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Addressing the Needs of Students with Foreign Language Anxiety

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Walden University
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Abstract

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MA, Walden University, 2017

BS, Temple University, 2013

Dissertation Submitted in Partial Fulfillment

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Psychology

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Abstract

Foreign language anxiety is a condition in which students of foreign languages experience test anxiety, avoidance of communication, and fear of evaluation that become so inhibiting that their social and academic progress, along with their ability to become global citizens, is significantly stunted. This sequential mixed-methods research study was conducted so that foreign language educators might be better informed about how best to address foreign language anxiety within their classrooms. Because the concept of foreign language anxiety is based upon the idea of the foreign language classroom being uniquely taxing upon students, the stress-coping theory as well as the anxiety/uncertainty management theory and the concept of situationism were used in this study's design to determine the range of foreign language anxiety levels among nine American university students, as well as what these students perceive to be helpful and harmful in terms of anxiety mitigation attempts. The survey in Phase 1 of the study identified extreme case participants for Phase 2, and the interview results were analyzed according to emotion, value, and pattern coding structures. Ultimately, the data showed that the majority of the American university students experienced at least moderate levels of foreign language anxiety, and there were emergent themes on the effects of teachers, peers, environment, language type, and activity type. Future research should be conducted on language type and experience as mitigating factors, in addition to further studies on student perceptions of peers and activity types. With additional supporting research, the results of this study may be used to better train foreign language educators and thus lessen the impact that foreign language anxiety has on students resulting in positive social change.

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Dedication

This dissertation is dedicated to my mother and father, who have always encouraged me to be the best possible version of myself.

Acknowledgments

I would like to acknowledge everyone who played a role in my academic accomplishments. First of all, my parents, who have unconditionally supported me throughout the years. Without you, I literally would not have existed to get to this point.

Secondly, my significant other, who has put up with my stress and anxious outbursts over the years as I struggled through each late night and made it through the dissertation process. Without your love and support, who knows if I would have made it to this far.

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Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Introduction

Foreign language anxiety (FLA) is a term attributed to the distinct complex feelings and behaviors that a student experiences because of the unique demands and intricacies present within a foreign language classroom (Bensalem, 2018). It can present itself in a multitude of ways, but none lead to success and positivity. It causes assessment scores as well as real world language usage to suffer. Students who are adversely affected by FLA become less well rounded and culturally diverse, and ultimately their academic performance and development of proper social skills are impacted. Students experiencing lower levels of foreign language anxiety tend to perform better on all proficiency tests and in class (Sparks & Ganschow, 2007), but students who do not perform well because of FLA run the risk of lower college acceptance rates and less funding from scholarships. If their FLA becomes bad enough, some students may even begin to skip their foreign language classes altogether (Horwitz et al., 1986), which can put their graduation at risk, thereby threatening their prospects to enter the workforce. This study, by extending knowledge of how to prevent FLA as well as how to aid those who are already suffering from it, may support students of all ages in better reaching their full potential as global citizens.

In this chapter, I discuss the basis for this research study focusing on the phenomenon of FLA within the United States, along with the specific goals of the study. The theoretical framework is covered, in addition to all assumptions that were necessary

in order for the research to be conducted. The need for this research is explained in depth, as well as the possible benefits and limitations.

Background

Much of the data collected about FLA over the last two decades has had a focus on the contributing factors of the condition. Some of these data have been very generalized, with many findings being applicable to numerous types of anxiety disorders. Inam et al. (2017), for example, found support for four causes of any kind of anxiety: (a) awkward scenarios resulting from inappropriate social skills, (b) individuals underestimating themselves, (c) neutral events or stimuli being immediately followed by negative conditions or results, and (d) differences in personality aspects. The factor of "differences in personality aspects" remains open to debate. It is traditionally thought that high levels of neuroticism and low levels of extraversion lead to greater anxiety. High FLA can impact academic performance, but Dewaele (2007) found no effect of these personality traits on grades. This is unsurprising, given that these findings typically refer to more generalized anxiety disorders rather than FLA specifically.

Along with the circumstances noted above, there are specific factors that influence a student's experiences with FLA. For example, the student's purpose for learning the language has an effect on the amount of FLA experienced (Gocer, 2014). Gursory and Arman (2016) collected data suggesting that lowerclassmen tend to be more anxious than upperclassmen, although data from Zhou (2017) showed that students in their 1st and 4th years of study with a language felt the highest levels of FLA, which supports the notion that the number of years of experience with a language is more

influential than actual grade level or age. Even more specifically, researchers have been able to note which factors can lead to issues with one or more specific communication skills, such as listening, writing, reading, and speaking.

Chang (2008) found data supporting the idea that foreign language students feel more anxious during listening tasks when the speech is fast and when the students have low confidence in their comprehension abilities. In terms of writing tasks, Liu and Ni (2015) found that factors contributing to FLA were lack of vocabulary, lack of personal desire to do better, and unfamiliarity with the genre. Rajab et al. (2012) also found that languages with nonromanized writing systems such as Chinese or Arabic elicit higher levels of FLA in students who are primarily used to Romanized ones. Further studies by Nadeem and Gill (2019) seem to support this, as they collected data showing that students studying Arabic had high FLA levels whereas students studying English only had moderate FLA levels.

As for reading tasks, Zhou (2017) gathered data listing contributing factors as unfamiliarity with topics, discomfort with reading aloud, and worries about comprehension. With speaking tasks though, Mak (2011) noted possible exacerbating factors as lack of comfort in conversing with native speakers, fear of public speaking without advanced preparation, and negative self-evaluations caused by previous experiences such as being corrected in the middle of speaking.

Research has not only been able to narrow in on the contributing factors in FLA, but also has been able to identify noncontributing factors. Ali and Fei (2016), as well as Gursoy and Arman (2016), found evidence to support the idea that females experience

FLA more than males, but Liu and Ni (2015) found data showing that this was not the case, at least when it came to writing tasks. On top of this, Dewaele (2007), Kuscu (2017), and Öner and Gedikoğlu (2007) found no evidence at all to support the idea of gender being an influencing factor on FLA. In fact, Kuscu and Öner and Gedikoğlu showed no influence of gender, parental education, parental occupation, or even school type as FLA factors.

Additional research has been done in order to explore the negative consequences of anxiety, although not all of it has focused on FLA specifically. For example, students with high FLA tend to have lower grades (Dewaele, 2007), and as with any kind of anxiety disorder, they are more at risk for school refusal and less likely to continue with higher education (de Lijester et al., 2018). They may also end up suffering from symptoms at somatic levels such as trembling and racing heart rates (Dormaradzka & Fajkowska, 2018). Problems with anxiety can even lead to substance abuse (Fatseas et al., 2018).

It is important to note that a lot of the research on FLA has been conducted outside the United States. Dewaele (2007) worked with Flemish students, and Aliakbari and Gheitasi (2016) worked with students in Iran. Chen and Chang (2004) as well as Liu and Chen (2015) focused on students in Taiwan, and another two studies by Dewaele and colleagues (2018) used students from Britain. Liu and Ni (2015) focused on students in China. Djafri and Wimbarti (2018) focused on students from Indonesia and Altunel (2019), Kuscu (2017), and Öner and Gedikoğlu (2007) recruited students in Turkey. Ewald (2007) and Horwitz et al. (1986) used American students, but only those studying

Spanish, and Zhou (2017) also used American students, but only those studying Chinese. It is very difficult to make generalizations about American students because of these limited populations.

Problem Statement

Within the United States, it is becoming more important for and expected of emerging youth to attend university and become well-rounded global citizens. Becoming a global citizen can include learning a foreign language. Among the top 115 universities in the United States, 60 require applicants to have taken a foreign language in high school, and another 49 schools on the list at minimum recommend this (Collegetransitions.com, 2018). Upon admission to a college or university, students are often expected to continue foreign language studies as a part of their general education requirements. In fact, at least 39% of college students attend an institution where this is a requirement (Neuman, 2017), and at any given time 7.5 % of college students are enrolled in foreign language classes (Looney & Lusin, 2018). Unfortunately, a student's progress in such courses can be stalled by the phenomenon known as FLA.

FLA is a term used to refer to the distinct, complex feelings and behaviors that an individual undergoes because of language learning in a classroom setting (Bensalem, 2018). Students experience numerous classroom difficulties as a result of FLA, but most notably, it causes communication apprehension, test anxiety, and a fear of negative evaluations. Communication apprehension and test anxiety revolve around the idea of being afraid to communicate with others or failing in an academic setting. A fear of negative evaluations may lead to the avoidance of evaluative situations with peers

(Bensalem, 2018). Each of these experiences can stall the learning process and inhibit student progress. A lack of progress in school eventually leads to difficulties with careers and the responsibilities of adulthood.

Unfortunately, because much of the research on FLA has been done outside the United States, especially in the last decade, it is not well known how prominent FLA is within the United States. The studies that have been conducted within the United States have tended to focus on learners of one specific language, such as English. On top of this, most research has contributed to the field of study by noting factors that may or may not influence the appearance of FLA. Little is known about what the current FLA level of various university students is today, and not much has been shared about how to aid those suffering from it.

In order to combat the negative ramifications of FLA, foreign language educators have made attempts at implementing anxiety-reducing teaching methods. Being able to use technology supposedly helps students feel less anxious (Henry et al., 2018). Self-paced reading and listening activities (Roberts, n.d.) in addition to the use of flipped classrooms also reportedly help encourage more communication (Henry et al., 2018). Despite these revelations, the problems of FLA still exist. Other teaching methods or activities are still affecting foreign language students. What practices are hindering or aiding students with FLA need to be identified and then promoted or discouraged as appropriately as possible. With this in mind, I developed four points of focus for the research problem in this study. Among members of the scholarly community of this decade, there is little knowledge about the range of FLA experienced by those at the

collegiate level who are studying another language, students' experiences with and perceptions of various instructional practices, students' recommendations for FLA-reducing practices, and whether these experiences, perceptions, and recommendations vary depending on the level of FLA.

Purpose

The purpose of this explanatory sequential mixed method study (Creswell & Creswell, 2018) was to measure the range of FLA experienced by a sample of university students. I sought to achieve this purpose by interviewing students at both the high and low levels of the FLA spectrum in order to understand their perceptions of, experiences with, and recommendations for instructional techniques to reduce FLA and to compare emergent themes according to FLA level.

Research Questions

1. What is the current range of foreign language anxiety in college students in America who are presently enrolled in and attending a foreign language class?
2. What are the experiences with and perceptions of various instructional practices by college students who are enrolled in and attending a foreign language class?
3. What are the recommendations for most effective practices and activities that teachers employ to mitigate FLA as perceived by college students taking a foreign language class?

4. How do students who report high and low levels of FLA compare on experiences with, perceptions of, and recommendations for FLA-reducing foreign language instructional practices?

Theoretical Framework

Three theories were relevant to this study: anxiety/uncertainty management theory, situationism, and stress-coping theory. Anxiety/uncertainty management theory indicates that in order for communication to occur, anxieties and uncertainties about possible occurrences have to be reduced (Griffin, 1994). Situationism is the idea that an individual's behavior is conditional on the environment and is not a result of the individual's personality traits (Goldie, 2013). Stress-coping theory operates on the belief that stress occurs when an individual's environment puts demands on the person that are so taxing that they exceed the person's available coping skills (Krohne, 2001).

In reference to this particular study, research was conducted with the idea that the foreign language classroom has unique requirements that are not present in other classes. This uniqueness can pose entirely new, never previously experienced challenges. For example, a student might need to write with pictographs for the first time. If the student has never had this kind of experience before, it may cause the student to feel uncertain about what will happen in the class, which may lead to stress, which then, in turn, may become anxiety that the student does not know how to deal with.

Nature of the Study

For this particular study, an explanatory sequential mixed methods research design (Creswell & Creswell, 2018) was used. University students in the United States

who were taking a foreign language class were surveyed and interviewed in order to gain insight into how they perceived their own FLA levels in relation to the language, their instructor, and the class itself. They were able to share their personal firsthand accounts of teaching methods, practices, or educational activities that their instructors used within the classroom that proved beneficial to the students when trying to keep anxiety at bay, or that may have exacerbated anxiety.

Without an understanding of the current level of FLA within university students taking foreign language classes in the United States, it is difficult to provide feedback to teachers and instructors about how best to assist them. Because of this, I conducted a two-phase study with university students studying various foreign languages. The first phase of the study required students to complete the Foreign Language Classroom Anxiety Scale created by Horwitz et al. (1986). This helped establish students' current levels of anxiety in terms of their foreign language classes. That information was then used to conduct semistructured interviews with students who fell in both the low and high ranges of FLA. The point of these interviews was to gather more in-depth information on their foreign language classes and the educators running them so that student perceptions of contributing factors to FLA could be identified. In addition to this, information about perceptions of teaching methods and instructional activities that escalate or diminish feelings of FLA were also collected.

Definitions

Foreign language: For the purpose of this study, any mention of *foreign language* refers to all nonnative languages being studied with the exception of English, unless specifically noted otherwise.

Foreign language anxiety (FLA): This is a set of complex behaviors and feelings unique to the foreign language classroom that are most evident through communication apprehension, text anxiety, and fears of negative evaluations (Bensalem, 2018).

Instructional methods/practices/activities: These describe any action taken by an educator in the classroom in order to assist students with learning.

Assumptions

For the purpose of this study, there were two main assumptions. The first was that each participant did not have any previously diagnosed anxiety disorder that might confound the results of the study. The second assumption was the idea that all participants would be honest in their responses, from recruitment all the way to the interviews. As recruitment was done online, possible participants had to indicate whether they were in the United States, whether they were attending college, and whether they were currently taking a foreign language class. Because personally identifying information was not collected, there was no way to prove that participants were telling the truth in their responses. When actually conducting the survey and interviews, I also had no way to prove that participants were telling the truth about how they felt and what they perceived. In all instances, then, it must be assumed that they were telling the truth.

Scope and Delimitations

The original intended population for this study included any student in the United States who was taking a class to learn a foreign language. The population had to be narrowed, though, because it was much too broad, including college students, K-12 students, private tutees, and even those just taking a language class for enrichment at a community center or other location. There is not much in the way of statistics on people taking private language classes and personal enrichment courses, and K-12 students (those under 18 years of age) are considered to be members of vulnerable populations for which specific protocols must be followed and parental consent forms must be signed. As such, these students were eliminated from the intended population. Therefore, for the purpose of this study, the population was college students within the United States who were taking a foreign language class.

The distinction of the students being located in the United States was important because participants from multiple countries would have brought additional influencing factors that would have been difficult to account for. Additionally, previous research traditionally focused on one country or region per study. It is also important to note that participants who were taking English as a foreign language were excluded from the study because the survey and interviews were conducted in English. If participants had still been learning English, they might not have fully understood the questions or even the information on the consent form. Therefore, only participants who indicated in their prescreening survey that they were native English speakers were included in the study.

Of all the potential participants identified during prescreening, 97 completed the survey phase of the study. Using formulas provided by Bonett (2002) and Yurdugul (2008), I determined that the necessary sample size to ensure a 95% confidence interval for measurement reliability was 48 to 62 participants, respectively. In a normal distribution, most cases fall within one standard deviation of the mean score. Those who were more than one standard deviation away would fall within the high and low ranges of FLA and those students, in an extreme case sampling procedure (Daniel, 2012), would be invited to participate in interviews in the second phase of the study. However, a Phase 1 measurement reliability sample size of only 48 or 62 participants would have required every participant in the extreme case ranges to participate to obtain an adequate qualitative sample size. Increasing the Phase 1 sample size to 100 participants increased the number of participants who might fall into extreme case ranges and widened the selection pool for the interviews so that not every individual had to participate. All of this allowed for more generalizability within the study, as there was a very high chance that the sample population's results were representative of the entire intended population.

It is also important to note the possible threats to validity in this study. The first half of this study involved the use of the Foreign Language Classroom Anxiety Scale. Thankfully, its validity had already been established, as its correlation with four previous test instruments had all fallen within a range of .28 to .53. For the qualitative interview questions, possible validity threats included bias and setting. Bias was combatted through the use of external auditors prior to and following the administration of the interviews. Efforts to minimize the threats of interview settings were taken by listing setting

requirements in the consent forms and reminding participants during scheduling. Additionally, parts of the setting were visible during the video interviews, so further adherence to setting requirements could be verified through visual checks and conversations with the participants themselves. Clearly detailing these requirements and procedures for checking the settings also aided in ensuring transferability in later studies.

Limitations

This study had a few limitations and challenges. To start with, at any given time, only 7.5% of college students are enrolled in a foreign language class (Looney & Lusin, 2018). Moreover, the students composing that 7.5% have a lot of freedom and may choose not to ever attend their foreign language classes, even if they remain enrolled. Therefore, in gathering participants, I had to rely on participants being honest about their actual attendance of the class. Because participants were recruited online, with no personal information collected, I had to act on the assumption that participants were honest about their enrollment and attendance status.

The reasons that students take foreign language classes vary. Some may take a foreign language class to fulfill general education requirements, whereas others may take it to satisfy the requirements of their major. Still others may take the class for enjoyment purposes. Depending on the reasoning for students taking the course, levels of FLA may vary. Therefore, it was important to collect information from students about their reasons for enrollment in order to determine whether this was indeed a contributing factor, as some studies had suggested.

In addition to the aforementioned concerns, there was a possible limitation related to focusing on the point of view of the student. Students might, for innumerable reasons, have downplayed or embellished their own symptoms and experiences. Additionally, similar experiences might have been more impactful for some students than others, and this might have skewed certain results. This is a risk that all studies with human participants face, though, and participants must be trusted to be sincere.

Significance

The research conducted in this study contributes to the fields of both psychology and education. Knowledge about anything that promotes or halts mental growth and progress is beneficial for both educators and mental health professionals. Students are meant to receive every opportunity to succeed and become functioning members of a global society, so that they can then offer their own assistance with improving society as a whole for the future. Because of the negative impacts of conditions such as FLA, the progress of numerous children and adults remains stunted. These individuals cannot reach their full potential academically, mentally, and possibly socially. The results of this research may provide educators with the information that they need in order to lessen the likelihood of this happening.

Information about the current level of FLA in American college students was collected in this study, along with information about contributing factors and how instructors can best support their students in terms of FLA. This knowledge may directly lead to positive social change, as the methods and practices explored will most likely have applicable components across disciplines and other fields. Any person who is

responsible for guiding others in any subject, including therapy and counseling, may better aid those people and steer them toward a more productive and fulfilling future.

Summary

This chapter demonstrated the need to discover the current range of FLA present within American university students, as well as the need to discover the most beneficial ways that foreign language educators can assist their students in terms of FLA. As such, this study determined how much of a presence FLA has in universities within the United States today and explored how students perceive their instructors and their classroom settings.

In the next chapter, I consider current research and relevant psychological theories as they pertain to FLA. This review of literature further solidifies the necessity of the study. The literature review is followed by an in-depth look at the methodology for this study in Chapter 3, where the research design and all relevant data components are examined. Chapters 4 and 5 report the results of both studies phases as well as their implications.

Chapter 2: Literature Review

Introduction

FLA has affected numerous students across the globe for decades. It is an inhibiting condition that prevents language learners from achieving their full potential academically, emotionally, and socially. In order to figure out the best course of action to address FLA, all previous research and known information about FLA must be pooled together. In this literature review, I explore how language is acquired, along with what makes FLA distinct, which factors contribute to FLA, and how FLA is measured. In addition to these topics, I address current research and attempts to rectify the problems of FLA.

Literature Search Strategy

All academic journal articles and other texts collected for the purpose of this literature review were gathered through the Walden University Library using the Thoreau, SAGE Journals, and PsycINFO databases. Search terms that were used involved numerous combinations of the following: *foreign language*, *foreign language anxiety*, *anxiety*, *students*, *high school students*, *college students*, *contributing factors of anxiety*, *assisting with anxiety*, *school*, *university*, *language acquisition*, and *measurements of anxiety*. The need for additional search terms such as *situationism*, *anxiety management theory*, *Lazarus*, *Gudykunst*, *Horwitz*, and *stress-coping theory* also emerged. Further research on test instrument information for FLA was conducted through the PsycTESTS database.

Theoretical Framework

There are three psychological theories that may account for the phenomenological occurrence of FLA. The first theory is that of anxiety/uncertainty management. This theory indicates that anxiety is the emotional equivalent of uncertainty, of which there are four types: predictive, explanatory, cognitive, and behavioral (Stephan et al., 1999). Predictive uncertainty refers to making guesses about other people's feelings and values, while explanatory uncertainty refers to the explanations for those feelings (Stephan et al., 1999). Cognitive uncertainty refers to individuals' actual knowledge about other people, and behavioral uncertainty is the degree to which people are sure of how others will behave (Stephan et al., 1999). Ultimately, the point of the theory is that these anxieties or uncertainties must remain low in order for intercultural communication to occur (Griffin, 1994). Intercultural communication is the goal of a foreign language class.

The second theory relevant to FLA is stress-coping theory (Lazarus & Folkman, 1984). The idea underlying this theory is that a person's environment provides constant stimuli that then create negative emotions when the stimuli are threatening or challenging (Biggs et al., 2017). This initiates coping strategies, but when the stimuli persist and the individual is not able to compensate for the stimuli, the individual feels stress (Krohne, 2001). This stress becomes anxiety when the individual tries and fails to cope with imagined future possible scenarios before they have even happened.

The final theory is that of situationism. Situationism is a broad theory, applying to many different scholarly subjects. In psychology, it refers to the idea that individuals' behavior is more dependent upon their surroundings and situation in the moment than

upon some character or personality trait (Goldie, 2013). The premise of FLA is that it occurs because the subject has requirements and scenarios that are not present in other classes. Therefore, the anxiety that the individual feels is situational and may not be present anywhere else.

Literature Review

How Is Language Acquired?

How the brain actually acquires language is a complicated process. Unsurprisingly, it starts from birth. Immediately after birth, a baby is exposed to numerous sounds or phonemes. These phonemes come together to make syllables, which in small sequences are recognizable to some extent even to neonates (those under 1 month of age; Ferry et al., 2016). By 6 months of age, infants can distinguish between all of the phonemes, and by the end of their first year of life, infants have actually learned how to differentiate between them even if they do not yet understand their meanings or how to use them appropriately (Kuhl, 2010). Vocabulary starts to build now, increasing dramatically after about 18 months; by the age of 3 years, syntax begins to be understood (Kuhl, 2010). This is when the critical period for grammatical concepts in the individual's primary target language begins.

The critical period for language acquisition lasts from ages 3 to 7 years (Kuhl, 2010), although some studies have shown that first language acquisition can occur until puberty, when cerebral lateralization is complete (Snow & Hoefnagel-Hohle, 1978). Snow and Hoefnagel-Hohle (1978) found that those between the ages of 8 and 15 years actually achieved the best language control, whereas those between the ages of 3 and 5

years had the worst, even though the latter participants were in the prime age range for the critical period. Other theories, such as Chomskyan linguistic theory, operate under the assumption that people learn language from a universal grammar system built into the brain (Mizen, 2017) due to commonalities among languages. More often, though, people still believe that as long as a person gets exposure to a language during the critical period, whether it is auditory or visual in nature, the individual will be able to accurately learn the language. After this time frame, individuals' propensity for assimilating new concepts supposedly decreases. As such, acquiring a second language can be a bit different than learning one's native tongue, even though second language learners rely on the distributional regularities that exist within their first language (Molinaro et al., 2017).

Infants can begin to learn a foreign language at around 9 months of age (Kuhl, 2010), and the earlier the second language acquisition takes place, the better. Second language acquisition at an early age is linked to greater connectivity within and between the molecules of the brain (Liu et al., 2017). Thus, it creates better connections between the hemispheres in the frontal lobe (Gullifer et al., 2018) and greater levels of activation within the left temporal lobe (Ip et al., 2017). It can also result in increased density of grey matter in the left inferior parietal cortex, and in some individuals, it even increases white matter density within the anterior cingulate (Mohr et al., 2018). These extra cells and connections in the brain allow for greater knowledge retention and performance.

Unfortunately, not everyone has the opportunity for this kind of exposure to multiple languages that early in life. Most will get exposure in a classroom, possibly not until as late as high school or even college. By this point, the critical period is long over,

and students' brains have already developed language patterns and processes. Overall, this situation makes language acquisition harder, although not impossible.

Foreign Language Anxiety

Because of the identified differences between secondary and primary language acquisition and other contributing factors, learners often experience anxiety, which consists of subjective feelings of apprehension and nervousness that arouse the nervous system (Horwitz et al., 1986). A very specific reaction to learning another language has come to be known as FLA, which is a set of complex feelings and self-perceptions and resulting behavior arising from the language learning process (Bensalem, 2018). Female students usually experience FLA more than their male counterparts (Ali & Fei, 2016), except in the case of foreign language writing tasks, where male students tend to be the most anxious (Liu & Ni, 2015).

Regardless of gender, FLA presents itself in one or more of three different and distinct outlets. The first is communication apprehension. This occurs when an individual experiences shyness or fear about communicating with other people (Bensalem, 2018). The second is text anxiety. Learners express this when they fear failure in an academic setting (Bensalem, 2018); of the three outlets, it is the most commonly experienced version of the disorder (Ali & Fei, 2016). The final expression is fear of a negative evaluation. Students experience this when they feel the need to avoid evaluative situations involving their peers (Bensalem, 2018).

Experiencing FLA can affect students in a number of ways. Those with lower levels of anxiety score higher on language assessments (Sparks & Ganchow, 2007), but

for those with higher levels of FLA, the anxiety can not only cause academic performance to suffer (Ali & Fei, 2016), especially in the 2nd or 3rd year of study (Dewaele, 2007), but can actually make them more likely to quit their studies of foreign language altogether (Dewaele & Thirtle, 2009). This diminishes opportunities for scholarships, college acceptances, and future job opportunities. Additionally, too much stress and anxiety of any kind can lead to peer rejection and school refusal (de Lijster et al., 2018), as well as health concerns such as stomachaches, ulcers, and heart palpitations (Berk, 2014).

