushida administered a modified version of the *Attitude/Motivation Test Battery* (AMTB) created by Gardner (1985) twice in the semester to measure the attitudes and motivation of the participants, followed by the *Faculty Course Evaluation* (FCE) of Carnegie Mellon University to measure the outcomes of the course. The results showed that students tended to have relatively high anxiety levels about the online course at the beginning of the semester due to their lack of familiarity with the online learning environment, but their levels of motivation were relatively positive and stable during the course. Motivated students studied regularly and productively to take every opportunity to perfect their language skills. Findings also show that the attitude of the teacher can create a unique class culture that can indeed affect students' motivation towards studying the L2 in the online context, therefore reinforcing the critical role of the teacher in technology-enhanced education. Moreover, the author concluded that some students could benefit from the flexibility of the online course, yet at the same time, not all students learn how to manage their own learning when online, and this can create low levels of motivation.

An influential theory that explains motivation is the *Self-Determination Theory* (SDT) (Deci & Ryan, 1985). SDT is a theory that is built on the fundamental premise of

learner autonomy. SDT argues that all humans have an intrinsic need to be self-determining or autonomous, as well as competent and connected to their environment. SDT focuses primarily on internal sources of motivation such as a need to gain knowledge or independence. According to this theory, people need to feel the following to achieve psychological growth: *autonomy* (people need to feel in control of their own behaviors and goals), *competence* (people need to gain mastery of tasks and learn different skills) and *connection or relatedness* (people need to experience a sense of belonging). All these can be affected by the context in which education takes place, and this is the main reason why this theory has been used to study motivation in the online context and will appear on several occasions in this literature review.

Xie et al. (2006) applied SDT to examine students' motivation in an online discussion board. Using a mixed-methods design, the authors investigated students' *perceived interest* (intrinsic motivation), *value* (extrinsic motivation), *choice* (perceived autonomy), *course engagement* (as measured by the numbers of login and discussion board postings), and *attitudes* towards the class. Correlation analyses revealed that the three SDT-based indicators (perceived interest, value, and choice) positively correlated with online students' course attitude and engagement. Additionally, results from interviews and open-ended questions indicated that instructor participation, guidance, and feedback were critical to online students' motivation. However, the study by Xie et al. revealed that perceived competency did not have significant correlations with engagement and course attitude, which was contrary to SDT.

Since previous research had demonstrated that the mode of instruction had an effect in student's motivation, researchers began to focus on comparing face-to-face and online settings. Mullen and Tallent-Runnels (2006), in their research on student perceptions, found that students in online classes and in face-to-face settings perceived

classroom environments and instructors' support and demands differently. The differences in perception were related to students' motivation, course satisfaction, and learning. In this mixed-methods study, 7 graduate students were interviewed and 187 (91 online; 96 traditional) graduate students were surveyed about perceptions of differences in instructors' demands and support, as well as student motivation, self-regulation, satisfaction, and perceptions of learning in these environments. Results indicated significant differences in students' perceptions on all variables except self-efficacy, and a strong effect between perceived instructor affective support in online and traditional classrooms. Although students in traditional classrooms ranked instructors' affective support higher, the variable had a stronger relationship with online students' satisfaction. Mullen and Tallent-Runnels concluded that instructors should be careful not to assume that teaching the same in both environments will create similar results. In the same way, researchers may not assert that motivation theories established in face-to-face classrooms and other settings can be directly transplanted to the online learning environment, because the characteristics of the learning environment, such as flexibility, accessibility, CMC, and the dynamics of student motivation are different in online settings.

Research also began to focus on specific factors that might affect motivation in the online setting. In their quantitative study, Knowles and Kerkman (2007) investigated students' attitudes and motivations towards online learning. Students in the online course Introduction to the Visual Arts, were asked to complete questionnaires administered during the first and last week of the online course. This study measured student motivation towards learning on five different scales. Interest, Self-management, Locus of Control, Study Process and Attitude. Students in the study were found to have

a strong internal Locus of Control (attribute of success to one's own efforts and abilities). The study showed that this online course provided enough student to instructor interaction, a high amount of student to material interaction, and a low amount of student-to-student interaction. Students missed interaction with other students, experiencing a lack of motivation which showed one of the downsides of the online setting.

Meanwhile comparative studies between online and on-campus students continued to be notoriously present among researchers. In Wighting et al.'s (2008) quantitative study, findings indicated that online students were more intrinsically motivated than their on-campus counterparts. A discriminant analysis was used to determine if students could be classified depending on whether they were enrolled in e-learning and in face-to-face learning university courses (N=353) based on their scores from separate questionnaires that measured sense of community and motivation. The results of this study provided evidence that the two groups could be clearly distinguished. These results also revealed a stronger intrinsic motivation in the online group, representing the most important predictor in discriminating online and in-person students.

Given the fact that some aspects of the online setting had been suggested to decrease motivation, Selvi (2010) aimed to determine the factors that might increase the motivation of students in online instruction. The students were asked to explain their opinions about the factors increasing their motivation and what could be done to increase it. Two questions were directed to students who attended six synchronous virtual classes in three different terms in the 2007-2008 and 2008-2009 academic years. By means of a qualitative data analysis, the research results showed that learning-

teaching process, competencies of instructors, participants' attention, online learning environment/technical infrastructure and time management were the factors that affected motivation in the online courses. The role of instructors was considered the most important factor for creating motivation in the online course, since teacher's enthusiasm, warmth, and friendly attitude were pointed out as being the main source of motivation.

In another study concerning the different kinds of motivation experienced by students, Hartnett et al. (2011) explored the motivation to learn of preservice teachers in two online distance-learning contexts using SDT as a framework. Their objective with this qualitative study was to discover whether and what kind of different motivations existed in learners. Students were found to be not intrinsically motivated in the first place. Instead, student motivation was determined to be complex and sensitive to the conditions, since both intrinsic and extrinsic types of motivation co-existed and were highly susceptible to situational influences. A range of extrinsic motivations as well as intrinsic motivations occurred in varying degrees that differed depending on the online environment in which learners were engaged. Therefore, they found that motivation is not one-dimensional, but is complex, multifaceted, and heavily influenced by the context.

It can be noticed how early research had focused on different disciplines of online education, among which online language teaching studies were scarce. However, research on motivation in the online world language class can be found in more recent years. In their study, Yoshida et al. (2014) examined the effects of online learning on Japanese language learners' motivation in Korean as a foreign language class (KFL). The participants completed project-based cooperative learning via the Internet with

Korean university students. During the Internet-based cooperative learning session, participants worked in a group of five students: two or three Japanese students and two or three Korean students. After the session, the participants of the study completed a questionnaire that assessed their motivation in KFL. Results indicated that online cooperative learning promoted learners' intrinsic motivation. The results of the study indicated that if Japanese students had an opportunity to learn cooperatively with Korean students and talk about their culture and lifestyles, they could increase their motivation about learning Korean language and Korean culture. That is to say that the authentic, meaningful, and task-based learning environment which online cooperative learning provides led to the increase of students' intrinsic motivation in KFL, showing an advantage of this particular online setting in terms of increasing motivation.

Even though research had focused on the negative impact of online learning in motivation, some researchers were interested in the positive aspects that this mode of instruction could bring to education. Harandi's (2015) objective was to investigate the strength of the relationship between e-learning and students' motivation. This quantitative study was conducted in Iran. A questionnaire was applied to collect data from 140 students. Overall, the outcomes of this study confirmed that e-learning was an element which affected students' motivation. Findings indicated that, when teachers applied e-learning to create the training courses, to distribute learning content, to communicate with students and to manage the courses, more motivation was generated by students and vice versa. According to the researcher "students are more likely to be more motivated when applying e-learning; if students are more motivated to learn, then they are more likely to be engaged; and if they are engaged and engaged successfully, they are more likely to achieve the learning objectives" (p.429)

Online learner's motivation has been considered as one of the most important factors that not only affects, but also drives online learning. Drawing from SDT, Widjaja (2017) incorporated the concepts of intrinsic and extrinsic motivation through the *Attention, Relevance, Confidence, and Satisfaction Model* (ARCS) to empirically investigate the effect of learners' motivation towards online learning effectiveness. The author measured student's grades and perceived skill development. Online participation, social presence, and collaboration were also considered as the factors which could enhance online learners' motivation. *75 International Management Business Administration* (M.B.A.) students who enrolled in several online learning courses participated in this study. The findings strongly indicated that higher online learners' ARCS could significantly increase online learners' perceived skill development, but not their grade. Online learner's extrinsic motivation did not show significant increase in any factors. This study provided some valuable insights on how to improve online learning course design, particularly by considering online participation as the strongest factor that drives online learners' intrinsic motivation.

Researchers have also turned their attention to motivation in the online learning environment since the onset of the COVID-19 pandemic, mostly due to the impact that the shift to online instruction seemed to have on students. Pasion et al. (2020) aimed to explore whether the COVID-19-related circumstances impeded academic motivation, engagement, and attachment to university. The authors surveyed two groups of undergraduate business students who completed the questionnaires at the beginning and at the end of the semester. One group of students attended only face-to-face classes in the 2018/2019 academic year and the other group transitioned to online classes because of the COVID-19 outbreak in the 2019/2020 academic year. The findings showed no

statistically significant group differences between the pre- and post-test in students' intrinsic and extrinsic motivation, feelings of attachment to the university, or engagement dimensions of absorption (the state in which one is highly concentrated and happily engrossed in works) and vigor (high levels of energy and mental resilience while working). Nevertheless, a moderate negative effect was found in the dedication dimension, which means that the lack of experience in online learning and the pressure of reorganizing and adapting to a new format reduced involvement, undermining engagement. In summary, their findings suggested that the changes imposed by the first COVID-19 outbreak did not compromise students' academic motivation.

Research did not only focus on students' perceptions on online instruction, but also in their success on the course. Konecki (2020) researched the impact of distance learning on student motivation and success rate during the pandemic. The research was conducted among the first-year information technology students during a distance education course focused on programming. A questionnaire including open-ended items was administered at the end of the course. The results showed that students perceived an online programming course and distance learning as something interesting and that the course content was presented in an understandable and clear manner. Students' motivation to learn was also slightly increased, as well as their knowledge of skills, and they stated that distance learning was something they would like to be present in future teaching activities. Students awarded their teacher with high scores, and they stated that the interaction was achieved in a way that was useful to students via interesting and easy-to-use communication tools.

