

UNIVERSITY STUDENT CHOICE AND ATTITUDES TOWARD SECOND LANGUAGE

LEARNING: A CAUSAL-COMPARATIVE STUDY

by

Jazmin Marielis China Barreto

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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## ABSTRACT

The purpose of this quantitative, causal comparative study was to determine if student language choice at the university level affects their attitudes toward second language learning. Current literature in second language acquisition primarily focuses on English as a second language; additionally, studies that address languages other than English are primarily conducted in the United Kingdom. This study addressed this gap in the literature and added to the existing body of knowledge to ascertain student attitudes toward L2 learning based on the language of study. Participants included 190 monolingual speakers of English enrolled in a first-semester language course in a North Texas university. Data collection methods included a valid and reliable 17-question, five-point Likert-type questionnaire related to valuing multilingualism and cognitive effects to measure student attitudes. Language choice was determined by student enrollment across the eight languages offered. Statistical analysis of data involved two one-way ANOVA's to compare statistical significance of cause-and-effect relationships between the variables. Results demonstrate that student attitudes toward valuing multilingualism were statistically significantly different for different language groups. There was a significant difference between the Spanish group and the ASL group. Student attitudes toward cognitive effects were also statistically significantly different for different language groups. There was a significant difference between the Spanish group and the ASL group, and between the Spanish group and the Korean group. In conclusion, the researcher rejected the null hypothesis for both valuing multilingualism and cognitive effects. Further research is needed to address generalizability to different regions, age groups, and language levels.

*Keywords:* attitudes, second language learning, self-determination theory, target language, university students

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### **List of Abbreviations**

Content and Language Integrated Learning (CLIL)

Second Language (L2)

Second Language Acquisition (SLA)

Self-determination Theory (SDT)

Target Language (TL)



## CHAPTER ONE: INTRODUCTION

### Overview

The purpose of this quantitative, causal comparative study is to determine if there is a difference in attitudes toward second language learning between university students enrolled in different language courses. Chapter One provides a background for the topics of the decline in second language learning in anglophone countries and student attitudes, motivation, and perceptions toward language learning. Included in the background is an overview of the theoretical framework for this study. The problem statement highlights the gap in recent literature on this topic. The purpose statement is followed by the significance of the present study and the research questions. Lastly, the chapter concludes by defining pertinent terminology.

### Background

“And the Lord said, “Behold, they are one [unified] people, and they all have the same language. This is only the beginning of what they will do [in rebellion against Me], and now no evil thing they imagine they can do will be impossible for them” (*Amplified Bible*, Genesis 11:6). This passage continues with the confusion of languages and scattering of people, marking the beginning of language diversity. Currently, there are approximately 7,000 languages spoken with a 40% decline in languages over the past 70 years (Fostar, 2021). This decline is referred to as language death, defined as the elimination or loss of a language as a result of the death of all its remaining speakers or when one language replaces another across generations (Bousquette & Putnam, 2019). This generational shift in language can be seen in the United States when a family immigrates from a non-anglophone country and teaches their American born children English without teaching them the language from their home country. Language death is more than the loss of linguistic features, but also in the loss of identity, culture, history, and valuable

information tied to the language (Muchena & Jakaza, 2022). Mirroring the decline of global languages, there is also a decline in multilingualism and second language learning due to the spread and dominance of English (Nordquist, 2019a). Below, a historical overview of second language (L2) learning and teaching is discussed, highlighting issues in acquisition and perceptions in the past. A description of how these issues have evolved over time and how they are currently being addressed is provided. An overview of the theoretical framework guiding this research is also discussed briefly.

### **Historical Overview**

Second language skills have commonly and historically been perceived as useless and unnecessary in anglophone countries (Dobson, 2018; Parrish, 2020). Historically, L2 teaching and learning was focused on grammar translation. This method was implemented to teach classical languages, like Latin and Greek, with the intent of teaching students to read classical literature through the memorization of grammar rules and linguistic aspects such as root words and affixes. Unfortunately, the grammar translation approach did not help students develop speaking skills in the target language (TL). Students could only read the TL with the purpose of translating it back into the first language in order to derive meaning. These language skills were considered useless in the workforce (Dobson, 2018). Despite advancements in second language acquisition (SLA) methodology, L2 learning is still perceived negatively in anglophone countries where there is a decline of L2 study.

Research has attributed the decline of L2 study to the spread of English. English is the third most spoken language in the world. Roughly 75 countries identify English as a dominant language, schools in over 100 different countries teach English as a foreign language (EFL), about 500 million people are native speakers of English, and an estimated 510 million people

speak English as a second language (ESL) (Nordquist, 2019a). Considering English has become the perceived lingua franca around the world, monolingual speakers of English do not value bilingualism and lack motivation and interest in learning other languages (Clayton, 2016; Dörnyei & Al-Hoorie, 2017; Duff, 2017; Huhtala et al., 2019; Lanvers, 2017a; Lanvers, 2017b; Lanvers et al., 2019, 2020; Looney & Lusin, 2019; Vidal Rodeiro, 2017).

Historically, studies have shown that students identified motivation, ability levels, and classroom atmosphere as factors that affect their language learning success or failure. Findings also showed that male students tend to maintain an internal locus of control in regards to their success while female students tend to possess an internal locus of control in regards to their failure (Williams et al., 2004). Previous research findings also noted a decline in language learning motivation across transitions due to the repetition of previously learned content or anxieties about a higher focus on literacy and grammatical accuracy (Courtney, 2017). Teachers of all subjects have historically struggled with providing students a smooth transition from elementary school through middle school, high school, and higher education or the work force. This is an issue that also significantly affects L2 teachers because providing students with a successful transition is an essential aspect of the implementation of an effective and successful curriculum for modern languages (Courtney, 2017). The issue has evolved over time and recent findings show that students who begin learning an L2 at an early age experience positive attitudes toward language learning and their enjoyment increases in secondary school when they are challenged to work more diligently (Chambers, 2019); however, abrupt changes in pedagogy between primary and secondary education negatively affects L2 learners' attitudes about the TL. Findings also show that despite fluctuations in learner motivation and attitude, students continue to progress in the language acquisition process as they transition into secondary school

(Courtney, 2017). Recent research has also examined school policy and student motivation in relation to teaching and learning foreign languages. Parrish and Lanvers (2019) found that providing students with free choice is connected to substantive intrinsic motivation to study a foreign language. Learners also perceive some foreign languages as more useful depending on the context of whether the language is needed for traveling, social reasons, or business (Parrish & Lanvers, 2019). Furthermore, language learners enjoy implementing the target language in relevant contexts and maintain positive perceptions about their own progress (Bower, 2019). As students transition into post-secondary education, their attitudes toward language learning remains positive; however, these positive attitudes tend to evolve over the course of the semester. After one semester of language study at the university level, most students express lower expectations about the benefits of communicating in the target language (Knouse et al., 2021; Mills & Moulton, 2017).

### **Society-at-Large**

The shifts from positive to negative attitudes toward L2 learning align with the declining enrollment and elimination of language programs at the university level (Knouse et al., 2021; Mills & Moulton, 2017). In the United States, less than 20% of K-12 students were enrolled in L2 courses during the 2014-2015 academic year (American Councils for International Education, 2017). Enrollment in L2 courses in K-12 schools decreased 9.2% from 2013 to 2016; additionally, L2 enrollment in universities declined 15.3% from 2009 to 2016 and 651 language programs were eliminated between 2013 and 2016 (Looney & Lusin, 2019). According to the Modern Language Association of America (2022), these statistics are the most recent reports; however, data gathering for more recent enrollment reports began in 2021, and the updated statistics will be published in the spring of 2023.

Researchers and practitioners have attempted to implement strategies to address the current issue of the decline in L2 enrollment. In regards to students forming negative perceptions and attitudes toward the target language as a result of abrupt changes in pedagogy, Courtney (2017) suggests the need for improved communication between primary and secondary language teachers regarding pedagogy. Greater communication between language teachers and greater transition planning to prepare students for the expectations in secondary school and in higher education minimizes the abrupt change across the transitions. Meaning that language teachers in secondary and post-secondary institutions should be collaborating about student expectations. Research also suggests that greater emphasis on the value of learning an L2 in language classrooms influences learners to perceive the TL as relevant to their educational goals and life outside of education (Courtney, 2017; Koppelman, 2017). In the United States, schools in only seven states and the District of Columbia include L2 study as a graduation requirement. Schools in 22 states offer and allow foreign language courses to fulfill an elective graduation requirement. Lastly, schools in the remaining 21 states typically offer foreign language courses despite not having a state mandated requirement (O'Rourke et al., 2016). Considering this data, promoting the value of L2 learning solely within L2 classrooms will not influence the majority of the student population in the United States.