Contributing Factors

There is a certain set of students who are more likely to have a pre-disposition toward anxious feelings. Students who are shy (Alsaleh, 2018) or who lack self-confidence (Melouah, 2013) and are in a competitive environment (Ohata, 2005) often struggle with anxiety. Those with a previous history of low grades or poor developmental skills with tasks such as telling time or self-help, as well as those who struggle with lecture-based classes, are more likely to feel anxiety in a foreign language classroom (Chen & Chang, 2004). Those operating under culturally influenced expectations (Ohata, 2005) may experience more severe anxiety, but those who are heritage language learners, meaning that they are students who are studying a language associated with their cultural background, tend to have lower levels of FLA than other types of students (Tallon, 2009). It stands to reason, then, that nonheritage language learners are more likely to experience higher levels of FLA. In addition, although personalities with higher levels of neuroticism and low levels of extraversion do not have a direct effect on grades/scores (Dewaele,

2007), it is believed that individuals with these traits tend be more anxious than others because they are overly concerned with their environment and are more emotionally unstable (Vreeke & Muris, 2012).

Additionally, those with early traumatic experiences in childhood more often experience psychological distress, including anxiety (Espeleta et al., 2017). These experiences may include but are not limited to awkward encounters with peers due to inappropriate social skills and average situations being immediately followed by negative results (Inam et al., 2017). The trauma may also include more serious issues such as substance abuse (Fatseas et al., 2018) or parental loss and abuse (Sachs-Ericsson et al., 2017). Each of these experiences may be a gateway for students to develop anxiety in any setting, including in a foreign language classroom. There are additional factors that may trigger or exacerbate the condition in terms of foreign languages specifically.

Besides outside influences, which foreign language educators cannot always combat, contributing factors that lead to the three expressions of FLA are numerous. Negative attitudes toward the classroom environment can color one's feeling about the language being taught there (Mak, 2011; Young, 1991). This may occur because of the behavior of others, the teacher's management, or teaching procedures (Djafri & Wimbarti, 2018; Young, 1991), or simply as a result of being observed by others (Merc, 2011). Exposure to overly strict and detail-oriented teachers as well as a personal lack of proficiency skills can lead to higher levels of FLA (Subetki, 2018a). The fact that language learning becomes more demanding and ways of assessing it change over time, combined with differing curriculum structures and teacher-student relationships (Trang et

al., 2013), also accounts for various FLA experiences (Young, 1991). Even geographical background, experience abroad, and the frequency of language use have been linked as variables contributing to FLA (Jiang & Dewaele, 2020).

Some contributing factors can be rooted in just one of the four communication skills: speaking, writing, listening, and reading. In terms of reading and writing, one study showed that students felt high levels of anxiety when learning Arabic, but only moderate levels when learning English (Zaidi et al., 2019). This may be due to the fact that anxiety is more likely to occur when the language in question has a new and different writing system (Rajab et al., 2012) or when a written text is perceived to be of an unfamiliar genre (Alsaleh, 2018) or difficulty level (Liu & Ni, 2015). Lack of comprehension of new vocabulary, passage length (Alsaleh, 2018), or just being asked to read aloud may serve to instigate anxiety (Zhou, 2017).

As for speaking and listening, conversational classes and tasks elicit the highest levels of FLA (Kim, 2009). Struggles with pronunciation (Alsaleh, 2018) as well as speaking to native speakers, public speaking in general, or even not being permitted to use one's own language and being required to only use the target language can cause anxiety in students (Mak, 2011). The fear of making mistakes in front of others (Alsaleh, 2018) and then being corrected on those mistakes while in the middle of speaking (Mak, 2011; Melouah, 2013) is also a factor. Even just having others listen to one's speech on a recording can incite anxiety (Barkanyi & Melchor-Couto, 2017). Listening to a fast-paced audio recording can be stressful (Chang, 2008), and not recognizing a spoken or written word when it is known in another format can also lead to students feeling

uncomfortable (Bekleyen, 2009). Even simply being asked an unexpected question can elicit an anxious reaction (Merc, 2011). In fact, all it can take to trigger FLA is for students to realize that they are making simple mistakes that are most likely preventable (Horwitz et al., 1986).

Any of the aforementioned factors can together create anxiety, and ultimately those feelings can damage students' beliefs in their own abilities (Liu, 2018). Beliefs about one's own abilities are known as self-efficacy (Tucker, 2018). Anxiety can put students in jeopardy of lower levels of motivation and engagement, as well as high stress loads. Although some studies, such as those conducted by Razak et al. (2017), found no correlation between anxiety and academic achievement, more often studies have shown that FLA has a negative correlation with academic performance (Dogan & Tuncer, 2016; Subekti, 2018b). Basically, the higher the anxiety, the lower the grades (Ali & Fei, 2016). For all of these reasons, FLA can be devastating academically and socially.

Measuring Foreign Language Anxiety

Determining if one is suffering from FLA versus other types of anxiety or even another disorder in general requires the use of an evaluative instrument. In the case of FLA, the Foreign Language Classroom Anxiety Scale (FLCAS) was created by Horwitz (1986). The FLCAS consists of 33 items that can be answered with one of five possible answer choices from a Likert scale ranging from *strongly agree* to *strongly disagree* (Horwitz et al., 1986).

The FLCAS has been tested over the years in order to ensure that it does indeed test for what it is intended to. It is meant to contain questions relating to one or more of

the three components of FLA: communication apprehension, test anxiety, and fear of negative evaluation. Overall, the test has been proven to have good internal consistency and reliability. This is evident through the alpha coefficient, which has ranged from .83 to .93 (Horwitz et al., 1986). The FLCAS was utilized in a later study, and its alpha coefficient was .90 (Rahman, n.d.). All alpha coefficients above .80 are considered good (Stephanie, 2014), so these results support the FLCAS as a valid test instrument.

It should be noted that the FLCAS is not perfect. In an effort to further confirm the appropriateness of it as a test instrument, studies were conducted to ensure that it adequately covered all three previously mentioned components and that it was free of bias. Toyama and Yoshitaka (2018) were able to confirm two of the scale's components, communication apprehension and fear of failure, but not the third. Another study by Ra and Rhee (2018) determined that two of the test items exhibited gender-related differential item functioning, which explains why some studies, but not others, have shown differences in mean levels of FLA based upon gender. It is important to take these two results into consideration when examining data collected using the FLCAS, but they do not completely negate the survey as a testing tool.

Current Research

Within the last three decades or so, research on foreign language anxiety has had a very narrow focus. In the past, studies have focused on students outside the United States. The problems posed by FLA, however, are universal. High school students, especially in the United States, are often required to take foreign language classes in order to graduate. In fact, out of the 50 American states, 25 states, along with the District

of Columbia, have this requirement, and another three states allow for local school districts to add this requirement at their own discretion (MacDonald et al., 2019). Even if compulsory education in a state does not mandate that students enroll in foreign language classes, the children of immigrant families may be expected to enroll in a language class so that family communication overseas can continue.

Studies in the last 15 years have examined culturally diverse populations ranging from elementary to university students. The focus of such studies tended to remain focused on contributing factors to the development of FLA, but they have still provided valuable information and a deeper understanding of the phenomenon. Although it was not the goal of the study, Gopang et al. (2015) collected data showing no significant differences in FLA levels for university students in Pakistan based upon course major as a variable. Öner and Gedikoğlu (2014) found that the education and occupation of students' parents as well as the students' school type were not contributing factors for the development of foreign language anxiety within students studying English. Such results were further supported in another study conducted on high school students studying French (Kuscu, 2017).

In another study conducted by Zhou (2017), data was found to suggest that course level does not account for a significant difference FLA levels in those studying Chinese, but in Kuscu's (2017) study there was contrary data suggesting that levels of foreign language vary most often between grade levels. Additional findings in favor of Kuscu's work were evident in the work of Gursory and Arman (2016) who found that 9th grade students studying English as a foreign language experienced more text anxiety than their

10th grade counterparts. Melouah (2013) found evidence that FLA is actually the most pervasive amongst university 1st year students, but studies like those conducted by Karabiyik and Ozkan (2017), and Casado and Dereshiwsky (2001) found that older upperclassmen experienced higher levels of FLA, possibly due to them being more concerned with accuracy than their younger peers. These researchers also found that, unlike Kuscu's, Semmar (2010), and Gopang et al.'s (2018) findings, gender did not affect FLA levels. Gursoy and Arman, as well as Gerencheal and Mishra (2019) found that females experienced more anxiety than males, which confirms findings in previous studies.

There has been less controversial evidence gathered in newer research that has shown additional contributing factors. Time limits on tests, overall test lengths, and teacher attitudes were all identified as factors being capable of exacerbating FLA (Gursoy & Arman, 2016). Gocer (2014) found that in students studying Turkish, the nationality of the students as well as the purpose of learning the foreign language did influence the level of severity of FLA.

Besides research into contributing factors, there have also been studies conducted with the purpose of identifying how much of a presence FLA makes in today's societies across the globe. On average, the majority of Turkish university students who were studying a foreign language presented with moderate levels of FLA (Altunel, 2019; Ekmekci, 2018; Karabiyik & Ozkan, 2017), as well as students studying English in Saudi Arabia (Alsaleh, 2018; Tanielian, 2017). In Iran it was found that 60% of high school students studying English have above average levels of test anxiety (Aliakbari &

Gheitasi, 2016) and those in Jordan ranked amongst the highest levels of FLA (Abood & Abu-Melhim, 2015). Private school students in Taiwan also felt moderate levels of FLA regardless of academic or vocational tracks (Liu & Chen, 2015). A study of Indonesian college students found that those studying nonLatin based languages experienced the highest levels of FLA, with Japanese creating the most anxiety (Djafri, & Wimbarti, 2018). Students in Ethiopia fell within the moderate to high range (Gerencheal & Mishra, 2019), and those in Yemen primarily scored within the moderate range (Yassin & Razak, 2018).

Addressing the Problem

Based on the possible contributing factors, the actions of the foreign language teacher in the classroom definitely play a role in both creating and relieving FLA (Ewald, 2007). Therefore, it is up to educators to address the problems caused by FLA. There has been evidence found in London and Saudi Arabia to support the idea that the positive effects of foreign language enjoyment can be stronger than the negative effects of FLA (Dewaele & Alfawzan, 2018). Therefore, some say that it is up to the educators to make efforts to make their classes more enjoyable and entertaining. This concept has been further supported by Dewaele et al. (2018).

If an enjoyable classroom helps students experience less anxiety, the question remains regarding exactly how a teacher can make class as enjoyable as possible for all students. According to Subekti (2018a), teachers can do this by making jokes, using supportive facial expressions, and by encouraging group work. In fact, Casado and Dereshiwsky (2001), Kim (2009), and He (2017) also recommend pair/group work to

help ease FLA. Like Subetki, He (2017), and Melouah (2013) suggested using comedy within the classroom, but they also encouraged the tolerance of minor errors. As noted previously, some students experience FLA when they are corrected whilst speaking. Therefore letting small mistakes go unaddressed in real time might help with that. Subetki (2018a) also calls for the allowance of the use of native languages rather than demanding communication only be done in the target language; an idea further supported by Casado and Dereshiwsky (2001), especially in terms of grammatical concept discussions.

Besides the classroom environment, how a student thinks plays a big part in their experiences with anxiety. Conservative thinking styles have a positive relationship with anxiety (Desta, 2020). This means that the more traditional and inflexible a person's thinking is, the more FLA they experience. For creativity generating and external thinking styles there is a negative relationship (Desta, 2020); so for these individuals the more expressive and open they are with their thinking, the less anxiety they experience. Thinking styles can also influence a student's own beliefs about themselves, which is known as self-efficacy. More open thinkers may have better views of themselves. In terms of FLA, having a positive orientation towards the language or the classroom environment is shown to be a significantly negative predictor of anxiety (Jin & Dewaele, 2018). Additional studies have shown that tactile and kinesthetic learners experienced more positive self-efficacy than their peers of other learning styles (Liu, 2018). Thus, there is a correlation between hands-on physical activities and student beliefs about their own abilities. It stands to reason that these activities may lead to higher self-efficacy in

other students as well and thus reduce levels of FLA. However, this theory has not yet been explored. Other possible ways of increasing self-efficacy beliefs and reducing stress in students include flexible due dates as well as combining assignments (Lin, 2016), in addition to teaching students affective strategies for the management of emotions. Those who are able to use these techniques in order to control their emotions are shown to have stronger self-efficacy beliefs (Liu, 2018). It remains to be seen what these strategies are exactly and how educators in a foreign language classroom can best incorporate them.

When attempts to raise a student's self-efficacy and self-esteem do not yield the desired results and progress, foreign language educators especially are left wondering how else they can specifically assist the anxious students in their classes. It was thought that cooperative learning strategies might prove beneficial, but there was no correlation found with FLA (Duxbury & Tsai, 2010). Independent learning has been trending in the United States, but it may not be as beneficial as some instructors believe. Desta (2020) found evidence of a positive correlation between independent learning and anxiety This means that as students have more choices in learning materials or more control over how their time is managed in the foreign language classroom, their anxiety actually increases. Methods like systematic desensitization, in which individuals are progressively exposed to anxiety inducing situations and taught to cope with them, have shown potential in reducing FLA, but more so in females (Abood & Abu-Melhim, 2015). However, systematic desensitization is very time consuming. Teachers themselves may not have the necessary time and experience to properly implement this kind of technique. The total physical response method, which calls for the teaching of language through the recitation

of oral commands for different motor activities by the teacher and students gaining comprehension by physically following the orders, is another possible tool for aiding with FLA. FLA scores traditionally range from 33 to 165, and current research indicates that this method alleviates FLA in terms of a few points (Oflaz, 2019). Unfortunately, it would not be enough to significantly decrease FLA from the high end of the spectrum towards the lower end.

Recently, there have been some additional recommendations made by researchers for addressing FLA. Providing multiple choice questions as well as allowing previews of questions has been shown to lead to confidence increases (Anna, 2008), which in turn help with test anxiety. Positive improvements with FLA have been seen with the incorporation of free reading and reading journals as well as the removal of required specific texts (Aydin & Gonen, 2012). Teacher word choice when providing feedback can assist with reducing evaluation fears (Tucker, 2018). Mindfulness techniques like breathing exercises and the silent game may aid with somatic symptoms of anxiety (Wilson & Dixon, 2010). Other practices like incorporation of game play and rehearsal opportunities for performance tasks have been suggested (Kim, 2009; Melouah, 2013), but their effectiveness has not been evaluated. Melouah (2013) also suggests eliminating competitiveness, although it is unclear how to do this. Melouah also suggested the use of a circular seating pattern in the classroom rather than rows. Inada and Inada (2019) found data suggesting that using the target language outside of the classroom, studying for longer hours, and participating in study abroad programs all lead to lower levels of FLA. Casado and Dereshiwsky (2001) recommend utilizing smaller class sizes, but teachers

cannot mandate these practices since class size is generally outside of their control. The teacher can merely encourage activities like study abroad and at home studying, not require them. Offering assistance outside of class is another recommendation (Casado & Dereshiwsky, 2001), but this is not realistic for every foreign language teacher to do. As such, it remains unclear how foreign language teachers can best aid students with FLA and how to sustain its reduction in the students who minimally stuffer from it.

Summary

This literature review described how the human brain is capable of learning a language and how that process can be interrupted by something like FLA. There have been attempts made to solve the problems posed by FLA, but over the last two decades it has still been a nuisance despite the knowledge of what factors significantly exacerbate the condition. There is a clear gap in the research, evidenced by the lack information about American university students in this decade and the paucity of proven FLA assistance techniques.

In the following chapter, the methodology for this research study intended to fill in these gaps will be explained at length. All procedures and criteria will be reviewed for the purposes of study recruitment, data collection, and analysis.

Chapter 3: Research Method

Introduction

The purpose of this explanatory sequential mixed methods study (Creswell & Creswell, 2018) was to measure the range of FLA within a sample of college students in the United States and to interview select students at both high and low FLA levels in order to understand their experiences and recommendations for various instructional practices aimed at reducing FLA.

This chapter includes a description of this study's research design and methodology. The quantitative data collected via survey were used to select extreme case participants for qualitative interviews. In this chapter, I specifically discuss all procedures in both phases of the study as well as other information such as my role as the researcher and threats to validity and trustworthiness.

Research Setting

This study, which focused on the occurrence of FLA, fell into the category of mixed-methods research. The first phase of the study involved the collection of quantitative data from a larger population of students in order to determine to what degree the phenomenon afflicts university students in the United States. The second phase of the study involved a more intimate and qualitative approach in order to gain a more in-depth understanding of the experiences of students who score on both the high and low ends of the FLA spectrum. With this information, in terms of FLA, foreign language educators can minimize more harmful activities and teaching methods and promote the use of more beneficial ones.

For this study, participants were recruited online through Prolific, a research recruiting website. Various people across the United States are invited by Prolific to register for participation in paid research studies through the website. When registering, participants provide basic demographics and information about themselves so that they can be directed to eligible population criteria studies. All potential participants for this study were vetted in an initial interest survey to ensure that they were indeed college students in the United States taking a foreign language class. Those who met these selection criteria were then invited to complete a survey via SurveyMonkey until at least 100 complete surveys were received. After the data gathered from the survey had been analyzed, some participants were invited to take part in more in-depth video interviews.

The Prolific website allows researchers to post their consent forms and collect electronic consent from participants before forwarding them to a chosen survey platform or allowing them to schedule a video conference. The quantitative phase of this study was conducted online via the SurveyMonkey platform during the first 2 weeks of September 2020, and the qualitative phase of the study was conducted via online interviews through the Prolific video conferencing service during September and October 2020. As the focus of the study revolved around anxiety, it was best to allow the participants to have as much anonymity as possible. Allowing for online participation through the Prolific website removed the need to collect any identifying information, as each participant was referred to with an assigned Prolific ID number and had direct communication access to me as the researcher through Prolific's messaging service. Online participation also conveniently allowed for participants to complete the study in their own homes.

Research Design

The study had an explanatory sequential mixed-methods research design (Creswell & Creswell, 2018). In the first phase of the study, I used an online quantitative survey to measure FLA, the results of which were necessary in order to invite participants for the second phase of the study based on extreme case sampling procedures (Daniel, 2012). The second phase of the study consisted of qualitative video interviews conducted over the Internet. The focus of the qualitative phase was understanding students' experiences with and perceptions of various instructional practices, students' recommendations for FLA-reducing practices, and whether these experiences, perceptions, and recommendations vary depending on level of FLA. The qualitative phase best fit what Merriam and Tisdell (2016) referred to as basic qualitative research to simply uncover and interpret participants' anxiety or confidence in studying a foreign language.

Research Questions

The purpose of the study was to further explore the range of FLA experienced by U.S. college students and determine how best to approach it in the classroom. Thus, the research questions were as follows:

1. What is the current range of foreign language anxiety in college students in America who are presently enrolled in and attending a foreign language class?
2. What are the experiences with and perceptions of various instructional practices by college students who are enrolled in and attending a foreign language class?

3. What are the recommendations for most effective practices and activities that teachers employ to mitigate FLA as perceived by college students taking a foreign language class?
4. How do students who report high and low levels of FLA compare on experiences with, perceptions of, and recommendations for FLA-reducing foreign language instructional practices?

Researcher Role

In this study, I was the researcher. I had no connection to any participants or organizations providing the services for recruitment and completion of the study. It should be noted, however, that I am a foreign language teacher in the United States. As such, I see students within my classroom who suffer from FLA. It is my desire to help them overcome FLA. Although I had some preconceived notions about what could be affecting FLA and how best to address it, these ideas could not be allowed to create bias within the study. The FLCAS (Horwitz et al., 1986), which was used in Phase 1 of the study, is an established tool.

Because of the possibility of my past experiences unjustly influencing the study, a few measures had to be taken in order to prevent biased data. A complete list of all questions for the video interviews were reviewed by no less than four individuals, including my dissertation chairperson, my second committee member, and two foreign language teachers. Each reviewed the questions to ensure that they were open ended and relevant to the research goals. Any possibility of leading a participant's response to a specific answer was eliminated from question wording, and all of the code lists created

from the interview transcriptions were examined as well to ensure that there were no mistakes in coding.

Methodology

The population consisted of college students studying in the United States who were currently enrolled in and attending a foreign language class. Previous research done by the Modern Language Association of America showed that only 7.5% of university students in America were actively enrolled in a foreign language class. It was estimated that in 2020 there would be 14.61 million students attending public universities and another 5.14 million attending private ones (Duffin, 2020). Using these numbers, it could then be estimated that of the 19.75 million or so students who would attend college in the United States, only about 1,481,250 students would take a foreign language course. These students were the study's intended population.

In accordance with an explanatory sequential mixed-methods research design (Walden University IRB # 08-28-2020-0661694), which calls for the collection of quantitative data before using the results of the data analysis to build upon further qualitative research (Creswell & Creswell, 2018), students were recruited from the Prolific website in order to take part in a survey. It was impossible to include each student from the intended population, so a multistage nonprobability sampling strategy was used. This meant that first possible participatory groups were identified through the prescreening survey that was offered to all registered users on the Prolific website, and then possible participants who met selection criteria were approached. The sample then

consisted of all those who agreed to participate, which meant that they were chosen for inclusion based upon availability (Creswell & Creswell, 2018).

For the quantitative phase, the required sample size was based on reliability and confidence interval of Cronbach's alpha for the composite score of the 33-item FLCAS, and having an adequate number of cases in the lowest and highest scoring groups for extreme case sampling (Daniel, 2012) for the qualitative phase. Although the FLCAS was reported as reliable in prior studies (Horwitz et al., 1986; Rahman, n.d.), reliability of a measure is sample specific and not an attribute of the measure but of the scores in a sample (Henson, 2001; Onwuegbuzie & Daniel, 2002; Pedhazur & Schmelkin, 1991; Thompson & Vacha-Haase, 2000) and report of sample-specific reliability is expected for quantitative studies (Wilkinson & American Psychological Association Task Force on Statistical Inference, 1999). For the FLCAS scores in the sample for this study to be psychologically interpretable, internal consistency must be adequate (Cronbach, 1951). Additionally, although in a normal distribution 32% of cases are equally divided above and below ±1 standard deviation, it was important to consider whether the expected distribution with respect to FLCAS scores would yield meaningfully different extreme case scores (if the standard deviation was 0.5, then extreme cases would only differ by 1 point, which was not meaningfully different). For these reasons, specific procedures as described below were followed.

Bonett (2002) provided a formula for testing and estimating Cronbach's alpha that Bujang et al. (2018) explained in less technical terms and on which Arifin (2018, 2020) based an online calculator. For a 33-item scale, a sample size of 48 is needed with power

= .90 to obtain a Cronbach's alpha of .80 that does not include .60 (a poor reliability index) in its 95% confidence interval. An alternative approach to determining sample size for an unbiased estimate of the population value of Cronbach's alpha is based on the expected eigenvalue or percent of variance in the first component of a principal component analysis (Cronbach, 1951). In a Monte-Carlo study, Yurdugul (2008) found that when the percent of variance in the first component was at least 40%, a sample size of 30 was unbiased, and when the first component accounted for 20%-39% of the variance, a sample size of 100 was unbiased. In a principal components analysis of the FLCAS, Matsuda and Gobel (2004) found that the first component accounted for 31% of the variance. Extrapolating from Yurdugul, this suggests a sample size of 62.

In a normal distribution, 68% of the cases fall within ±1 standard deviation. Thus, 32% of the cases are separated by at least 2 standard deviations. It was these cases that would be targeted for the qualitative interview phase, so there needed to be a sufficient number of cases in these extreme groups. The previously calculated 48 and 62 needed for a reliable Cronbach's alpha would only have about 7 and 10 cases, respectively, in each of the extreme groups, which would require all cases to agree in order to have an adequate sample for the qualitative interview. However, if a quantitative sample size of 100 were obtained, then there would potentially be 16 cases in each of the two extreme groups, and only half of these would need to agree to have an adequate qualitative sample.

With a range of possible scores from 33 to 165, Horwitz (1986) reported a FLCAS summative mean of 94.5 (SD = 21.4) in a sample of 108 students. Horwitz et al.

(1986) reported the percentage of 75 students across the 5-point Likert response options for each of the 33 items. From those data, C. T. Diebold (personal communication, March 31, 2020) calculated a summated mean of 98.1. Matsuda and Gobel (2004) found a FLCAS summated mean of 100.8 (*SD* = 11.4) in a sample of 252. The weighted average of these three findings estimated an FLCAS mean of 98.8, and the pooled standard deviation was 15.1. Matsuda and Gobel also reported skewness (.14) and kurtosis (.04) values that indicated that FLCAS scores were normally distributed. In a sample of 100 with a mean of 98.8 and standard deviation of 15.1, the 95% confidence interval for the mean would be 95.8 to 101.8, sufficiently narrow and approximating the means found in the three studies previously cited. If this study's sample had a mean of 98.8 and standard deviation of 15.1, then the extreme groups would be separated by about 30 or more points on the FLCAS (83.7 or lower, and 113.9 or higher), which was a substantial difference in anxiety and comparative experiences with, perceptions of, and recommendations for FLA-reducing foreign language instructional practices in the qualitative interviews.

In order for this sample population to be filled, first a prescreening survey (see Appendix A) was conducted on the Prolific website in order to identify those who fit the selection criteria. The criteria for selection into the study were that participants had to be college students studying in the United States who had been enrolled in and attended a foreign language class between January 2020 and July 2020. Participants in the prescreening survey who fell outside the scope of this particular study would still be compensated. According to Prolific's service policies, researchers must pay at minimum $6.50 an hour for survey participation and $15 an hour for video interviews. The

prescreening survey only took a minute to complete, and as such, all participants who did so would receive $0.16. Up to 500 participants would be allowed to respond, but if the necessary 100 participants for the sample population were not located, up to another 500 responses would be permitted.