Noticing that online education had an impact on students' attitudes and motivation, some researchers decided to focus on how interaction between students was

affected by the online setting. Almaleki et al., (2021) measured students' interaction in distance education through an electronic platform (not specified) among K-12 students. Their goal was to identify the level of students' interaction in distance education and the differences between individuals, as well as the impact of distance education on their motivation to learn. To achieve the aim of the study, two scales were designed and applied to a sample consisting of 268 participants. The results showed that the level of students' interaction through the e-learning platform was high. There was no statistically significant difference between the mean scores of males and females, and there was also no significant difference between them in their motivation for distance learning via the online platform. However, there was a positive statistically significant effect of interaction through the electronic platform on students' motivation to learn. These results pointed to the fact that the virtual classroom enabled students to actively interact in educational situations, that learning through the electronic platform allowed them to use their skills and interests usefully, and that electronic learning was more "attractive and more enjoyable for them" (p.10) than face-to-face classes.

Some research during the pandemic also focused on how different teaching methodologies were perceived by students depending on the mode of instruction. Campillo and Miralles-Martinez (2021) investigated the effects of the online flipped classroom on Education students' perceptions of their learning and motivation during the COVID-19 pandemic. To do so, data was collected through a questionnaire, and the opinions and impressions of students were later analyzed quantitatively and qualitatively. The sample consisted of 179 student teachers from the Faculty of Education of the University of Murcia in the academic year 2020–2021, in which the flipped classroom model was implemented, and the classes were carried out via Zoom

video-conferencing meetings. Statistically significant differences were found between pre-tests and post-tests, with students with greater experience with online learning environments scoring higher on average in the latter. Most students had a positive perception about the flipped classroom, noting the advantage of practical activities online, as well as increased self-autonomy in learning, which had a positive effect on their self-perceived motivation and learning. However, despite the students' positive opinions, their impressions of the flipped classroom were not as optimistic as in other similar pre-pandemic studies conducted in the face-to-face context.

As can be noticed, not much research has focused on SLA and motivation during and after the pandemic. As online learning began to be implemented in language classes worldwide due to COVID-19, it became central to investigate learners' *self-directed learning* (SDL). Subekti (2021) conducted one of the few studies dedicated to investigating (L2) learners' SDL during online classes due to the COVID-19 pandemic. SDL was considered critical in online learning settings, where teachers' ability to check learners' progress was not as extensive as it is in the face-to-face mode of instruction. The participants of the study were 187 undergraduate students taking English for Academic Purposes (EAP) classes. Through the data obtained from the online questionnaire, the study found that learners, in general, reported a high level of autonomy even though many of them still embraced procrastination behaviors and considered the pragmatic need to pass the EAP class more important than the actual L2 learning.

Since motivation was considered one of the key factors attributed to L2 learners' success and performance, it became a concern for teachers and researchers. Esra and Sevilen (2021) carried out a qualitative case study, which was conducted to explore

students' perceptions of online teaching and how it affected their motivation over a period of a seven-week-course. The data was collected through semi-structured interviews and creative writing samples of 12 students. Both interviews and creative writing tasks demonstrated that students believed online education had a negative impact on their motivation due to lack of social interaction, a mismatch between expectations and content, organizational problems, and the organization of learning environments. Interestingly, some students pointed to the fact that being extremely comfortable in their online sessions made them unable to concentrate, having a suppressive effect on students' motivation.

As has been found through the previously mentioned research, one of the most important factors in successful online learning is the motivation of the student. Even as the pandemic fades, finding the factors that affect motivation is still one of the main research objectives. In one of the latest studies on motivation, Berestova (2022) examined the very essence of this affective factor in the context of e-learning with the purpose of identifying the factors that influence motivation. The investigation involved 123 fifth-year students in Russia. To determine the specific factors affecting students' motivation, she used a specially designed questionnaire. Motivation analysis was done by using the *Academic Motivation Scale* (AMS) adapted for Russian students. The link between the reviewed factors of influence and academic motivation was established by using correlation analysis. The main factors affecting anxiety were the lack of communication, a weak self-organization and the support from the instructor. In general, the results of the experiment indicated the absence of statistically significant variations in motivation levels across experimental (studying online) and control (studying face-to-face) group participants. The author concluded that e-learning cannot

completely replace face-to-face education but can be beneficial in ensuring a high level of education accessibility while maintaining its quality.

The perspective of teachers has been also considered key in understanding the impact of online learning in motivation. Aldossary and Altalhab (2022) aimed to explore 114 female secondary-level English teachers' perceptions of the effectiveness of distance education in schools in Saudi Arabia, specially focusing on motivation and engagement during COVID-19. They used a questionnaire to gather quantitative data and an interview to collect qualitative data. Findings indicated an overall positive perception of distance education. However, the interviewed teachers expressed a clear preference towards face-to-face teaching. Online education posed some challenges, such as lack of internet connection, increased workload, lack of human interaction and students' perceived unwillingness to learn.

This literature review has covered research on anxiety and motivation prior to and during the pandemic. Regarding anxiety, the synthesis of studies appears to conclude that, while research results have not reached a consensus, the use of technology tends to have a reducing/positive effect on FLA. However, when taking the pandemic into account, some research showed that COVID-19 has not necessarily affected students, while other studies show a clear impact on attitudes, especially in terms of stress, isolation, and fear of falling behind due to ineffective use of technology or even the lack of it.

In terms of motivation, the link between this affective factor and online classes seems to be mainly positive. Pre-pandemic research seems to point to the idea that, if the online setting allows easy communication, motivation is maintained; and if the students find the digital tools used interesting, motivation is even slightly raised.

However, some studies have shown that the main factor affecting motivation negatively in online students is the lack of face-to-face interaction and the lack of a sense of community created in the traditional setting. Research carried out during the pandemic also showed positive effects of the online context, although not as strong as in studies conducted before the pandemic, especially in terms of self-perceived motivation. Nonetheless, it has also been highlighted that online and face-to-face learning are not the same, and therefore, both contexts affect the dynamics of motivation in one way or another. While some students might feel more motivated by the attractiveness of online learning (Almaleki, 2021), others may feel a detrimental effect of the lack of interaction (Esra & Sevilen, 2021) Therefore, researchers' have advised teachers to keep the differences in mind when designing the course.

Given the large number of students who have been and still are engaged in online or remote language learning, it is important to consider how anxiety and motivation in this context are related to the learning experience. While research on SLA in the online language classroom is abundant, the same cannot be said about research on motivation in the online setting, which is rather scarce. Moreover, the research that has been conducted in SLA about online learning during the pandemic is also limited, and that conducted prior to the pandemic seems to center on learners who elected to take their language courses online. During the past three years, many students have been forced into remote learning because of the pandemic, and their experience of higher levels of anxiety / low motivation may have originated from a lack of agency in the selection of their learning environment. Therefore, results of new research may vary as the pandemic fades and the online setting becomes a choice again. Due to these factors, more research is needed to determine how affective factors are influenced by the

context in which education takes place, which will be the focus of the present study.

This study attempts to build upon past research by investigating language learners' perceptions of anxiety and motivation in online learning.

CHAPTER III: RESEARCH QUESTIONS

This study aims to explore student anxiety and motivation in Spanish as a foreign language class. More specifically, the present study examines whether there are any differences in students' experience of anxiety and motivation in the online synchronous versus the in-person setting. The following research questions were created to address these issues.

1. Do students experience more anxiety during online synchronous language classes than in the in-person setting? What factors do students identify with anxiety?

2. Do students experience less motivation during online synchronous language classes than in the in-person setting? What factors do students identify with motivation?

CHAPTER IV: METHODS

Participants

The participants of this study were 18 L2 Spanish students in a medium-size public university in the United States, 10 female and 8 male students. The students were enrolled in a beginning-level Spanish as a foreign language course that was primarily taught in-person, but that also had an online synchronous component. Many of the students were taking the course to fulfill a language requirement, not because they were planning to major or minor in Spanish or studying the language for personal reasons.

Teaching context

The Basic Spanish Skills course of the present study is the first introductory course for beginning students of Spanish at this university. Students who enroll in this four-credit hour course are not expected to have prior knowledge of the language. The course is imparted in fifty-minute lessons, four days a week during one semester. Students learn Spanish for a total of fifteen weeks (60 hours per term). During the first week of the semester, four hours of instruction were obligatorily taught in the online synchronous format using the video-conferencing platform Zoom due to measures taken by the university to prevent the spread of COVID-19 at the time when the number of cases were high in the local community. Moreover, for the purpose of the present study, a total of eight classes during two consecutive weeks towards the middle of the semester were also taught in the online synchronous format using the video-conferencing platform Zoom. Hence, a total of three weeks of the 15-week course or 20% were taught synchronously online, while the other 80% of the class sessions were taught in

person. It is important to mention that the classes that took place online for the purpose of the current research were recorded, and students were aware of this fact.

This course was taught through *Contraseña*, an online platform where students are presented with all the learning resources necessary for the course. Students were expected to be able to convey personal basic meaning and engage in very simple conversations about personal or daily topics. The emphasis of this course was to develop oral skills in Spanish. Therefore, exposure to meaningful input and encouraging output exchange between students was considered of central importance.

In this Spanish course, students learned the materials following the flipped-classroom approach. Instructional videos about grammar and vocabulary were found in *Contraseña*. After watching these explanatory videos, students completed some input-based application activities before attending class. During class time, the instructor provided the students with input-based activities and communication-based tasks in order to practice the previously learned content. This approach was maintained during the three weeks of online teaching created for the current study. Since many activities involved communication in pairs or groups, these were done using *breakout rooms*, a feature in *Zoom* that allowed the instructor to divide the students into separate virtual rooms where pairs or groups could interact on their own.