The implementation of Content and Language Integrated Learning (CLIL), where students learn vocabulary and language skills in the L2 while learning a subject, and promoting student choice have been identified as strategies to resist inadequate motivation. CLIL increases student motivation and enrollment in modern language classes (Bower, 2019). CLIL has been implemented in many secondary schools throughout Europe but only minimally in England. Some of the CLIL programs that have been implemented in secondary public schools in Canada

and in the United States include bilingual education, immersion programs, and content-based language learning (Bower, 2019). Students are more intrinsically motivated when they are provided autonomy to study a foreign language, feel competent in acquiring the target language, and when the target language is related to their life in terms of practicality and usefulness. These findings align with the self-determination theory which has been applied as the theoretical framework in previous research on SLA focused on motivation, student choice, and L2 learning (Muñoz & Ramirez, 2015; Parrish & Lanvers, 2019).

### **Theoretical Background**

The self-determination theory (SDT) is a macro-theory regarding human motivation and personality. Within SDT, students are motivated when their basic psychological needs of autonomy, competence, and relatedness are satisfied. SDT was first introduced by Deci and Ryan in 1985, but the development of this theory was influenced by many theorists such as William James, Woodworth, Allport, Freud, Hull, and White (Deci & Ryan, 1985). As a macro-theory, SDT consists of six sub-theories that function together. These six sub-theories include the cognitive evaluation theory, the organismic integration theory, the causality orientations theory, the basic psychological needs theory, the goal contents theory, and the relationships motivation theory. SDT is a logical theoretical framework because it aligns with the study's focus on student motivation and choice regarding L2 learning.

### **Problem Statement**

Current research shows that many monolingual English speakers lack an interest in learning an L2, believing that learning a foreign language is unimportant and that English is the only language worth knowing (Clayton, 2016; Dörnyei & Al-Hoorie, 2017; Duff, 2017; Huhtala et al., 2019; Lanvers, 2017a; Lanvers, 2017b; Lanvers et al., 2019, 2020; Looney & Lusin, 2019;

Vidal Rodeiro, 2017). In the United States, roughly 78% of the population only speaks English (U.S. Census Bureau, 2019). Americans typically harbor a nationalistic attitude regarding language. This mindset aligns with a monoglossic language ideology in which an individual only values the dominant language and rejects or disregards the value of other languages and multilingualism (Fuller, 2013; Parrish, 2020). The perception that English is the only valuable language originates from the global dominance of English and the value and prestige that society has granted to English fluency (Dörnyei & Al-Hoorie, 2017). The importance of comprehending English is also stressed in other countries where learning English is encouraged as a foreign language more than other languages; furthermore, research in SLA is dominated by studies with a focus on English language learners, creating a clear gap in literature and the need for research that focuses on languages other than English (Dörnyei & Al-Hoorie, 2017).

In contrast, studies show that students typically develop positive attitudes regarding their potential success in a foreign language course and enjoy being challenged, especially if they started learning an L2 prior to high school (Chambers, 2019; Knouse et al., 2021; Parrish & Lanvers, 2019). Language learners are more proficient and enjoy language learning more the earlier they begin L2 acquisition. However, school policy regarding L2 study in the United States varies by state and only seven states and the District of Columbia require L2 study as a stipulation for high school graduation (O'Rourke et al., 2016). The global dominance of English and the mentality of English being the only relevant language has led to a decline in L2 learning in anglophone countries, especially when L2 study is not compulsory (Lanvers et al., 2019).

Additionally, enrollment in foreign language courses at the university level is not evenly distributed, where Spanish typically has the highest enrollment followed by French. These enrollment trends align with the most commonly offered foreign language courses in secondary

schools being Spanish, French, and German (Parrish, 2020). Although many universities offer a variety of modern language courses, these languages continue to be the most popular among students. Current literature on this topic is primarily focused on primary and secondary students in the United Kingdom. Further research is needed to generalize findings and to understand the attitudes and perceptions of monolingual speakers of English who are enrolled in universities in the United States. The problem is that more research is needed to determine if university student attitudes toward L2 learning differ based on their language choice in the United States (Dörnyei & Al-Hoorie, 2017; Duff, 2017; Knouse et al., 2021; Lanvers et al., 2019, 2020; Mills & Moulton, 2017; Parrish, 2020; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017).

### **Purpose Statement**

The purpose of this quantitative, causal-comparative study is to determine if student attitudes toward L2 learning differ based on their language choice at the university level. This study focuses on monolingual students in a university in North Texas, United States, who are enrolled in a first-semester modern language course. Student attitudes, comprised of two subcomponents as defined by valuing multilingualism and cognitive effects function as the dependent variables. Valuing multilingualism refers to student attitudes or thoughts towards world languages and the global status of English. Cognitive effects refer to student attitudes toward self-efficacy, cognitive attainability, and cognitive advantages of bilingualism (Lanvers et al., 2019). Language choice is the independent variable. Language choice is defined by student enrollment in a first-semester American Sign Language (ASL), French, Korean, or Spanish course offering at a North Texas University,.



### **Significance of the Study**

Current literature in SLA is dominated by research pertaining to students learning English as an L2, where 70.5% of research over the past 20 years focuses on English and is distantly followed by Spanish as the second-most researched language comprising only 5.4% of the literature (Hiver et al., 2021). This quantitative, causal-comparative study will add to the existing body of knowledge to ascertain student attitudes toward L2 learning varies based on the language of study. A literature review focusing on monolingual English speakers learning an L2 will detail studies that were primarily conducted in the United Kingdom, thus creating a need for research in the United States as student attitudes may be influenced differently based on the languages spoken in the neighboring countries. Additionally, the target population in the majority of current research studies are primary and secondary students. There are few studies that focus on university students learning an L2. Many of the current research studies are also qualitative in nature, presenting a need for quantitative research. The contributions from this study are potentially significant because SLA in the United States is approached differently than in the United Kingdom.

School policy regarding SLA in the United Kingdom is considerably different than in the United States. The majority of participant students included in research studies set in the United Kingdom and enrolled in an L2 in primary and secondary school, discontinue study once it is no longer compulsory. In the United States, many public schools do not offer L2 courses until high school and maintain minimal requirements. Only seven states require study in an L2 to graduate and the majority of states do not offer a language other than English as an option to fulfill the elective requirement (Davin et al., 2018; Knouse et al., 2021). This means that first-year university students in the United Kingdom that enroll in an L2 typically present a few more years

of experience in the target language while first-year university students in the United States will typically have only 2 years of language learning experience. Research shows that students who begin learning an L2 at an early age project greater positivity toward language learning (Chambers, 2019; Knouse et al., 2021; Parrish & Lanvers, 2019); therefore, the findings pertaining to student attitudes toward L2 learning in the United Kingdom may not be generalizable to students in the United States who did not start learning an L2 from an early age.

### **Research Questions**

**RQ1:** Is there a difference in *valuing multilingualism* scores among university students enrolled in second language courses based on their choice of the language studied?

**RQ2:** Is there a difference in *cognitive effects* scores among university students enrolled in second language courses based on their choice of the language studied?

### **Definitions**

1. *Anglophone* – Anglophone refers to a person whose dominant, and typically only, language is English (Fuller, 2013).
2. *Autonomy* – Autonomy refers to a person’s ability to engage in activities based on free choice or the need to have a sense of choice or volition (Deci & Ryan, 1985; Van den Broeck et al., 2016).
3. *Commuter School* – A commuter school usually refers to a university where most students do not live on campus or university housing; instead, students continue to live at home with their family and commute from the surrounding towns and cities (Muniz, 2020).
4. *Competence* – Competence refers to the need to feel accomplished and to gain new skills (Van den Broeck et al., 2016).

5. *Content and Language Integrated Learning (CLIL)* – CLIL is a language acquisition approach where students learn an L2 while learning a subject and has been shown to increase intrinsic motivation to learn an L2 (Bower, 2019; Del Pozo Beaumud, 2019; Sylvén, 2017).
6. *English as a Foreign Language (EFL)* – EFL refers to the study of English by non-native speakers in an environment or country where English is not the dominant language; for example, students learning English in Brazil (Nordquist, 2020).
7. *English as a Second Language (ESL)* – ESL refers to the study of English by non-native speakers in an environment or country where English is the dominant language; for example, Spanish-speaking students learning English in the United States (Nordquist, 2019b).
8. *First Language (L1)* – An L1 refers to the language a person learns in early childhood and is considered the person's native or dominant language (Nordquist, 2019c).
9. *Heritage Speaker* – A heritage speaker refers to a person who associates a language with their ethnicity but is not necessarily fluent in this language; although, their parents or grandparents did speak the language as their L1 (Fuller, 2013).
10. *Lingua Franca* – A lingua franca refers to a common language that is spoken between two speakers with different native languages (Fuller, 2013).
11. *Monoglossic Language Ideology* – A monoglossic language ideology is a mindset where a person only values the dominant language and rejects or disregards the value of other languages and multilingualism (Fuller, 2013).