Once the list of sample participants was complete, each of those participants was invited to electronically agree to the study's consent form, and they then filled out the FLCAS (Horwitz et al., 1986) via SurveyMonkey. The survey was expected to take about 20 minutes to complete, and in accordance with Prolific's mandatory pricing minimums, all participants were compensated at a rate of $2.17. Even if the participants took more or less than this time approximation, they were still compensated the same amount. Based upon the survey results, students scoring in the low and high areas of the FLA survey were identified, and then a random extreme case sampling strategy (Daniel, 2012) was used in order to select students to participate in the video interviews via Prolific. After the lists were compiled for students scoring within each range of FLA, about 10 students in each of the high and low scoring ranges were selected for participation in the second phase of the study. This led to a total possible number of around 20 participants in the qualitative research phase. This number of participants allowed for deeper saturation of the data. Saturation refers to the length that fresh data can go when inspiring new insights (Creswell & Creswell, 2018). A sample size that is too small can leave a number of questions unanswered or viewpoints unexpressed, whereas a larger sample size may result in the collection of redundant data. About 20 participants was a good option so that

ideally 10 students could be interviewed from the low end and 10 could be interviewed from the high end.

The students invited for Phase 2 of the study were contacted via the Prolific messaging service to set up a time to complete video interviews with me. Video interviews were the best option at this point in time because participants were located throughout the United States, and travel was especially discouraged at the time of the study due to the COVID-19 pandemic. Video interviewing also allowed participants to complete the study in the comfort of their own homes, which was expected to make the whole experience more comfortable and keep participants more at ease—something very important ethically, as participants were asked to discuss their personal experiences with anxiety in depth. Interviews took approximately 20 to 30 minutes to complete. Prolific states that interview participants should be compensated at a rate of $15 an hour, but for this phase of the study, participants received the full $15, even though the interviews were completed in less time.

Instruments

This research utilized two separate instruments, one for the quantitative phase and one for the qualitative phase. For the quantitative phase, the FLCAS (Horwitz et al., 1986) was administered via an online format through SurveyMonkey. In addition to the FLCAS question, the survey also contained a few demographic questions about age, gender, and language being studied in order to gather descriptive statistics about the sample. Permission to use the survey and reprint the survey questions in this dissertation was granted by John Wiley & Sons Inc. (see Appendix B). The FLCAS was created

through feedback collected during meetings of two foreign language support groups, consisting of 15 students each, at the University of Texas (Horwitz, 1986). Originally, the FLCAS was piloted on 75 University of Texas students ranging in age from 18 to 27 years who were taking an introductory Spanish course (Horwitz, 1986). Later, for the purpose of establishing reliability and validity, the same test was used in additional studies with up to 300 students (Horwitz, 1986).

An important quality for a test instrument is high validity. Validity is a term that refers to how well the instrument measures what it is supposed to (Warner, 2013). When it comes to quantitative data, this can be determined through criterion validity. Criterion validity is demonstrated when there is a correlation between test performance and classroom/job performance; something determined at the time of testing (Chiang et al., 2015). Additionally, there can be a check for a correlation between the test instrument in question and other instruments meant to measure similar constructs, which is categorized as convergent validity (Chiang et al., 2015). Criterion and convergent validity of the FLCAS have already been established. The ratio between performance on the FLCAS and final classroom grades for two introductory Spanish and French classes at the University of Texas was found to be -.49 and -.54 respectively (Horwitz, 1986). This means that the higher the score was on the FLCAS, the lower the final grade was.

Correlation ratios of .35 or higher show the best degrees of validity (Saad et al., 1999), so this correlation between test performance and final grades helps establish concurrent validity for the FLCAS as a testing instrument. As noted, though, the test is further validated through convergence. The correlation between FLCAS and the State-

Trait Anxiety Inventory (Spielberger, 1983) and the Personal Report of Communication Apprehension (McCroskey,1970), were .29 and .28, respectively (Horwitz, 1986). Though they did not hit the .35 mark, ratios above .21 are still considered acceptable (Saad et al., 1999). The correlation coefficients among the Fear of Negative Evaluation Scale (Watson & Friend, 1969) and the Test Anxiety Scale (Sarason, 1978) were .35 and .53, respectively (Horwitz, 1986), satisfying the requirements for convergent validity.

For the qualitative phase of the study, the instrument being utilized was an open-ended questionnaire (Appendix C) that will be answered via recorded video interviews. The 12 open-ended questions on the interview questionnaire were created by myself in order to gather possible answers for the research questions. Unlike the validity of quantitative instruments like the FLCAS, validating self-made qualitative instruments is more complex.

When it comes to qualitative instruments, they must be evaluated for validity through face content rather than criterion. Face validity refers to the extent to which a tool appears to measure a construct (Chiang et al., 2015). It is difficult to quantify, and because of possible biases, the creator may think that they are adequately covering a construct when in fact they are not. In order to fulfill the requirements for face validity, the researcher should utilize an external auditor or two (Creswell & Creswell, 2018). The auditor can give their opinions and feedback on whether the instrument assesses the intended relevant data. For face validity purposes, the questionnaire created for this study was audited by two doctoral professors at Walden University (the dissertation chair and committee member) as well as two colleagues teaching another foreign language in the

United States. Both of these individuals ensured that the wording of the questions was such that it was understandable and relatable to college students, that there were no leading or biased questions, and that each question connected back to the research questions and goals of the study. Only the version of the questionnaire that both experts agreed upon was utilized which aids in the establishment of the desired face validity.

In order to assist with the establishment of this self created instrument's validity, during the actual implementation process of the questionnaire rich descriptions were recorded. During the video interviews, the entire conversation's audio was recorded. Participants were asked to provide some standard background information as well as describe their physical surroundings and current mood in order to ensure that participants were in as neutral of a location as possible with minimal distractions. As they progressed through the questionnaire, any irregularities such as expressions, movements, and a change in tone or pacing were noted on a field notes sheet. In addition to this, any responses that were short in length incurred further prompting for richer detail and explanations. All of this information provided a plethora of data which were coded initially through both the emotions and values coding methods and then secondarily coded using the pattern coding method (Saldana, 2016). Everything was then checked by additional external auditors again along with the interview transcripts in order to further verify that validity will be upheld.

Procedures

As noted in previous sections, the recruitment of participants was conducted via the Prolific website. All recruitment was done anonymously and per the Prolific privacy

policy (see Appendix D) no personal data was exchanged. After the sample population was established from the prescreening survey, in which potential candidates responded to three questions in exchange for $0.16, the participants in the sample population were invited through Prolific's whitelist service to participate in Phase 1 of the study. The whitelist service allowed me to create an invitation list for participants who met selection criteria after completing the prescreening survey. Rather than being open to all Prolific registered participants, only those on the whitelist invitation list were allowed to participate in the Phase 1 FLCAS survey. They were redirected from the Prolific website to the consent form on SurveyMonkey. The consent form explained the goals of the study as well as any possible risks, and what participation entailed. Once consent forms were signed electronically, participants were given access to the FLCAS survey through SurveyMonkey, after which they were compensated at a rate of $2.17.

For the duration of the study, all consent forms and survey responses remained stored on SurveyMonkey. They were protected through TLS cryptographic protocols and password protection as per SurveyMonkey's privacy and security policies (Appendices F & G). At the completion of the study, all consent forms and survey responses were downloaded from SurveyMonkey and converted into encrypted and secure files, which were then be stored on a password protected USB drive and will continue to be stored for a term of five years. The data on SurveyMonkey was then immediately wiped from their databanks.

Once all data had been downloaded from SurveyMonkey, the FLCAS results were analyzed on a secure password protected laptop using the IBM SPSS software version 28.

Participants were notified in their consent forms that they would not receive their resulting scores unless contacted for a secondary video interview. Those that were selected for such interviews were notified through the Prolific messaging service, otherwise participants were not be contacted again.

For the second phase of the study, which is qualitative in nature, 23 participants from the first phase of the study were contacted through Prolific's messaging service requesting for them to further participate in a more in-depth video interview. In the initial consent forms in Phase 1 of the study, participants were informed of the possibility of interview selection, and they were permitted to indicate whether or not they would like to be considered for selection on their consent forms. The consent forms also informed them that they were to be additionally compensated for the interview at a rate of $15 per interview. Once the secondary participants had been chosen and contacted through the Prolific messaging service, they were instructed to schedule a date and time to conduct their video interview during a 2 week time frame from September to October, 2020. Interviews lasted approximately 30 minutes.

All audio from the interviews was recorded through the use of the recorder app available for Apple technology users. In the consent form participants were made aware of the recording procedure. With the app's assistance, all recorded audio from interviews was immediately downloaded from the phone onto the same secure laptop that all of the study's analysis was conducted on. The recordings were also copied onto the password protected USB drive storing all other data from the study. After this, all recordings were immediately wiped from the recording app's memory and the phone. The recordings

were only submitted to one other location, and that is to the transcription service provider. For the purpose of this study, Scribie Audio/Video Transcription was utilized. Scribie offered both manual human transcription and automatic AI transcription for $0.80 per minute and $0.10 per minute respectively. For this study, the AI transcription was used. All files handled by Scribie were protected with 256-bit-SSL encryption and all confidentiality was upheld via their privacy policy (see Appendix G) and terms of service (see Appendix H).

Students participating in the qualitative phase of the study were debriefed immediately following their interviews and only contacted once more via the Prolific messaging service in order for them to review their interview transcripts and codes for confirmation that there was no error in interpretation.

Data Analysis

Once the FLCAS had been completed by all participants, all responses were transferred to the IBM SPSS software for analysis. Each response on the Likert scale corresponded to a numerical value between one and five. The IBM SPSS software quickly tallied the total scores of each participants' responses, allowing for them to be placed into expected categories based on an average calculated mean of 98.8 and one standard deviation of 15.1, thus making low FLA scores be those scoring at 83.7 or below and high FLA scores those that are at 113.9 or above. The software was also used to calculate Cronbach's alpha so that reliability for this sample population's responses could be established. In the case of the overall FLCAS having a low Cronbach's alpha (<.60),

an exploratory principal axis factor analysis was conducted to arrive at valid factor scores.

As Cronbach (1951) noted, adequate internal consistency is necessary for a measure to be psychologically interpretable. Cronbach's alpha is an estimate of the proportion of first-factor common variance among items. If alpha is low, a common reason is because the set of items are multidimensional; principal axis factor (PAF) analysis can identify such multiple dimensions. Scores for meaningful dimensions can be saved and cases exceeding ±1 standard deviation can be identified for the Phase 2 qualitative interviews. If PAF is necessary, standard procedures (e.g., Pedhazur & Schmelkin, 1991; Tabachnick & Fidell, 2007; Warner, 2008) will be followed to identify meaningful factors to retain, including assessment of the overall Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, the KMO of individual items on the anti-image correlation matrix, initial and extracted communalities, reproduced correlations and residuals, and a Monte Carlo syntax procedure to conduct Horn's (1965) parallel analysis.

The first of the research questions could be answered by examining the mean and standard deviation of the total scores (or factor scores if needed). In addition, for descriptive purposes, FLCAS comparisons by sex, foreign language taken, and reason for taking a class was provided where number of cases in levels of these variables is sufficient for analysis.

Every randomly selected participant who scored in the low and high ranges of FLA was contacted, if the participant indicated their assent, on the Prolific website to set up a video interview. Audio from the interviews was recorded and then the recordings

transcribed. These transcriptions along with researcher notes taken during the interviews were manually coded in two cycles within Microsoft Excel. In the first cycle, coding was done using the emotion coding method and values coding method. Emotion coding refers to the labeling of participants recalled and experienced emotions while values coding is labeling that applies to participant attitudes and beliefs that represent their worldviews and perspectives (Saldana, 2016). When this coding cycle was complete, a second cycle was done utilizing the pattern coding method. Through this method, similar codes from the first cycle were grouped together to show emerging themes (Saldana, 2016), which allowed for comparative analysis. The coded spreadsheets were stored on the same USB drive and password protected laptop as all other data and forms.

During the video interviews, it was possible that incomplete or conflicting interviews would occur. Although each participant who was invited to participate in the interviews had completed the FLCAS in its entirety, interview responses may not have match up with their original results. In order to minimize this risk, at the beginning of the interviews the participants were informed of their FLCAS rating and asked if they felt that the score was representative of their FLA. If the answer was no, the interview would have continued with the case, for coding purposes, noted as conflicting. For incomplete or conflicting interviews, a new participant would have been randomly selected from the remaining result pool and contacted for an interview in attempt to maintain a balanced extreme case sample. This was unnecessary as there were no conflicting interviews conducted.

In addition to the previously noted possible discrepancies, some participants may have felt unable to answer certain questions on the interview. They may not have been able to recall specific instances or put ideas into words. In those instances, some examples were provided as triggers for thinking, such as "think of a time when you felt upset with your foreign language teacher", but only one per question. After that the interview continued and the problematic question was revisited again later if the trigger probe did not elicit a thematically codable response. Probes and triggers are a common practice in qualitative interviewing that provide response guidance to the participant (Patton, 2002) and were not written out in advance because they depended on an individual participant's response (Merriam & Tisdell, 2016; Patton, 2002). Probes and triggers are a natural aspect of the interviewer as primary instrument of data collection (Merriam & Tisdell, 2016).

Threats to Study Validity

"Validity is a property of knowledge, not methods" (Shadish, 1995, p. 421). Following Merriam and Tisdell (2016), who noted qualitative terminology related to research rigor is in flux, I discuss the validity of the proposed study within the traditional categories of internal and external validity. Also, because this is a mixed methods study, I discuss internal and external validity as it applies to the quantitative phase, the qualitative phase, and to the explanatory sequential design as a whole.

Internal Validity

Ideally, quantitative research seeks to uncover cause and effect (Campbell & Stanley, 1963; Cook & Campbell, 1979) and qualitative research seeks to uncover

participants' constructions of reality (Merriam & Tisdell, 2016). Johnson (1997) argued that qualitative researchers are often also interested in potential cause and effect relationships in describing how phenomena operate. In this explanatory sequential mixed study, I hoped to connect participants quantitative (FLACS scores) and qualitative (extreme case interviews) constructions of FLA by describing instructional practices (potential causes) that relate to their FLA experiences (potential effects). Such searching for cause and effect evidence is what Johnson termed *researcher as detective,* one of several strategies to maximize internal validity.

Other of Johnson's (1997) strategies include: (a) *low inference descriptors*, which were achieved by verbatim report of participant responses; (b) *theoretical triangulation*, which is the use of multiple theories to interpret and explain the data that was accomplished by examining participant responses and emergent themes with respect to anxiety/uncertainty management theory, situationism, and stress-coping theory; (c) *participant feedback* (member checking), which I accomplished by sharing information with some participants in order to identify errors or to provide clarification; (d) *peer review*, which involved discussions with the committee chair and committee member on interpretations and conclusions; and (e) *reflexivity*, which I attempted to control through note taking of potential biases and predispositions.

Relevant internal validity threats to the quantitative phase included maturation, selection, and an analogue of statistical regression (Campbell & Stanley, 1963; Cook & Campbell, 1979). With respect to maturation, the sample was likely to include participants studying various foreign languages with varying degrees of experience and

motivations in studying that foreign language, which may have confounded the interpretation of FLCAS scores. However, the survey included demographics of gender, age, foreign language, prior number of courses, and academic reason for foreign language enrollment, so I was able to determine differences and relationships affecting FLCAS scores to some extent. However, I was not be able to determine if those who agree to participate are different in some way from those who did not participate—a selection effect. Selection may have also skewed the distribution of FLCAS scores and affect variance, which may have affected practically significant and meaningful differences in FLCAS scores at or beyond ±1 standard deviation that were used to identify and invite extreme cases for the qualitative phase. Finally, statistical regression, while not literally relevant because there was no pre-post testing (and, thus, no regression to the mean at post), part of this threat to internal validity was the idea that a proximal event affected response (Cook & Campbell, 1979). For example, a student who had a particularly good performance in class or on an assignment proximal to completing the FLCAS might underestimate their average anxiety, and those who performed poorly might overestimate their anxiety. This could have further affected congruence between FLCAS selected extreme cases and subsequent interview responses, which was a reason for asking interview participants if they agreed with their FLCAS score.

Another important strategy to maximize internal validity of the study is what Johnson (1997) termed *methods triangulation*, which also helped to mitigate regression effect congruence. As an explanatory sequential mixed method study, I was able to establish corroboration between FLCAS extreme scores and interview responses. More

specifically, methods triangulation was maximized by selecting interview participants based on FLCAS extreme scores, mitigating a potential threat to validity noted by Creswell and Creswell (2018) if separate samples are used in the quantitative and qualitative phases of an explanatory sequential design.

External Validity

The primary threat to external validity was the internal validity of a study (Guba & Lincoln, 1981; Winer, 1999), though internal validity does not ensure external validity. If internal validity issues, as previously discussed, were mitigated, then limited generalizability may be possible. Campbell (1986) used the term proximal similarity and Stake (1990) used the term naturalistic generalization to refer to the external validity of qualitative research applied to people, setting, and circumstances to which qualitative findings might apply. This applies, as well, to quantitative studies (Cook & Campbell, 1979). All participants in this study were supposed to be college students in the United States, who have attended a foreign language course within the past 6 months or so. There was no feasible way to validate this, and I had to rely on the honesty of participant responses to the prescreening questions. As well, those who agreed to participate may have been different from those who did not participate in ways that may threaten the representativeness of the sample to the target population and the anxiety and experiences of students taking a foreign language.

Shadish (1995) discussed five principles of generalization common to quantitative and qualitative research, three of which can be addressed in a single study (the other two involve replication or additional studies). Using Campbell's (1986) term, Shadish

described the principle of proximal similarity as a strategy for limiting generalizability to the prototypical features of one's study. In this study, the prototypical features were the various levels of quantitatively measured foreign language anxiety, the qualitative themes of instructional practices that participants reported or recommended that addressed such anxiety, and the fit of the theories that guided this research to develop, interpret, and explain the emerging themes.

Shadish's (1995) principle of explanation limits generalizability to the essential components of confidently relating one variable to another and identifying mediating processes or interactions. If themes diverged with respect to anxiety or confidence for extreme cases on the FLCAS, then results could be generalized to those most and least anxious about learning a foreign language, which would also satisfy Shadish's principle of discriminant validity by showing that the target construct of level of foreign language anxiety accounted for divergent experiential themes.

Ethical Considerations

Every study involving human participants has ethical concerns that need to be taken into consideration. The American Psychological Association has established five principles that every study must strive to adhere to in order to keep those concerns at a minimum.

The first principle is that of beneficence or the idea that the work is being done to benefit others without harm and to safeguard the rights and welfare of the participants (American Psychological Association, 2017). The main goal of the study was to look deeper into the phenomenon of FLA so that those who are hindered by it can be better

assisted and helped to reach their full potential. Anxiety is a sensitive subject, and some participants can even suffer somatic or physical symptoms as result. Discussing the factors causing the anxiety or even just the experience itself could possibly trigger anxious episodes in some students. In order to minimize this, students were made aware that they could cease participation and withdraw from the study at any time. In addition to this, students who experienced some difficulties as a result from participation in the study were able to find assistance by requesting a researcher provided packet of calming techniques (see Appendix I) or by searching for a mental health provider at http://www.findcbt.org/xFAT. Furthermore, during the interview phase of the study, participants were asked to describe their mood and feelings at multiple points in order to ensure that they remained healthy and stable.

The second ethical principle is fidelity and responsibility. This means that researchers must accept responsibility for behavior during the study and they must seek to manage conflicts of interest and consult with others when necessary (American Psychological Association, 2017). As mentioned in previous sections, in order to prevent a conflict of interest and potential bias, all research was conducted with anonymous participants. In addition to this, colleagues and other experts were consulted as noted for review of interview questions and interview transcripts to keep the study valid and reliable. Furthermore, it was also my responsibility as the researcher to ensure that all participants were compensated appropriately for their time and that it was understood there were no other incentives for participation.

The third principle is integrity, meaning the researcher strives to promote accurate and honest science and that there is no intentional fraud or misrepresentation (American Psychological Association, 2017). In order to limit this, all roles and relationships were already outlined previously as well as methods for countermeasures. In order to have accurate and honest data, all participants within the study were recruited ethically. First, they voluntarily submitted responses to the prescreening survey in order to see if they matched selection criteria. Then participants were recruited specifically from the pool of participants that did meet the criteria. Those that electronically signed consent form were included in the study and allowed to complete the FLCAS survey. Through this process, there was no question about the authenticity and acceptability of the sample pool.

The fourth principle is justice. Justice states that researchers use reasonable precaution against potential bias and expertise limitations (American Psychological Association, 2017). The same precautions listed for fidelity and responsibility apply here as well.

The final ethical principle to be considered is that of respect for rights and dignity, meaning that everyone has the right to privacy, confidentiality, self-determination, and inclusion (American Psychological Association, 2017). From recruitment to de-briefing, this principle played a huge part in the study as a whole. To start with, just because a student chose to participate in the survey did not mean that they had to participate in the video interviews. They had the right to choose whether or not they did. On top of this, they had the right to withdraw from any phase of the study at any time. They also had the

right to have all their data kept confidential. The anonymity offered by Prolific helped ensure this.

Besides the aforementioned considerations, it is important to note that all students, regardless of gender, socioeconomic status, culture, religion, race, and disability were welcome to participate in the study as long as they were a college student in the United States taking a foreign language class, besides English, and had signed the study's consent form. The only ones excluded were those who were not college students taking a foreign language class besides English, and those outside of the United States who as such were not be able to provide information related to the study's goals.

Throughout the entire study's process, no names and personally identifiable information were collected. Even Prolific ID numbers were kept out of publication. Upon completion of the study, data was transferred onto a secure password encrypted USB drive and all other copies of the data were destroyed. The same was done with consent forms. All of this was done in an effort to keep participation as anonymous and confidential as possible.

Summary

This chapter described a mixed-methods study with the primary goals of identifying what the range of levels of foreign language anxiety is within American college students taking foreign language classes, other than English, as well as how educators either help or hinder students with keeping FLA at bay. The providence of the in-depth descriptions of both the quantitative and qualitative phases of the study, as well

as all procedures was the purpose this chapter. All results from both phases of the study will be relayed and discussed within the next chapter.

Chapter 4: Results

FLA is a phenomenon that has been plaguing students of all ages for decades. Despite advances in the educational field, it remains an issue worldwide that can have lasting physical, social, academic, emotional, and mental ramifications. With something so potentially damaging facing the students of today, this study's aim was to determine exactly how much of presence it already has in the college classroom setting and how best to address it, according to students themselves. This study used four research questions in order to answer those questions:

RQ1: What is the current range of foreign language anxiety in college students in America who are presently enrolled in and attending a foreign language class?

RQ2: What are the experiences with and perceptions of various instructional practices by college students who are enrolled in and attending a foreign language class?

RQ3: What are the recommendations for most effective practices and activities that teachers employ to mitigate FLA as perceived by college students taking a foreign language class?

RQ4: How do students who report high and low levels of FLA compare on experiences with, perceptions of, and recommendations for FLA-reducing foreign language instructional practices?

This chapter is divided based upon quantitative and qualitative research material. The first section contains information relating to Quantitative Phase 1 of the study, while

the second section contains the information for Qualitative Phase 2. Each section contains information about each phase's setting, participant demographics, data collection, data analysis procedures, results, and information about trustworthiness. A summary of the entire study's results is included at the end of the chapter.

Quantitative Phase 1

Research Setting

For the duration of Phase 1 of this study, all data collection was conducted remotely from September 1 through September 13, 2020. All demographic information and survey responses were collected through the Internet, allowing for participants to be involved from the comfort of their own homes. Not only did this allow for more convenience and ease of recruitment and participation, but it ensured that the study was conducted in accordance with various state quarantine and COVID-19 mandates.

Demographics

Data on a valid sample of 97 participants were obtained. Ages ranged from 18 to 48 years ($M = 21.86$, $Mdn = 21$, $SD = 4.59$), with the vast majority (84.5%) between 18 and 24 years of age. Table 1 reports key categorical demographics. Males comprised 11% more of the sample than females. A plurality of participants (39.2%) were enrolled in a Spanish course, 20.6% were enrolled in a nonromanized language course (i.e., Japanese, Chinese, or Korean), and 15.5% were enrolled in less commonly studied languages that were not specifically delineated as a response choice. A majority ($n = 50$, 51.5%) were taking a foreign language class as part of their university general education, major, or

minor requirements. Of the remaining 47 participants, 44 (45.4%) were taking the class for pure enjoyment or personal interest, and three were enrolled for undisclosed reasons.

Table 1

Quantitative Phase 1 Participant Demographics

Variable	Frequency	Percent
Gender		
Female	53	54.6
Male	42	43.3
Other	2	2.1
Language		
Spanish	38	39.2
French	11	11.3
Italian	6	6.2
Latin	2	2.1
German	2	2.1
Japanese	8	8.2
Chinese	7	7.2
Korean	5	5.2
Portuguese	3	3.1
Other	15	15.5
Reason		
Gen. ed.[a]	36	37.1
Major ed.[b]	8	8.2
Min. ed.[c]	6	6.2
Enjoyment	43	45.4
Other	3	3.1

[a] Gen. ed. = General education requirement. [b] Major ed. = Major education requirement. [c] Min. ed. = Minor education requirement.

Data Collection

Phase 1 of the study originally called for 100 participants to complete the FLCAS via online survey. In order to locate these individuals, two prescreening surveys were conducted. The first prescreening survey was given on August 28, 2020 via SurveyMonkey through the Prolific website and was completed by 493 individuals.