Data collection procedures

The approach taken in this study is quantitative. The participants were asked to complete two questionnaires, one related to anxiety and the other to motivation. Both were completed online through the platform Qualtrics. The surveys were administered towards the middle of the semester, immediately after the online synchronous

instruction had concluded. Participants were given time in class to fill out the questionnaires and could take as much time as they needed to complete them. In addition, when answering the questionnaires, participants were asked to think specifically about the three weeks of the course that were taught in the synchronous online format when they responded to the questions querying them about anxiety and motivation in the online setting and to think about the three weeks of the same course that had been taught online when completing questions about the online setting.

Anxiety questionnaire

To measure the anxiety, participants completed an adapted version of the *Foreign Language Classroom Anxiety Scale* (FLCAS) created by Horwitz et al. (1986). The original instrument contains 33 items, which each included a five-point Likert-type scale, ranging from “strongly Agree” (1) to “strongly disagree” (5). It measures students’ self-reports regarding anxiety by adding up the ratings on the 33 items. The FLCAS comprises three dimensions of anxiety: (1) fear of negative evaluation; (2) communication apprehension; and (3) test anxiety. Adapted versions of the FLCAS, such as the *Online World Languages Anxiety Scale* (OWLAS) (Chametzky, 2019) and the *Language Virtual Classroom Anxiety Scale* (FLVCAS) (Kaisar and Chowdhury, 2020), were used as models for the creation of the questionnaire employed here. Such adaptations of the FLCAS were useful for this study because they were designed to measure FLA specifically in the online setting. However, some adaptations for the present study were still needed. Specifically, some items were revised for clarity, some questions were discarded due to irrelevance, and some others were added to make the questionnaire fit for a class that was not taught entirely online. There are questions on the instrument that specifically ask students to compare the online and the face-to-face

settings. The final anxiety questionnaire employed in this study is composed of 19 items and uses a five-point scale to measure the level of anxiety. See Appendix A for the version of the anxiety questionnaire used for the present study.

Motivation questionnaire

To measure motivation, students answered a questionnaire adapted by the researcher from the the *Attitude/Motivation Test Battery* (AMTB) (Gardner, 1985). The AMBT is still considered the only published standardized test of foreign or second language learning motivation. The original questionnaire includes a total of 104 items. In each case, individuals are presented with the item followed by the seven alternatives: strongly agree, moderately agree, slightly agree, neutral, slightly disagree, moderately disagree, strongly disagree. Higher scores on each statement correspond to greater agreement with each statement. The original AMTB had a maximum score of 70 and a minimum score of 0. A higher score indicated higher levels of motivation. The original AMTB explores language learning in six main areas: Integrativeness, Attitude Toward Learning Situation, Motivation, Language Anxiety, Parental Encouragement, and Instrumental Orientation. These variables can be divided in several sub-variables: attitudes towards socio-cultural background, interests in foreign languages, attitudes towards learning the specific language, motivational intensity, desire to learn the language, teacher evaluation, teacher inspiration, teacher competence, teacher rapport, course difficulty, course utility and course interest.

The first part of the questionnaire aimed to collect student's desires, attitudes, and motivations in a more general fashion. Its goal was to collect information to understand student's feelings about a number of items prior to a more in-depth survey regarding specific factors related to motivation. It is composed of six statements and a

scale of 0 to 100 that the students had to rate. Depending on the item, the scale fluctuates between to labels: very low (0) –very high (100), weak (0)– strong (100), or unfavorable (0)–favorable (100).

The second part of the questionnaire was concerned with student’s feelings regarding their Spanish course. This part of the questionnaire is used to gather knowledge on more specific motivational aspects that were present or absent in the Spanish course depending on the mode of the course, and focuses on motivational intensity, desire to learn Spanish, attitudes towards learning Spanish and attitudes towards the teacher and curriculum. Students were asked to select an option for each statement according to the amount of agreement or disagreement with that item, in a scale from “strongly disagree” to “strongly agree.”

Since the present study aimed to investigate motivation in relation to the context in which the L2 teaching takes place, items regarding integrativeness, instrumental orientation, and parental encouragement were not included in the instrument used in this study. Further, since anxiety was measured in this study with a separate questionnaire, items related to anxiety were removed to avoid repetition. Only those items that referred to factors that are subject to the educational setting were considered useful, and therefore only four major sections were maintained in the adapted AMTB employed in this study: Motivational Intensity (i.e., how much effort people reportedly expend in learning the language), Desire to Learn Spanish (i.e., how much enjoyment people report feeling when they learn the language), Attitudes Towards Learning Spanish (i.e., how much personal investment in succeeding in the language people claim for themselves) and Attitudes Towards the Teacher (i.e., how much the role of the teacher affects the student’s learning experience). The instrument adapted for the present study

consists of 32 items with the same seven response options in the original AMBT to determine students' level of agreement with each item statement. Additionally, the questionnaire items were modified to focus on Spanish as the target language and the setting where students learn, including both face-to-face and online instruction. The language of the items was also simplified to make them more meaningful and contextually relevant for the participants. For the motivation questionnaire employed in this study, see Appendix B.

Data analysis procedures

With regards to the anxiety questionnaire, the answers were analyzed quantitatively to determine if students reported experiencing more anxiety during the online class sessions than in the in-person sessions. Some of the items of the questionnaire were comparative, targeting specific features and asking about them in both settings, online and face-to-face. The researcher compared the percentages of the participants who agreed or disagreed with these comparative items to determine which setting was more anxiety provoking. Specific items were looked at in which students were asked to identify factors relating to anxiety to find out which ones were considered more problematic and in which setting, online or face-to-face.

Turning to the motivation questionnaire, a quantitative analysis of the responses was conducted. Some of the items of this questionnaire were also comparative, asking about specific features in both the online and face-to-face setting. The percentages were compared to determine whether students felt less motivated during the online synchronous classes or the face-to-face lessons and what factors they identified as motivating or demotivating in each setting.

CHAPTER V: RESULTS

L2 learners' anxiety in the Spanish course

The results for the anxiety questionnaire will be presented in this section in order to answer the research question: “Do students experience more anxiety during online synchronous language classes than in the in-person setting? What factors do students identify with anxiety?”

To begin, the percentage of students who answered “agree”, “neutral” or “disagree” to these questions is shown in Table 1. For ease of representation, “strongly agree” was merged with “agree” and “strongly disagree” with “disagree”.

Table 1. Responses to anxiety questionnaire

Question	Agree	Neutral	Disagree
1. I feel uneasy thinking that my teacher or fellow students might see my home setting when in online classes.	0%	0%	100%
2. I feel anxious that I might miss something due to connection issues.	64.71%	0%	35.29%
3. I feel anxious thinking that the teacher might not see my non-verbal responses or involvement during online class.	52.94%	11.76%	35.29%
4. I feel uncomfortable about the possibility of being recorded during virtual class.	11.76%	5.88%	82.35%
5. Since I do not necessarily have to expose my physical appearance in a virtual class, I feel more comfortable and relaxed when the class is online.	35.29%	11.76%	52.94%
6. Long time using technology during the virtual class makes me anxious about my physical and mental health.	41.17%	5.88%	52.94%
7. I feel more anxious when I do tests in-person than in the online classroom.	52.94%	5.88%	41.17%
8. I feel more anxious when I do tests in the online classroom than in-person.	35.29%	5.88%	58.83%
9. The direct presence of eye contact with the teachers makes me more nervous in class than in a virtual environment.	23.53%	5.88%	70.59%
10. I worry more about making mistakes in in-person classes.	35.29%	5.88%	58.83%
11. I worry more about making mistakes in online classes.	23.53%	11.76%	64.7%
12. I feel more anxious when I know I'm going to be called on in the online class.	58.83%	5.88%	35.29%

(Table continues)

(Table continued)

13. I feel more anxious when I know I'm going to be called on in the in-person class.	41.17%	0%	58.83%
14. It embarrasses me more to volunteer answers in the online class.	52.94%	5.88%	41.17%
15. It embarrasses me more to volunteer answers in my in-person class.	17.64%	17.65%	64.71%
16. I feel less self-conscious about speaking the foreign language in front of other students in the online classroom.	35.29%	17.65%	47.05%
17. I feel less self-conscious about speaking in the foreign language in front of other students when in-person.	47.06%	23.53%	29.41%
18. A real classroom environment fits me more for the Spanish class.	76.47%	11.76%	11.76%
19. I prefer the online class to learn Spanish.	17.64%	5.88%	76.47%

The main factors indicated by students as being anxiety-provoking in the online setting were connectivity issues (64.71%), lack of visibility of non-verbal responses (52.94%), being called on by the teacher (58.83%), and volunteering answers (52.94%). However, there were some features that were identified by students as being less anxiety-provoking in the online class than in the in-person context, such as making mistakes, since 58.83% of students worried more about making mistakes during in-person classes compared to online classes. Regarding testing, when comparing question 8 with question 7, it seems that a slightly higher percentage of students felt anxious when quizzes took place in-person (52.94%), when compared to online (35.29%). However, some of the features that were exclusive to the virtual setting were not identified as anxiety-triggering, as students disagreed with the fact that exposing their home setting when online (100%) and the possibility of being recorded (82.35%) were anxiety-provoking for them. Finally, when presented with the item "I prefer the online class to learn Spanish", 76.47% of students disagreed.

The direct eye contact that students experience when they are physically present in front of the teacher was considered a possible anxiety provoking factor and thus

included in the questionnaire. Nevertheless, 70.59% of the participants disagreed with the fact that eye contact made them more nervous in an in-person classroom than in a virtual environment. 47.06% of the students felt less self-conscious about speaking in Spanish when they were in the physical classroom, which is a high percentage compared to the 29.41% who disagreed with this affirmation. Further, the highest number of neutral responses was found in this question (23.53%). Volunteering answers in the in-person classroom did not seem to affect students' levels of anxiety either, since only 17.64% of the students agreed with item 14. In comparison, 54.94% believed that volunteering answers online was more embarrassing than in-person. Making mistakes in front of their peers in-person as being more anxiety-producing in person than online was only agreed upon by 35.29% of the participants. However, this percentage decreased when this question was asked in reverse, since 23.53% of the participants worried more about making mistakes online than in person. Anxiety provoked by the action of being called on in the in-person class was not considered a problem by 58.83% of students. However, the same percentage of students agree upon the fact that being called on in the online classroom is anxiety provoking. Above half of the participants (52.94%) felt more anxious when they did tests in-person, while only 35.29 % felt more anxious when exams took place online. With regards to student's preferences on the context of the Spanish language classroom, 76.47% reported that the in-person language classroom fit them more for learning a language, a high amount when compared to the 17.64% of students who preferred the online class to learn Spanish.