12. *Native Speaker* – A native speaker refers to a person who speaks a language as their L1 or dominant language in which they acquired naturally during early childhood (Fuller, 2013).
13. *Relatedness* – Relatedness refers the need to love and be loved which is met through personal connections (Van den Broeck et al., 2016).
14. *Second Language (L2)* – An L2 refers to a language or languages a person learns or studies in addition to their native language, generally during adolescence (Dörnyei & Al-Hoorie, 2017).
15. *Second Language Acquisition (SLA)* – SLA refers to the learning of any additional language (Dörnyei & Al-Hoorie, 2017).
16. *Self-determination Theory (SDT)* – SDT is a macro-theory regarding human motivation and personality (Deci & Ryan, 1985).
17. *Target Language (TL)* – A TL refers to the language that is being studied as an L2 (Dörnyei & Al-Hoorie, 2017).

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

The following systematic review of literature examines the current problem of the decrease in second language (L2) learning in anglophone countries. This chapter presents a review of the current literature related to L2 learners' motivation, attitudes, and perceptions. The first section discusses a theory, self-determination (Deci & Ryan, 1985), related to language learner motivation. The next section synthesizes recent literature on choice, motivation, school policy, attitudes and perceptions, and academic achievement. Lastly, a gap in the literature is identified, presenting a well-founded need for the current study.

### **Theoretical Framework**

Theories explain observed phenomena and describe how constructs are interrelated. Research that is grounded in existing theory typically yields important findings and provides an understanding and rationale when interpreting results (Gall et al., 2007). The guiding theory for this research, the self-determination theory (Deci & Ryan, 1985) is discussed in detail. How the theory originated and definitions for the various elements in the theory are included. Additionally, a rationale for the selected theoretical framework is provided.

### **Self-Determination Theory**

Self-determination theory (SDT) was first introduced by Deci and Ryan (1985). SDT is a macro-theory regarding human motivation and personality that consists of the following six sub-theories: cognitive evaluation theory (CET), organismic integration theory (OIT), causality orientations theory (COT), basic psychological needs theory (BPNT), goal contents theory (GCT), and relationships motivation theory (RMT; Deci & Ryan, 1985). The development of SDT has multiple influences. Starting with William James' discussions regarding motivation in

1890, suggesting that interest and attention are related and, thus, influencing the idea of intrinsic motivation in SDT. In 1918, Woodworth addressed behavior that was intrinsically motivated and Allport coined the term functional autonomy in 1937. Freud's psychodynamic drive theory in 1923, and Hull's empirical drive theory in 1943, also shaped SDT in that drive naming did not adequately explain intrinsically motivated behaviors. Lastly, in 1959, White reformulated motivation theory and proposed effectance motivation. The theorists outlined this formulation when they first introduced SDT (Deci & Ryan, 1985).

The meeting of human needs is a vital component of motivation. Within SDT, students are motivated when their basic psychological needs of autonomy, competence, and relatedness are satisfied. As defined by Deci and Ryan (1985) and readdressed by Van den Broeck et al. (2016), autonomy refers to a person's ability to engage in activities based on free choice or the need to have a sense of choice or volition. Competence refers to the need to feel accomplished and to gain new skills. Relatedness refers to the need to love and be loved, which is met through personal connections.

The six sub-theories of SDT are interconnected and address the concepts of motivation, autonomy, competence, and relatedness in the following different ways (Deci & Ryan, 1985; Núñez & León, 2015; Van den Broeck et al., 2016). Cognitive evaluation theory (CET) focuses on intrinsic motivation and how social context can influence intrinsic motivation. Intrinsic motivation refers to the need to feel competent and to maintain self-determination. Organismic integration theory (OIT) focuses on extrinsic motivation and how social context can affect internalization. Extrinsic motivation refers to the need to receive tangible or intangible rewards. Causality orientations theory (COT) focuses on autonomy, control, and *amotivated* orientation that affects human behavior (Deci & Ryan, 1985; Van den Broeck et al., 2016). Basic

psychological needs theory (BPNT) focuses on autonomy, competence, and relatedness and how these needs affect a person's psychological well-being. Goal contents theory (GCT) focuses on the difference between intrinsic and extrinsic goals and how they affect motivation and wellness. Lastly, relationships motivation theory (RMT) focuses on relatedness, specifically on the relationships with different people and how these relationships affect a person's well-being because their need for relatedness is satisfied (Deci & Ryan, 1985).

In SDT, a student who projects self-determination maintains the option to make choices without feeling pressured, controlled, or obligated to implement certain actions. In the classroom, autonomous motivation refers to the student's voluntary participation in the learning process through intrinsic motivation or identified regulation, meaning the student recognizes the importance and value of reaching the identified goal. Conversely, controlled motivation refers to the external or introjected regulation of behavior that is forced or pressured. External regulation refers to student participation to earn a reward or avoid a consequence or punishment; introjected regulation refers to student participation to avoid shame or guilt (Núñez & León, 2015). When a student is intrinsically motivated, he or she will experience enjoyment as the result of being completely involved in an activity. Enjoyment will persist and increase personal improvement when derived from intrinsic motivation. This leads to persistence, meaning a student will continue to participate in an activity even after the external contingency is no longer present. Separate from enjoyment, interest is a student's attraction toward an activity and is considered a form of extrinsic motivation (Núñez & León, 2015; Vansteenkiste et al., 2010).

SDT is a logical theoretical framework for this proposed study because of its focus on motivation, autonomy, competence, and relatedness. A primary aspect that will be addressed is the focus and explanation of intrinsic versus extrinsic motivation. This study will also discuss

unconscious motivation. Autonomy pertains to this study because students will have the opportunity to choose from eight different languages. Competence will be addressed because learning an L2 is a skill that must be developed. Relatedness will be explored because students will have the opportunity to make connections with their peers in the target language. The locus of casualty can be incorporated in this study to align student perceptions and societal views of language learning. Other concepts within SDT that will be incorporated in this study are student interest, enjoyment, autonomous motivation, and controlled motivation.

Del Pozo Beaumud (2018) implemented this theoretical framework to examine the relationship between motivation and content and language integrated learning (CLIL). CLIL is a bilingual education program where students are taught non-linguistic concepts in the target language, simultaneously learning the content and language. In addition to SDT, this literature review also addresses the socio-educational model and the L2 motivational self- system as they relate to second language learning. Del Pozo Beaumud (2018) notes that SDT is useful when examining motivation in students learning a second language and that CLIL is a beneficial approach to bilingual education according to research findings that indicate higher motivation in participants compared to students who are not receiving a bilingual education.

Lanvers (2017) applied this theoretical framework to explore the concept that monolingual speakers of English may be demotivated to learn a second language due to their perceived notion of the global spread of English. This comparative study focused on university students in the UK and included 939 traditional campus students and 240 distance students. Results suggested minimal correlation between language learners' motivation and their beliefs regarding global English. Additionally, results highlighted a link between the belief that second



language learning is important and a weaker perception of English as a *lingua franca* (Lanvers, 2017b).

Parrish and Lanvers (2019) incorporated this theoretical framework to investigate the relationship between student motivation toward L2 learning and school policy on teaching L2 courses. The study was qualitative in nature and focused on students aged 14 to 15 in England. Results indicated that school policy that allows free choice was beneficial to student motivation. Additionally, students were motivated to study certain languages based on perceived usefulness. Usefulness was the common theme that emerged and was divided into the subthemes of traveling, making connections with friends and family, culturally specific goals, and geopolitical value (Parrish & Lanvers, 2019).

### **Related Literature**

Research must build upon current research in the related field to provide a substantial contribution. An expansive review of literature will establish the limits of a research problem, highlight a gap in the literature, identify approaches that should be avoided because they provide insignificant results, provide methodological insights, and gather recommendations for further research (Gall et al., 2007). This review of literature synthesizes findings on topics related to this study. Topics include choice, student motivation to learn an L2, school policy, enrollment trends, student attitudes and perceptions toward languages, and academic achievement. Current literature related to L2 study in anglophone countries is primarily focused on secondary students in the United Kingdom, thus, creating a need for research focused on post-secondary students in the United States.

### **Choice**

With a focus on the relationship between university student attitudes toward learning a second language and their language choice, it is important to first understand the decision-making process and consider factors that may affect choice in other contexts. Gwinn and Krajbich (2020), note that choice is affected by societal factors that a person's attention is exposed to such as advertisements and peer pressure. More so, visual attention has been linked to choice outcomes. The attractiveness of a choice increases with the amount of exposure or visual attention it receives. Daily choices that people make, such as what to eat for dinner, which pair of shoes to buy, and even moral decisions are influenced by what has captured their visual attention the most (Smith & Krajbich, 2018b).