Fewer than 100 individuals met the selection criteria of being a college student in the United States taking a foreign language class. As a result, a second prescreening survey was done on August 29, 2020. The combined results from the two prescreening surveys gave a total of 126 participants who met selection criteria. These 126 individuals were invited to complete the FLCAS survey on September 1, 2020, and the survey closed out with 109 responses on September 13, 2020. The survey was carried out via SurveyMonkey through the Prolific website just as the prescreening surveys were.

Of the 109 survey responses, 100 of them were fully completed, with nine respondents having missing data across all 33 FLCAS items resulting in elimination from further analysis. The sample was further narrowed down to 97 participants after response set analysis resulted in the elimination of three participants whose responses displayed what Huang et al. (2011) termed insufficient effort through infrequency, inconsistency, pattern, and response time. One participant answered "neither agree or disagree" to 29 of the 33 items and took only 2 ½ minutes to answer the entire survey; another answered "disagree" to 27 of the 33 items, did not discriminate between positive and negative items, and took 3 minutes and 2 seconds to complete the survey; and the third answered "strongly agree" to 24 of the 33 items, took 2 minutes and 47 seconds to complete the survey, and did not discriminate between positively and negatively worded items.

Data Analysis

All of the data from the FLCAS survey were downloaded from the SurveyMonkey website in the form of an Excel spreadsheet, then imported and analyzed using IBM SPSS software version 27. FLCAS item response options were from 1

(*strongly agree*) to 5 (*strongly disagree*). Some FLCAS items were positively worded, and others were negatively worded with respect to anxiety. So that a high FLCAS score indicates higher anxiety, 24 of the 33 items worded in the direction of anxiety were reverse coded (i.e., *strongly agree* = 5 instead of 1).

Three participants had missing data on one of the 33 FLCAS items, for which participant-specific mean on the other 32 items was imputed as the value for the missing item. An initial reliability analysis revealed a minimum correlation among items of -.192, which invalidates scalability. Further examination identified that Items 6r, 11, and 21r had a pattern of negative correlations with several other items, and output indicated that Cronbach's alpha would improve if these items were deleted. Cronbach's alpha for the 30 retained items was .945 with an average correlation among items of .37. Descriptive statistics of the mean and sum FLCAS composites are reported in Table 2.

Table 2

Quantitative Phase 1 FLCAS Mean and Sum Composite Descriptive Statistics

FLCAS composite	*M*	Min	Max	*SD*	*S*	*K*	α
Mean	3.35	1.10	4.87	0.73	-0.69	0.70	.945
Sum	100.62	33.00	146.00	21.80			
Interitem *r*	.37	.04	.75				

Note. S = skewness; K = kurtosis; α = Cronbach's alpha.

Final Results

Phase 1 of the study was conducted in order to answer the research question: What is the current range of foreign language anxiety within American university students presently enrolled in and attending a foreign language class? As reported in Table 2, the FLCAS composites were within normal distribution parameters (skewness =

-0.69, kurtosis = 0.70). Potential univariate outliers are cases that exceed ±3.29 (i.e., critical *z* at alpha = .001) and that are discontinuous from the distribution of other cases (Tabachnick & Fidell, 2007). Minimum and maximum *z* scores were -3.10 and 2.08, respectively, and a histogram showed no discontinuity. FLCAS mean scores ranged from 1.10 to 4.87 with a mean of 3.35, and sum scores ranged from 33 to 146 with mean of 100.62. These results are discussed with respect to other researchers' results in Chapter 5.

Supplemental Results

In addition to Research Question 1 results above, further analyses were conducted to examine FLCAS relationship with age and number of prior courses taken, and FLCAS comparisons by sex, foreign language taken, and reason for taking a class.

FLCAS scores were not statistically significantly related to age, $r(95) = .053$, $p = .135$, or with number of prior foreign language courses taken, $r(95) = -.163$, $p = .111$. Results of FLCAS mean difference comparisons are reported in Table 2. Males and females did not statistically significantly differ on FLCAS scores, as seen in Table 3. For foreign language taken, there were adequate numbers of cases for comparison between Spanish, French, and Asian languages. Participants studying an Asian language had statistically significantly higher FLCAS scores than those studying Spanish, $MD = 0.43$, which accounted for 6.9% of between-group variance, a medium size effect. None of the other pairwise comparisons were statistically significant. Participants taking a foreign language for personal enjoyment had lower FLCAS scores than those taking a foreign language to fulfill a general education requirement, and although the effect size was

about midway between a small and medium effect, which may be of practical importance, it was not statistically significant.

Table 3

Quantitative Phase 1 ANOVA Results

Variable	*N*	*M*	*SD*	*F*(*df*)	*p*	η^2
Sex				0.03 (1, 93)	.861	< .001
Male	53	3.37	0.70			
Female	42	3.34	0.78			
Language						
Spanish	38	3.19	0.82			
vs. French				0.20 (1, 47)	.659	.004
vs. Asian				4.17 (1, 56)	.046	.069
French	11	3.32	0.77			
vs. Asian				1.44 (1, 29)	.239	.047
Asian	20	3.62	0.62			
Reason				2.68 (1, 78)	.106	.033
Gen. ed.[a]	36	3.52	0.71			
Enjoyment	44	3.25	0.79			

[a] Gen. ed. = General education requirement.

Qualitative Phase 2

Research Setting

Phase 2 qualitative interviews were conducted virtually from late September to early October 2020. It was confirmed via visual camera displays and through verbal confirmation with the participants that they were in their own residences, with no other people or distractions in the room with them. The COVID-19 pandemic and various health and safety mandates, which were ongoing, may have affected overall stress and anxiety for those returning to campus or engaged in online learning that may not have been present at the time of the initial quantitative survey.

In order to ensure that participants had not deviated from their original FLA rankings, two check-in questions were presented at the beginning of the interviews. First, participants were asked to describe their mood and emotional state; they were then asked if they felt comfortable continuing with the interview at that time. Additionally, participants were asked if they agreed with their FLA scores so that their responses would remain consistent with their categorization. All participants felt fit and able to proceed with their interviews, despite any stress derived from the coronavirus pandemic. They all also agreed with their FLA rankings, indicating that their amount of FLA had not fluctuated with the start of a new semester.

Demographics

There were a total of nine participants in Phase 2. Six out of the nine were male, and the other three identified themselves as female (Table 4). All nine were in the traditional undergraduate age range of 19 to 24 years. Five were taking a Romance language (with four taking Spanish and one taking Portuguese), two were taking an Asian language (with one taking Korean and one taking Japanese), and two were taking nontraditional foreign languages such as a sign language. The majority of participants (five of nine participants) were enrolled in their foreign language course simply for personal enjoyment, while three were seeking to fulfill their university's general education requirements and another was taking the course for the sake of family heritage. All except two participants had at least some sort of prior foreign language class experience.

The intent of the qualitative phase was to identify and interview extreme cases, those with high and low FLCAS scores. The average FLCAS *z*-score for the four participants in the high FLA group was 1.50, ranging from 1.12 to 2.08. The average FLCAS *z*-score for the five participants in the low FLA group was -1.79, ranging from -0.76 to -2.78. On average, the high and low FLA groups were separated by 3.29 standard deviations.

Table 4

Qualitative Phase 2 Participant Demographics

Variable	Frequency	Percent
Gender		
Female	6	66.7
Male	3	33.3
Age		
19	1	11.1
20	4	44.4
21	2	22.2
22	0	0.0
23	1	11.1
24	1	11.1
Language type		
Romance	5	55.6
Asian	2	22.2
Other	2	22.2
Reason		
Gen. ed.[a]	5	55.6
Enjoyment	3	33.3
Other	1	11.1
Prior classes		
0	2	22.2
1	2	22.2
2	0	0.0
3	2	22.2
4+	3	33.3

[a] Gen. ed. = General education requirement.

Data Collection

Originally, Phase 2 of this study included the plan to recruit 20 individuals to participate in the qualitative interviews. From the initial 97 participants who fully completed the FLCAS survey in Phase 1, 23 participants were identified as meeting extreme case selection criteria for interviews. All 23 participants were invited to continue on to Phase 2, but only nine actually participated. Of these nine participants, four were ranked as being in the high FLA category, and the other five were in the low FLA category. Via the Prolific website's messaging system, each of these participants was asked to schedule a date and time for their video interview. Interviews were then conducted virtually, with only the audio being recorded, on weekdays between September 29, 2020 and October 7, 2020. Interview questions were limited to those listed in Appendix C.

The recorded audio from each of the nine interviews was recorded using an application called Voice Recorder, and then the audio files were uploaded to the Scribie transcription service website. After that, the audio files were stored on a password-protected USB drive along with all other study data and documents and were deleted from the recording application.

Using Scribie's artificial intelligence transcription service, all interviews were transcribed and then checked manually by myself for accuracy. Transcriptions were then downloaded from Scribie. All transcripts are visible in Appendices K through S. All participant responses from the transcripts were reconciled into Excel spreadsheets to allow for primary and secondary coding of the data. Once coding was complete, the

coded files were shared with participants via Prolific for approval. There were no rejections or edit requests made by the participants.

Data Analysis

The coding process was conducted in two cycles. The first cycle involved emotions and values coding (Saldana, 2016). This means that the focus was on labeling feelings experienced by participants as well as identifying any beliefs or worldviews that came to light. Besides various emotions, the codes created during this cycle were relevancy, peers, teachers, outside opportunities, immersion, atmosphere, helps, hurts, factors, environment, language type, tasks, past experience, positive, and negative.

The second cycle of analysis involved pattern coding in which the primary cycle codes were grouped together based on similarities in order to create themes. As a result of the second coding process, a total of five themes emerged in response to research questions two, three, and four. The first four themes revolved around the ideas that teachers, peers, classroom tasks, and classroom environment all can positively and negatively influence the development of foreign language anxiety. The fifth theme focused on language relevancy and how it impacts students. The themes are discussed in depth in the next section.

There was a single discrepancy that appeared during the data collection process. One participant in Phase 2, referred to as participant one, actually studied more than one foreign language in their lifetime thus far. Participant one had experience with both English language classes and Portuguese language classes. The focus of the study is FLA in university students studying a foreign language other than English. As such, although

participant one shared insight from both foreign language experiences, only the experiences with Portuguese classes were considered and those from childhood involving English classes were not included in analysis.

Final Results

Because Phase 1 of the study was conducted in order to answer the first research question and identify participants for Phase 2, the data from Phase 2 was meant to answer the other three research questions. They were as follows:

RQ2: What are the experiences with and perceptions of various instructional practices by American university students enrolled in and attending a foreign language class?

RQ3: What are the recommendations for most effective practices and activities that teachers employ to mitigate the various factors contributing to FLA as perceived by the foreign language students?

RQ4: How do high and low FLA compare on experiences with, perceptions of, and recommendations for FLA-reducing foreign language instructional practices?

RQ2 and RQ3 focused on how teachers of foreign language behave and what they specifically do that helps or hinder students in terms of FLA as perceived by the university students themselves while RQ4 focused on the differences of those perceptions based upon FLA ranking. Results are initially reported according to the themes that arose during the analysis process, then later summarized with respect to each research question.

Theme 1: Teachers Make a Difference in How Much Anxiety Students Experience

For students of all levels of FLA, how their teacher performs in class can both positively and negatively impact their experiences as evident in the coding chart of Appendix J. According to Participant 9, students were negatively impacted and made to feel more anxious in their foreign language class because of the teacher's attitude. They stated that "the professor was pretty relatively strict" and had the expectation that "if you're one minute late and you don't have a 100% completed, you get a zero". This concern was shared by Participant 8 who expressed that it can be "very frustrating, just not having another way to communicate" when the instructor refuses to allow non-target language usage even to ask for assistance, as well as Participant 3 who stated that the foreign language tests are set up so that if a student is automatically reported if they click on another computer tab during an exam time and so this suspicious set-up by the teacher makes one always wonder "what if I get caught for something I didn't do" even though the teacher "expects us to put the most effort in this class". Even Participant 5 felt that the attitude the teacher portrays brings them down and makes them wonder "why do I care about this more than you do when you're... It's supposed to be a mutual thing."

On top of teacher attitude, teacher actions or a lack there of also leads to feelings of anxiety within students. According to Participant 3, they panic when "the professor is calling on you randomly" and Participant 7 also explained that when this happens "sometimes I'm just not ready to respond or ready to just talk in that language." Participant 7 also explained that their instructor was "not really, I would say, organized. Her syllabus is very disorganized, and tough to read through and sometimes she changes

at the last minute and that can be stressful." Participant 8 felt that "definitely one issue I have seen for everyone so far is the lack of examples provided for certain assignments." This shows support for the idea that poor planning and surprise call outs in the class exacerbate anxiety within students.

Although teacher attitudes and behaviors can negatively impact their students in terms of anxiety, those same aspects can positively impact them as well. According to Participant 3 their teacher makes others feel at ease because "for her it's okay then if someone gets it wrong on and she sort of explains what the answer is", an experience shared by Participant 6. Participant 6 also believed that it would be even better if teachers can be "more flexible with due dates and stuff." These sentiments were echoed by Participant 9's statement that "if they had more of a flexible grading policy that would have definitely helped" and Participant 7's comment that they think "flexible due dates are helpful." Overall, the idea that if teachers had less strict mindsets and more flexible ones then their students would feel less anxious.

As for teacher behavior, there are some actions that the interview participants noted as being particularly beneficial. Participant 4 explained their appreciation of the teacher "asking me to do a different assignment than the rest of the class to practice learning that's better for me" because the scaffolding helped them from feeling stunted. Participant 6 shared how when their teacher "takes the time to explain it rather than rush it, and then after that, he'll ask the whole class as opposed to just that one person who asked" it is incredibly beneficial as keeps the pace better for those who might otherwise fall behind. Participant 3 liked that their teacher "tries to break things up with break out

activities and videos," and Participant 5 would have felt more at ease if their teacher created note sheets or organizers that specifically note "this is what we need for this, and here's a bunch of keywords, and here's all the stuff you really need to know."

Theme 2: The Presence of Others Makes a Difference in How Much Anxiety Students Experience

In the majority of foreign language classrooms, there is more than a single student present. These other students, or peers, unwittingly have both negative and positive impacts on each other just as the teacher does, as seen responses in Appendix K. The presence of other peers in classroom can cause students to feel more anxiety because it causes fear. Participant 1 explained that they "definitely feel more anxious speaking to someone that's fluent in the language" because the skills of others can be intimidating. Participant 2 had similar experiences. Participant 5 shared that they were "actually scared of saying something to offend someone," and Participant 6 explained that in pair work there is "a good amount of pressure on me, because instead of there being the whole class, there is just two other people."

Participant responses also showed that just like with teachers, peers can have a positive impact on anxiety in others. Participant 9 enjoyed pair work because they "felt like I was in the same boat with my partner, we were kind of on the same level in regards to the teaching style," and Participant 2 similarly stated that they often think "hey, we're all in the same boat here, it felt less anxious doing it" when working with others. Participant 5 thought that "more often than not, you'll have a really good pairing and both parties will be really optimistic and have a good answer at the end," and even Participant

3 also had positive experiences because their other classmates were “usually engaging in it, and so working with other classmates that kinda helps as you get to while working, have a conversation with them.”

Theme 3: Some Class Activities Cause More Anxiety Than Others

It is hard for teachers to include activities that make class enjoyable and fun for everyone. Some students are more visual than others, some more musical, and so on. Oftentimes teachers try to utilize a variety of classroom tasks in the hopes that there will be something to appeal to everyone. In a foreign language classroom, this practice is even harder because the teacher must design activities to enhance each of the four communication skills: reading, writing, listening, and speaking. With all of this variety, it is no wonder that some activities were more anxiety inducing than others as seen in Appendix L. This is especially true for tests and speaking tasks. Participant 9 felt overwhelmed when on their tests there was “just a lot of audio, I guess, a lot of questions on the test and also a lot of translation…” and Participant 1 clearly stated that “pop quizzes aren't good.” Participant 5 explained in depth that “definitely speech-type things where you have to stand in front of a class” cause them to feel nervous, and Participant 6 said overall for their foreign language class “it’s a lot of talking with other students, there's a lot of conversing... It's a little bit difficult.”

In almost all foreign language classes it is impossible to eliminate tests and speaking tasks but based on participant responses it appears that anxiety can be relieved if the number of tests is limited and if advanced notice is given for them all so that there is ample time to prepare. In addition to this, Participant 6 noted that doing “a fun little

game, what we're learning at the same time as we're having fun…definitely helps anxiety levels," and Participant 4 mentioned that their classmates feel better when there are outside of class "opportunities for them to connect with a native speaker and practice speaking the language." Participants 3 and 5 also mentioned the use of toys or other media sources as being beneficial.

Theme 4: Some Classroom Environments Are Not Conducive to FLA Mitigation

The setting in which one studies has always been thought to influence a student's progress academically. It is why teachers are always encouraged to make their classroom's more visually appealing with posters and banners and such. With the world undergoing a global pandemic with the coronavirus, the setting for many classrooms have been forced to change from these colorful and appealing backdrops to online platforms at home. This change in environment has appealed to some language learners, but the majority of the participants in this study who commented on learning environment looked upon the virtual classrooms negatively. As seen in Appendix M, Participant 8 expressed unhappiness because "I am in a foreign language that does not require speech, but it is a sign language class, and so say, using the online platforms are very difficult at times" because "you can't always see the professor or the screen freezes for a second." Participant 3 said that it has been difficult because of "all the distractions and it's hard to ask questions over a computer screen" at home.

The one positive comment about virtual learning was made by Participant 6, a low FLA individual, who said that virtual learning was "a lot less stressful as opposed to actually being physically in person" but they also explained that the "teacher makes it

optional to have a video camera on or off, some students will keep it off, which I guess might help increase your confidence," so there are some caveats to the idea. Besides the response provided by Participant 6, the only other positive comment to be made in relation to the learning environment was by Participant 2 recommending that online learning should be structured like "almost like immersion therapy, maybe like tons of talking in front of classmates or with classmates."

Theme 5: A Language's Perceived Importance Can Damage Motivation

Many people believe that some languages are more difficult to learn than others. Languages that are perceived to be more difficult tend to not be spoken by as many people and as such the opportunities to use them become limited. Opportunities can also be limited simply based upon where one is living. Because of this, language students may feel frustration because of a lack of progress or how much time is being required to master something with limited real-world application (Appendix N). Participant 9 "felt like I wasn't really learning much about the language" and Participant 7 felt that it "takes a lot of energy." Participant 1 had the viewpoint that a language "doesn't help in a lot of branches… it doesn't make you better in work." If it takes so much time to actually make progress and its perceived use is limited, students may not feel motivated to continue their studies.

Relation to Research Question 2

RQ2 asked: What are the experiences with and perceptions of various instructional practices by American university students enrolled in and attending a foreign language class? Out of the 23 analyzed comments made in reference to foreign

language teachers, 11 were negative while 12 were positive. This shows that there is a pretty even spread of perceptions of the teachers by their students. Of the 11 comments made in references to the participants' peers, five were negative while six were positive. Much like the responses involving teachers, this shows an almost even mixture of perceptions. For class activities or tasks, there were a total of eight comments made. It was a completely even split of responses with four being positive in nature and four being negative. It was also an even split for the six comments made about learning environment. As for language relevancy, there were nine comments made with seven being negative and only two positive.

Overall, there were 30 negative responses collected during the interviews and a total of 27 positive ones. Even though the numbers are close, this suggests that overall university students studying a foreign language in the United States perceive their foreign language classes more negatively.

Relation to Research Question 3

RQ3 asked: What are the recommendations for most effective practices and activities that teachers employ to mitigate the various factors contributing to FLA as perceived by the foreign language students? According to the participants, FLA can be mitigated by teachers avoiding grading strictness (especially on certain topics), not showing a lack of passion for the subject material, erasing suspicious attitudes, stopping inflexibility, limiting overwhelming workloads, and stopping the practice of calling upon students randomly. Instead, they should present friendly and respectful attitudes, be flexible with due dates, slow their pacing, scaffold the curriculum, creating note sheets

and graphic organizers, utilize various media sources and breaks, be more accepting of mistakes, and utilize pair work activities as much as possible. In addition to this, they should also use games, videos, or other types of media, provide focusing tools like fidget spinners, and create opportunities for students to use the language outside of the classroom whenever possible.

Relation to Research Question 4

RQ4 asked: How do high and low FLA compare on experiences with, perceptions of, and recommendations for FLA-reducing foreign language instructional practices? What is notable yet unsurprising is that the majority of the negative comments about teachers were made by participants with high FLA and the majority of the positive comments were made by participants with low FLA. Eight out of the 11 negative comments were made by highly anxious participants while seven of the 12 positive comments were made by more confident ones. This suggests that students with higher levels of FLA are more likely to see their foreign language teachers in an unfavorable light.

Unlike with the teachers, the majority of responses for both the positive and the negative comments about peers were primarily made by participants with low FLA. Only two out of the five negative comments were made by high FLA individuals and they only made two out the six positive comments. This type of dominance in responses to the topic of peers hints at the idea that students with low FLA are more aware of their peers than their high FLA counterparts. This trend continued with the responses given about learning activities/tasks. In this instance, three out of the four negative comments were

made by low FLA participants and three of the four positive comments were made by the high FLA ones.

When it comes to language relevancy, two low FLA participants indicated that when they saw their language being used outside of class it made them feel reassured. They felt like there was a reason to continue on with their studies. Conversely though, there were seven negative comments made in reference to the relevancy train of thought, four of which were made by participants with low FLA.

Based upon this information, it can be said that students of both high and low FLA levels have both positive and negative experiences and perceptions. The high FLA individuals were more likely to look upon their teachers, learning environment, and language importance negatively while the low individuals actually had more negative comments about their peers and learning tasks.

Trustworthiness: Internal and External Validity

In Chapter 3, a rationale was provided to assess trustworthiness in terms of internal and external validity. This included the strategies Johnson (1997) laid out for qualitative internal validity and Shadish's (1995) five principles of external validity.

When it comes to internal validity of the study, six of Johnson's strategies (1997) were utilized. These included the researcher as the detective method, low inference descriptors, theoretical triangulation, participant feedback, peer review, and reflexivity. With the researcher as the detective, method one seeks to find evidence of cause and effect. This was done throughout both phases of the study with the FLA scores of the quantitative phase being considered the "effects" and the information gathered during the

qualitative phase the "cause" since the focus was on what aspects of foreign language classes contribute to the development of various levels of FLA. As for low inference descriptors and participant feedback, these validity methods' usages were evident through the verbatim transcripts of the participant responses in the qualitative phase in addition to their confirmation of those transcripts and their coded evaluations as accurate. Credibility was established since all nine participants approved of the transcripts and coding sheets with no requests for alterations.

Peer review and reflexivity were continually used though out the entire study as the data as well as any potential biases in interpretations were discussed and analyzed with the committee chair before proceeding with each phase of the study. As for theoretical triangulation, this method was not utilized until the end of the study when the results were explained in terms of different theories. In this case those theories were anxiety/uncertainty management theory, situationism, and stress-coping theory, and these interpretations will be further discussed in Chapter 5.

In addition to aforementioned ways that validity threats were addressed, there were three other concerns with trustworthiness that had to be acknowledged. These were maturation, which was able to be mitigated, analogue of statistical regression, which remained mostly outside the realm of control, and selection, which was impossible to account for at this stage.

In terms of maturation, this was dealt with through the collection of descriptive data from the participants has to what language they took, what were their reasons for taking the course, prior experience, etc. Because of this, different relationships and

possible correlations between these various factors and FLA scores were able to be investigated, even if they were not evident at statistically significant levels. With respect to the statistical regression, it is impossible within this study to identify if proximal events prior to the completion of the study influenced various scores on the FLCAS. The only way to possibly mitigate this concern was to double check with the interview participants that they agreed with their FLA score so as to ensure that their feelings and self-estimations had not deviated over the course of both phases. It is possible that future studies could examine this and provide data for pre-post testing, something that would establish additional confirmability and transferability since it was clearly explained how participants were recruited and data was collected and analyzed. As for selection concerns, there was no way to determine if those who participated varied from their nonparticipating counterparts. It is possible that others that fit the selection criteria were unable to participate because they were not associated with the Prolific recruitment platform. Those individuals may have had more variance in their scores and as such this may call some of the study's dependability into question. However, it is not feasible to reach every single individual of the study's intended population in this case. All that could be done was to be consistent in practice that all participants within the study came from the recruiting source.

Besides internal validity, it should be noted that issues with external validity could cause a study to be deemed untrustworthy as well. Although one form of validity does not guarantee the other, the more the internal threats are neutralized the more chance there is for generalizability, something that represents external validity. Stake (1990)

refers to generalization as the extent to which findings can be applied to people, settings, and circumstances. All participants in this study, if assumed to be honest, were college students within the United States of America who had taken a foreign language course within the last six months. In order to say that the results of this study are representative of that entire population, at least a limited generalization had to be established.

According to the Shadish (1995), generalization can be established through five principles, although two of said principles can only be established through additional studies. Therefore, the three that were most relevant to this study were the principle of proximal similarity, the principle of explanation, and the principle of discriminant validity. These were all satisfied since the study focused on the relation of FLA scores and mitigating practices and multiple themes were able to emerge as a result.

Summary

Phase 1 of the study showed that the mean score on the FLCAS for a sample of 97 college students taking a foreign language course in the United States of America was 100.6. This is firmly within the moderate range and it showed support for the idea that the average college student in the United States suffers from a notable amount of foreign language anxiety. Participants studying an Asian language had statistically significantly higher FLCAS scores than those studying Spanish. FLCAS scores were not statistically significantly related to age or number of prior foreign language course taken and did not statistically significantly differ by gender or between those taking the course as a general education requirement versus for personal enjoyment.