The most important findings of the anxiety questionnaire are that students' anxiety was increased during online lessons, except for testing and making mistakes, which students feel less anxious about in an online environment. Students' overall preference was inclined towards the in-person setting to learn Spanish.

L2 learners' motivation in the Spanish course

The results of the motivation questionnaire created for this study will be displayed in this section. The findings of the data will address the research question “Do students experience less motivation during online synchronous language classes than in the in-person setting? What factors do students identify with motivation?”

The results from the first section of the motivation questionnaire, which focuses on students' desires and attitudes more generally, are shown in Table 2. The highest score was given to the attitude towards the teacher, which the students situated at 97.88 out of 100, meaning that the students expressed a considerably positive view of the teacher. Although not negative, the lowest scores were given to interest in learning a foreign language in general, situated at 65.29 in the scale, and their desire to learn the Spanish language specifically, positioned at 65.59. However, attitudes were somewhat higher in favorability than desire, since their attitude towards learning the Spanish language was placed at 74.29, and their attitude towards the Spanish course at 75.71.

Table 2. First part of motivation questionnaire

My interest in foreign languages is:	65.29
My desire to learn Spanish is:	65.59
My attitude toward learning Spanish is:	74.29
My attitude toward my Spanish teacher is:	97.88
My attitude toward my Spanish course is:	75.71
My motivation to learn Spanish is:	68.94

As described above, the second part of the questionnaire is concerned with students' feelings regarding their Spanish course. The results of the responses to this portion of the questionnaire are presented in Table 3 and Table 4 below. As shown in Table 3, questions 1, 3, 5, 7, 9, 10, 12, 14, 17, 19, 21, 23, and 25 of the motivation questionnaire were used to gather data about students' level of motivation in the physical classroom. In contrast, questions 2, 4, 6, 8, 11, 13, 16, 18, 20, 22, 24, and 26 asked students about their motivation in the online language class, as shown in Table 4. For the sake of presentation, the categories were collapsed into "Agree" and "Disagree".

Table 3. Motivation in the in-person classroom

Questions	Agree	Disagree
1. I have a strong desire to go to my in-person Spanish class.	88.24%	11.76%
3. I feel like the Spanish class is really a waste of time.	11.76%	88.24%
5. Studying Spanish is not enjoyable.	11.76%	88.24%
7. I don't think my Spanish teacher is very good.	0%	100%
9. I would rather spend more time in the online Spanish class instead of in-person.	26.41%	73.59%
10. I think my Spanish class is boring.	5.88%	94.12%
12. I enjoy the activities of our Spanish class much more in-person than online.	76.47%	23.53%
14. My Spanish teacher has a more dynamic and interesting teaching style when in-person.	100%	0%
17. When I have a problem understanding something in my Spanish class, I prefer being in-person to ask my teacher for help.	94.12%	5.88%
19. I think that learning Spanish is dull.	5.88%	94.12%
21. I look forward to the time I spend in Spanish in-person class.	88.24%	11.76%
23. I have a hard time thinking of anything positive about my Spanish class.	0%	100%
25. Spanish is one of my favorite in-person courses.	95.12%	5.88%

Table 4. Motivation in the online classroom

Questions	Agree	Disagree
2. I have a strong desire to go to my online Spanish class.	58.83%	41.17%
4. I feel like the Spanish class online is really a waste of time.	23.53%	76.47%
6. Studying Spanish online is not enjoyable.	41.49%	58.81%
8. I don't think my Spanish teacher is very good when the class is online.	0%	100%
9. I would rather spend more time in the online Spanish class instead of in-person.	26.41%	73.59%
11. I think my Spanish class online is boring.	41.17%	58.83%
13. I enjoy the activities of our Spanish class much more online than in-person.	23.53%	76.47%
15. My Spanish teacher has a more dynamic and interesting teaching style when online.	35.59%	64.71%
16. When I have a problem understanding something in my Spanish class, I prefer the online version to ask my teacher for help.	23.53%	76.47%
18. Being online has made me lose desire to know Spanish.	35.29%	64.71%
19. I think that learning Spanish online is dull.	47.06%	52.95%
22. I look forward to the time I spend in Spanish online class.	41.17%	58.83%
24. I have a hard time thinking of anything positive about my online Spanish class.	17.64%	82.36%
26. Spanish is one of my favorite online courses.	52.95%	47.05%

The results of this second part of the questionnaire indicate a clear distinction between the levels of motivation in the in-person classroom and in the online course. Students indicated a stronger desire to attend in-person classes (88.23%) in comparison to attending the online sessions (58.83%). The majority of students (73.59%) did not agree with the item: “I would rather spend more time in the online Spanish class instead of in-person,” and a similarly high percentage agreed that they enjoyed the activities of the Spanish class much more in-person than online (76.47%). More than half of the participants (64.71%) asserted that being online made them lose desire to learn

Spanish. When asked about their attitude regarding attending the class, 88.24% of the students looked forward to the time they spend in the Spanish in-person course.

However, this percentage dropped substantially when asked about the online setting, when only 41.17% agreed with the fact that they looked forward to going to class.

47.06% of the participants thought that learning in the online setting was dull, which is a high percentage compared to those who considered that learning Spanish in-person was dull, only 5.88%. When asked about the instructor, all students thought that the Spanish teacher had a more dynamic and interesting teaching style when in-person. In the same way, not one of the 18 participants of the study thought that learning Spanish was boring, but when asked about learning Spanish online, 41.17% thought it was.

Another feature that was considered in previous research as having influence on students' motivation is asking the instructor for help. The great majority of participants (94.12%) preferred being physically in front of the teacher to ask questions when they did not understand something in Spanish. Finally, 95.12% of students agreed that Spanish was one of their favorite in-person courses, a percentage that dropped when they were asked the same question but about the online class, an item with which 52.95% of students agreed.

As a conclusion, it can be said that the features of the online lessons decreased students' motivation, affecting their attitudes towards the teacher, their interest in the course and learning activities, and their desire to attend the lessons.

CHAPTER VI: DISCUSSION OF RESULTS

This study was designed to explore the effects of the online setting on the levels of anxiety and motivation experienced by students in a beginning-level Spanish as a foreign language course, as well as to identify the aspects that students identify with these affective factors. The results indicated that students did feel slightly more anxious in the online setting. Results also suggested that motivation was not greatly affected by the virtual mode of education, since students did not report feeling demotivated by the features of the online setting. However, there was a decrease of the motivation experience online when compared to the in-person setting. In this section, a discussion the findings of this study will be presented, answering each research question in more detail. A consideration of the various limitations this study faces will also be included, as well as the pedagogical implications of the findings and recommendations for further research.

Discussion of anxiety questionnaire results

From early studies, it was found that the levels of anxiety in the synchronous online context did not differ much from those in the in-person setting. Despite the concern shown about the increased amount of online work in such studies, most students were able to identify the positive impact that asynchronous virtual education had on their learning, as can be seen, for example, in the results of Scida and Jones' research (2016). However, students also showed concern about technical support, and pointed to connectivity as being one of the few but main problems that they had to face when taking classes online. 82.4% of the participants in Cueva and Terrones' (2020) study also attributed the highest levels of anxiety to encountering problems with the managing of Zoom, the platform used for the synchronous virtual sessions in that study.

Moreover, when asked about how important connection issues had been for the virtual classes, 46% of the students showed values above 7 in the scale from 1 to 10. Students also positioned anxiety and frustration in second and third place of the predominant feelings experienced during the online sessions. Similarly, above two thirds of the participants in Valizadeh's (2021) study reported feeling anxious about being disconnected during the synchronous online class, which was mainly produced by the fear of missing out. Lastly, the results of the in-depth interview carried out by Kaisar and Chowdhury (2020) showed that almost all students reported missing words or exact pronunciation from the teacher due to network problems, raising their anxiety levels. In addition, the most important source of their virtual classroom anxiety was also recorded as being the fear of being disconnected. It can be said that the results of the present study align with previous research in this matter, since a large number of students in the sample indicated that connectivity was a cause of anxiety.

This fear of missing information from the teacher can also be present in the other direction since students have also reported concern about not being correctly perceived by the teacher during online sessions. More than half of the participants of this study agreed that they felt anxious thinking that the teacher might not see their non-verbal responses or involvement during class. Previous researchers also found this factor as a concern in their studies, such as Valizadeh (2021), whose results showed that 65.2% of the participants felt anxious thinking that the teacher might not be able to perceive the students' careful listening in the form of nodding or shaking heads. Kaisar and Chowdhury's (2020) participants also identified this issue, since 68.2% of them reported that the source of their anxiety was that the teacher might not realize their seriousness about the course. Moreover, most of students in Kaisar and Chowdhury reported feeling uncared by teachers during the synchronous virtual language class,

which shows how pivotal the role of the teacher may be when the context of education changes.

Another source of anxiety identified by the students that participated in this study is knowing they were going to be called on in the online class. This specific anxiety triggering factor was targeted in the original FLCAS (Horwitz et al., 1986) through the item: “I can feel my heart pounding when I’m going to be called on in language class”. Being called on in class seemed to generate a nervous response in students in the in-person classroom (Horwitz et al., 1986). This same item in Scida and Jones’ (2016) research indicated high levels of anxiety in the online context, but it had the highest mean difference from pre- to post-FLCAS, indicating that students felt less anxious when being called upon in class near the end of the semester relative to the beginning of the semester. This shows that the more time students spend online, the less anxiety provoking it becomes. This information may help in understanding why the participants of the present study showed higher levels of anxiety on this item. Since they only experienced three weeks of online education, they could not get accustomed of the dynamics of answering questions on Zoom. However, it seems to be a problematic feature that must be taken into account, since in the present study, a clear difference among those who felt anxious when being called on in the physical classroom (41.17%) and in the online classroom (58.83%) was observed. Another possible explanation of this rise in anxiety levels can be the warmth perceived by students the in-person class. In Valizadeh’s (2021) research, respondents reported feeling more comfortable when talking with teachers and classmates in an in-person classroom. Some said that they could easily convey their points, interaction was more intimate and friendly, and that they could express their ideas without hesitation, which significantly reduced their anxiety levels. Similarly, it can be said that participants in this study perceived the

atmosphere in the physical classroom was more welcoming for students to provide an answer when they were called on, and therefore, anxiety was less present in this context.