The decision-making process is often described as an evidence-accumulation process in which participants are given a variety of options to choose from and each option is presented in a manner to attract the participants' attention. Findings show that this evidence-accumulation process is affected by visual attention, meaning that participants will choose the option that received the most visual attention (Smith & Krajbich, 2018b). However, research also indicates that there are some limitations to this phenomenon, where participants are less likely to choose a lesser accessible option despite holding their visual attention the most (Gwinn & Krajbich, 2020). Ultimately, the decision-making process is consistent across contexts; therefore, when people are presented with different options, their attention remains a reliable factor in their choice even though the degree to which their choice is influenced by attention may differ for different people (Smith & Krajbich, 2018a). Considering that the decision-making process is consistent across various contexts, it can be assumed that when university students are presented with a list of languages to choose from, they may choose to enroll in the language that their attention has been exposed to the most.

## **Motivation to Study a Second Language**

Students who study an L2 present various forms of motivation. Intrinsic, extrinsic, and unconscious motivation in L2 students is discussed. In SDT, intrinsic motivation refers to the need to feel competent and to maintain self-determination, while extrinsic motivation refers to the need to receive tangible or intangible rewards (Deci & Ryan, 1985). Unconscious motivation refers to the preference for something after repeated exposure (Dörnyei & Al-Hoorie, 2017).

### ***Intrinsic Motivation***

Intrinsic motivation for studying a foreign language is connected to allowing students to freely choose and enroll in a language course. When provided with the free choice of whether to study a foreign language, students in the UK who chose to study a language had greater intrinsic motivation than students who felt an obligation to study a language (Lanvers et al., 2019, 2020; Parrish & Lanvers, 2019). Students in bilingual education programs, such as CLIL, are more intrinsically motivated to learn an L2 than their non-CLIL peers (Del Pozo Beaumud, 2018; Sylvén, 2017). In a research study comparing intrinsic motivation for CLIL and non-CLIL students, results from independent *t*-test scores indicated that CLIL students had a mean score of 8.72 and non-CLIL students had a mean score of 11.90 ( $p < 0.01$ ), where lower mean scores translate to higher intrinsic motivation (Doiz et al., 2014). The development of cross-cultural connections and interest in foreign languages perceived as valuable can serve as an initial motivation to study the target language (Huhtala et al., 2019; Parrish & Lanvers, 2019); however, intrinsic motivation significantly ( $p < .001$ ) declines as students continue to study an L2 (Coleman et al., 2007).

### ***Extrinsic Motivation***

Although the potential development of cross-cultural connections can motivate students to study an L2, it is only an initial motivator. Findings illustrate that students are motivated by their future and study languages with their professional aspirations in mind (Huhtala et al., 2019). Despite the global dominance of English, Lanvers (2017b) did not discover a significant connection between English and motivation; however, students who believed that languages other than English were important to study also did not perceive English as having a worldwide dominance, where 86% of participants disagreed that global English makes L2 study unnecessary (Lanvers, 2017a).

### ***Unconscious Motivation***

Behaviors and motivations are commonly thought to be conscious and intentional; however, some studies demonstrate that behavior and motivation can also occur unconsciously (Capa et al., 2013; Henry & Thorsen, 2018). In line with Dörnyei and Al-Hoorie (2017), wherein the preference for something after frequent exposure is considered unconscious motivation, the preference for English over other languages in anglophone countries can be described as unconscious motivation because of repeated exposure to the language. Research shows that unconscious motivation elicits positive, implicit attitudes that significantly ( $p = .001$ ) affect L2 achievement; furthermore, positive implicit attitudes are related to higher achievement (Al-Hoorie, 2016b). Nonetheless, further research is required to determine if the influence that unconscious motivation has on behavior and the brain could affect higher-order executive control functions, including language learning (Al-Hoorie, 2016a; Capa et al., 2013; Henry & Thorsen, 2018).

### **Policy for Second Language Courses**

School policy and enrollment trends for L2 courses vary by region. Low enrollment and the elimination of language programs, however, are consistent across anglophone countries. Differences in school policy for the US, the UK, and Australia are discussed. Enrollment trends for the US, UK, and Australia are also provided.

### ***Language Policy in Anglophone Countries***

School policy regarding L2 courses is not consistent across the US. The US does not have a national policy for L2 learning which has led to varying state language learning requirements. Only seven states and the District of Columbia include L2 study as a graduation requirement, 22 states allow L2 courses to fulfill an elective graduation requirement, and the remaining 21 states do not have a state-mandated requirement but commonly offer L2 courses (O'Rourke et al., 2016). Considering this data, promoting the value of L2 learning solely within L2 classrooms will not influence the majority of the student population in the United States.

In the UK, L2 study is offered at primary, secondary, and post-secondary schools, but is only required for students between the ages of 11 and 15 (Lanvers & Coleman, 2017). During non-compulsory years, students who desire to learn an L2 can enroll in an L2 course as an elective; however, when school policy does not allow free choice, school leaders decide which students can enroll in these courses. These decisions are typically based on predicted achievement and success in the target language (Parrish & Lanvers, 2019). The L2 courses offered heavily depend on teacher availability. The most common language choices for L2 students in the UK are French with 43.1%, Spanish with 32.7%, and German with 24.2% (Parrish, 2020).

Although English is the official language in Australia, the Australian government recognizes and places cultural value on the Aboriginal languages (He & Liao, 2020). Due to

tourism and natural resources, Australia conducts business and trade with various countries, including non-anglophone countries; therefore, the government emphasizes the need for foreign language development. Students are asked to study a community language or a language that will benefit the Australian economy (He & Liao, 2020).

### ***Enrollment Trends***

According to Hanna et al. (2020), low enrollment and the elimination of language programs are logical trends following the absence of consistent school policy regarding L2 requirements. The US, UK, and Australia struggle with promoting L2 study across secondary and post-secondary institutions; thus, low retention rates in university language programs are attributed to students experiencing difficulty and disengagement in first-year L2 courses (Hanna et al., 2020). In the US, less than 20% of K-12 students were enrolled in L2 courses during the 2014-2015 academic year (American Councils for International Education, 2017). Enrollment in L2 courses in US K-12 schools decreased by 9.2% from 2013 to 2016, with less than 20% of students enrolled in an L2 course (American Councils for International Education, 2017; Looney & Lusin, 2019). Second language enrollment in US universities declined 15.3% from 2009 to 2016 and 651 language programs were eliminated between 2013 and 2016 (Looney & Lusin, 2019). Second language enrollment trends in the UK are also declining. Since 2000, 40 universities in the UK have eliminated their language departments (Copekoga, 2015). Enrollment in higher education institutes in Australia has increased over the last few years and in 2017, 1.3 million students were enrolled in Australian universities (Delahunty & O'Shea, 2019). Yet, L2 enrollment in Australian schools and universities is the lowest among the 38 nations in the Organization for Economic Co-operation and Development (OECD), where less than 8% of students study an L2 during secondary school (Hanna et al., 2020).

### *Language Policy and Enrollment Trends in Non-Anglophone Countries*

Despite the number of countries that make up Europe and their respective languages, the spread of English continues to rise in secondary and post-secondary institutions (Lasagabaster, 2015). In 2005, 28% of Europeans could communicate in two languages other than English, but by 2012, this statistic decreased to 25%, indicating a decrease in the desire to learn or speak languages other than English. Although the objective of language planning in Europe promotes multilingualism, language policies generally favor English over other languages (Fäcke, 2021; Lasagabaster, 2015;). Additionally, there are extreme dissimilarities across European countries concerning the implementation of multilingualism. On one end, more than 95% of students in Luxembourg, France, Czech Republic, Romania, Slovakia, Estonia, and Finland learn 2 or more foreign languages. On the other end, less than 20% of students in Ireland, Portugal, and Greece learn 2 or more foreign languages (Fäcke, 2021). In Italy, multilingualism is encouraged through the national mandate that requires primary and lower secondary students to study two foreign languages (Dong & Tan, 2021). Students are required to study English and any additional European language. Upon graduation and before university acceptance, Italian students are required to take a national exam and a foreign language proficiency test in the language determined by the nation's department of education (Dong & Tan, 2021).

While the Chinese Constitution requires the promotion of Mandarin, China's many minority languages and dialects are protected and implemented in each ethnic school (He & Liao, 2020). The majority of foreign language courses offered in schools are English, Japanese, French, and Russian; however, English is prioritized as college students are required to enroll in a compulsory English course in addition to taking an English proficiency exam for admission into a Chinese university. As of 2018, the undergraduate foreign language majors in Chinese

universities are dominated by English with 1,300 programs while there are only 506 Japanese programs and 200 Russian and German programs (He & Liao, 2020).

The demographics of the United Arab Emirates are ethnically diverse, where immigrants make up the majority of the population and only 11.48% of the population are Emirati nationals (Al-Bataineh, 2021). The diverse ethnic population also creates a diverse linguistic presence, but Arabic is the official language; yet English is the medium of instruction in all universities. Furthermore, to qualify for admission to any university in the United Arab Emirates, students must pass an English proficiency assessment which determines if they are prepared for tertiary study with an English medium of instruction. Students who do not meet the set benchmark are placed in a pre-university level course and are required to pass another proficiency exam to transition into tertiary study or they will be dismissed from the institution. Results from these proficiency assessments show that only 3% of students met the language proficiency requirement in 2003, with a gradual increase to only 20% of students in 2013 (Al-Bataineh, 2021).