For Phase 2, interview responses from nine participants in the low and high scoring ranges of FLA showed support for the idea that teachers, peers, classroom environment, and class activities all influence students positively and negatively in terms of FLA. Specific information about what behaviors, activities, and settings should be avoided and pursued were provided as well as information about how students view the importance of foreign language learning. There were also notable differences in how the high and low FLA individuals perceived each of the aforementioned concepts.

In the next chapter the implications and limitations of the results will be discussed along with the numerous recommendations for future research. How all findings connect back to theoretical framework will be explored in addition to an explanation of how these findings extend the current knowledge of FLA.

Chapter 5: Discussion, Conclusions, and Recommendations

In the previous chapter, the results from the study showed the mean average FLA level for college students in the United States and that these levels are affected by the students' teachers, peers, class activities, and class environment. In addition to this, information was collected to support the idea that some language students negatively question the importance of the class. All of this was uncovered in order to discover how to best assist students who suffer from FLA.

FLA is a real problem with real consequences extending past poor academic scores into social, physical, and economic disabilities. It can spiral out of control and inhibit the thousands of individuals who take a foreign language class every year. In this chapter, I review the findings of the entire study and how they relate to current knowledge of FLA as well as acknowledge the study's limitations. Recommendations for future research in addition to all of the positive implications of this research are covered.

Interpretation of Findings

Phase 1 Quantitative Results

Many of the findings from this study are in line with the results of previous studies. The mean FLA sum score for the sample population was 100.62 (with possible range from 30 to 150) or 3.35 (possible range 1 to 5) when converted to mean. This indicates that the average participant experienced moderate levels of FLA, which lends credit to the situationism theory that one's behavior and experiences are conditional upon the environment rather than being due to personality traits (Goldie, 2013).

Because three items were unreliable with the other 30 FLA items, the corrected sum for comparison to prior studies would be 110.68. This sum score was similar to the most recent results found in Turkey (Altunel, 2019; Ekmekci, 2018; Karabiyik & Ozkan, 2017), Saudi Arabia (Alsaleh, 2018; Tanielian, 2017), Taiwan (Liu & Chen, 2015), Ethiopia (Gerencheal & Mishra, 2019), and Yemen (Yassin & Razak, 2018). This type of consistency across the globe shows that FLA has remained a notable problem in advanced and developing countries alike and that there is merit in the anxiety/uncertainty management theory, which states that communication (even in a foreign language) can only occur when uncertainties about possible occurrences are diminished (Griffin, 1994). In layman's terms, communication skills in foreign language classrooms will go up if the anxieties within classes are reduced.

Although there is a need for further study, there was some evidence of FLA group mean differences by language type, further supporting the situationism theory. The data showed that the mean score for students of Asian languages was 3.62, while the mean scores for students studying Spanish and French were 3.19 and 3.32, respectively. This indicates that students studying Asian languages such as Japanese, Chinese, and Korean were more likely to have higher FLA levels than students studying Romance languages such as Spanish and French. With an eta squared of 0.059, indicating a medium effect size, this is consistent with the findings of Djafri and Wimbarti (2018). With a significance level of 0.133, though, it is not conclusive, although it does lend support to the stress-coping theory, which revolves around the idea that stress/anxiety happens when an environment becomes too taxing for an individual to handle (Krohne, 2001). It is

possible that Asian language classrooms are more demanding than those for the Romance languages, perhaps because of the different writing systems, and thus they induce higher levels of FLA in students.

Additionally, there was evidence of a negative correlation between FLA scores and prior course experience. The correlation for these two factors was noted to be -.163 at a significance level of $p = .111$. This suggests that the more classes students take in a foreign language, the lower their FLA might become. This actually shows that as students progress and spend more time in such classes, their abilities to cope and handle the demands increase, thus reducing their anxiety—something in line with the stress-coping theory. Although this goes against the findings of Zhou (2017), Karabiyik and Ozkan (2017), and Casado and Dereshiwsky (2001), studies by Kuscu (2017), Gursory and Arman (2016), and Melouah (2013) reported results that all support this idea. Phase 1 also had evidence for enrollment reason being an influencing factor on FLA, a suggestion supported by results from Gocer (2014). This too requires additional research because the significance level was $p = .106$ but with an eta squared of .033, indicating a small to medium effect size.

Not all of the quantitative Phase 1 results aligned with previous research. There was no statistically significant difference in FLA score based upon gender, with male and female FLA scores differing by less than 1 point on the sum composite. Karabiyik and Ozkan (2017) and Casado and Dereshiwsky (2001) reported data similar to this, but the studies of Kuscu (2017), Semmar (2010), Gopang et al. (2018), Gursoy and Arman

(2016), Gerencheal and Mishra (2019), Liu and Ni (2015), and Ali and Fei (2016) all had data showing a difference in FLA based on gender.

Phase 2 Qualitative Results

In the Phase 2 qualitative portion, it was found that teachers caused students to feel more anxious when they were disorganized, strict, suspicious, inflexible, and lacking passion, and when they created immense workloads and called on students randomly. This is in accordance with the principles of anxiety/uncertainty management theory as well as situationism, as these factors can vary from class to class and can be impossible to anticipate ahead of time. Studies by Subetki (2018a) showed that teacher strictness was indeed a contributing factor to FLA, and Gursoy and Arman (2016) found evidence that a teacher's attitude definitely exacerbates anxiety within students. The participants in phase two offered suggestions for foreign language teachers to try in these situations. They took the form of more friendly attitudes, which Subetki (2018a) said can be conveyed by smiling and making jokes during class, offering flexible assignment due dates, creating and sharing note sheets, scaffolding material, using various media sources, and being more lenient with mistakes. These recommendations are similar to those of He (2017) and Melouah (2013).

It was also found in Phase 2 that students felt more anxiety around their peers because of intimidation, fear, and embarrassment. Most likely this was because students had no way of knowing when they might experience those negative situations, and so they felt anxious about the possibility of the events on top of the anxiety that came when they actually did occur, just as posited in anxiety/uncertainty management theory.

Surprisingly, the low FLA participants had more to say about this than the high FLA individuals did. This suggests that those with low FLA are more aware of their peers, something once again supporting situationism theory. Perhaps high FLA individuals tend to be more focused on other aspects of the class than their classmates and so they have little to comment on in that respect. Regardless, these negativities were outweighed by the positivity and interest of pair/group work. This finding was supported by the work of Subetki (2018a), Casado and Dereshiwsky (2001), Kim (2009), and He (2017).

Additionally, there were data from the participants indicating that speaking tasks and assessments made them the most anxious, most likely because it is often impossible to anticipate how one is going to be expected to respond, which in turn causes the uncertainty referred to within anxiety/uncertainty management theory. This was in line with previous research conducted by Kim (2009). Most of these negative comments were made by low FLA individuals, however. This indicates that low FLA students are more likely to look unfavorably upon the actual work they perform in class, whereas high FLA individuals feel better about it. The reason for this is unclear, but it is possible that high FLA students become hyper-focused on their tasks and as such get more enjoyment out of them than their low FLA counterparts, who may be focused on other things. Like those of Kim (2009) and Meloulah (2013), this study's results showed that this kind of anxiety could be mitigated through the use of games. Responses also showed that videos and the use of attention toys such as fidget spinners may also be helpful in these instances.

Because COVID-19 had shifted learning to online platforms, participants commented on the impact of virtual learning. Virtual learning environments are less

familiar for foreign-language courses for many students, and the shift to a virtual environment can affect students' behaviors, as is expected in situationism. In fact, students of varying FLA levels expressed frustration with utilizing an online platform for language learning. Both high and low FLA individuals expressed this sentiment, and so it appears that this type of classroom environment may exacerbate those already heavily afflicted with FLA or increase it in those who are normally very confident. Virtual learning requires more self-management and independent learning than traditional learning does. Desta (2020) found a positive correlation between independent learning and anxiety. This means that the more independent learning there is, the more anxiety goes up. This frustration and anxiety lead to more negative viewpoints about the classes themselves. Mak (2011) and Young (1991) warned that negative attitudes toward classroom environments can affect students' views about a language as a whole.

I also found evidence that students were frustrated when their progress with the language was slow or if the language seemed irrelevant to their daily life. These frustrations bring the relevance of language study into question and can exacerbate the other reasons that high FLA students discontinue their studies (Dewaele & Thirtle, 2009). Overall, the low FLA participants in Phase 2 had more positive comments about their experiences than their high FLA counterparts, but they, too, were not immune from these frustrations and might choose to cease their studies as well. This is a daunting prospect that future research can determine how to address.

To summarize, while some of the findings merely supported previous research done by others, there was some new information collected. Overall, most students were

affected by FLA on at least a moderate level, and teachers should try to be more friendly and accepting while using more pair work, games, videos, and note sheets in their classes so that they can help mitigate it. As soon as it is safe to do so, teachers should also try to limit how much their classes are conducted online. Once the beneficial practices are put into place and the student surroundings are improved, the students should perform better and be less anxious.

Limitations

Like any other study, this research has limitations for generalizability. Varying FLA scores based on things like reasons for taking the class and prior experience were mollified by collecting that information from participants at the time of their survey completion in Phase 1. Information such as participant race, class grade, or family size was not collected, though, and those are factors that could account for variance in FLA levels.

Another limitation stems from this study having a relatively small sample. There were 97 participants in Phase 1 and only nine in Phase 2. The study would most definitely have to be repeated in order to gain additional quantitative precision and qualitative trustworthiness. On top of this, only college students in the United States who were registered with the Prolific website were able to participate. This left a large number of the intended population unable to be consulted for their input. It is possible that those individuals would have additional valuable insight that has not been accessed yet. It is also impossible to prove whether the participants who were included in the study were downplaying or embellishing their experiences.

The final limitation of the study was that it was conducted during the COVID-19 pandemic. As such, almost all classes for foreign languages were required to be conducted online, and they had been occurring online for a few months by the time the study was conducted. Because of this, in Phase 2 there was less information provided about the classroom environment than there might normally be. The interview was set up to only discuss the participants' most recent class experiences. More information about in-person classes could have been gathered if cues had been in place to request this information specifically. Unfortunately, this was not something that I anticipated prior to conducting the interviews. As such, the findings of the study may not be applicable to every foreign language class.

Recommendations

In this study, I was able to provide additional support for evidence found in previous studies from the last decade. I was able to provide some new insights as well. These new insights not only broaden the current knowledge of FLA, but also bring to light foundations for future research.

During Phase 1 of the study, results suggested that language type could be a predicting factor in FLA. This would mean that certain language types create more anxiety within students than others. The data showed higher averages of FLA for students of Asian languages versus Latin-based Romance languages and a medium effect size. As such, there is a need for further research to determine whether the difference is evident in other samples, perhaps at a more significant level. Similarly to language type, reasons for enrollment in a foreign language class also appeared to be a factor in FLA level, albeit

with a small to medium effect size. Therefore, reasons for enrollment also need to be researched further.

There was a small to medium negative correlation between FLA score and prior course experience. This suggested that as students got more course experience, their anxiety levels would be lower, and the result was not statistically significant, but the observed effect size merits further studies to examine the size and sign of correlations in other populations. Other factors not included in the study that should be considered in the future include race of the participants, learning style, and current foreign language class grades. Information about grades may help to solidify prior concepts of students with higher FLA levels having poor academic scores, while data on race and learning style of participants may provide insight into the possibility of those two factors being influential on FLA development.

The results of Phase 2 analyses led to the creation of two additional research suggestions. The first involves perceptions and experiences with one's peers. In the interviews, the majority of negative comments were made by individuals with high FLA. When it came to the subject of their peers, though, the participants with low FLA responded the most. In fact, they responded more than their high FLA counterparts, both negatively and positively. This led to the conclusion that high FLA individuals are less preoccupied with their classmates than low FLA ones are. The reasons for this, though, are unclear, and one can only speculate at this point. More research is required in order to understand this phenomenon.

On a similar note, the second future research suggestion involves classroom activities. Once again, the low FLA participants made more negative comments about tasks and activities, while the high FLA participants made more positive comments. This contrasts with the overall takeaway from the interviews and is quite curious, as the reasons for this flip are unknown. Future research could rectify this gap in understanding.

Implications

The findings of this study have the potential to be very impactful. If teachers of foreign languages follow the advice of participants in this study, there could be a reduction in average FLA. On the individual level, lowering FLA could allow students to perform better academically, be free of harmful somatic symptoms, be more social with international citizens, and be more likely to progress onto better scholarship, college, and career opportunities. Such individuals may go on to be a part of a well-educated and globally connected society. When foreign language teachers see how much of an improvement their students have made without FLA to hold them back, the teachers themselves can feel more pride and resolve in their work.

In order for this social change to happen, the findings of this study could be applied in designing better instructional practices for teachers. School boards and educational organizations already provide numerous media sources and games for teachers of languages such as Spanish and French, but there is a distinct lack of materials for other languages such as Japanese and sign languages. There could be more of an effort to create and locate these materials to give teachers easier access so that they can include them in their lessons. At the same time, school boards could give their teachers

the freedom to be more lenient with students. Sometimes, a teacher's grading policy comes from the school itself, and the teacher has no control over assignment weights and due dates. This strictness is the opposite of what participants reported needing for dealing with FLA.

Conclusion

The results of this study showed that although some students of foreign language are not notably stricken with anxiety, the majority of them are in some way affected by it. Those who have high FLA tend to have more negative perceptions of their language classes and the language itself, but those with low FLA can still have negative experiences as well that could lead to discontinuing their language studies. There are some practices that can be avoided and others that can be used more often to help combat these negative feelings and anxiety overall. If those practices are followed, the average student's level of anxiety could decrease. With the increasing globalization of society and interconnectedness of cultures, foreign language fluency is becoming more and more important and, therefore, so is reducing FLA.

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Appendix A: Prescreening Survey

Instructions for Prescreening Survey

Hello, you are being invited to partake in this pre-screening survey for an academic research study on foreign language anxiety. In order to participate in the study, you must first be pre-screened to ensure that all participants meet the selection criteria. Regardless of the results, all participants in the pre-screening survey will be compensated at a rate of $0.16 per survey. Those who meet the selection criteria will invited to complete the study's actual survey at a later date for additional compensation.

You may choose to withdraw from the pre-screening survey at any time, but only those who complete all questions will receive compensation.

If you agree with these terms, please continue on with the pre-screening survey.

Prescreening Survey

1. Are you a college student in the United States of America?
    a. Yes
    b. No

2. Are you a native English Speaker?
    a. Yes
    b. No

3. In the last six months have you enrolled in and attended a foreign language class?
    a. Yes
    b. No

Appendix B: Foreign Language Classroom Anxiety Scale Usage Permission Letter

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Appendix C: Qualitative Interview Questions

Foreign Language Anxiety Interview Questions

1. Please describe your current physical environment.
2. How would you describe your current mood/emotional state?
3. How would you describe your general experiences with your language class, the teacher, and the language itself?
4. Do you agree with your rating on the FLCAS?
    a. If not, please explain why?
5. Do you have any diagnosed learning disabilities or required accommodations?
    a. If so, what are they?
6. What factors do you think contribute to your current level of foreign language anxiety or confidence? These can be physical, environmental, emotional, mental, etc.
7. How do those factors influence your feelings of foreign language anxiety or confidence and your class performance?
8. What does your instructor do that contributes to your current level of foreign language anxiety or confidence?
9. How does anxiety or confidence manifest for you in your foreign language class?
10. What practices do you think aid you the most in the classroom in dealing with foreign language anxiety or confidence? These can be practices that your teachers, peers, or yourself implement in order to keep foreign language anxiety at bay or actively decrease it in the moment, or promotes confidence or increasing confidence in the moment.
11. Do you have any ideas for methods of preventing or dealing with foreign language anxiety or confidence that haven't been tried yet, either by yourself or the instructor?
12. How do you think foreign language anxiety or confidence will affect you in the long or short-term future?

Appendix D: Prolific Privacy Policy

Prolific Privacy Notice and Cookies Policy

Introduction

1.1 We are committed to safeguarding the privacy of our website visitors, service users and other individuals with whom we deal. This Notice sets out information about how we use, store and transfer personal data relating to those individuals. We are a data controller in relation to that personal data, which means we determine the purposes and means of the processing of that personal data.

1.2 This Notice also contains our cookies policy. We will ask you to consent to our use of cookies in accordance with the terms of this Notice when you first visit our website.

How we use your personal data

1.3 In this Section we have set out:

(a) the kinds of personal data that we may collect, use, store and transfer. We have grouped that data together into different categories based on its subject matter, and based on the kinds of individuals to whom it may relate;

(b) the purposes for which we may process personal data;

(c) the legal bases of the processing. The **legal basis** means one of the permitted bases for processing set out in Article 6 of the General Data Protection Regulation (GDPR). We are required by law to identify this legal basis to you.

Data relating to almost everyone we deal with, such as Prolific users, suppliers, commercial partners and correspondents:

1.4 We may process data about your use of our website and services ("**usage data**"), which we obtain through our analytics tracking systems. The usage data may include your IP address, geographical location, browser type and version, operating system, referral source, length of visit, page views and website navigation paths, as well as information about the timing, frequency and pattern of your service use. We process it for the purposes of analyzing the use of our website and services. We may also use usage data to deliver ads and to make recommendations via your Facebook profile, and to measure the effectiveness of Facebook ads, using the Facebook pixel mentioned in the section headed "Cookies used by our service providers" below.

1.5 We may process information contained in or relating to any enquiry or communication that you send to us or that we send to you ("**correspondence data**"). The correspondence data may include the communication content and metadata associated with the communication, as well as any contact details you may provide to us such as your name, email address, phone number, job title, address, social media username and feedback surveys. We process

correspondence data to communicate with you for purposes such as service communications, requests for feedback or participation in the interviews you mention below, support queries and so on. We may use comments and feedback in correspondence to improve our products and services and assess user experience. If you have indicated your interest in our services then we may also process correspondence data to provide you with occasional news about our services and marketing communications (although you will be free to unsubscribe at any time).

Data relating to Researchers & Participants:

1.6 We may process the account data ("**account data**") you provide to us, which may include your name, email address, phone and address. The account data may be processed for the purposes of operating our website, providing our services, ensuring the security of our website and services, and communicating with you.

1.7 If one of your friends or colleagues refers you to our service, they may provide us with your email address so we can send you an introductory email with a signup code. We will only use your email address (we'll call this a "referee email address") to send you that introductory email. We will not retain it or otherwise use it (unless you then choose to sign up for our service or mailing list).

Data relating to Participants:

1.8 We may process your information included by you in your personal profile on our website ("**profile data**"). The profile data may include your gender, date of birth, relationship status, interests and hobbies, educational details and employment details and other categories. The profile data which we process may also include *special categories of data*. This data may include data about *race, ethnic origin, politics, religion, health, sex life or sexual orientation*. We process profile data for the purposes of demographic screening.

1.9 If you use a third-party application like Facebook to log into your account on our website, then we may receive and process account data from the relevant third party, which we use to verify your login.

1.10 We may process information relating to payments we make to you ("**payments data**"), which may include your contact details, your payment account details and the transaction details. We process this for the purposes of paying rewards to you.

1.11 We may process your information provided by you for the purposes of study listings ("listing data"). This might include your name, role, institution and any further information you choose to add to the study description. We process this information in order to display study listings to potential participants in your study.

Screeners and Studies run by Prolific:

1.12 Prolific may conduct short surveys (for example, with one question) for screening purposes. Your responses to those screening surveys will be saved to your profile (and will therefore form part of your profile data as described above). Like the rest of your profile data, your responses will be used for demographic screening to establish your eligibility for studies and may contain special categories of data. Your responses can be removed by you from your profile at any time.

1.13 Prolific may also conduct surveys using the Prolific platform as a Researcher. We may process your information submitted by you in these studies ("Prolific study data"). The Prolific study data may include your gender, date of birth, relationship status, educational details, employment details and other categories. The Prolific study data which we process may also include special categories of data. This data may include data about race, ethnic origin, politics, religion, health, sex life or sexual orientation (which we will delete immediately after calculating the study results). We process Prolific study data for the purposes of research, survey eligibility, account status, data quality and fraud prevention.

1.14 Short screener surveys, and research surveys conducted by Prolific, are conducted using the 3rd party software Typeform. Typeform S.L. may collect and process personal data on our instructions and our behalf as our data processor. Typeform's privacy policy is available at https://admin.typeform.com/to/dwk6gt."

Data relating to Researchers and to our suppliers and commercial partners:

1.15 We may process information relating to transactions that you enter into with us through our website or by other means ("**transaction data**"), such as the supply or purchase of goods or services. The transaction data may include your contact details, your card details and the transaction details, and any associated documentation such as purchase orders (POs) or invoices. The transaction data may be processed for the purposes of supplying or receiving the purchased goods or services.

Our other processing

1.16 We may also process any of the data described above:

(a) for the purposes of record-keeping and hosting, back-up and restoration of our systems;

(b) as required by law or in connection with legal claims; or

(c) in order to protect your vital interests or those of another individual

Our legal bases of processing

1.17 We will process personal data only on lawful bases. In particular, we will process personal data on the following lawful bases identified in Article 6 GDPR:

(a) for the performance of a contract with you, or to take steps at your request

prior to entering into a contract with you (Article 6(1)(b) GDPR). This may be our basis for processing correspondence data, account data, profile data, payments data and transaction data;

(b) for our legitimate interests (Article 6(1)(f) GDPR). This may be our basis for processing:

i) correspondence, account and profile data, referee email addresses (as we have an in- terest in properly administering our business and communications, developing our relationships with interested parties, and using feedback to improve our products and services);

ii) transaction data and payments data (as we have an interest in making and receiving payments promptly and in recovering debts);any personal data identified in this Policy where necessary in connection with legal claims (as we have an interest in being able to conduct and defend legal claims to preserve our rights); and

iii) any personal data identified in this Policy in connection with hosting, backups and restoration of any element of our IT systems or databases containing that personal data (as we have an interest in ensuring the resilience of our IT systems and the in- tegrity and recoverability of our data);

iv) Prolific study data, as we have an interest in ensuring the quality of data provided to researchers, ensuring that users participate only in surveys for which they are eli- gible, and ensuring fraud prevention

v) listing data as we have an interest in displaying study listings to potential participants in your study.

(c) your express consent to the processing (Article 6(1)(a) GDPR). This is our lawful basis for processing special category data comprised in your profile data, or Prolific study data.

Automated decision-making

1.18 We will use your personal data for the purposes of automated decision-making in relation to survey eligibility, account status and fraud prevention.

1.19 This automated decision-making will involve assessing your account data, profile dat, usage data and Prolific study data, in order to assess eligibility, data quality and for fraud prevention.

1.20 In particular:

a) if a survey is only available to users with a specific profile (e.g. users in a specific territory or of a specific gender or level of qualification) then your eligibility may be determined automatically;

b) if your responses to screening or check questions indicate a low quality of data (for example, due to a lack of attention or accuracy in your responses) or if any data inputs indicate fraud then your eligibility to participate in our platform or in surveys may be determined automatically.

How we provide your personal data to others

Disclosures to our suppliers

1.21 We may disclose your personal data to our suppliers or contractors in connection with the uses described above. For example we may disclose:

(a) any personal data in our possession to suppliers which host the servers on which our data is stored;

(b) transaction and payments data to our payment services providers Braintree, Paypal, and Circle. We will share transaction and payments data with our payment services providers only to the extent necessary for the purposes of processing payments, refunding such payments, and dealing with complaints and queries relating to such payments and refunds. You can find information about the payment services providers' privacy policies and practices at

- https://www.braintreepayments.com/en-gb/legal/braintree-privacy-policy
- https://www.paypal.com/en/webapps/mpp/ua/privacy-full
- https://www.circle.com/en-gb/legal/eea-privacy

(c) usage data and account data for the purposes of analysing the use of the website and services, account verification and for fraud prevention, to protect ourselves and our users from attempts to commit fraud or to contravene our terms of use. Usage data may also be processed by third party providers who deliver ads. In particular, Facebook pixel data may be processed by Facebook in accordance with their own Data Policy.

Disclosures to Researchers

1.22 We will not disclose personal data between Participants and Researchers, although Researchers will see anonymised demographic data relating to Participants for screening purposes. If you are a Participant and you agree to participate in any study posted by a Researcher, then any personal data you disclose to the Researcher (whether through Prolific or otherwise) will be used by that Researcher as a data controller in its own right, and we are not responsible for any such use. If you are a Researcher, then it is your responsibility to ensure that you have performed your legal obligations as data controller in relation to any personal data you may receive, and in particular to ensure that you have provided all information required by law prior to the collection of any such personal data and ensured that any transfer of such personal data outside the EEA is lawful.

Other disclosures by us

1.23 We may disclose your personal data as necessary to comply with law (e.g., to Government or law enforcement) or in order to protect your or another individuals vital interests. We may also disclose your personal data where necessary for us to establish, exercise or defend legal claims.

1.24 We may disclose your personal data to our legal or professional advisors in

order to take advice, but will do so under obligations of confidentiality.

1.25 If any part of our business or operations is sold or transferred to, or integrated with, another organisation (or if we enter into negotiations for those purposes), your personal data may be disclosed to that organisation.

International transfers of your personal data

1.26 Some of the third parties to whom we may transfer your personal data, discussed above, may be located outside the EEA or may transfer your personal data to their own service providers located outside the EEA. If so, then we will ensure that transfers by our appointed data processors will only be made lawfully (e.g., to countries in respect of which the European Commission has made an "adequacy decision", or with appropriate safeguards such as the use of standard clauses approved by the European Commission or the use of the EU-US Privacy Shield). You may contact us if you would like further information about these safeguards.

1.27 Personal data that you submit for publication through our website or services or otherwise make visible to other users may be available, via the internet, to others around the world. We cannot prevent the use (or misuse) of such personal data by others. For example, if you are a Researcher and publish study details including your name, this may be visible to other users.

1.28 Researchers may be located outside the EEA and, as described above, are responsible for ensuring that any transfer of personal data to them in connection with any study is lawful.