It seems clear that oral communication is an extremely stressful activity for many students, and that students are more anxious when they must speak than when they must write in the foreign language. When Chametzky's (2019) participants were asked about their confidence when speaking in the classroom, 71.4% of the participants reported not feeling confident about their speaking abilities, which points to oral production as an element that causes anxiety in students. Therefore, it could be expected that any activity related to oral communication can provoke distress in foreign language students, and that actions such as volunteering answers or speaking in front of other students would be anxiety provoking regardless of the context in which they take place. However, in the present study, students indicated feeling more embarrassed when volunteering answers in the online class (52.94%), a high percentage compared to the in-person sessions (17.64%). The data gathered through this item stands in line with previous research. Kaisar and Chowdhury (2020) included similar items in their FLVCAS to target students' feelings when communicating in class. Responses to report their comfort in favor of the in-person classroom were higher, although a good number of students (45.2%) said that they also felt comfortable doing language speaking activities in front of teachers and classmates in the virtual classroom. Similar results were found by Valizadeh (2021), since a high percentage of learners (85.3%) stated that they found it easy doing activities in front of other people in the in-person classroom, although a high number (70.3%) felt the same way in the online setting too. Students in Pakpahan and Gulton's (2022) study also believed that, if given the chance to speak face-to-face, their speaking skills would be improved, indicating that the in-person

setting was perceived by students as being more beneficial in terms of developing their oral competences than the synchronous online classroom.

As Pichette (2009) maintained, FLA can make learners unwilling to interact with their peers in the classroom, and it is probable that some students resort to virtual learning for such reason, because they seek security and anonymity. Valizadeh (2021) found that there were a high number of students who reported feeling less stressed participating in the virtual classroom because, since nobody could see them, they had the impression that no-one was staring at them, offering a comfortable and safe space to make mistakes. 67.4% of the students in Valizadeh (2021) said that, because they do not have to answer while others are looking at them, they felt more comfortable in the online class. Even more (72.1%) mentioned that, because others did not see their physical appearance in the online class, they felt comfortable and relaxed. Similar results were found by Kaisar and Chowdhury (2020). However, fear of negative evaluation did not seem to be reduced by being behind a screen for the participants of the present study, since 64.7% disagree with the fact that being online makes them less worried about making mistakes, and 52.94% did not feel more comfortable about not having to expose their physical appearance. These low results might have occurred due to the fact that turning the camera on was stressed as being mandatory by the instructor, and therefore, student's had fewer opportunities to seek refuge behind a black image. However, in the present study, 35.29% worried more about making mistakes in the in-person class, contrasting with the 23.53% that feel more worried in the online context. Therefore, it can be said that the online setting might have had a reducing effect on the anxiety of students who worried about committing errors, although they are rather few in number. The majority of respondents of this item of the anxiety questionnaire decided to remain neutral, which makes it difficult to interpret this issue.

Apart from exposing their physical appearance, it can be observed in previous research that some students also felt uneasy about the possibility of showing their personal space when they attended the course from their homes. Previous research has shown that this is one of the most anxiety provoking characteristics of virtual education, as can be seen in Kaiser and Chowdhury's (2020) and Valizadeh's (2021) studies. About two thirds of the Turkish respondents in the former study stated that they felt uneasy thinking that the teacher or fellow students might be able to see their home setting or hear the voices in their homes. A good number of respondents (45.2%) in Kaiser and Chowdhury's (2020) study also reported feeling anxiety when thinking about their peers or teacher observing their surroundings. Results in this study completely contradict previous research since the totality of students in the present study disagreed with this particular item. One possible interpretation is that the students participating in this research had already met each other in person before the online sessions took place. This might imply higher acquaintanceship with their peers and teacher, eliminating the trust barrier that might be the reason behind their concern to share their surroundings.

The direct presence of eye-contact has been considered one of the main reasons why students could feel anxious participating in an in-person class (Kaiser and Chowdhury, 2020; Valizadeh, 2021). For this reason, some researchers have hypothesized that, far from being an anxiety creator, the online setting could even be a healer, helping the students feel less observed behind the computer screen. This was the case of Kaiser and Chowdhury's (2020) study, although most participants disagreed that direct presence or eye contact of the teacher made them more nervous in the in-person setting compared to in the virtual environment. Results of the present study are consistent with previous research, since 70.59% of respondents disagree with item 9,

implying that they did not feel threatened by the direct presence of eye contact with the teacher in the in-person classroom, nor did they perceive it as any less threatening in the virtual environment. Interestingly, Valizadeh (2021) found that the lack of eye contact had the opposite effect than expected. Through the open-ended item, some enlightening perceptions were collected: “Because when I don’t have eye contact with others in class, I feel confused” or “I like eye contact and direct speech. This way is natural” are comments reflecting the predominant feelings of the participants in Valizadeh’s study. These responses suggest that the virtual setting can be anxiety provoking for some students precisely because of the lack of eye contact, becoming unnatural and confusing.

A feature that can be said to be more prevalent in the online setting is the possibility of being recorded during the lesson. Therefore, it was considered as an important factor to include in the questionnaire for the present study. Even though the online lessons for this research were recorded, a high percentage (82.25%) of the participants in this study disagreed with the item “I feel uncomfortable about the possibility of being recorded during virtual class”, disregarding this factor as an anxiety provoking issue. In this sense, the data collected in this research project is not consistent with previous studies. 60.9% of Valizadeh’s (2021) participants reported feeling anxious about being recorded in every activity during the virtual class. However, Kaisar and Chowdhury’s (2020) participants reported in their in-depth interview that the class being recorded made them feel assured that they would not miss anything from the lecture. These findings do not project into the current study, mainly because the recordings were not shared with students after the lesson.

The effects of online classes on students’ mental health was a topic of concern during the pandemic. Cueva and Terrones (2020) asked their students the question

“Sientes que las clases virtuales en esta coyuntura especial han afectado a tu salud mental” (‘Do you feel that virtual classes at this special juncture have affected your mental health?’), to which 83.8% of participants answered positively. According to Villamonte (2020), teachers had to deal with special circumstances and adapt to a change in education that, undoubtedly, needed completely new skills that were different to those required in in-person teaching. For this reason, students had to manage an overload in work that, together with the inexperience learning in a virtual platform, had repercussions in students’ overall mental health. Valizadeh (2021) found that 71.6% of the participants felt overwhelmed in the online classroom setting, and 70.8% said that long time use of technology during online sessions made them anxious about their physical and mental health. In Kaisar and Chowdhury’s (2020) study, participants took a course that had been taught virtually even before the pandemic started, which eliminates the abrupt change in educational modes brought by COVID-19. In this context, students also felt that technology was having a toll in their mental and physical state, since 62.2% of participants reported that this was the case. These findings are not in line with the present study, in which 52.94% disagree with the item related to mental health, which can be attributed to the fact that only three weeks of the Spanish course were taught online, and therefore, the amount of time might have been insufficient to cause students to develop concerns about their health.

According to Stowell and Bennett (2010), students who normally experience high levels of anxiety during exams in the classroom had reduced test anxiety when they took place in an online setting, demonstrating that test delivery mode indeed affected the levels of anxiety of students. The present study stands in line with previous research in that 52.94% of the respondents agreed with the fact that taking quizzes in-class is more anxiety provoking than in the online classroom. When asked the reverse,

58.83% disagreed, again showing a tendency in favor of the online setting for assessment to take place. However, it can be said that this is one of the few anxiety-reducing factors that students in this study reported for the online mode of language instruction. A possible explanation of the decrease of anxiety when doing the quizzes online can be explained by the easy accessibility to external help while the assessment takes place. Aldossary and Altaihab (2022) found that about half of the interviewed teachers asserted that online exams were unreliable measures of student proficiency because the students could quite easily use external resources like bilingual dictionaries or notes. This same concern was voiced many times in previous research (Adedoyin & Soykan, 2020; Ramadani & Khaferi, 2020), with the main concern being that students might use the internet as a cheating method.

Despite the discrepancies among previous research, there is one item of the FLCAS in which the responses seem to be unanimous among the participants of the different studies: the preference towards an in-person setting for language learning purposes. Valizadeh (2021) found that, regardless of neutral answers, 43.4% of the participants stated that a face-to-face classroom is more suitable in general than the synchronous online language classroom, a considerable amount compared to the 21.7% that said the contrary. In Kaisar and Chowdhury's (2020) study, similar results were found for the number of respondents who stated that the synchronous online environment was more suitable for them (21%) than in the in-person setting. However, the majority (77.8%) agreed that the in-person classroom environment fitted them more for language lessons, being completely in line with the present study, where 76.47% agreed that a face-to-face classroom environment fits them more for language learning. Through the group discussion carried out in Kaisar and Chowdhury's (2020) study, the students came up with the decision that if interaction could be arranged in the same

manner as in an in-person classroom, it could be less boring and ensure learning achievement. Moreover, many stated having the impression that communication occurred only one-way (teacher to student), and feeling a sensation of monotony and distraction during language activities. Some stated that in the in-person classroom they could receive help from their classmates if they missed something, but the virtual classroom did not give them that chance, making them feel anxious. Therefore, existing research including the present study, suggests that students prefer the in-person setting more than the synchronous online setting for language learning purposes.