In 2002, the educational council in Qatar implemented an educational reform that mandated public schools to teach math, science, and technology in English, despite opposition from educators and scholars (Mustafawi & Shaaban, 2019). After results from national examinations showed that less than 20% of students presented mastery in math, science, English, and Arabic, the educational council reverted to Arabic as the medium of instruction for K-12 schools and Qatar University in 2012. Mustafawi and Shaaban (2019) found that the negative attitudes of stakeholders towards English as the medium of instruction, the limited qualifications and teacher preparedness for teaching students in the target language, and the manner by which the educational council introduced the new mandate were factors that inhibited the successful execution of this reform.



Countries in Latin America are dominated by Spanish and Portuguese with various minority languages among the indigenous population (Hamel et al., 2016). The medium of instruction in public schools throughout Latin America is Spanish or Portuguese and foreign language education is not provided. Universities in Latin America also use the dominant language for instruction but have created foreign language programs in an attempt to transition from a predominant monolingual institution toward plurilingualism with a focus on English (Hamel et al., 2016).

Although South Africa has 11 official languages declared by the South African Constitution, schools prioritize Afrikaans and English (Kretzer & Kaschula, 2020). In Limpopo Province, South Africa, Kretzer and Kaschula (2020) found that although some teachers follow South Africa's official language policy, other teachers implement translanguaging and code-switching between one or more African languages during oral communication whereas English is solely used for written communication. Additionally, parents perceive economic opportunities to be linked with English and prefer that their children attend school with English as the mode of instruction instead of African languages (Kretzer & Kaschula, 2020).

### **Student Attitudes and Perceptions**

Student attitudes and perceptions toward English and learning an L2 in anglophone countries align with declining enrollment trends and the elimination of language programs (Knouse et al., 2021; Mills & Moulton, 2017). The value of English as a native speaker and the value of languages other than English as an L2 are discussed. A comparison of secondary and post-secondary student attitudes and perceptions toward L2 study is also provided.

#### ***Value of English***

Recent research findings show that a common attitude among monolingual students in anglophone countries is that learning an L2 is unnecessary because English is the only relevant language as a *lingua franca* (Clayton, 2016; Dörnyei & Al-Hoorie, 2017; Duff, 2017; Huhtala et al., 2019; Lanvers, 2017a; Lanvers, 2017b; Lanvers et al., 2019, 2020; Looney & Lusin, 2019; Vidal Rodeiro, 2017). This perception stems from the global dominance and societal prestige of English. In many non-anglophone countries, English is used to communicate on social media platforms in informal contexts, and also in various formal contexts such as conferences, research journals, examinations, and universities. In Iran, English is associated with having higher social and economic status and a higher education (Jannejad et al., 2015). The societal value placed on English creates the ideology that English is the most valuable language even among students in other countries where learning ESL is encouraged more than other languages. Additionally, Dörnyei and Al-Hoorie (2017) noted that a large majority of research in the field of SLA focuses on students learning ESL, thus, highlighting a need for studies focused on languages other than English.

**Global English.** The term ‘global English’ is used to refer to the unparalleled use of English worldwide as it is spoken to a certain degree in more countries than any other language; however, English is not spoken in every country. Although not a truly global language, English can be described more so as a transnational language (Haberland & Mortensen, 2012). The globalization or internationalization of English did not occur by chance. Phillipson (2017) and Lemberg (2018) discuss how the idea that English should be the *lingua franca* of the world immersed and was manufactured in the years following World War II and the Cold War. After 1945, the spread of English was a purposeful and intentional joint effort by the US and the UK as a means to maintain influence and be able to communicate between linguistically diverse groups

(Lemberg, 2018). Policymakers and politicians from the US and the UK worked together to create and fund English language teaching programs, textbooks, and dictionaries and distributed these materials abroad (Lemberg, 2018; Phillipson, 2017).

Due to the unequalled widespread dominance, English has permeated and fortified its presence in academia, research, and sciences across non-anglophone countries. Due to this unequalled widespread dominance, English has permeated and fortified its presence in academia, research, and sciences across non-anglophone countries. Many universities in various countries worldwide place precedence on preparing students to be successful global citizens and have redesigned many programs with the intention of internationalizing their institutions (Galloway et al., 2020). One approach towards internationalization is implementing English as the medium of instruction for a wide variety of courses unrelated to second language acquisition. This trend emerged in Europe and is continuously growing. Research findings reveal that in 2014, there were 11 times more university programs in Europe that had implemented English as the medium of instruction than there were in 2001 (Wächter & Maiworm, 2014); furthermore, this policy trend has also expanded to other countries, such as in China and Japan. It is important to note that programs with English as the medium of instruction are different from bilingual programs such as content and language integrated learning, where students learn vocabulary and language skills in the target language while learning subject content. Rather, language learning is not an intended objective within programs with English as the medium of instruction (Galloway et al., 2020). Despite the absence of language learning objectives, research reveals that teachers and students perceive many personal benefits from studying in institutions where English is the medium of instruction (Galloway et al., 2020). These personal benefits include publishing in

academic journals, presenting research at international conferences, greater access to knowledge, and higher employability.

In Swedish educational institutions, 90% of doctoral students write their theses in English, aiming to increase the research quality and internationalize the impact of their research (Salö, 2018). In a university in Portugal with a large percentage of international students and no explicit language policy, the medium of instruction is decided by each teacher. The student demographic of most classrooms include a variety of linguistic differences and many teachers decide to teach their courses in English; although, some teachers opt for a translanguaging approach where instruction and student discussions are comprised of multiple languages (Caruso, 2018).

In a qualitative study focused on Syrian refugee teachers' and their beliefs regarding the importance of teaching English, Karam et al. (2017) found that the majority of participants expressed various reasons as to why they considered teaching their students English as important and beneficial. Many teachers regarded English as a global language that could help students communicate internationally, access knowledge from scientific reports, and increase employment opportunities. Some teachers conveyed the importance of teaching English as early as possible and considered English more valuable than Arabic; however, other teachers reported concerns that their students' Arab identity may be diminished by the strong emphasis placed on teaching English as a second language (Karam et al., 2017).

**English as a Second Language.** A significant majority of research in the field of SLA is focused on students learning ESL, both in anglophone and non-anglophone countries. The global dominance of English has also affected the variety of languages that are offered in other countries as most students enroll in ESL courses (Coffey, 2016). In the European Union, there is

a decreased interest in languages other than English where 83% of primary students and 94% of secondary students decide to learn English as a second language over other international languages (Lanvers et al., 2018).

Studies on ESL students in non-anglophone countries show that students perceive English as a tool, express positive attitudes toward learning English, and exhibit positive attitudes toward the influence English has on their identity (Sa'D, 2017). Language and culture are interconnected and learning another language, including ESL, can change students' perceptions of the world through the introduction of various cultures that are tied to the respective language. Exposure to foreign cultures adds elements to a person's identity as they begin to adopt and practice various aspects of these other cultures. This notion is aligned to a non-essentialist view of identity which argues that identity is based on what a person does, their actions, and not simply their pre-existing traits such as skin color or birthplace (Fuller, 2013; Sa'D, 2017). In an exploratory-interpretive research study, results indicated that students learning ESL presented negative perceptions of grammar instruction with only a fifth of participants indicating enjoyment in regards to learning grammar; however, ELLs also acknowledged the importance of grammar instruction and corrective feedback during the language learning process (Martinez Agudo, 2015). Findings also indicated that ELLs expressed a preference for communicative activities to develop fluency and conversational skills. Additionally, ELLs valued corrective feedback but they viewed communicative skills as more valuable (Martinez Agudo, 2015).

Studies also show that female students learning ESL present more implicit positive attitudes toward learning languages than do males (Al-Hoorie, 2016a). ESL students' implicit attitudes toward the target language and speakers of that language positively predict L2

achievement (Al-Hoorie, 2016b). The intended effort of ESL students, however, does not significantly predict L2 achievement because of instances when low achievers realize they may fail and express higher intended effort; similarly, high achievers may become overconfident in their abilities and exhibit lower intended effort (Al-Hoorie, 2016b). Students in most European countries, excluding Spain and Germany, who prefer plurilingualism rather than a strict focus on English bilingualism, regard learning English as vital and more valuable than learning a language other than English (Duff, 2017).