How we retain and delete personal data

1.29 We comply with our legal obligations in relation to the retention and deletion of personal data, and in particular ensure that personal data that we process is not to be kept for longer than is necessary for the relevant purposes.

1.30 We will retain your personal data as follows:

(a) most data associated with any account on our website (including account data, profile data, and correspondence data) will be kept during the life of the account and then deleted no more than twelve (12) months after account closure. If an account is dormant for more than twelve (12) months then we may close that account and delete all associated data. As an exception, we may retain data related to dormant accounts if they have any outstanding balances associated with them, until that balance has been cleared, in order to ensure we can pay out or dispose of that balance lawfully. You can also delete some profile data yourself (for example by deleting answers to your screening questions) in which case we will cease to process that data;

(b) correspondence data which relates only to enquiries and not to any business relationship with us or any account will be retained for the period of the enquiry or chain of correspondence and then deleted after approximately twelve months;

(c) transaction and payments data will be retained for up to seven (7) years following the relevant transaction or payment (as we are obliged to keep records for tax compliance purposes);
(d) encrypted phone numbers may be stored for up to seven (7) years for the purposes of fraud prevention
(e) correspondence data relating to any business relationship we may have with any person may be retained for approximately six years after the end of the relevant business relationship (in order to ensure that we have kept records of that business relationship for the applicable limitation periods prescribed by law);
(f) usage data will be deleted within twelve (12) months of creation.
(g) will will we potentially keep study data up to 12 months, but in the case of study data which is special category data, will delete it immediately after processing.
(h) Prolific study data will be deleted within twelve (12) months of creation, except where it is special category data, which we will delete immediately after calculating the study results.
(i) we will delete referee email addresses immediately after sending the introductory email and signup code.

1.31 We may retain your personal data longer:
(a) to comply with law;
(b) to protect your vital interests or those of another individual; or
(c) in connection with any legal claims (to the extent those claims are continuing after the end of the relevant retention period).

1.32 Finally, we may create anonymized or aggregated records relating to demography or the use of our website or services, from which no individual is identifiable (for example, it might be useful for us to track the overall demographics of users of our website). We may retain those records, which are not personal data, indefinitely.

Security of personal data

1.33 We will take appropriate technical and organisational precautions to secure your personal data and to prevent the loss, misuse or alteration of your personal data.

1.34 We will store all your personal data on secure servers, personal computers and mobile devices.

1.35 Data relating to your financial transactions that is sent from your web browser to our web server, or from our web server to your web browser, will be protected using encryption technology.

1.36 You should ensure that your password is not susceptible to being guessed, whether by a person or a computer program. You are responsible for keeping the password you use for accessing our website confidential and we will not ask you for your password (except when you log in to our website).

Amendments

1.37 We may update this Notice from time to time by publishing a new version on our website.

1.38 You should check this page occasionally to ensure you are happy with any changes to this Notice.

1.39 We may notify you of changes to this Notice by email or through our website.

Your rights

1.40 We have summarized below the rights that you have under data protection law. Some of the rights are complex, and not all of the details have been included in our summaries. You can read guidance from the Information Commissioner's Office at www.ico.org.uk for a fuller explanation of your rights. In particular, you have:

(a) **the right to access**: if requested, we must confirm what personal data of yours we process, and must provide you with access to that data and further information about our processing;

(b) **the right to rectification**: if requested, we must correct or complete any inaccurate or incomplete personal data of yours;

(c) **the right to erasure**: you can request that we erase your personal data in limited circumstances (e.g., if we use it for marketing or no longer need it for our other purposes). This is not an absolute right and we may be entitled to retain your data where necessary (e.g., to comply with law);

(d) **the right to restrict processing**: you can request that we restrict the processing of your personal data in limited circumstances. Where processing has been restricted, we may continue to store your personal data and will observe the restrictions on processing except in the case of processing permitted by applicable law (for example, in connection with legal claims or for reasons of public interest);

(e) **the right to object to processing**: you can object to our processing of your personal data on the basis of our legitimate interests. We may be entitled to continue processing in certain circumstances (e.g., if we have compelling grounds to do so, or to comply with law);

(f) **the right to data portability**: you have a right to receive your data from us in an easily- portable format in limited circumstances: that is, if we process that data on the basis of a contract with you and by automated means. This is unlikely to apply in most circumstances; and

(g) **the right to complain**: if you believe we are in breach of applicable law, you can complain to the Information Commissioner's Office (in the UK) or, if you live or work in another EU member state, a supervisory authority responsible for data protection in that member state.

1.41 You may exercise any of your rights in relation to your personal data by written notice to us.

Third parties

1.42 Our website includes hyperlinks to, and details of, third party websites.

1.43 We have no control over, and are not responsible for, the privacy policies and practices of third parties, including (for example) Researchers, third party survey platforms, or social media operators.

Personal data of children

1.44 Our website and services are targeted at persons over 18.

1.45 If we have reason to believe that we hold personal data of a person under that age in our databases, we will delete that personal data.

Updating information

In most cases we provide you the facility to update this via our platform. Otherwise please let us know if the personal information that we hold about you needs to be corrected or updated.

About cookies

1.46 When you use the Site it will store data on your device by two methods: web storage and cookies. Web storage means the storage of data within your browser. A cookie is a small file, which is stored on the device which you use to access the Site. You can read more about web storage at https://en.wikipedia.org/wiki/Web_storage and about cookies at http://aboutcookies.org.

The web storage and cookies we use allow us to monitor the use of the Site and to improve our service offering. The following section describes what kinds of cookies we use.

Cookies that we use

1.47 We use cookies for the following purposes:

(a) authentication – we use cookies to identify you when you visit our website and as you navigate our website;

(b) status – we use cookies to help us to determine if you are logged into our website; and

(c) cookie consent – we use cookies to store your preferences in relation to the use of cookies more generally.

Cookies used by our service providers

1.48 Our service providers use cookies and those cookies may be stored on your computer when you visit our website.

1.49 We use Google Analytics to analyse the use of our website. Google Analytics gathers information about website use by means of cookies. The information gathered relating to our website is used to create reports about the use of our website. Google's privacy policy is available at: https://www.google.com/policies/privacy/

1.50 We use Google reCAPTCHA for fraud prevention. Google reCAPTCHA gathers information by means of cookies. Google's privacy policy is available at: https://www.google.com/policies/privacy/

1.51 We use Amplitude to analyse the use of our website. Amplitude gathers information about website use by means of cookies. The information gathered relating to our website is used to create reports about the use of our website. Amplitude's privacy policy is available at: https://amplitude.com/privacy

1.52 We use Appcues to host content. Appcues gathers information by means of cookies. Appcues's privacy policy is available at https://www.appcues.com/privacy

1.53 We use Helpscout to communicate with our users. Helpscout gathers information by means of cookies. Helpscout's privacy policy is available at https://www.helpscout.net/company/legal/privacy/

1.54 We use Zendesk to communicate with our users. Zendesk gathers information by means of cookies. Helpscout's privacy policy is available at https://www.zendesk.co.uk/company/customers-partners/privacy-policy/

15.6 We use Pusher to handle realtime data updates Pusher gathers information by means of cookies. https://pusher.com/legal/privacy-policy

15.7 We use the Facebook pixel to show ads and to make recommendations for businesses and other organisations who may be interested in our products. Facebook gathers information by means of cookies For information about how Facebook uses cookies and other storage technologies https://www.facebook.com/policies/cookies/

Managing cookies

1.55 Most browsers allow you to refuse to accept cookies and to delete cookies. The methods for doing so vary from browser to browser, and from version to version. You can however obtain up-to-date information about blocking and deleting cookies via these links:

(a) https://support.google.com/chrome/answer/95647?hl=en (Chrome);
(b) https://support.mozilla.org/en-US/kb/enable-and-disable-cookies-website-preferences (Firefox);
(c) http://www.opera.com/help/tutorials/security/cookies/ (Opera);
(d) https://support.microsoft.com/en-gb/help/17442/windows-internet-explorer-delete- manage-cookies (Internet Explorer);
(e) https://support.apple.com/kb/PH21411 (Safari); and
(f) https://privacy.microsoft.com/en-us/windows-10-microsoft-edge-and-privacy (Edge).

1.56 Blocking all cookies will have a negative impact upon the usability of many websites.

1.57 If you block cookies, you will not be able to use all the features on our website.

Our details

1.58 This website is owned and operated by Prolific Academic Ltd.

1.59 We are registered in England and Wales under registration number 08991598, and our registered office is at 81 St. Clements Street, The Wheelhouse, Angel Court First Floor, Oxford, Oxfordshire, England, OX4 1AW.

1.60 Our principal place of business is at 81 St. Clements Street, The Wheelhouse, Angel Court First Floor, Oxford, Oxfordshire, England, OX4 1AW.

1.61 You can contact us:

(a) by post, to the postal address given above;

(b) using our website contact form;

(c) by email, using support@prolific.ac.

Data protection registration

1.62 We are registered as a data controller with the UK Information Commissioner's Office.

1.63 Our data protection registration number is ZA317731.

Data Protection Officer

Our data Protection Officer's contact details are: *dpo@prolific.ac*

Appendix E: SurveyMonkey Privacy Policy

1. Introduction

This Privacy Policy applies to all the products, services, websites and apps offered by SurveyMonkey Inc., SurveyMonkey Europe UC, SurveyMonkey Brasil Internet Eireli, Usabilla BV, and other SurveyMonkey affiliates (collectively "SurveyMonkey"), except where otherwise noted. We refer to those products, services, websites and apps collectively as the "services" in this policy. Unless otherwise noted in your contract, our services are provided by SurveyMonkey Inc. inside of the United States, by SurveyMonkey Brasil Internet Eireli inside of Brazil, and by SurveyMonkey Europe UC everywhere else.

References to "data" in this Privacy Policy will refer to whatever data you use our services to collect, whether it be survey responses, data collected in a form, or data inserted on a site hosted by us – it's all your data! Reference to personal information or just information, means information about you personally that we collect or for which we act as custodian.

2. Information we collect

2.1 Who are "you"?

We refer to "you" a lot in this Privacy Policy. To better understand what information is most relevant to you, see the following useful definitions.

Creators

You hold an account within a SurveyMonkey service and you either directly create surveys, forms, applications, or questionnaires or you are collaborating on, commenting on, or reviewing surveys, forms, applications, or questionnaires within an account.

Respondents

You have received a survey, form, application, or questionnaire powered by a SurveyMonkey service.

Panelists

You have signed up and agreed to take surveys sent to you by SurveyMonkey on behalf of creators. We deal with panelists in an entirely separate section of our Privacy Policy, which you can read here.

Website Visitor

You are just visiting one of our websites because you are Curious or you have heard about us from our marketing and sales channels!

2.2 Information we collect about you.

- Contact Information (for example name or email address).
  You might provide us with your contact information, whether through use of our services, a form on our website, an interaction with our sales or customer support team, or a response to one of SurveyMonkey's own surveys.
- Usage information.
  We collect usage information about you whenever you interact with our websites and services. This includes which webpages you visit, what you click on, when you perform those actions, what language preference you have, what you buy and so on.
- Device and browser data.
  We collect information from the device and application you use to access our services. Device data mainly means your IP address, operating system version, device type, device ID/MAC address, system and performance information, and browser type. If you are on a mobile device we also collect the UUID for that device.
- Information from page tags.
  We use first party and third party cookies and tracking services that employ cookies and page tags (also known as web beacons) to collect data about visitors to our websites. This data includes usage and user statistics. Emails sent by SurveyMonkey or by users through our services also include page tags that allow the sender to collect information about who opened those emails and clicked on links in them. We provide more information on cookies below and in our Cookies Policy.
- Log Data.
  Like most websites today, our web servers keep log files that record data each time a device accesses those servers. The log files contain data about the nature of each access, including originating IP addresses, internet service providers, the files viewed on our site (e.g., HTML pages, graphics, etc.), operating system versions, device type and timestamps.
- Referral information.
  If you arrive at a SurveyMonkey website from an external source (such as a link on another website or in an email), we record information about the source that referred you to us.
- Information from third parties and integration partners.
  We collect your personal information from third parties where, for example, you give permission to those third parties to share your information with us or where you have made that information publicly available online.

If you are a Creator we may also collect:
Account Information

- Registration information.
  You need a SurveyMonkey account before you can use SurveyMonkey services. When you register for an account, we collect your first and last name, username,

password and email address. If you choose to register by using a third party account (such as your Google or Facebook account), please see "Information from third parties" below.

- Billing information.
  If you make a payment to SurveyMonkey, we require you to provide your billing details, a name, address, email address and financial information corresponding to your selected method of payment (e.g. a credit card number and expiration date or a bank account number). If you provide a billing address, we will regard that as the location of the account holder to determine which SurveyMonkey entity with whom you contract and the sales tax, if applicable, to be applied to your purchase.
- Account settings.
  You can set various preferences and personal details on pages like your account settings page (or in your account settings page for our other products as applicable). For example, your default language, time zone and communication preferences (e.g. opting in or out of receiving marketing communications from SurveyMonkey).

Use of some of our services will also result in us collecting the following data on your behalf:

- Address book information.
  We may allow you to import email addresses and other contact information into an Address Book so you can easily invite people to take your surveys or fill in your form via our collectors. We don't use this data for our own purposes or contact anyone, except at your direction.
- Survey/form/application data.
  We store your survey/form/application data (questions and responses) for you and provide analysis tools for you to use with respect to this data.
- Profile information.
  When you sign up for our services you are asked to provide us with information about yourself and to give us more detailed insights into who you are.

3. How we use the information we collect

3.1 Creator

We process personal data about you either with your consent or in order to:

· Fulfill our contractual responsibility to deliver the services to you;
· To pursue SurveyMonkey's legitimate interests of:
· improving service experience; and
· developing new products and service features.

In each of the instances where we describe how we use your data in this privacy policy, we have identified which of these grounds for processing we are relying upon.

You have consented to us using certain types of tracking and third party cookies on our websites. In particular:

Cookies and Similar technology.
We or third party data and advertising platforms that we work with may use or combine multiple technologies, such as cookies, page tags, mobile identifiers and IP addresses to infer users' common identities across different services and multiple devices such as tablets, browsers, and mobile phones. We may do so, for instance, to tailor ads to users, to enable us to determine the success of our advertising campaigns and to improve upon them. These third party data and advertising platforms may sometimes use data that we provide to them in order to improve their technologies and their ability to match common devices to users. We also may also use this technology to allow a Creator to measure the performance of their email messaging and to learn how to improve email deliverability and open rates.

More details: The above data and techniques are used for personalized marketing, analytics, and related purposes. To learn more about interest-based advertising and how to opt-out of it, please see our Cookies Policy in Section 6. We use this data to personalize online marketing campaigns to be relevant to you and your interests in our services. By clearing your cookies in your browser settings you will no longer see personalized messages in this way but you continue to see ads over the internet that are not based on information you provided to SurveyMonkey.

We process your personal information in the following categories of data for legitimate interests pursued by us, which are described in detail in this Privacy Policy. We have undertaken to ensure that we place clear limitations on each of these uses so that your privacy is respected and only the information necessary to achieve these legitimate aims is used. Our primary goal is to improve upon and make sure our services and messaging are relevant for all our users, while also ensuring that personal information of all users is respected and protected.

Contact Information.
We use contact information to respond to your inquiries, send you information as part of the services, and send you marketing information (for as long as you do not opt-out).
More details: We use your email address to send you marketing (newsletters), unless you indicate a preference to opt-out and for general updates on your account. You can opt out of marketing communications at any time by clicking on the "unsubscribe" link in them and changing the relevant setting on your My Account page.

How you use our services.
We use information about how you use our services to improve our services for you and all users.

More details: We collect information about the types of surveys/forms/applications you create (e.g. HR surveys), the types of plans you purchase and your account transactional behavior to build a profile about you so as to help direct you and your organization to other relevant features and services we offer and help you in using our services, for

example by making recommendations for you to optimize use of our services.

Device and browser data.
We use device data both to troubleshoot problems with our service and to make improvements to it. We also infer your geographic location based on your IP address.

More details: We collect this to help us improve your service experience through a specific device/browser by optimizing how the website looks in a particular browser, how your screen brightness affects your experience and to ensure the service operates optimally and as it should on different devices and browsers.

Log data.
We use log data for many different business purposes to include:
· To monitor abuse and troubleshoot.
· To create new services, features, content or make recommendations.
· To track behavior at the aggregate/anonymous level to identify and understand trends in the various interactions with our services.
· To fix bugs and troubleshoot product functionality.

More details: Your IP address is used to determine where an unknown/unauthorized access may have occurred in your account (abuse monitoring).

Referral information.
We use referral information to track the success of our integrations and referral processes.
Third parties and integrations.
We collect and use information from third parties and integration partners, where applicable to one of our services, to:
· Ensure you can sign-up to our service from a third party integration like Facebook/LinkedIn/Microsoft/Google/SSO;
· To personalize our services for you; and
· Ensure you can use our service in conjunction with other services.
See further information here on our API partners – for other SurveyMonkey services see below or on the website for that service.

Service and Marketing uses.
· Profiling. We combine information about you from third party sources with information we hold about you to create a user profile, which will help us to make our sales and marketing efforts more relevant to you and to personalize and improve your service experience.
· Machine learning. We use machine learning techniques on certain data in order to provide users with useful statistics and more relevant insights from the data they have collected using our services and to optimize our marketing campaigns and for fraud detection. For example, if you have used open text questions in a survey, our machine learning may provide you with useful insights into the trends in responses to that question

in our Analyze survey tool.

· To manage our services we will also internally use your information and data, for the following limited purposes:

· To enforce our agreements where applicable.

· To prevent potentially illegal activities.

· To screen for and prevent undesirable or abusive activity. For example, we have automated systems that screen content for phishing activities, spam, and fraud.

Legal uses.

To respond to legal requests or prevent fraud, we may need to use and disclose information or data we hold about you. If we receive a subpoena or other legal request, we may need to inspect the data we hold to determine how to respond.

We collect and use the following on the basis that we have to use this information in order to fulfill our contract with you:

Your Account Information.

We need to use your account information to run your account, provide you with services, bill you for our services, provide you with customer support, and contact you about your service or account. We occasionally send you communications of a transactional nature (e.g. service-related announcements, billing-related matters, changes to our services or policies, a welcome email when you first register). You cannot opt out of these communications since they are required to provide our services to you.

Your Profile.

We process other aspects of your account information (like the personal information you provide about your job, your job title, and your marketing preferences) as well as information obtained from public sources, for legitimate interests like providing you with a personalized experience and relevant and useful marketing information as well as to make other product, feature and service recommendations to you and your organization to optimize use of the services we offer.

You can object to us using your information as described above but in some cases, our ability to fully and properly provide our services to you may be impacted if you do not want us to collect or use the above data.

In relation to Survey Data

Your Data.

We also use survey questions and responses on an aggregated and anonymized basis as described in this Privacy Policy. We will never sell individual response data or identify / contact individual respondents except on your request or where required by law. Feature descriptions will identify where this is feature linked. In some cases you can avoid the use of your questions/responses in this way by simply choosing not to use a feature or by indicating your preferences in your account. See our “Respondent” section.

3.2 Respondent

We process your personal information in the following categories of data for legitimate interests pursued by us, which are described in detail in this Privacy Policy. We have undertaken to ensure that we place clear limitations on each of these uses so that your privacy is respected and only the information necessary to achieve these legitimate aims is used. Our primary goal is to improve upon and make sure our services and messaging are relevant for all our users, while also ensuring that personal information of all users is respected and protected.

Cookies (to include page tags).

We collect information using cookies when you take a survey. These cookies are used to ensure that the full functionality of our survey service is operational, to ensure the survey operates appropriately and optimally. For more information please read our Cookies section below and our Respondent Cookies Policy. After completion of a survey, in most cases, you will be re-directed to our website and treated as a website visitor where other cookies may be used so you should read our Website Visitor section if this is of interest to you.

Examples

We use page tags to allow the email sender (for a survey or form for example) to measure the performance of email messaging and to learn how to improve email deliverability and open rates. We also use cookies to ensure a respondent can only take a survey once (where the Creator has set this function) and to track completion rates of surveys.

Contact Information.

We only use contact information to respond to an inquiry which you, as a Respondent, submit to us.

Examples

Our customer support team use your email address to communicate with you if you have contacted us about a survey, form, application or questionnaire you received, but we will not send marketing to you unless you have otherwise opted-in to marketing.

How you use our services (applicable to survey Respondents only).

We use information about how you use our services to improve our services for you and all users.

Examples

We collect information about the types of questions you answer. This data will be aggregated and anonymized so we can examine patterns in terms of respondent preferences when submitting responses (see further below in Information for Survey Respondent section). We collect and use all this data for our legitimate interests like helping us improve the experience for respondents (so that questions are easier to answer), for training purposes and to understand industry trends in and to help improve the completion rates on surveys/forms.

We will also use usage information such as the type of survey, form, questionnaire or application that you answered to personalize products we show you on completion of a survey when you are re-directed to our website.

Device and browser data.
We use device data both to troubleshoot problems with our service and to make improvements to it. We also infer your geographic location based on your IP address.

Other Examples

We collect this to ensure that service experience works well across all possible devices and to infer geographic location to produce aggregated data around Respondent location trends. We also want to use this information to provide an additional data layer to Creators so that they can filter responses by e.g. inferred geographic location. Note however, that we do not collect precise GPS co-ordinate location. We just infer location from IP address. Finally we will use this information to compare and look at trends on how our service operates and how you interact with surveys, on different browsers and devices.

Log data.
We use log data for many different business purposes to include:

- To monitor abuse and troubleshoot.
- To create new services, features, content or make recommendations.
- To track behavior at the aggregate/anonymous level to identify and understand trends in the various interactions with our services.
- To fix bugs and troubleshoot product functionality.

Examples

Your IP address is used to ensure that you do not complete the same survey, form, application or questionnaire twice if the creator has included settings to avoid this (ballot stuffing), for abuse monitoring purposes (so we can identify a Respondent who abused the survey taking experience in a manner contrary to our usage policies or to facilitate the Creator in complying with their own legal obligations). We also collect log data to collate aggregated data and metrics on activity at a non-identifying level and so that we can identify trends in survey taking over time.

Third parties and integrations.
We will collect and use information from third parties and integration partners to facilitate Creators in sending surveys/forms/applications/questionnaires to you.

Machine learning.
We will use machine learning techniques on response data, metadata (as described above) and cookie data, in order to provide Creators with useful and relevant insights from the data they have collected using our services, to build features, improve our services, for fraud detection and to develop aggregated data products. You can read more about this in relation to SurveyMonkey surveys below.

- To manage our services we will also internally use your information and data, for the following limited purposes:
- To enforce our agreements where applicable.
- To prevent potentially illegal activities.
- To screen for and prevent undesirable or abusive activity. For example, we have

automated systems that screen content for phishing activities, spam, and fraud.

Legal uses.
To respond to legal requests or prevent fraud, we may need to disclose any information or data we hold about you. If we receive a subpoena or other legal request, we may need to inspect the data we hold to determine how to respond.

Use of survey responses (SurveyMonkey surveys only)
In general survey responses to SurveyMonkey surveys are controlled and managed by the Creator (the person who sent or deployed that survey). In those instances SurveyMonkey is only processing those responses on behalf of the Creator.
Creator and Respondent trust is paramount to everything we do and so when we do use data about Respondents, we put Creators and Respondents first. When we do analysis of response data we only do so once we have ensured the anonymity of individual respondents (by aggregating and anonymizing the data).
Our goal is to improve the user experience across SurveyMonkey survey services while maintaining the confidentiality and privacy of responses.
We go into more detail below on how SurveyMonkey uses survey data. A Creator has some controls over how we use responses in their Account settings and may have turned off our ability to apply machine learning to responses where it is feature linked.
SurveyMonkey uses data in the ways described below, for our legitimate interests as described in this section:
The data impacted by this section includes:
· Survey type, question type and responses (at an aggregated and anonymized level only)
· Device data
· Log data
SurveyMonkey will use automated processes and machine learning, to analyze survey responses, which in turn helps us to:
Aggregate response data and activity: We will aggregate responses, activity and behavior of Respondents so that we can identify trends, build product features that optimize responses, make product recommendations and provide guidance on which products and services work best in different scenarios. These product features also provide feedback and recommendations to increase response rates. For an example of this check out how SurveyMonkey Genius works. See more about SurveyMonkey Genius here.
· Extract and analyze usage patterns: By understanding response data and Respondent interaction in different types of surveys we can:
· improve our services and ease of use: for example, we might identify when respondents prefer multiple choice versus open text questions and make predictive response suggestions when certain question types are selected. We might also use this data to help improve analysis of responses,
· undertake personalization for survey Creators and Respondents (for example by customizing the page on our website which a Respondent sees at the end of a survey - See more about Customizing Survey End Page here.). If a Respondent does not want to

be included in this personalization they can clear the cookies in their browser settings after taking a survey,

· improve user experience (for example, by collecting and using device and browser information from Respondents to improve how our survey service operates on those devices and in those browsers), and

· identify insightful data trends (which never identify any individuals).

4. Information you share

Many of our services let you share information with others. Remember that when you share information publicly, it can be indexable by search engines. Our services provide you with different options on sharing and deleting your content but we cannot delete content from search engines so you need to be careful about information you make public.

5. Information we share

We do not share your information or data with third parties outside SurveyMonkey except in the following limited circumstances:

· If you are a Creator that is part of a team plan or Enterprise plan using SurveyMonkey, your account information and data will be shared with the primary administrator(s) and your survey data may also be visible to other members in your team with whom you share your surveys or with whom you collaborate. Your administrator(s) will be able to view your account data, change your passwords, suspend, transfer or terminate your account or restrict your settings. Please refer to your organization's internal policies if you have questions about this.