As a conclusion, connectivity issues were considered one of the main problems of the online context, followed by the lack of perception of non-verbal responses by teachers. Actions such as volunteering answers, speaking in front of teachers and classmates, and being called on in class were considered more anxiety provoking when the class took place online. However, a slightly higher percentage of students felt more confident about committing errors when the class took place online. Showing personal surroundings or being recorded during online classes was not considered problematic by students. Eye contact was also not considered threatening in in-person classes, nor any less when the class took place online. Students did not consider that the online sessions took a toll in their mental health. Finally, and even though doing quizzes in person was considered more anxiety provoking than when online, an overall preference for in-person classes for the Spanish language class was found.

Discussion of motivation questionnaire results

According to previous literature on motivation and online learning, students' attitudes towards the course can be affected by the mode of instruction. Some researchers have found a positive impact of the online setting on student's motivation,

(Harandi, 2015; Konecki, 2021) while some others have found a detrimental effect (Esra & Sevilen, 2021; Aldossari & Altaihab, 2022). The current study has found several factors of the online classes that have negatively impacted the motivation of the participants.

When analyzing motivation in the online setting, the role of the teacher has been found to be pivotal. Ushida (2005) found that each teacher uniquely implemented the online course, and therefore could create a unique class culture that affected motivation towards the language course. In fact, students in that study reported in the course evaluations that the teacher was the center of their satisfaction with the online sessions. Results in Ushida's research highlighted the critical role of the teacher in online education, suggesting that the instructor might be the most influential variable in a positive online language-learning experience. Selvi (2010) found similar results in her study about motivating factors of online education. Teachers' warmth and friendliness, as well their use of appropriate instructional techniques, were mentioned by students as clear examples of motivation enhancement factors. If these results are compared to the data collected in this study, there is a very high coherence between them. Responses in the items related to "Teacher Competence" in the motivation questionnaire showed a positive attitude towards the instructor. Since the totality of students disagreed with the item "I don't think my Spanish teacher is very good when the class is online", it could be said that instructor evaluation was positive. However, a 100% of the participants also agreed that the teacher had a more dynamic and interesting teaching style when the class took place in-person, which pointed to the instructor's competence online as a source of demotivation for the students.

Mullen and Tallent-Runnels (2006) found that their participants reported positive thoughts towards the online setting in their motivation levels. However, they

also found that some students described synchronous discussions as a waste of time. For them, attending online sessions was frustrating due to a lack of importance of the material discussed during this time. Thus, researchers identified boredom as a potential problem for maintaining online students' motivation. Several students in Esra and Sevilen's (2022) study also mentioned the need for enjoyment to sustain self-determination. They called the online courses "boring", which caused them to lose motivation at times. Aldossari and Altaihab (2022) found similar results, this time from the teacher's perspective. One of the participants of their study argued that in online classes, some students were unwilling to respond to the teacher and to participate, and this lack of enthusiasm might reflect the students' boredom with online learning, which therefore decreases their motivation to participate. This perspective aligns with the current study, since a good number of students (47.17%) thought that learning Spanish online was boring or dull, a high number when compared to the same question asked about the in-person class, to which only 5.88% agreed. In this sense, it can be said that the online context affects course evaluation. However, only a 23.53% of the students in this study believed the Spanish online class was a waste of time, indicating that, even though it might be less motivating than in-person, the course material was still found relevant for their education.

Even though research has indicated that the online context affects students' perceptions of the course, their desire to attend class does not seem to be affected by the e-context. Aldossari and Altaihab (2022) found that 73.80% of the participating teachers noticed that students attended online classes regularly. Additionally, 76.80% of the teachers revealed that students in online classes were responsive to deadlines for assignments. These findings mirror those of Muslimin and Harintana (2020), who noted that students' motivation in distance education environments exhibited a 90% increase

over students' motivation in in-person classroom environments, revealing that technology-rich online sessions could promote student engagement. However, results of the current study were not in line with previous findings. 73.59% of the students would have preferred to spend more time in in-person classes. Moreover, a considerable difference was found in the level of desire to attend the Spanish class: 58.83% presented a strong desire to be present in the online sessions, while 88.23% reported a strong interest to attend to class when it was held in-person.

Some distance education instructors are concerned about involving various interesting teaching and learning materials, precisely with the purpose of engaging students. This fact was not lost on Aldossari and Altalhab's (2022) participating teachers, since 83.40% stated that the reason for students' increased motivation in online classes was the teachers' use of visually attractive materials such as interactive books, colorful PowerPoint presentations, and interesting videos. This finding is consistent with previous research (Konecki, 2020; Almaleki et al., 2021), which revealed that visually appealing classroom materials promoted students' engagement in class activities. Over three-quarters (75.40%) of the participating teachers asserted that the more interesting the instructional materials are in distance education, the more cooperative the students are. Having this in mind, the results of the present study might point to the lack of rich online activities during the online sessions, since 76.47% of respondents agreed that they enjoyed the Spanish learning activities much more when they took place in-person.

As was discussed in the previous section, communication in the online classroom can be disturbed by the lack of face-to-face interaction (Kaisar and Chowdhury, 2020; Valizadeh, 2021). This can be considered an important factor when it affects the interaction between teacher and student, especially when a problem arises.

However, previous research has not found the online context as a problematic environment to ask for help. Aldossari and Altaihab (2022) found that 83.40% of students always asked teachers for guidance about projects and assignments during online classes. Such interaction emphasized the important roles that teachers play as guides in students' learning process. However, interaction with teachers was also reported to be limited when compared to face-to-face education, as students couldn't communicate with their teachers as they usually do in face-to-face education. Similar results were found by Esra and Sevilen (2022) in their interviews with instructors, who stated that distance education is ineffective and cannot replace face-to-face human interactions in in-class education. In that study, most interviewed participants expressed their preference for in-class settings rather than distance education, because students can ask their questions easily and without hesitation in class, simultaneously learning what they did not understand. According to the perspectives of participants in previous research, this did not happen in online classes due to the limited time and the short breaks. Moreover, some teachers reported that, even if students had questions to ask teachers, they did not want to send emails or messages out of fear to disturb, a fear that would not exist if they had the chance to ask questions in person. Results of the current study shows that 94.12% of students preferred being in-person to ask the teacher for help when they have issues, while only 23.53% preferred the online setting, aligning with the results of previous studies and showing that the in-person setting is considered less threatening for students to present their problems to the instructor.

Preferences for the in-person mode of instruction seem to be consistent across research. Most teachers interviewed in Aldossari and Altalhab (2022) expressed their preference for in-person settings rather than distance education. Two teachers mentioned that they preferred blended learning to purely traditional methods and to

purely distance education methods because a mix of the two elevates the interest and innovativeness of the entire learning process. This finding was consistent with Bataineh and Mayyas (2017), which revealed that certain types of blended learning improved students' proficiency in reading comprehension and grammar. In the present study, a clear preference towards the in-person lessons can be identified. 95.12% of the participants thought that Spanish was one of their favorite in-person courses, while this percentage decreased when asked about the online version, with only 52.95% of the participants in favor. Moreover, 35.29% of students reported losing desire to learn Spanish due to the shift to online classes, which indicates a clear decrease in motivation brought by the virtual lessons and a preference toward the face-to-face educational context.

To conclude this section, it can be said that the role of the teacher is central in student's motivation when the mode of instruction is online. Students of the present study felt demotivated by a less dynamic and interesting style of the teacher during online sessions. The online classes were also considered more boring than the in-person classes, although, according to students' responses, still relevant for their education. Activities were also considered to be more enjoyable face-to-face. Moreover, students preferred being in the in-person classroom to ask questions to the instructor. Lastly, it is important to mention that students reported losing desire about learning Spanish during the three weeks when the classes took place online.

CHAPTER VII: LIMITATIONS OF THE STUDY

The main aim of the present study was to assess the factors that affect anxiety and motivation in a hybrid Spanish as a second language university course. In the implementation of the study, certain limitations were found, which will be presented in this section.

The sample selected for this study was formed by students who did not choose the Spanish course, since it was a requirement for their degrees. The results obtained in this study may not be applicable to students outside of this designation. Moreover, the group of participants selected for this study had enrolled in a course that was initially designed to be taught in-person. Only three weeks of instruction were taught online, and students were not aware of this before choosing the course. This could have affected the results of the study in several ways. In the first place, their motivation or anxiety levels might have been affected by the fact that they did not choose to be in a hybrid course; and secondly, the amount of time spent online might not have been enough for students to relate to certain factors included in the questionnaires. It is important to mention that not all students showed up to the same number of classes during the duration of the online lessons, thus not all participants were exposed to the same amount of online instructional hours. Therefore, future studies that use language students as sample population should consider collecting data from a group that spend a larger amount of time learning the language in the online mode of instruction.

Another limitation of the present study is the fact that the teacher was the same person as the researcher. All the findings related to the role of the instructor in the class should be taken with caution for this reason. Students might not have wanted to speak

negatively about their instructor, worrying it could negatively affect their grade or be prejudicial to their relationship with the teacher.

The availability of previous research instruments was also found problematic in terms of the creation of the questionnaires used for the present study. Few researchers had focused their efforts in creating tools that could measure anxiety or motivation in the foreign language online classroom, since this area of research had only regained attention due to the recent COVID-19 pandemic. The fact that the questionnaires used in the present study were adapted from several sources and not assessed for their reliability means that their reliability is unknown, in comparison with standardized tools, such as the FLCAS (Horwitz et al, 1986) or the AMTB (Gardner, 1985). Using a modified version of these surveys was the only possible way of measuring anxiety and motivation in the specific context of this course. Moreover, research that focuses on motivation and anxiety in co-occurrence is almost non-existing, limiting the analysis scope of the current study.

Even though the questionnaires used in the present study were detailed enough to answer the research questions, it would have been useful to include items to target students' in-depth perspectives. Some of the items in the questionnaire would have been more useful with further explanation by the participants on their answers to understand the reasoning behind their answers. Further research could benefit from including an in-depth interview or open-ended questions in which specific factors are targeted, with the objective of gaining insight into students' opinions.