### ***Value of Languages Other than English***

Research demonstrates that students value languages for different reasons. Some languages are considered more valuable or useful depending on their applicability in terms of travel, politics, business, culture, and future employment (Bower, 2019; Enkin & Correa, 2018; Mills & Moulton, 2017; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017). In England, students perceive German as useful for making personal connections, Chinese is identified as relevant because of its geopolitical position, and Japanese is considered valuable for cultural reasons. Overall, students value languages based on their relevance to authentic contexts (Bower, 2019; Parrish & Lanvers, 2019). Research demonstrates that students enjoy learning an L2 when applied in authentic contexts and they express confidence in progressing in listening and writing in the TL (Bower, 2019). Additionally, perceived applicability influences student choice in enrolling in a foreign language course (Bower, 2019; Parrish & Lanvers, 2019). Students learning an L2 value oral proficiency above other language skills and view language learning as a way to form connections across cultures (Enkin & Correa, 2018). Although learning an L2 is beneficial for education and careers, the lack of national policy for L2 study dilutes the idea that L2 study is valuable. Consequently, a decline in enrollment and participation in L2 courses is

present because students enroll in courses they perceive to be relevant or valuable to their future (Mills & Moulton, 2017; Vidal Rodeiro, 2017).

### *Secondary Students*

Studies show that students in the United Kingdom (UK) who formally begin studying an L2 prior to high school project significantly ( $p < .05$ ) higher confidence, or positive attitudes, than students who start in or after high school (Knouse et al., 2021). When L2 learners are prepared for the transition between primary and secondary school, students do not feel anxious about the higher expectations; instead, student enjoyment of L2 learning increases in high school when they feel challenged and express that this challenge is surmountable (Chambers, 2019; Knouse et al., 2021; Parrish & Lanvers, 2019). Students also express enjoyment and positive attitudes toward language learning when the language is applied in relevant contexts and when they see their progress (Bower, 2019). The students' progress and expressions of enjoyment indicate they are intrinsically motivated to study the L2, which is aligned with SDT (Núñez & León, 2015).

In contrast, when students in the UK are not well-prepared for the transition into secondary school and experience abrupt changes in pedagogy, they express lower motivation and negative attitudes and perceptions toward the target language (Chambers, 2019; Courtney, 2017). Furthermore, negative attitudes and perceptions toward L2 learning originate from negative experiences due to the L2 teacher and difficulty in acquiring the target language. Concerning the negative experiences with the L2 teacher, students expressed not forming a good relationship with the teacher because the teacher did not take the time to develop a relationship with students (Chambers, 2019; Courtney, 2017; Molway, 2021). In a study in England where students had the choice of Spanish, French, or German, students expressed that they generally think language

study is not important. Some of these students also indicated that learning an L2 was “a waste of time” (Parrish, 2020, p. 541). Despite negative attitudes and decreased motivation to learn an L2 when transitioning into secondary school, findings show that students still make progress in acquiring the target language (Courtney, 2017).

### *Post-secondary Students*

Research shows that first-year university students in the UK generally have positive attitudes toward L2 learning at the beginning of the semester; however, their attitudes are negatively formed as they continue in post-secondary L2 programs (Hanna et al., 2020; Knouse et al., 2021). The negative changes include losing interest and thinking the target language is irrelevant to their future careers. In a study focusing on the perceptions of French language learners transitioning to post-secondary language study in Australia, students initially expressed their enjoyment of learning French in high school; however, students expressed that the course “killed my passion for the French language” in an end-of-course survey (Hanna et al., 2020, p. 23). Initial positive attitudes consist of expressions of general enjoyment of L2 learning and excitement for the language course. Students also expressed they maintained high expectations for the course despite presenting low confidence and feelings of anxiousness regarding course difficulty, mistakes in the target language, and experiencing discomfort.

Research demonstrates that positive attitudes toward language learning tend to change after one semester of post-secondary L2 study (Hanna et al., 2020; Knouse et al., 2021). A qualitative research study set in an Australian university with low L2 enrollment rates focused on first-year students studying French (Hanna et al., 2020). A thematic analysis of responses from end-of-course surveys from 2014 to 2016 reveals the emergence of 4 recurring themes. The survey required students to express their likes and dislikes and to compare the course to their



previous experience of studying the TL in high school. The first theme, learning opportunities, depicted that the L2 course was too fast-paced, covered too much material, and had demanding expectations. The second theme, structure, indicated that the L2 lacked structure or was different than what students were used to before attending university. The third theme, interaction, presented that students enjoyed speaking in the TL but lacked confidence and avoided speaking in class. The last theme, contact with staff, highlighted that students negatively viewed interaction with the L2 teacher in terms of not having enough support or access to the teacher outside of class time (Hanna et al., 2020).

### **Academic Achievement**

Academic achievement at the university level generally means a student earns a degree, maintaining a minimum of a 2.0 GPA. Intelligence alone does not equate to academic achievement as many aspects of university life may affect a student's GPA. Factors such as classroom modality, attitude, engagement, socio-economic status, support system, dedication, attendance, and physical, mental, and emotional health are a few examples of aspects of university life that may impact a student's academic success. Baglione and Smith (2022), found that university students in the United States perceive grades and GPA as an accurate reflection of academic achievement. Although some students believe grade inflation occurs, students believe A grades are earned (Baglione & Smith, 2022). In a study focusing on first-generation Australian university students, 81% of participants described themselves as successful students, 7% responded as unsuccessful, and 13% were unsure if they would consider themselves to be successful students (Delahunty & O'Shea, 2019). Qualitative results revealed that students perceive success as a balance between grades, employment, perseverance, abilities, satisfaction,

confidence, quality of life, happiness, lifelong learning, and the ability to give back and or contribute to society (Delahunty & O'Shea, 2019).

### ***Factors that Affect Academic Performance***

Academic performance can be influenced by a myriad of factors and cannot be attributed to one sole aspect of a student's life (Kassarnig et al., 2018). Various aspects, such as health, lifestyle, socioeconomic status, demographics, and academic habits, and their effects on academic achievement are discussed in this section. Mental and emotional health, including the concept of happiness, are factors that may influence academic performance at the university level (Kryza-Lacombe et al., 2018). In a study examining the effects of happiness on academic achievement for university students in the United States, Kryza-Lacombe et al. (2018), differentiated between hedonic and eudaimonic emotional states. Hedonic motives refer to the action of seeking enjoyment, comfort, and relaxation. Eudaimonic motives refer to the action of seeking purpose, meaning, and personal growth. Results revealed that Hedonic motives were not significantly related to GPA ( $r_s = -.16, p = .08$ ); however, a significant correlation was observed between eudaimonic motives and GPA where students who reported higher instances of seeking purpose, meaning, and personal growth also had higher GPAs ( $r_s = .24, p = .01$ ) (Kryza-Lacombe et al., 2018).

Kivlighan et al. (2018) examined the association between academic performance and feelings of hope and belongingness for university students in the United States who were on academic probation and had voluntarily enrolled in an academic enhancement program. Results from this study revealed that students experienced an increase in hope and belongingness by the end of the program which also significantly coincided with an increase in GPA. An additional finding was a gender difference in the relationship between hope and academic achievement.

Female students who experienced any increase in hope greatly improved their GPA. Men saw a large improvement in GPA when they also experienced a large increase in hope, whereas men with only a small increase in hope saw a small, yet significant improvement in GPA (Kivlighan et al., 2018).

Academic performance can also be affected by the health behaviors and habits of students. Reuter and Forster (2021) examined this relationship in university students in the United States over the span of 2 years. Findings revealed that healthy behaviors such as eating breakfast and engaging in physical activity and strength training were positively associated with GPA. Subsequently, results indicated a negative association between academic achievement and unhealthy habits and behaviors such as consuming fast food, energy drinks, alcohol, engaging in recreational marijuana use and electronic vaping, and the number of hours a student works and sleeps (Reuter & Forster, 2021).

In a study focused on female university students in Canada, Dubuc et al. (2017) found significant correlations between academic performance and motivational, physical, and lifestyle factors. Regarding physical factors, the cardiorespiratory fitness of participants significantly correlated to GPA ( $r = 0.32, P = .001$ ). In terms of motivational factors, intrinsic motivation toward knowledge ( $r = 0.23, P = 0.024$ ), intrinsic motivation toward accomplishment ( $r = 0.27, P = 0.007$ ), and extrinsic motivation toward external regulation ( $r = -0.30, P = 0.002$ ), were significant predictors of GPA. Lastly, the lifestyle factors that were significantly correlated with GPA were the number of meals participants ate per day ( $r = 0.20, P = 0.044$ ), and religious status where 75% of participants with higher GPA reported to be atheists and 46% of participants with lower GPA reported to be atheists ( $P = 0.003$ ) (Dubuc et al., 2017).