· If your organization has purchased an Enterprise account and you are using an email address on a domain owned by your employer or organization linked to your individual account, you may be asked to migrate to the Enterprise Account and your email address, name and account data will subsequently be visible to the primary administrator for that account once you have been migrated. You may be notified in advance of this migration and given an opportunity to change the email address linked to your account if you are not using your account for business purposes.

· To help us provide certain aspects of our services we use our affiliates and trusted key partners – in particular, we engage third parties to:

· facilitate our email collectors for sending surveys by email to Respondents.

· facilitate customers in making payments.

· deliver and help us track our marketing and advertising content.

· help us track website conversion success metrics.

· manage our sales and customer support services to you.

We enter into confidentiality and data processing terms with partners to ensure they comply with high levels of confidentiality and best practice in privacy and security standards and we regularly review these standards and practices.

· On your instructions, we share your information or data if you choose to use an integration in conjunction with SurveyMonkey services, to the extent necessary to facilitate that use. See further information here on our API partners.

· We also may have to share information or data in order to:
· meet any applicable law, regulation, legal process or enforceable governmental request.
· enforce applicable policies, including investigation of potential violations.
· detect, prevent, or otherwise address fraud, security or technical issues.
· protect against harm to the rights, property or safety of our users, the public or to SurveyMonkey and/or as required or permitted by law.
· facilitate a sale, merger or change in control of all or any part of our company or business or in preparation for any of these events.

Where we use any third parties to assist us in service delivery for you (the Creator), and they process your data as part of that service, we provide a list of these third parties which is available on completion of this form. This form contains a list of all sub-processors used across all services covered by this Privacy Policy so please keep in mind that your service may only be impacted by a subset of these sub-processors.

6. Cookies

We and our partners use cookies and similar technologies on our websites. For more information see our Cookies Policy. For information about cookies used in our surveys please see Cookies used on Survey Pages. If you are a customer of SurveyMonkey and separately use cookies or similar technologies in conjunction with any of our products and services, then you yourself will be responsible for complying with any laws related to the use of those technologies and this Privacy Policy is not applicable to that use by you. We use certain cookies, as described in our Cookies Policy and here in our Privacy Policy, that you agree to when you use our sites and, in the case of some cookies, for legitimate interests of delivering and optimizing our services (where the cookie delivers essential functionality). Cookies are small bits of data we store on the device you use to access our services so we can recognize repeat users. Each cookie expires after a certain period of time, depending on what we use it for. We use cookies and similar technologies for several reasons:

· To gather metrics about your survey taking experience. For example, we will collect data about the number of clicks it took Respondents to complete a survey, whether they left and returned to a survey, whether they skipped parts of a survey and how long it took to complete the survey and other details about the survey taking. However, this information is collated and kept at an aggregated and anonymized level only.
· To make our site easier to use. Creators if you use the “Remember me” feature when you sign into your account, we store your username in a cookie to make it quicker for you to sign in whenever you return to SurveyMonkey.
· For security reasons. We use cookies to authenticate your identity and confirm whether you are currently logged into SurveyMonkey or determine if an incident impacts you.
· To provide you with personalized content. We store user preferences, your default language, device and browser information, your profile information which includes, the level of usage of service and the web-pages on our site which you visit, so we can identify you across devices and personalize the content you see.

· To improve our services. We use cookies to measure your usage of our websites and track referral data, as well as to occasionally display different versions of content to you. This information helps us to develop and improve our services (it helps us focus on the parts of the service you seem most interested in) and optimize the content we display to you (which may include marketing content).
· To advertise to you. We, or our service providers and other third parties we work with, place cookies when you visit our website and other websites or when you open emails that we send you, in order to provide you with more tailored marketing content (about our services or other services), and to evaluate whether this content is useful or effective. For instance, we evaluate which ads are clicked on most often, and whether those clicks lead users to make better use of our tools, features and services. If you don't want to receive ads that are tailored to you based on your online activity, you may "opt out" of many of the companies that are involved in such tailoring by going to https://www.aboutads.info, https://preferences-mgr.truste.com/ or, if you're located in the European Union, at https://www.youronlinechoices.eu. Opting out in this way does not mean you will not receive any ads; it just means that you will not receive ads from such companies that have been tailored to you based on your activities and inferred preferences.
· Google Analytics. In addition to the above, we have implemented on our websites and other services certain Google Analytics features that support Display Advertising, including re-targeting. Visitors to our websites may opt out of certain types of Google Analytics tracking, customize the Google Display Network ads by using the Google Ad Preferences Manager and learn more about how Google serves ads by viewing its Customer Ads Help Center. If you do not wish to participate in Google Analytics, you may also download the Google Analytics opt-out browser add-on.
You can choose to remove or disable cookies via your browser settings.

7. Security
We have a security statement related to our self-serve businesses (SurveyMonkey and Wufoo) available to view here. For information about security related to our other business lines you can speak to a sales representative by completing the form here.

8. Data Retention
If you hold an account with SurveyMonkey we do not delete the data in your account – you are responsible for and control the time periods for which you retain this data. There are controls in your account where you can delete data at the account level (all data in your account) and at the response level. If you are a Respondent, you will need to ask the Creator how long your responses will be stored in SurveyMonkey services.
We also describe the expiry periods for cookies on our websites in our cookies policy.

9. Safety of Minors
Our services are not intended for and may not be used by minors. "Minors" are individuals under the age of 13 (or under a higher age if permitted by the laws of their residence). SurveyMonkey does not knowingly collect personal data from Minors or

allow them to register. If it comes to our attention that we have collected personal data from a Minor, we may delete this information without notice. If you have reason to believe that this has occurred, please contact customer support.

10. Data Transfers and Privacy Shield Certification

Your information and data may be processed in and transferred or disclosed in the United States and countries in which our affiliates are located and in which our service providers are located or have servers. You can view where our affiliates are located on the Office Locations page.

EU-U.S. Privacy Shield and Swiss-U.S. Privacy Shield.

SurveyMonkey Europe UC has entered into contractual terms to include standard contractual clauses with SurveyMonkey Inc. for the transfer of data to SurveyMonkey Inc. as part of delivery of service. SurveyMonkey Inc. is located in the United States and accordingly, data (to include Respondent data) will be transferred to the United States. SurveyMonkey Inc. participates in and has certified its compliance with the EU-U.S. Privacy Shield Framework and Swiss-U.S. Privacy Shield. SurveyMonkey is committed to subjecting all personal information received from European Union (EU) member countries and Switzerland, in reliance on the Privacy Shield Framework, to the Framework's applicable Principles. To learn more about the Privacy Shield Framework, visit the U.S. Department of Commerce's Privacy Shield List. https://www.privacyshield.gov/.

SurveyMonkey also complies with the Privacy Shield Principles for all onward transfers of personal data from the EU and Switzerland, including the onward transfer liability provisions.

When SurveyMonkey receives personal information under the Privacy Shield and then transfers it to a third-party service provider acting as agent on SurveyMonkey's behalf, SurveyMonkey has certain liability under the Privacy Shield if both (i) the agent processes the information in a manner inconsistent with the Privacy Shield and (ii) SurveyMonkey is responsible for the event giving rise to the damage. With respect to personal data received or transferred pursuant to the Privacy Shield Framework, SurveyMonkey is subject to the investigatory and enforcement powers of the U.S. Federal Trade Commission. In certain situations, SurveyMonkey may be required to disclose personal data in response to lawful requests by public authorities, including to meet national security or law enforcement requirements.

Please contact SurveyMonkey as described in Section 14 below if you have any concerns or complaints of any nature. If you have an unresolved privacy or data use concern that we have not addressed satisfactorily, please contact our U.S.-based third party dispute resolution provider, (free of charge) at https://www.jamsadr.com/file-an-eu-us-privacy-shield-claim.

Under certain conditions, more fully described on the Privacy Shield website https://www.privacyshield.gov/article?id=How-to-Submit-a-Complaint, you may invoke binding arbitration when other dispute resolution procedures have been exhausted.

11. Changes to our Privacy Policy
We can make changes to this Privacy Policy from time to time. We will identify the changes we have made on this page. In circumstances where a change will materially change the way in which we collect or use your personal information or data, we will send a notice of this change to all of our account holders.

12. Personalized marketing
You can opt-out from direct marketing in your account and we provide opt-out options in all direct marketing emails. Finally, if you do not wish to see personalized marketing content on the web related to our service you can clear the cookies in your browser settings. See our Help Center article on how to do this here.

13. Who is my data controller?
As mentioned above – all response data at an individual level is controlled by the Creator. SurveyMonkey can be a data controller of data about Respondents only in the very limited ways described in the section here called "How we use the information we collect - Respondent". To the extent that is the case we have identified the correct controller below.
For Creators, Respondents, Website Visitors and Panel who are addressed in this privacy policy and who are located outside the United States, your data controller is SurveyMonkey Europe UC to the extent that it is processing your personal data. For Usabilla please see section 16.4.

14. Your rights
For SurveyMonkey Apply users please see information on how to exercise your rights here. This section describes the rights you may have generally as a customer of any SurveyMonkey service.
You may wish to exercise a right to obtain information about yourself or to correct, update or delete that information. For more information about these rights you can read about ithere. Some of these rights may be subject to some exceptions or limitations in local law. Please note your rights and choices vary depending upon your location. We will take reasonable steps to verify your identity and we will respond to your request to exercise these rights within a reasonable time (and in all cases within 30 days of receiving a request) subject to the below for specific categories of person.

- Creator
- Respondent
- Visitor

Other rights and choices

- For rights and choices specific to California consumers click here. Please note we will take reasonable steps to verify your identity and the authenticity of your request. Once verified, we will maintain your request in the event our practices change.

15. Exercising your rights

Except as explicitly provided herein, please use the following Contact Information for Privacy Inquiries

SurveyMonkey Inc.
1 Curiosity Way
San Mateo, California 94403
United States

Or contact us here.

SurveyMonkey Europe UC
2 Shelbourne Buildings,
Second Floor,
Shelbourne Rd,
Ballsbridge
Dublin 4,
Ireland

Or contact us here.

Note that our contact form is the best way to make a rights request with us.

Complaints

If you are resident in the European Union and you are dissatisfied with how we have managed a complaint you have submitted to us, you are entitled to contact your local data protection supervisory authority. As SurveyMonkey Europe UC operates its business in Ireland, it operates under the remit of the Irish Office of the Data Protection Commissioner (see: ODPC Website)

Appendix F: SurveyMonkey Security Policy

LAST UPDATED: JANUARY 27TH, 2020

This Security Statement applies to the products, services, websites and apps offered by SurveyMonkey Inc., SurveyMonkey Europe UC, SurveyMonkey Brasil Internet Ltda. and their affiliates (collectively "SurveyMonkey"), which are branded as "SurveyMonkey" and "Wufoo", except where otherwise noted. We refer to those products, services, websites and apps collectively as the "services" in this Statement. This Security Statement also forms part of the user agreements for SurveyMonkey and Wufoo customers.

SurveyMonkey values the trust that our customers place in us by letting us act as custodians of their data. We take our responsibility to protect and secure your information seriously and strive for complete transparency around our security practices detailed below. Our Privacy Policy also further details the ways we handle your data.

Physical Security

SurveyMonkey's information systems and technical infrastructure are hosted within world-class, SOC 2 accredited data centers. Physical security controls at our data centers include 24x7 monitoring, cameras, visitor logs, entry requirements, and dedicated cages for SurveyMonkey hardware.

Compliance

SurveyMonkey, Wufoo, and SurveyMonkey Apply are compliant with the Payment Card Industry's Data Security Standards (PCI DSS 3.2) and can therefore accept or process credit card information securely in accordance with these standards. SurveyMonkey re-certifies this compliance annually. SurveyMonkey has achieved ISO 27001 certification.

Access Control

Access to SurveyMonkey's technology resources is only permitted through secure connectivity (e.g., VPN, SSH) and requires multi-factor authentication. Our production password policy requires complexity, expiration, and lockout and disallows reuse. SurveyMonkey grants access on a need to know on the basis of least privilege rules, reviews permissions quarterly, and revokes access immediately after employee termination.

Security Policies

SurveyMonkey maintains and regularly reviews and updates its information security policies, at least on an annual basis. Employees must acknowledge policies on an annual basis and undergo additional training such as HIPAA training, Secure Coding, PCI, and job specific security and skills development and/or privacy law training for key job

functions. The training schedule is designed to adhere to all specifications and regulations applicable to SurveyMonkey.

Personnel

SurveyMonkey conducts background screening at the time of hire (to the extent permitted or facilitated by applicable laws and countries). In addition, SurveyMonkey communicates its information security policies to all personnel (who must acknowledge this) and requires new employees to sign non-disclosure agreements, and provides ongoing privacy and security training.

Dedicated Security Personnel

SurveyMonkey also has a dedicated Trust & Security organization, which focuses on application, network, and system security. This team is also responsible for security compliance, education, and incident response.

Vulnerability Management and Penetration Tests

SurveyMonkey maintains a documented vulnerability management program which includes periodic scans, identification, and remediation of security vulnerabilities on servers, workstations, network equipment, and applications. All networks, including test and production environments, are regularly scanned using trusted third party vendors. Critical patches are applied to servers on a priority basis and as appropriate for all other patches.

We also conduct regular internal and external penetration tests and remediate according to severity for any results found.

Encryption

We encrypt your data in transit using secure TLS cryptographic protocols. SurveyMonkey and Wufoo data is also encrypted at rest.

Development

Our development team employs secure coding techniques and best practices, focused around the OWASP Top Ten. Developers are formally trained in secure web application development practices upon hire and annually.

Development, testing, and production environments are separated. All changes are peer reviewed and logged for performance, audit, and forensic purposes prior to deployment into the production environment.

Asset Management

SurveyMonkey maintains an asset management policy which includes identification, classification, retention, and disposal of information and assets. Company-issued devices are equipped with full hard disk encryption and up-to-date antivirus software. Only company-issued devices are permitted to access corporate and production networks.

Information Security Incident Management

SurveyMonkey maintains security incident response policies and procedures covering the initial response, investigation, customer notification (no less than as required by applicable law), public communication, and remediation. These policies are reviewed regularly and tested bi-annually.

Breach Notification

Despite best efforts, no method of transmission over the Internet and no method of electronic storage is perfectly secure. We cannot guarantee absolute security. However, if SurveyMonkey learns of a security breach, we will notify affected users so that they can take appropriate protective steps. Our breach notification procedures are consistent with our obligations under applicable country level, state and federal laws and regulations, as well as any industry rules or standards applicable to us. We are committed to keeping our customers fully informed of any matters relevant to the security of their account and to providing customers all information necessary for them to meet their own regulatory reporting obligations.

Information Security Aspects of Business Continuity Management

SurveyMonkey's databases are backed up on a rotating basis of full and incremental backups and verified regularly. Backups are encrypted and stored within the production environment to preserve their confidentiality and integrity and are tested regularly to ensure availability.

Your Responsibilities

Keeping your data secure also requires that you maintain the security of your account by using sufficiently complicated passwords and storing them safely. You should also ensure that you have sufficient security on your own systems. We offer TLS to secure the transmission of survey responses, but you are responsible for ensuring that your surveys are configured to use that feature where appropriate. For more information on securing your surveys, visit our Help Center. This article is written for SurveyMonkey customers but some of the guidance will apply equally to our Wufoo customers.

Logging and Monitoring

Application and infrastructure systems log information to a centrally managed log repository for troubleshooting, security reviews, and analysis by authorized SurveyMonkey personnel. Logs are preserved in accordance with regulatory requirements. We will provide customers with reasonable assistance and access to logs in the event of a security incident impacting their account.

Appendix G: Scribie Privacy Policy

Audio/Video Transcription Service

We collect personal information in a number of ways when you visit our site or use our service. For example, you provide us with personal information when you register for an account or contact us by email. CGBiz Corporation automatically receives and records information from your browser, including your IP address and cookies. The personal information collected is used for billing, identification, authentication, service improvement, research, and contact.

Cookies
A cookie is a small amount of data that is sent to your browser from our servers and stored on your computer's hard drive. We use cookies to access information when you sign in, store your preferences, and to keep you logged in. You can configure your browser to accept or reject these cookies.

Information Sharing
CGBiz Corporation does not sell, rent or share personal information with any third parties under any circumstances. We may, however, disclose personal information when we believe it violates our Terms of Service or is appropriate to comply with the law, to protect our or our users' rights, as well as to protect our users from fraudulent, abusive, and unlawful use of our site. We reserve the right to disclose your personally identifiable information as required by law and when we believe that disclosure is necessary to protect our rights and/or to comply with a judicial proceeding, court order, or legal process served on our website.

Client Data and Storage
CGBiz Corporation ensures that all the files, transcripts and data remain private and confidential. Access is restricted strictly on a need to know basis to our employees and contractors. All employees and contractors are required to sign a Non Disclousure Agreement before being allowed access to the data. Due to the sensitive nature of the recordings and transcripts we take privacy very seriously and make it our primary concern for all our customers.

Information Security
We restrict access of information to CGBiz Corporation employees, contractors and agents who need to know that information in order to operate, develop or improve our transcription service. These individuals are bound by confidentiality obligations and may be subject to discipline, including termination and criminal prosecution, if they fail to meet these obligations.

Changes
CGBiz Corporation will notify customers by email about any significant changes in this policy.

Privacy Questions and Feedback

If you have questions or concerns about CGBiz Corporation's Privacy Policy please contact us at privacy@scribie.com.

We are committed to conducting our business in accordance with these principles in order to ensure that the confidentiality of personal information is protected and maintained.

Appendix H: Scribie Terms of Service

Audio/Video Transcription Service

Acceptance of Terms
By using Scribie.com web site ("Service"), all services of CGBiz Corporation, you are agreeing to be bound by the following terms and conditions ("Terms of Service"), including any subsequent changes or modifications to them. If you do not agree to these Terms or our Privacy Policy, please do not use the Scribie.com website or services.

Privacy and Communications
You acknowledge and agree that that CGBiz Corporation may occasionally send you communications regarding your account or the Service via email.
See the Privacy Policy, which is incorporated into this Agreement by reference.

Accounts, Passwords and Security
You must be a registered user to access the Service. You are responsible for keeping your password secure. You will be solely responsible and liable for any activity that occurs under your registered account.

Transcription Rates
CGBiz Corporation reserves the sole right to alter, modify, change or withdraw the transcription rates offered or quoted for a specific file or all files or as stated on our website. We may ask for additional payment depending on our assessment of the time and effort required, such assessment to be in good faith. By using our Services you acknowledge and agree that our assessment is final and binding and refusal to accept that will lead to immediate cancellation of the order. For the avoidance of doubt, no fees are payable by you for any such cancelled orders where additional charges were levied.

Acceptable Use and Conduct
You are solely responsible for the data which is submitted to CGBiz Corporation in relation to the Service. You agree to indemnify, defend, hold harmless CGBiz Corporation and its suppliers from any and all loss, cost, liability and expense arising from or related to your data, your use of the Service or your violation of these terms. You agree to defend and/or settle any third party claim, action, suit or proceeding made against CGBiz Corporation and its suppliers alleging that CGBiz Corporation's use of your data or files infringes the intellectual property rights of a third party ("IP Claim"), provided CGBiz Corporation will give you (a) prompt written notice of such IP Claim, (b) sole control over the defense and settlement of such claim, and (c) cooperation in the defense of the claim. Your obligation for such IP Claim will not apply if the actual or alleged infringement results solely from any unauthorized modification, alteration or addition to your data or files.

The Software and Services are made available to you, your company, and/or your customers for personal or commercial use, which use must be in compliance with all applicable laws, rules and regulations and must not infringe or violate third party rights. Any unauthorized use of any CGBiz Corporation's Service is a violation of this Agreement and certain federal and state laws. Such violations may subject the unauthorized user and his or her agents to civil and criminal penalties.

Chargeback/Refund Policy
CGBiz Corporation will not, under any circumstances, issue cash refunds for any orders. If you have a question about an order, please contact us immediately. If the charges were made in error, we will credit your account or credit card account for the amount that was charged in error. CGBiz Corporation reserves the right to suspend and/or terminate a customer’s account any customer who disputes a credit card payment that is found to be valid will. Any past due fees and costs will be sent to collections. If our collection efforts fail, unpaid debts will be reported to all available credit reporting agencies.

No Warranties or Representations
CGBiz Corporation represents and warrants that it will provide personnel with sufficient skill and knowledge to perform the Service and that the Service will be performed in a professional and workmanlike manner. Except for the foregoing warranty, you understand and agree that the Software and Service is provided "as is" and CGBiz Corporation its affiliates, suppliers and Resellers expressly disclaim all warranties of any kind, beyond the Refund, express or implied, including without limitation any warranty of merchantability, fitness for a particular purpose, non-infringement or bailment of your data on CGBiz Corporation's servers. CGBiz Corporation, its affiliates, suppliers and Resellers make no warranty or representation, other than the Refund, regarding the results that may be obtained from the use of the Service, the security of the Service, or that the Service will meet any user's requirements beyond the Refund. Use of the Service is at your sole risk. You will be solely responsible for any damage to You resulting from the use of the Service. The entire risk arising out of use, security or performance of the Service remains with You. Without limiting the foregoing, the Service is not designed or licensed for use in hazardous environments requiring fail-safe controls, including without limitation operation of nuclear facilities, aircraft navigation/communication systems, air traffic control, and life support or weapons systems.

Limitations of Liability
In no event shall CGBiz Corporation be liable for any indirect, special, incidental, consequential or punitive damages (including but not limited to loss of use, loss of profits, or loss of data) whether in an action in contract, tort (including but not limited to negligence), equity or otherwise, arising out of or in any way connected with the use of or inability to use this site or the materials therein or resulting from unauthorized access to or alteration of data.

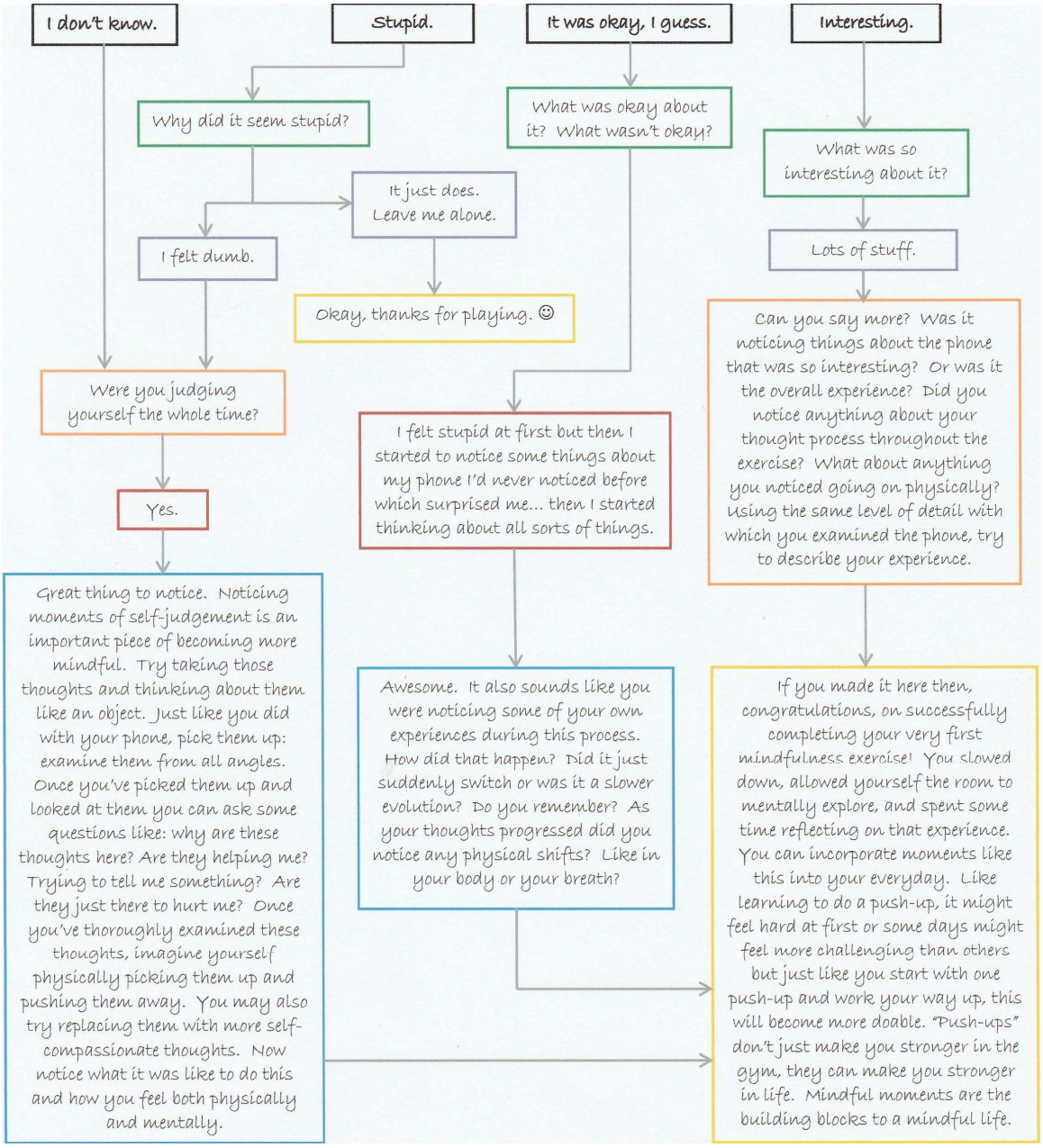
Termination of Service
We reserve the right to terminate or suspend your account at any time. You also have the option of canceling your account at any time without penalty. In the event of account cancelation you will lose all data related to your account. We also reserve the right to refuse service without providing a reason.