Lastly, it would also be enriching to include teacher's perspectives in future studies. When discussing the results of the present study, the opinions and feelings of instructors collected in previous research were found useful. Including a questionnaire with open-ended questions for teachers or conducting an in-depth interview with the

instructors of the course could clarify some of the question that students might not be able to answer, especially in terms of instructional methodology, activities, and their adequateness for the online context.

CHAPTER VIII: PEDAGOGICAL IMPLICATIONS

Results found in the present study contribute to the understanding of how the online setting of instruction of a second language can affect anxiety and motivation in students. It can inform instructors and course designers in terms of practical implications, which will be dealt with in this section.

In the first place, the results suggest that connectivity issues were one of the main factors leading to anxiety in students. These technological problems might have been produced by the lack of proper devices or Wi-Fi networks available for students. It would be recommendable that institutions take part in these technological issues and offer students the possibility of using fully functioning devices and networks, and to make them easily accessible for those students that might need to make use of them. On the other hand, instructors should be aware that technological difficulties are part of the nature of using technology. Therefore, lowering expectations or being more flexible with students can be another solution to lower technology-related anxiety in the online classroom.

Additionally, based on the results, the lack of visual contact was considered a problematic feature of the online lessons for many participants. Many students reported feeling anxiety due to not knowing whether the instructor had been able to see their non-verbal responses or involvement during the online lessons. It is important to mention that, since it was not mandatory, some students in the present study decided to keep their cameras turned off while instruction was taking place. It would be advisable for instructors to emphasize the need of turning the camera on during online lessons, or even make this factor a part of students' grade in a small percentage to incentivize them to keep their cameras on. Additionally, limiting classroom size can also prevent this

issue. Ensuring that all students fit on one screen can provide students and teacher with better visual contact and a better non-verbal communication.

Since many students in this study reported feeling more worried about volunteering answers, being called on, speaking in the foreign language or making mistakes during online lessons, it might be recommendable for instructors to try to create a safe space for students to communicate. This can be done by organizing students in small groups or pairs to collaborate in the instructional activities prior to calling them on or asking for volunteers. By doing so, students can share their responses with their classmates and re-assure their answers before sharing them in front of the whole group. Dividing the classes in smaller groups might also create a more inviting environment for students to be willing to participate, since less people are present in front of them when using the target language. Instructors might also consider using alternatives for participation, for example using platforms like Pear Deck or Nearpod through which students can write their answers. Allowing students to use the chat tool to offer answers at times might also be helpful.

In terms of testing, many students in the present study reported feeling less anxious when taking quizzes at home. This can be considered an advantage of the online setting for instruction. However, it should be noted that students might prefer not being in class due to the possibility of using external resources at the time of taking the exam. To prevent this, teachers might consider developing assessment tools for which the use of external help is not useful or necessary. Reducing the time limit of the assessment can also be a way of ensuring that students are not able to use external resources in tests.

This study has highlighted the relevance of the role of the teacher in online instruction. Many participants agreed that the teacher did not present an interesting or

dynamic style when compared to the in-person lessons. Some others thought that learning Spanish online was more boring or dull than in-person and reported losing desire to learn Spanish due to the incorporation of online lessons in the course. For these reasons, the creation of attractive, interactive, and visually appealing learning materials should be considered a priority for online instructors.

Moreover, the in-person setting was selected by participants in the study as the more suitable environment to ask the instructor for help in case of misunderstanding. Many students might decide to remain silent when a question arises in the online setting. In order to prevent students from hesitating to ask questions, it would be advisable for instructors to provide more time for queries before and after each online activity, or to emphasize the availability of office hours for those students who might not venture to ask their questions directly during class time. Enabling students to work on instructional activities in pairs or small groups can also be a solution for this issue. Students might be less hesitant to ask for the instructor's help in front of a smaller number of people. Lastly, dedicating a brief section at the end of the class period for questions or can be a solution for those who might want to ask for help without interrupting the pace of the lesson.

CHAPTER IX: CONCLUSION

Online instruction brings with it numerous alterations in education. This research gathers some of the main factors affecting anxiety and motivation of language students enrolled in a Spanish for beginners' course at university level. Firstly, anxiety and the factors affecting it were analyzed. It was concluded that online instruction can have repercussions on students' anxiety, since participants of this study experienced more anxiety during online language lessons than in the in-person setting. Secondly, students' motivation and the factors affecting it were analyzed. Motivation was also impacted by the online mode of instruction, since students reported being less motivated in that context than in the in-person setting. Therefore, the results of this study suggest the online mode of beginning Spanish language instruction resulted in lower motivation and a higher anxiety in students than in the in-person setting.

Investigating the factors that influence students' anxiety and motivation in online education can be a great source of knowledge for making enhancements to online learning in order to stimulate a motivating atmosphere and reduce anxiety that might prevent students from learning. Some of the improvements suggested include ensuring that students have access to fully functioning devices and networks, encouraging pair work, using alternative platforms for participation, and creating attractive, interactive and visually appealing activities. With these improvements, a healthy environment in which a full learning process can be forged would be achieved. It is important that the mental health of university students that enroll in online education is considered. Analyzing the environment in which students develop their skills would ensure that everyone has access to quality education, which is a fundamental human right.

REFERENCES

- Aldossari, S., & Altalhab, S. (2022). Distance Learning During COVID-19: EFL Students Engagement and Motivation from Teachers Perspectives. *English Language Teaching, 15*(7), 1-85.
- Ally, M. (2004). Foundations of educational theory for online learning. *Theory and practice of online learning, 2*, 15-44.
- Almaleki, D. A., Alhajaji, R. A., & Alharbi, M. A. (2021). Measuring Students' Interaction in Distance Learning Through the Electronic Platform and its Impact on their Motivation to Learn During Covid-19 Crisis. *International Journal of Computer Science & Network Security, 21*(5), 98-112.
- Akcaoglu, M., & Lee, E. (2016). Increasing social presence in online learning through small group discussions. *International Review of Research in Open and Distributed Learning, 17*(3), 1-17.
- Bates, A. T. (2005). *Technology, e-learning and distance education*. Routledge.
- Berestova, A., Burdina, G., Lobuteva, L., & Lobuteva, A. (2022). Academic Motivation of University Students and the Factors That Influence It in an E-Learning Environment. *Electronic Journal of e-Learning, 20*(2), 201-210.
- Bataineh, R. F., & Mayyas, M. B. (2017). The utility of blended learning in EFL reading and grammar: A case for Moodle. *Teaching English with Technology, 17*(3), 35-49.
- Campillo-Ferrer, J. M., & Miralles-Martínez, P. (2021). Effectiveness of the flipped classroom model on students' self-reported motivation and learning during the COVID-19 pandemic. *Humanities and Social Sciences Communications, 8*(1), 1-9.

- Chametzky, B. (2013a). Offsetting the affective filter and online foreign language learners. *Grounded Theory Review*, 12(2).
- Chametzky, B. (2017). Offsetting the affective filter. *Grounded Theory Review*, 16(1), 50-54.
- Chametzky, B. (2019). The online world languages anxiety Scale (OWLAS). *Creative Education*, 10(1), 59-77.
- Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, 12(24), 10367.
- Cueva, M. A. L., & Terrones, S. A. C. (2020). Impact of virtual classes on the university students in the context of COVID-19 quarantine: The case of the PUCP. *Propositos Y Representaciones*, 15-15.
- Dörnyei, Z. (2005) *The psychology of the language learner: Individual differences in second language acquisition*. New York, NY: Routledge.
- Erichsen, E. A., & Bolliger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research and Development*, 59(3), 309-326.
- Esra, M., & Sevilen, Ç. (2021). Factors influencing EFL students' motivation in online learning: A qualitative case study. *Journal of Educational Technology and Online Learning*, 4(1), 11-22.
- Evişen, N., Akyılmaz, Ö., & Torun, Y. (2020). A case study of university EFL preparatory class students' attitudes towards online learning during Covid-19 in Turkey. *Gaziantep Üniversitesi Eğitim Bilimleri Dergisi*, 4(2), 73-93.

- Gardner, R. C. (1985). *The attitude/motivation test battery: Technical report*. University of Western Ontario.
- Guilloteaux, M. J., & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL quarterly*, 42(1), 55-77.
- Harandi, S. R. (2015). Effects of e-learning on Students' Motivation. *Procedia-Social and Behavioral Sciences*, 181, 423-430.
- Harmer, J. (1991). *The practice of English language teaching - Motivational differences*. London: Longman.
- Hartnett, M., St George, A., & Dron, J. (2011). Examining motivation in online distance learning environments: Complex, multifaceted, and situation-dependent. *International Review of Research in Open and Distributed Learning*, 12(6), 20-38.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20(3), 559-562.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern language journal*, 70(2), 125-132.
- Kaisar, M. T., & Chowdhury, S. Y. (2020). Foreign Language Virtual Classroom: Anxiety Creator or Healer? *English Language Teaching*, 13(11), 130-139.
- Knowles, E., & Kerkman, D. (2007). An investigation of students' attitude and motivation toward online learning. *InSight: A Collection of Faculty Scholarship*, 2, 70-80.

- Konecki, M. (2020). Impact of distance learning on motivation and success rate of students during the COVID-19 pandemic. In *2020 43rd International Convention on Information, Communication and Electronic Technology*, 813-817.
- Krashen, S. (1981). Second language acquisition. *Second Language Learning*, 3(7), 19-39.
- MacIntyre, P. D., Gedges, T., & Mercer, S. (2019). Setting an agenda for positive psychology in SLA: Theory, practice, and research. *The Modern Language Journal*, 103, 262-274.
- Masgoret, A. M., & Gardner, R. C. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language learning*, 53(S1), 167-210.
- Mondol, M. S., & Mohiuddin, M. G. (2020). Confronting Covid-19 with a paradigm shift in teaching and learning: A study on online classes. *International Journal of Social, Political and Economic Research*, 7(2), 231-247.
- Mullen, G. E., & Tallent-Runnels, M. K. (2006). Student outcomes and perceptions of instructors' demands and support in online and traditional classrooms. *The Internet and Higher Education*, 9(4), 257-266.
- Muslimin, A. I., & Harintama, F. (2020). Online learning during pandemic: Students' motivation, challenges, and Loquen: English Studies <https://doi.org/10.32678/loquen.v13i2.3558> Journal, 13(2), 60-68.
- Pae, T. I. (2013). Skill-based L2 anxieties revisited: Their intra-relations and the inter-relations with general foreign language anxiety. *Applied linguistics*, 34(2), 232-252.
- Pakpahan, E. M., & Gultom, I. (2022). Overcoming foreign language speaking anxiety by using a language exchange website in online learning. *PROJECT (Professional Journal of English Education)*, 5(2), 385-394.