Kassarnig et al. (2018) examined the disparities between low academic achieving students and high academic achieving students in a university in Denmark, accounting for four features that address different aspects of life. The personality features consisted of 16 personality traits. Individual features combined the personality traits with behavior, such as attendance and Facebook use, and personal or demographic information such as gender and grade level. The network features included text messages, phone calls, proximity, interactions on Facebook, and Facebook friendships. The fourth feature combined the individual and network features. All features significantly correlated with academic performance ( $p < .001$ ) (Kassarnig et al., 2018). Findings indicate that the academic performance of peers has a strong effect on individual academic performance. Class attendance resulted in the strongest correlation with academic performance and Facebook activity had a negative correlation where students with higher academic achievement had lower Facebook activity (Kassarnig et al., 2018).

Stress and GPA have a curvilinear relation where a small amount of stress can motivate students and increase academic performance; however, too much stress can demotivate students and impede their academic performance (Frazier et al., 2019). Another form of stress that negatively affects academic achievement is financial stress and student loan debt (Baker & Montalto, 2019). University students in the United States during the Fall 2014 semester were sampled and those who were still enrolled a year later and had high levels of financial stress had lower GPAs. Additional findings reveal a racial disparity in the effects of loan debt and academic performance. Students of color with a large sum of student loan debt also had reduced GPAs; however, white students with a large sum of student loan debt did not have reduced GPAs (Baker & Montalto, 2019).

Student debt and financial stress can also lead to food insecurity, or the inability to access or obtain sufficient food and nutrition (Weaver et al., 2020). Students who are food insecure may often limit or skip meals and even not eat for an entire day due to their finances. Students may also borrow money from family and friends when they cannot afford to buy food. Weaver et al. (2020), examined the relationship between food insecurity and academic performance for university students in the United States. Forty-eight percent of surveyed participants were food insecure and were 2 times more likely than food-secure students to fall within the lowest 10% of GPA, ranging from .08 to 2.37. Similarly, food secure students were three times more likely than food insecure students to fall within the highest 10% of GPA, ranging from 3.92 to 4.0. Additionally, the demographics of students who were more likely to be food insecure include African Americans, Hispanics, women, commuters, students receiving financial aid, and students who did not have or had a partial meal plan (Weaver et al., 2020).

Blatt et al. (2020), studied the relationship between academic performance and demographics such as gender, race, and parent education for STEM university students in the United States. Regarding gender, female students performed higher in psychology ( $p < .001$ ), lower in physics ( $p = .065$ ), and had no significant difference from males in chemistry. In relation to race, underrepresented racial groups performed significantly worse than White and Asian students in chemistry ( $p < .001$ ), physics ( $p = .039$ ), and psychology ( $p = .064$ ). In terms of parent education, students with at least one college-educated parent outperformed students with zero college-educated parents in physics ( $p < .001$ ) and in psychology ( $p < .001$ ), but not in chemistry (Blatt et al., 2020).

Glew et al. (2019) examined the impact of academic literacy support on academic achievement for nursing students attending a culturally and linguistically diverse university in

Australia. Findings indicate that students who sought out support from the university's academic literacy support staff achieved a higher GPA and were 7 times more likely to continue in the nursing program than their peers who did not; moreover, the frequency of support sessions positively influenced GPA and retention (Glew et al., 2019). Grade disparities can also occur systematically based on program difficulty. Tomkin and West (2022), found that the courses within STEM programs and departments grade with less leniency than non-STEM courses. Consequently, GPAs for STEM students are, on average, four-tenths of a grade point lower than academically similar non-STEM students (Tomkin & West, 2022).

Time management can also affect university student GPA (Thibodeaux et al., 2017). Some habits of students with a higher GPA include estimating the time a task will require, studying habitually, setting goals, and monitoring academic progress. Students who spend most of their time off-campus focused on non-academic work report lower expectations regarding academic achievement and subsequently have lower GPAs than students who do spend most of their time on campus focused on academic-related tasks and activities (Thibodeaux et al., 2017).

Although many factors do in fact influence academic achievement, some factors such as the frequency of class meetings and the number of courses a student registers for do not significantly affect GPA. Many university course offerings differ in the number of days and times the class meets per week; for example, some classes meet for one hour, three times a week, other courses meet twice a week for an hour and a half, and other courses may meet for three hours once a week. Research indicates that these differences between class times do not impact academic performance (Diette & Raghav, 2018). Furthermore, student course load does not negatively impact academic performance (Huntington-Klein & Gill, 2021). Students who enroll in more classes receive similar grades as students who enroll in fewer classes. Findings indicate

that students enrolled in more classes will spend less time on non-academic activities to devote more time to their heavier course load (Huntington-Klein & Gill, 2021).

### *Academic Achievement for L2 Learners of LOTE*

As in all college courses, final course grades and GPAs for students enrolled in a foreign language do not perfectly reflect their proficiency in the target language. Although proficiency may influence grades, other factors such as attitude, attendance, work ethic, and a myriad of external factors like course load, employment status, and issues in students' family and personal life may affect grades (Brown et al., 2018). To assess proficiency, The American Council on the Teaching of Foreign Languages (ACTFL) offers the Assessment of Performance toward Proficiency in Languages (AAPPL) which assesses interpersonal listening and speaking, presentational writing, and interpretive reading and listening modes of communication in Arabic, English, French, German, Italian, Japanese, Korean, Mandarin, Portuguese, and Spanish (ACTFL Language Connects, 2012).

Winke et al. (2020) provide a proficiency profile of students enrolled in language courses in universities in Michigan, Utah, and Minnesota. Data were collected from ACTFL speaking, reading, and listening proficiency test results for students enrolled in Arabic, Chinese, French, Portuguese, Russian, and Spanish. ACTFL proficiency scores range from Novice Low to Advanced High in the following test results (Winke et al., 2020). Arabic students in the first year scored novice high in speaking and novice mid for reading and listening. Arabic students in the fourth year scored intermediate low in speaking, novice high for reading, and novice mid for listening. Chinese students in the first year scored novice mid in speaking and novice low for reading and listening. Chinese students in the fourth year scored intermediate mid in speaking and reading and intermediate low for listening. French students in the first year scored novice

mid in speaking, reading, and listening. French students in the fourth year scored intermediate high in speaking and listening and advanced low for reading. Portuguese students in the first year scored intermediate low in speaking and listening and intermediate mid for reading. Portuguese students in the third year scored intermediate mid in speaking and intermediate high for reading and listening. Russian students in the first year scored novice high in speaking, novice mid for reading, and novice low for listening. Russian students in the fourth year scored advanced mid in speaking and advanced low for reading and listening. Spanish students in the first year scored novice high in speaking, novice mid for reading, and novice low for listening. Spanish students in the fourth year scored intermediate mid in speaking, advanced low for reading, and intermediate high for listening (Winke et al., 2020).

Research findings indicate that L2 learners' perceptions of achievement are higher than expressed by their teacher; furthermore, students perceive their exam grades as an accurate representation of their achievement, but teachers argue the opposite (Enkin & Correa, 2018). Research demonstrates that 92% of students learning German and French as an L2 identified speaking as the most valuable L2 skill, while 94% of Spanish students identified listening as the most important skill (Alalou, 2001). Although most students regard oral proficiency as one of the most valuable language skills, students demonstrated the lowest proficiency in speaking and expressed feeling the least prepared for this skill (Enkin & Correa, 2018). The misalignment between student and teacher perceived achievement also appears in course grades. Course grades in L2 courses allow students to be aware of their general performance in the course, but they do not reflect language proficiency. Following the proficiency guidelines as described by the American Council on the Teaching of Foreign Languages (ACTFL Language Connects, 2012), proficiency levels are determined in ranges that explain what the L2 learner is and is not able to



do in the TL in terms of the four language skills. The four language skills are reading, writing, listening, and speaking. Course grades as a measure of proficiency in the TL are flawed due to the various components that may affect a student's grade. Instead, proficiency in the TL should be measured with a proficiency scale, such as the ACTFL proficiency guidelines (Brown et al., 2018). Assessments should be designed to accurately measure proficiency in these four language skills. Language learning does not occur as a linear progression and students can present different proficiency levels in each skill (ACTFL Language Connects, 2012).

### *Academic Achievement for Learners of ESL*

Many factors can affect academic performance and influence course grades. Students learning English as a second or foreign language can be assessed on their ability to use and understand English through the Test of English as a Foreign Language (TOEFL; Llosa & Malone, 2019). This TOEFL is an internet-based assessment that measures students' listening, speaking, reading, and writing skills in the target language as implemented in educational settings. Many universities require international students and non-native speakers of English to take the TOEFL as part of the admissions process (Llosa & Malone, 2019). Nevertheless, research findings reveal varied results when examining the correlation between TOEFL scores and academic success. Some research suggests weak to no correlations while other research reports higher correlations for students majoring in social science, education, and public affairs; furthermore, some research findings demonstrate that students who performed well on the TOEFL during admission did not have significantly higher grade point averages than students who performed poorly on the TOEFL (Neumann et al., 2019). These results further highlight that many aspects may influence academic performance besides language proficiency.