Conditions
We reserve the right to modify these Terms of Service at any time without notice. Please review these Terms of Service on occasion as they may change in the future. We may, but have no obligation to, remove accounts and content containing what we determine, in good faith and on reasonable grounds, as unlawful, offensive, threatening, defamatory, obscene or otherwise objectionable material. We will remove content that violates any party's intellectual property, if we have been notified of such violation, or these Terms of Service. An account terminated by CGBiz Corporation will not be backed-up for any reason and will be immediately deleted from our servers.

Intellectual Property
CGBiz Corporation claims no intellectual property rights over the material or content that you provide to the Service. You acknowledge that CGBiz Corporation owns all right, title and interest in and to the Service, including without limitation all intellectual property rights, and such rights are protected by US and international intellectual property laws. You agree that you will not copy, reproduce, alter, modify or create derivative works from the Service.

For any questions regarding this terms of service or the Privacy Policy please send an email to contact@scribie.com.

Appendix I: Calming Techniques


I don't know.
Stupid.
It was okay, I guess.
Interesting.
Why did it seem stupid?
What was okay about it? What wasn't okay?
What was so interesting about it?
It just does. Leave me alone.
I felt dumb.
Lots of stuff.
Okay, thanks for playing. ☺
Were you judging yourself the whole time?
I felt stupid at first but then I started to notice some things about my phone I'd never noticed before which surprised me... then I started thinking about all sorts of things.
Can you say more? Was it noticing things about the phone that was so interesting? Or was it the overall experience? Did you notice anything about your thought process throughout the exercise? What about anything you noticed going on physically? Using the same level of detail with which you examined the phone, try to describe your experience.
Yes.
Great thing to notice. Noticing moments of self-judgement is an important piece of becoming more mindful. Try taking those thoughts and thinking about them like an object. Just like you did with your phone, pick them up: examine them from all angles. Once you've picked them up and looked at them you can ask some questions like: why are these thoughts here? Are they helping me? Trying to tell me something? Are they just there to hurt me? Once you've thoroughly examined these thoughts, imagine yourself physically picking them up and pushing them away. You may also try replacing them with more self-compassionate thoughts. Now notice what it was like to do this and how you feel both physically and mentally.
Awesome. It also sounds like you were noticing some of your own experiences during this process. How did that happen? Did it just suddenly switch or was it a slower evolution? Do you remember? As your thoughts progressed did you notice any physical shifts? Like in your body or your breath?
If you made it here then, congratulations, on successfully completing your very first mindfulness exercise! You slowed down, allowed yourself the room to mentally explore, and spent some time reflecting on that experience. You can incorporate moments like this into your everyday. Like learning to do a push-up, it might feel hard at first or some days might feel more challenging than others but just like you start with one push-up and work your way up, this will become more doable. "Push-ups" don't just make you stronger in the gym, they can make you stronger in life. Mindful moments are the building blocks to a mindful life.

Muscle tension

Muscle tension is commonly associated with stress, anxiety and fear as part of a process that helps our bodies prepare for potentially dangerous situations. Even though some of those situations may not actually be dangerous, our bodies respond in the same way. Sometimes we don't even notice how our muscles become tense, but perhaps you clench your teeth slightly so your jaw feels tight, or maybe your shoulders become. Muscle tension can also be associated with backaches and tension headaches.

Progressive Muscle Relaxation

One method of reducing muscle tension that people have found helpful is through a technique called Progressive Muscle Relaxation (PMR). In progressive muscle relaxation exercises, you tense up particular muscles and then relax them, and then you practise this technique consistently.

preparing for relaxation

When you are beginning to practice progressive muscle relaxation exercises keep in mind the folloing points.

- **Physical injuries.** If you have any injuries, or a history of physical problems that may cause muscle pain, always consult your doctor before you start.
- **Select your surroundings.** Minimise the distraction to your five senses. Such as turning off the TV and radio, and using soft lighting.
- **Make yourself comfortable.** Use a chair that comfortably seats your body, including your head. Wear loose clothing, and take off your shoes.
- **Internal mechanics.** Avoid practicing after big, heavy meals, and do not practice after consuming any intoxicants, such as alcohol.

general procedure

1 Once you've set aside the time and place for relaxation, slow down your breathing and give yourself permission to relax.
2 When you are ready to begin, tense the muscle group described. Make sure you can feel the tension, but not so much that you feel a great deal of pain. Keep the muscle tensed for approximately 5 seconds.
3 Relax the muscles and keep it relaxed for approximately 10 seconds. It may be helpful to say something like "Relax" as you relax the muscle.
4 When you have finished the relaxation procedure, remain seated for a few moments allowing yourself to become alert.

Relaxation sequence

1. **Right hand and forearm**. Make a fist with your right hand.
2. **Right upper arm.** Bring your right forearm up to your shoulder to "make a muscle".
3. **Left hand and forearm.**
4. **Left upper arm.**
5. **Forehead.** Raise your eyebrows as high as they will go, as though you were surprised by something.
6. **Eyes and cheeks.** Squeeze your eyes tight shut.
7. **Mouth and jaw.** Open your mouth as wide as you can, as you might when you're yawning.
8. **Neck. !!!** Be careful as you tense these muscles. Face forward and then pull your head back slowly, as though you are looking up to the ceiling.
9. **Shoulders.** Tense the muscles in your shoulders as you bring your shoulders up towards your ears.
10. **Shoulder blades/Back.** Push your shoulder blades back, trying to almost touch them together, so that your chest is pushed forward.
11. **Chest and stomach.** Breathe in deeply, filling up your lungs and chest with air.
12. **Hips and buttocks.** Squeeze your buttock muscles
13. **Right upper leg**. Tighten your right thigh.
14. **Right lower leg**. **!!!** Do this slowly and carefully to avoid cramps. Pull your toes towards you to stretch the calf muscle.
15. **Right foot.** Curl your toes downwards.
16. **Left upper leg.** Repeat as for right upper leg.
17. **Left lower leg**. Repeat as for right lower leg.
18. **Left foot**. Repeat as for right foot.

Practice means progress. Only through practice can you become more aware of your muscles, how they respond with tension, and how you can relax them. Training your body to respond differently to stress is like any training – practising consistently is the key.

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Appendix J: Phase 2 Participant Responses Relating to Teachers

Negative themes and supporting quotes are listed, followed by positive themes and supporting quotes. The beginning of each supporting quote has an identifier in the form of "FLA level. Participant #.Line #". For example, Low.9.32 is participant #9 who scored low on the FLCAS and the quote is taken from line 32 of participant #9's transcript.

Negative Themes Relating to Teachers

Teachers are Too Strict

Low.9.32-I think negative about the professor and the course itself, but I do think positively about the language itself, there's just... I just can't tell if it's like the teaching style, 'cause I can't really get into... My last class is Spanish, and that was online for the semester due to the pandemic, and that probably affected my perspective on it, it felt like I wasn't really learning much about the language, it's a lot of repetition, the professor was pretty relatively strict about things academically, it was probably a lot more negative, but I do love learning about the cultures, so I do think highly of the language itself, I think it's very useful, especially for the area that I live in has a high Spanish-speaking population.

Teacher Attitude Reflects on the Class and Learning Process

High.5.34-Kind of annoyed, like, Why do I care about this more than you do when you're... It's supposed to be a mutual thing, and I'd also say, of course, frustration goes hand-in-hand with most anxieties, and I'm thinking... For the learning materials, one, I feel slightly resentful that because the materials given to me by the class aren't working with me, that it's not really my fault that I feel this way, and then I just feel kind of upset and angry at the book or whoever wrote the book... Or whoever decided that we needed to use it. Yeah, and I'd say with the other students just anxiety and fear are kind of the same thing, but in a different kind of instead of just internalized anxiety, like actually scared of saying something to offend someone because I feel like when you're in the classroom setting with so many other people, there's so many things that you don't know about them because they might not all be your friends, and also you're learning this new language, and so it's the combination of even if I was speaking English, I could say something real and then on top of that you're having to translate. And that's really...

Lack of Flexibility with Communication

High.8.30-For this course, it's like, besides like send in an email, which can also be very difficult because all structure is very different than English, so it's very hard to communicate. with other foreign languages, also I've taken another, and I guess... It's definitely the same kind of feel, even though it's a different sort of language to and be very frustrating, just not having another way to communicate.

Teacher Using Random Call Outs and High Workload

High.3.26-. I don't know, like when a professor is calling you randomly like that, but I guess this important thing to do to make sure that you are paying attention, and so I get it,

but I never liked that kind of teaching, but... Well, the professors are great... That's just a personal thing. Right. And I guess they assign a lot of work, it is a four-credit class, but I feel like I'm only taking 12 credits, but I do feel like I'm spending so much time on this class, so I don't know.

High.7.34-yeah, So sometimes the randomly calls on roll and speaks to me in a foreign language, and sometimes I'm just not ready to respond or ready to just talk in that language.

Teacher Lack of Examples
High.8.42-Okay, definitely one issue or have seen for everyone so far is the lack of examples provided for certain assignments, some of them have been like, Oh yeah, you're doing a video and these are the sentences that you need to sign, and then it's just like... We have not even seen half of those signs in class, and so we don't quite know how to structure the sentences correctly, only talked through the process of creating these sentences, but not actually showed us examples of the sentences before we had to do an assignment on them.

Teachers Act Suspicious of All Students
High.3.20-Also, one thing is that in my class on, some kids have been looking up answers and it reports them if you've clicked out of the tab while taking an exam, and I actually... I take my exam on different computer with the Korean keyboard, and so it's always like in a back of my mind, what if I read too long, what if I'm inactive on the page for too long and then I get a false flag or something, and that's a lot of online test anxiety. And that as, well, what if I could caught for something I didn't do.

Focusing on Specific Topics Over Others Can Cause Anxiety
Low.1.41-The Portuguese classes are a little bit different. We don't have the anxiety to say a word wrong or like that, we just afraid to do a mistake in gramet, don't know...yeah, grammar. And that makes a little bit more anxious. English doesn't have that much overall pressure.

Teacher Acts Like It Should Be Highest Priority
High.3.48-I guess being understanding about time outside of the classroom, 'cause I do kind of feel like she expects us to put the most effort in this class.

Grade Strictness and Zero Leniency
Low.9.70-It's just like one of those classes where, some of the work is online. And if you're one minute late and you don't have a 100% completed, you get a zero.

Lack of Organization on Teacher's Part
High.7.38- My teacher specifically, she's not really, I would say, organized. her syllabus is very disorganized, and tough to read through and sometimes she changes for the last minute and that can be stressful.

Positive Themes Relating to Teachers

Teacher Attitude

Low.1.19-No. They're normally quite nice.

Low.6.14-I guess overall, my teachers were very kind. I took Spanish all through high school and in the beginning of college, and I'm half Spanish myself, so I've been able to empathize with them pretty well, and am able to converse with them in a better way than some of my other peers can, so it kind of helps build a relationship with me and my professors.

Teacher Flexibility

Low.9.68-If they had more of a flexible grading policy that would have definitely helped.

High.3.51-so Maybe flexibility. Teachers being more flexible with due dates and stuff.

High.7.48-I Think flexible due dates are helpful. I would prefer if teachers didn't randomly call one person to speak a foreign language. 50-I don't really like any type of surprise... dialogues or any type of surprise test or anything like that.

Scaffolding

Low.4.26-My professor is very accommodating to me, definitely understands that I had a higher level of previous experience and a lot of the other students, so whether it's challenging me to go above and beyond and do a little bit more engagement with the course work or asking me to do a different assignment than the rest of the class to practice learning that's better for me, that really helps me engage and helps me feel positive about the environment because it's encouraging to me to continue working and not just stay stagnant, but also it's reinforcing the idea that I do feel very good at what I'm doing and that's making me feel better about myself.

Teacher Pacing and Respect

Low.6.32-Also my teacher goes slow, and he's very respectful to us and all my other peers... That helps as well.

Low.6.34-If we have, let's say a student doesn't know something or doesn't know a piece of the grammar in Spanish, he'll will take the time to explain it rather than rush it, and then after that, he'll ask the whole class as opposed to just that one person who asked, he will quiz the whole class on that topic, to make sure that they Understand that and that everyone's moving at the same pace.

Teacher Use of Media and Break Time

High.3.42-Music videos too. Sometimes she played music videos and then she shows the lyrics and we just have to listen and so that's kind of fun, and its just like... She likes to break things up, she doesn't just do a long droning lecture, which would not help either,

some professors have spent two hours just lecturing you and you don't absorb some of the information, but she tries to break things up with break out activities and videos and she's not judgmental, so... Yeah.

Teacher is Accepting of Mistakes

High.3.44-So if you get a question wrong, some professors would be so condescending about it or be like I've had professors are like, Oh, but if no one answers, they'd be like, Oh, but we taught this last week, you should know this, but well and some professions would be like, Can anyone help him or her with the answer. But for her its okay then if someone gets it wrong on and she sort of explains what the answer is, then she sort of lets you have a second try after, she's sort of explains the process if you forget something and she's always using encouraging where it's like, Oh, that's okay, or don't worry about it.

Low.4.38-I think just being okay with being wrong.

Teacher Should be Approachable and Open to Building Relationships

Low.6.48-If you need help, don't be afraid to ask the teacher, don't be afraid to meet him outside of class time, to talk to him one on one. That helps build a relationship.

Teacher Should Make Notesheets and Organizers

High.5.50-If the teacher goes through and I was like, This is what we need for this, and here's a bunch of keywords, and here's all the stuff you really need to know and organize that or... I think that would be very helpful to have that available.

Appendix K: Phase 2 Participant Responses Relating to Peers

Negative themes and supporting quotes are listed, followed by positive themes and supporting quotes. The beginning of each supporting quote has an identifier in the form of "FLA level. Participant #.Line #". For example, Low.9.32 is participant #9 who scored low on the FLCAS and the quote is taken from line 32 of participant #9's transcript.

Negative Themes Relating to Peers

Intimidation Because Others are Better

Low.1.33-Yeah, I definitely feel more anxious speaking to someone that's fluent in the language, like right now, I feel a bit more anxious than when I feel speaking in class.

Low.2.22-I would say the biggest factor is that there are a lot of, not necessarily native speakers of the language, but people of that culture in the class, so it's always like, Well, me thinking they probably have a pretty good handle on it, they might not, but they probably do better than I do, so there's always that in the back of my mind.

Fear of Insulting Others

High.5.34-I'd say with the other students just anxiety and fear are kind of the same thing, but in a different kind of instead of just internalized anxiety, like actually scared of saying something to offend someone because I feel like when you're in the classroom setting with so many other people, there's so many things that you don't know about them because they might not all be your friends, and also you're learning this new language, and so it's the combination of even if I was speaking English, I could say something real and then on top of that you're having to translate. And that's really...

Pressure From Being the Center of Attention

Low.6.44-Yeah, sometimes he puts us in things, it's called breakout rooms, where we work with one or two other students, and sometimes even though I have a low anxiety sometimes when I'm in those break out rooms, like I'll feel like there's a little or a good amount of pressure on me, because instead of there being the whole class, there is just two other people, so I feel like I have more weight on my shoulders.

Embarrassment When Others See You Lacking

High.8.26-embarrassment when you don't know something; that's so embarrassing at times.

Positive Themes Relating to Peers

Working With a Partner Aided Anxiety

Low.9.48-I would definitely say partner work, there is a lot of partner were in that course, so for the semester, you pick one partner and throughout the semester, there was probably six partner assignments, and I wouldn't say it was a confidence boost, and the fact that... I

felt like I was in the same boat with my partner, we were kind of on the same level in regard to the teaching style, and we also were on the same page on how things should be done, and also just overall... I hate to say it, but Complaints about the course in general, not just the teacher, but as I said, numerous times, the workload is just way too much, and there's also sometimes where I studied beforehand before we did those partner assignments and I had an idea whereas my partner, I was kind of lost and I was able to help her with that assignment and teach her some of the things. So that was definitely confidence boosting.

Low.9.58-I would say getting my work done early is probably the biggest factor… 64-Peer-wise. Having my partner, my partner helped out a lot because that would keep me on track... just having that, we trust each other, we are both trying to get very, very good grade in the class, so yeah. That definitely made me less anxious.

High.5.42-Something that I found, that this isn't really something that person themselves can control, but if a teacher puts you in very small groups, maybe pairs, and you're given a thing to work through together, I found that more often than not, you'll have a really good pairing and both parties will be really optimistic and have a good answer at the end, and that usually makes me feel a lot better just talking through it with a peer and hearing their anxieties if that makes sense, knowing that I'm not the only one.

Working With Others is Interesting and Relaxing

High.3.40-They use the break rooms a lot, so you do get to... And luckily, like my other classmates there are usually engaging in it, and so working with other classmates that kinda helps as you get to while working, have a conversation with them, so it's a little more laid back than professors just asking questions to you, so... break out rooms are sort of not relaxing but You know what I mean? And that helps, I guess.

Working With Others is Calming

Low.2.52-maybe like tons of talking in front of classmates or with classmates, 'cause this one, we don't do a whole lot of conversing, but like in high school, I took a Spanish, couple of Spanish classes and those were a lot more conversation intensive and that was almost like, Hey, we're all in the same boat here, it felt less anxious doing it, 'cause everyone was doing the same thing, but when... I think for me personally, when there's less of that, it's almost like you don't know where everyone stands on their handle on the language, and you think, I think I might be behind.

Having Others Around Helps Pacing

Low.6.34-If we have, let's say a student doesn't know something or doesn't know a piece of the grammar in Spanish, he'll will take the time to explain it rather than rush it, and then after that, he'll ask the whole class as opposed to just that one person who asked, he will quiz the whole class on that topic, to make sure that they Understand that and that Everyone's moving at the same pace.

Appendix L: Phase 2 Participant Responses Relating to Tasks/Activities

Negative themes and supporting quotes are listed, followed by positive themes and supporting quotes. The beginning of each supporting quote has an identifier in the form of "FLA level. Participant #.Line #". For example, Low.9.32 is participant #9 who scored low on the FLCAS and the quote is taken from line 32 of participant #9's transcript.

Negative Themes Relating to Tasks/Activities

Speaking Tasks Induce the Most Anxiety

Low.2.28-As with any foreign language class, we do have to stand up and speak, so I guess that will add to the anxiety, but she's very good at not laughing at me, let me get something wrong, but joking about it like, Oh, you said this instead. And it is a pretty laid-back environment, thankfully, but there still is a little bit of... I'm in this room with people who probably know more. And then I might screw it up.

High.5.38-Definitely speech-type things where you have to stand in front of a class, but also when a teacher... If they say things like, You know this, or come on, this is easy or something, then my brain was completely shut down and I'll totally forget what I'm trying to do all together, if there's even the possibility, if they say at all, any kind of hint of like I'm kind of disappointed in you for not knowing this kind of thing, I don't know what about that just freaks me out, but...

Low.6.16-It's very face-to-face. It's a lot of talking with other students, there's a lot of conversing... It's a little bit difficult.

Too Many Tests

Low.9.50-There was numerous quizzes and tests when it switched to completely online, there was a... Just a lot of audio, I guess, a lot of questions on the test and also a lot of translation...

Surprise Tests

Low.2.46-Pop quizzes aren't good.

Positive Themes Relating to Tasks/Activities

Games help With Anxiety

Low.6.32-occasionally, maybe once or twice a week, we'll do kahoots, which is like a fun little game, what we're learning at the same time as we're having fun, so that definitely helps anxiety levels.

Use of Various Media helps Keep Class Engaging

High.3.42-Music videos too. Sometimes she played music videos and then she shows the lyrics and we just have to listen and so that's kind of fun, and its just like... She likes to

break things up, she doesn't just do a long droning lecture, which would not help either, some professors have spent two hours just lecturing you and you don't absorb some of the information, but she tries to break things up with break out activities and videos and she's not judgmental, so... Yeah.

Using Flashcard Apps Helps
Low.4.32-Something that I do is I do Spanish vocabulary flashcards every single day, so I use a space repetition study app called Anqi, which I use for my medical student studies as well, but it's very efficient for learning language, so it takes the words that you know when it assigns them to like... Oh, you know this one really well. We're not gonna show it to you for a week, but you need more study on this work, so we'll show it to you in two days, so it's based retention...it enhanced my conversations, speaking skills as well as on the additional outside classroom work on the vocab.

Allowing Fidget Toys in Class May Help
High.5.46-maybe some of those fidget toys, that's the thing that the kids have these days.

Choose a Focal Point
High.7.42-I think the main thing is focusing on something in the room since for some reason I can't really think and make eye contact at the same time, so really when I'm thinking, I'm usually staring at the ceiling or anywhere else.

Breakout Rooms For Group Work in Virtual Learning Helps
High.3.40-They use the break rooms a lot, so you do get to... And luckily, like my other classmates there are usually engaging in it, and so working with other classmates that kinda helps as you get to while working, have a conversation with them, so it's a little more laid back than professors just asking questions to you, so... break out rooms are sort of not relaxing but You know what I mean?

Group /Pair Work is Good
High.5.42-if a teacher puts you in very small groups, maybe pairs, and you're given a thing to work through together, I found that more often than not, you'll have a really good pairing and both parties will be really optimistic and have a good answer at the end, and that usually makes me feel a lot better just talking through it with a peer.

Outside of Classroom Applications
Low.4.34-just practice speaking outside of the classroom, which I don't do as much, but my classmates, are there opportunities for them to connect with a native speaker and practice speaking the language.

Studying Outside of Class is Crucial
Low.2.42-For me, it's just simply studying, so if I feel like I have a confidence in what I'm about to say, I have a lot less anxiety for whatever activity there will be. I don't know if that's answer you're looking for, but studying.

Appendix M: Phase 2 Participant Responses Relating to Classroom Environment

Negative themes and supporting quotes are listed, followed by positive themes and supporting quotes. The beginning of each supporting quote has an identifier in the form of "FLA level. Participant #.Line #". For example, Low.9.32 is participant #9 who scored low on the FLCAS and the quote is taken from line 32 of participant #9's transcript.

Negative Themes Relating to Classroom Environment

Virtual is Not the Best Platform for Language Learning Classes

High.8.20-Part of it is definitely the new setting of doing foreign language online, for instance, I am in a foreign language that does not require speech, but it is a sign language class, and so say, using the online platforms are very difficult at times like say zoom, we're using now, you can't always see the professor or it's The screen freezes for a second and you tons of signs, and so I will definitely say that being in an upper level foreign language course, and not even being able to see half of it is very, very frustrating, and I'll really get very behind.

High.3.20-it's definitely mostly the shift to online learning, being online and trying to... 'cause the lectures are largely the same, it's just all the distractions and it's hard to ask questions over a computer screen, and the online tests are especially more inconvenient,

Low.9.40-at the time, it was an in-person class, there was a hybrid class, but then it switched to completely online and yeah, that definitely affected my performance academically, this includes loss of motivation, not really learning as much as I think I would be in person, or how it was before everything shut down.

Positive Themes Relating to Classroom Environment

For Virtual Learning Make Camera Optional

Low.6.40-For me, there's nothing really that I do, but for some other students, my teacher makes it optional to have a video camera on or off, some students will keep it off, which I guess might help increase your confidence, like let's say they're answering the question, they don't have the camera on, so they probably... There's less pressure on them.

Virtual Classes May Be a Good Option for Some

Low.6.24-For environmental, I'm not taking my classes in person, everything's online behind a computer screen, I feel like that's a lot less stressful as opposed to actually being physically in person.

Complete Immersion Settings May Be Beneficial for Some

Low.2.52-Maybe almost like immersion therapy, maybe like tons of talking in front of classmates or with classmates.

Appendix N: Phase 2 Participant Responses Relating to Language Relevancy

Negative themes and supporting quotes are listed, followed by positive themes and supporting quotes. The beginning of each supporting quote has an identifier in the form of "FLA level. Participant #.Line #". For example, Low.9.32 is participant #9 who scored low on the FLCAS and the quote is taken from line 32 of participant #9's transcript.

Negative Themes Relating to Language Relevancy

Higher Level Language Classes Use Material That Doesn't Seem Important in the Real World

Low.1.67-The lessons in Portugese here just talk about books and just learning you more in-depth about the Portuguese language, and that doesn't help in a lot of branches that the people can fall... Like knowing what the type of war is here, doesn't help you anywhere, it doesn't make you better in work.

Not Covering a Lot of Material So Questions Importance

Low.9.32-I think negative about the professor and the course itself, but I do think positively about the language itself, there's just... I just can't tell if it's like the teaching style, 'cause I can't really get into... My last class is Spanish, and that was online for the semester due to the pandemic, and that probably affected my perspective on it, it felt like I wasn't really learning much about the language.

Language Doesn't Seem as Important as Other Classes

Low.9.42-I felt like the class was secondary compared all of the other classes I was taking at the time, and not that I wanted it to be secondary, but at the end of the day, I was taking it as an elective and out of pure interest, but yeah, it just made me feel frustrated and I just want this class to be done and over with, especially... Got to that towards the end.

Lack of Outside Opportunities

High.8.22-I don't really have anyone that I can practice to us or really interested in learning the language, so there's another barrier there that is not much support for the language.

High.7.22-I would say The thing about foreign language is that I don't use it all the time, so if I'm reading or listening to a foreign language, I'm constantly translating between the foreign language and my native language, and that takes a lot of energy sometimes. I guess that's where my anxiety comes from the most.

Some Languages Harder Than Others

Low.1.16- so you would say that the Portuguese classes are a little bit more stressful? 17-Yes. definitely.

High.3.21-When you were taking the classes in person, would you say that having to write in Korean is a contributing factor because it's a different writing system than English…22-Yeah, definitely.

Positive Themes Relating to Language Relevancy

Having Outside Class Chances to Use Language Shows Its Importance

Low.4.34-my classmates, are there opportunities for them to connect with a native speaker and practice speaking the language .

Seeing Others in Class Makes One See Its Real-World Application

Low.2.26-It's nice to see them in the class as well, it's very assuring that the language that I'm learning will be relevant and it's assuring.