- Park, J. H., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Journal of Educational Technology & Society*, 12(4), 207-217.
- Pasion, R., Dias-Oliveira, E., Camacho, A., Morais, C., & Franco, R. C. (2020). Impact of COVID-19 on undergraduate business students: A longitudinal study on academic motivation, engagement and attachment to university. *Accounting Research Journal*.
- Pichette, F. (2009). Second language anxiety and distance language learning. *Foreign Language Annals*, 42(1), 77-93.
- Plaisance, M. (2018). Online course delivery. *The TESOL encyclopedia of English language teaching*, 1-6.
- Ryan, R. M., Patrick, H., & Deci, E. L. (2012). Self-Determination Theory. *Perspectives on Psychological Science*, 7(4), 325-340.
- Saadé, R. G., Kira, D., Mak, T., & Nebebe, F. (2017). Anxiety and performance in online learning. Proceedings of the Informing Science and Information Technology Education Conference, Vietnam, pp. 147-157
- Schunk, D. H., & Usher, E. L. (2012). Social cognitive theory and motivation. *The Oxford handbook of human motivation*, 2, 11-26.
- Schunk, D. H., Meece, J. R., & Pintrich, P. R. (2012). *Motivation in education: Theory, research, and applications*. Pearson Higher Ed.
- Selvi, K. (2010). Teachers' competencies. *Cultura International Journal of Philosophy of Culture and Axiology*, 7(1), 167-175.
- Spolsky, B. (1990). Introduction to a colloquium: The scope and form of a theory of second language learning. *TESOL quarterly*, 24(4), 609-616.

- Stowell, J. R., & Bennett, D. (2010). Effects of online testing on student exam performance and test anxiety. *Journal of Educational Computing Research*, 42(2), 161-171.
- Subekti, A. S. (2022). L2 learning online: Self-directed learning and gender influence in Indonesian university students. *Journal of English Educators Society*, 7(1), 10-17.
- Tóth, Andrea (2021) *Foreign language anxiety revisited: is FLA also present in the online language learning environment?* In: XXVII. Multimédia az oktatásban online nemzetközi konferencia, 42-46.
- Ushida, E. (2005). The role of students' attitudes and motivation in second language learning in online language courses. *CALICO journal*, 49-78.
- Valizadeh, M. (2021). Foreign language anxiety in virtual classrooms during the Covid-19 Pandemic in Turkey. *St. Theresa Journal of Humanities and Social Sciences*, 7(1), 54-80.
- Von Worde, R. (2003). Students' Perspectives on Foreign Language Anxiety. *Inquiry*, 8(1), n1.
- Widjaja, A. E., & Chen, J. V. (2017). Online learners' motivation in online learning: the effect of online-participation, social presence, and collaboration. *Learning Technologies in Education: Issues and Trends*, 12, 72-93.
- Wighting, M. J., Liu, J., & Rovai, A. P. (2008). Distinguishing sense of community and motivation characteristics between online and traditional college students. *Quarterly review of distance education*, 9(3).
- Xie, K. U. I., Debacker, T. K., & Ferguson, C. (2006). Extending the traditional classroom through online discussion: The role of student motivation. *Journal of Educational Computing Research*, 34(1), 67-89.

Yoshida, H., Tani, S., Uchida, T., Masui, J., & Nakayama, A. (2014). Effects of online cooperative learning on motivation in learning Korean as a foreign language. *International Journal of Information and Education Technology*, 4(6), 473.

APPENDIX A. ANXIETY QUESTIONNAIRE

1. I feel uneasy thinking that my teacher or fellow students might see my home setting when in online classes.	strongly agree	agree	neutral	disagree	strongly disagree
2. I feel anxious that I might miss something due to connection issues.	strongly agree	agree	neutral	disagree	strongly disagree
3. I feel anxious thinking that the teacher might not see my non-verbal responses or involvement during online class.	strongly agree	agree	neutral	disagree	strongly disagree
4. I feel uncomfortable about the possibility of being recorded during virtual class.	strongly agree	agree	neutral	disagree	strongly disagree
5. Since I do not necessarily have to expose my physical appearance in a virtual class, I feel more comfortable and relaxed when the class is online.	strongly agree	agree	neutral	disagree	strongly disagree
6. Long time using technology during the virtual class makes me anxious about my physical and mental health.	strongly agree	agree	neutral	disagree	strongly disagree
7. I feel more anxious when I do tests in-person than in the online classroom.	strongly agree	agree	neutral	disagree	strongly disagree
8. I feel more anxious when I do tests in the online classroom than in-person.	Strongly agree	agree	neutral	disagree	strongly disagree
9. The direct presence of eye contact with the teachers makes me more nervous in class than in a virtual environment.	strongly agree	agree	neutral	disagree	strongly disagree
10. I worry more about making mistakes in in-person classes.	strongly agree	agree	neutral	disagree	strongly disagree
11. I worry more about making mistakes in online classes.	strongly agree	agree	neutral	disagree	strongly disagree
12. I feel more anxious when I know I'm going to be called on in the online class.	strongly agree	agree	neutral	disagree	strongly disagree

(Table continues)

(Table continued)

13. I feel more anxious when I know I'm going to be called on in the in-person class.	strongly agree	agree	neutral	disagree	strongly disagree
14. It embarrasses me more to volunteer answers in the online class.	strongly agree	agree	neutral	disagree	strongly disagree
15. It embarrasses me more to volunteer answers in my in-person class.	strongly agree	agree	neutral	disagree	strongly disagree
16. I feel less self-conscious about speaking the foreign language in front of other students in the online classroom	strongly agree	agree	neutral	disagree	strongly disagree
17. I feel less self-conscious about speaking in the foreign language in front of other students when in-person.	strongly agree	agree	neutral	disagree	strongly disagree
18. A real classroom environment fits me more for the Spanish class.	strongly agree	agree	neutral	disagree	strongly disagree
19. I prefer the online class to learn Spanish	strongly agree	agree	neutral	disagree	strongly disagree

APPENDIX B. MOTIVATION QUESTIONNAIRE

My interest in foreign languages is:

VERY LOW 0-100 VERY HIGH

My desire to learn Spanish is:

WEAK 0-100 STRONG

My attitude toward learning Spanish is:

UNFAVOURABLE 0-100 FAVOURABLE

My attitude toward my Spanish teacher is:

UNFAVOURABLE 0-100 FAVOURABLE

My attitude toward my Spanish course is:

UNFAVOURABLE 0-100 FAVOURABLE

My motivation to learn Spanish is:

VERY LOW 0-100 VERY HIGH

1. I have a strong desire to go to my in-person Spanish class.	strongly agree	agree	neutral	disagree	strongly disagree
2. I have a strong desire to go to my online Spanish class.	strongly agree	agree	neutral	disagree	strongly disagree
3. I feel like the Spanish class is really a waste of time.	strongly agree	agree	neutral	disagree	strongly disagree
4. I feel like the Spanish class online is really a waste of time.	strongly agree	agree	neutral	disagree	strongly disagree
5. Studying Spanish is not enjoyable.	strongly agree	agree	neutral	disagree	strongly disagree
6. Studying foreign languages online is not enjoyable.	strongly agree	agree	neutral	disagree	strongly disagree
7. I don't think my Spanish teacher is very good.	strongly agree	agree	neutral	disagree	strongly disagree

(Table continues)

(Table continued)

8. I don't think my Spanish teacher is very good when the class is online.	strongly agree	agree	neutral	disagree	strongly disagree
9. I would rather spend more time in the online Spanish class instead of in-person.	strongly agree	agree	neutral	disagree	strongly disagree
10. I think my Spanish class is boring.	strongly agree	agree	neutral	disagree	strongly disagree
11. I think my Spanish class online is boring.	strongly agree	agree	neutral	disagree	strongly disagree
12. I enjoy the activities of our Spanish class much more in-person than online.	strongly agree	agree	neutral	disagree	strongly disagree
13. I enjoy the activities of our Spanish class much more online than in-person.	strongly agree	agree	neutral	disagree	strongly disagree
14. My Spanish teacher has a more dynamic and interesting teaching style when in-person.	strongly agree	agree	neutral	disagree	strongly disagree
15. My Spanish teacher has a more dynamic and interesting teaching style when online.	strongly agree	agree	neutral	disagree	strongly disagree
16. When I have a problem understanding something in my Spanish class, I prefer the online version to ask my teacher for help.	strongly agree	agree	neutral	disagree	strongly disagree
17. When I have a problem understanding something in my Spanish class, I prefer being in-person to ask my teacher for help.	strongly agree	agree	neutral	disagree	strongly disagree
18. Being online has made me lose desire to know Spanish.	strongly agree	agree	neutral	disagree	strongly disagree
19. I think that learning Spanish is dull.	strongly agree	agree	neutral	disagree	strongly disagree

(Table continues)

(Table continued)

20. I think that learning Spanish online is dull.				
strongly agree	agree	neutral	disagree	strongly disagree
21. I look forward to the time I spend in Spanish in-person class.				
strongly agree	agree	neutral	disagree	strongly disagree
22. I look forward to the time I spend in Spanish online class.				
strongly agree	agree	neutral	disagree	strongly disagree
23. I have a hard time thinking of anything positive about my Spanish class.				
strongly agree	agree	neutral	disagree	strongly disagree
24. I have a hard time thinking of anything positive about my online Spanish class.				
strongly agree	agree	neutral	disagree	strongly disagree
25. Spanish is one of my favorite in-person courses.				
strongly agree	agree	neutral	disagree	strongly disagree
26. Spanish is one of my favorite online courses.				
strongly agree	agree	neutral	disagree	strongly disagree