Another factor that can influence language learners' academic performance is classroom structure. In a study that compared academic performance for ESL students in a traditional classroom setting, a flipped classroom, and a semi-structured flipped classroom, results indicated a statistically significant difference in academic performance for each group (Feng Teng, 2017). Results from post-hoc Tukey's tests reveal that the academic performance of ESL students in a flipped classroom was significantly greater than ESL students in a semi-structured flipped classroom ( $p < .05$ ) and ESL students in a traditional classroom structure ( $p < .001$ ); additionally, these results were consistent across four assessments that addressed cross-cultural oral communication and comprehension of content and learning materials (Feng Teng, 2017).

### **Summary**

The mentality that knowing English makes learning another language irrelevant is prevalent among students in countries where English is the dominant language (Clayton, 2016; Dörnyei & Al-Hoorie, 2017; Duff, 2017; Huhtala et al., 2019; Lanvers, 2017a; Lanvers, 2017b; Lanvers et al., 2019, 2020; Looney & Lusin, 2019; Vidal Rodeiro, 2017). This mentality has caused a decrease in foreign language enrollment in universities across the United States, especially in higher-level language courses beyond the minimum requirement for graduation. There is a range of attitudes and perceptions toward L2 learning presented in the literature. Some students maintain optimistic views despite perceptions of difficulty. Students who indeed value L2 learning categorize languages as being valuable for different reasons such as travel, business, and entertainment (Bower, 2019; Enkin & Correa, 2018; Mills & Moulton, 2017; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017). European languages are ranked the highest in terms of value whereas minority languages are considered irrelevant, despite their presence in the students' communities. Many students also regard speaking in the target language as one of the

more valuable language skills; however, despite placing a higher value on speaking skills, students also tend to express feelings of unpreparedness to speak the target language in authentic or real-world situations and they subsequently score the lowest on oral proficiency skills compared to listening, reading, and writing proficiency skills.

Other students, predominantly in anglophone countries, view learning a language other than English as unimportant and without substantial gain. Additionally, the skills that L2 learners gain after a few semesters is perceived as inapplicable in the workplace (Mills & Moulton, 2017; Vidal Rodeiro, 2017). Although students progress in the L2, they tend to cease studying the language once they have met the requirement. Research shows that this trend is related to their negative attitudes toward bilingualism. Furthermore, many teaching practices are still centered on grammar instruction and not designed for helping students gain proficiency in authentic contexts (Dobson, 2018). This issue is not a new phenomenon and has elicited a decline in student enrollment in L2 courses. Despite efforts to address the issue, the problem remains prevalent and requires further research.

Student motivation to study a foreign language tends to originate from intrinsic and external factors (Parrish & Lanvers, 2019). School policies for language requirements and the limited availability of languages that are offered often act as barriers when students select an L2 to study. Concerning language attainment, there are some misalignments between perceived achievement, intended effort, and course grades (Al-Hoorie, 2016b). Students' perceptions of their progress in the language learning process are higher than the L2 teachers' perceptions. A majority of L2 research is centered around English as a second or foreign language. Even L2 research conducted in the United States has a higher focus on international students learning ESL than on American students learning a LOTE. Additionally, the majority of L2 research regarding

languages other than English focus on secondary students in the United Kingdom. Little research exists regarding the attitudes and perceptions of post-secondary language students in other anglophone countries. The existing gap in the literature regarding the perceived value of languages among university students in the United States creates a pressing need for the current study (Dörnyei & Al-Hoorie, 2017; Duff, 2017; Knouse et al., 2021; Lanvers et al., 2019, 2020; Mills & Moulton, 2017; Parrish, 2020; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017).

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of this quantitative, causal-comparative study was to determine if university student attitudes toward second language learning varies based on their language choice. Chapter Three provides the methodology for this study. Included in the methodology is the design and rationale. The research questions and null hypotheses are listed followed by a description of the participants and setting. The instrument and the procedures are clearly described in detail so the study can be replicated. The chapter concludes with the data analysis and a concise rationale.

### **Design**

A causal-comparative research design was employed for this quantitative study. The researcher aimed to determine if university student attitudes toward L2 learning varies by language choice. Based on the intent, type of data, and type of variables, an ex post facto causal-comparative research design best fit this study.

In causal-comparative research, the researcher seeks to identify cause-and-effect relationships by forming categories or groups that function as the independent variable and then detecting differences between the groups on the dependent variable (Gall et al., 2007). Ex post facto research is beneficial when relying on observations of natural, preexisting variations without manipulating the independent variable to observe its effect on the dependent variable. This study aligned with the design because the intent was to observe differences in university student attitudes toward L2 learning based on their choice of language study. Student attitudes were measured by two dependent variables: valuing multilingualism and cognitive effects. The independent variable was measured in the form of four preexisting groups, forming a nominal

scale (ASL, French, Korean, and Spanish). Furthermore, this research observed differences without manipulating the variables or implementing an intervention or treatment.

Many researchers implement this research design when identifying a cause-and-effect relationship. Block and Vidaurre (2019) applied this design to make comparisons between student attitudes in first-grade dual language immersion classes and mainstream English classes. Chen and Tsai (2020) employed this research design to determine if there is a difference in attitudes and language preference between students in a Hakka language immersion program and students not in the program. Özcan (2020) implemented this design to investigate if student attitudes toward Turkish language lessons differ in terms of their success, gender, number of siblings, and their parents' level of education. These peer-reviewed research studies applied a causal-comparative research design to identify relationships between independent variables, the naturally occurring or preexisting groups, and their effect on the dependent variables, the student attitudes. The similar nature of these studies to the current study provided a research rationale for the appropriateness of the selected research design.

In the RQ1 for this study, the dependent variable was valuing multilingualism as defined as student attitudes or thoughts toward world languages and the global status of English. In RQ2, the dependent variable was cognitive effects as defined as student attitudes toward self-efficacy, cognitive attainability, and cognitive advantages of bilingualism (Lanvers et al., 2019). In both research questions, the independent variable was language choice, measured by student enrollment in ASL, French, Korean, or Spanish during the academic semester. Student attitudes referred to how students perceive or value language learning.

### Research Questions

**RQ1:** Is there a difference in *valuing multilingualism* scores among university students enrolled in second language courses based on their choice of the language studied?

**RQ2:** Is there a difference in *cognitive effects* scores among university students enrolled in second language courses based on their choice of the language studied?

### Hypotheses

**H<sub>0</sub>1:** There is no difference in *valuing multilingualism* scores among university students enrolled in second language courses based on their choice of the language studied (ASL, French, Korean, or Spanish).

**H<sub>0</sub>2:** There is no difference in *cognitive effects* scores among university students enrolled in second language courses based on their choice of the language studied (ASL, French, Korean, or Spanish).

### Participants and Setting

After proper definition of the criterion, participants should be selected from the specific population (Gall et al., 2007). The identified population is discussed, highlighting the demographic diversity present in the selected region. Demographic information is also provided for the participants that will be selected from a convenience sample. The setting is then described, providing specifications of the requirements for each language course.

### Population

The participants for this study were drawn from a convenience sample of university students enrolled in a public university located in North Texas during the fall and spring semester of 2023. The identified population is specific to a particular region due to the size and population of Texas. Texas comprises 7 regions with varying demographic information as

evidenced by Table 1. North Texas comprises 30 counties and almost a third of the total Texas population. In North Texas, 54.1% of the population identified as White, 25.3% identified as Hispanic, 14.9% identified as Black, 5.4% identified as Asian, and 3.1% identified as other (Texas Counties, 2014).

This selected university was located in a metropolitan area and is considered a commuter school, meaning the majority of students do not live on campus and commute from the surrounding areas instead (Muniz, 2020). This university is ranked number 5 in the nation for ethnic diversity with over 100 countries represented by the student population of almost 60,000 students enrolled worldwide. The average age of the student population is 18 to 24; however, half of the student body are nontraditional students older than 24.

**Table 1**

*2010 Texas Demographics*

Region	Counties	Population	Percentages of population				
			White	Hispanic	Black	Asian	Other
North Texas	30	6,956,039	51.4	25.3	14.9	5.4	3.1
Panhandle	26	427,927	60.2	26.1	8.7	2.0	3.0
East Texas	38	1878918	66.0	12.6	17.6	1.2	2.6
Upper Gulf Coast	13	6087133	39.1	33.5	17.7	6.39	2.8
South Texas	47	4710347	26.6	65.1	4.4	1.7	2.3
West Texas	70	2136833	38.8	52.4	5.0	1.2	2.6
Central Texas	30	2956854	56.5	25.1	10.8	4.0	3.7
Statewide	254	25145561	44.5	36.1	12.3	4.2	2.9

*Note.* Data were adapted from Texas Counties (2014).

According to a five-year estimate American Community Survey from the U.S. Census Bureau (2019), English is the dominant language spoken in North Texas, where almost 70% of the population speak only English. As evidenced by Table 2, 22% of the North Texas population



speak Spanish. The remaining 8% of the population is divided into various languages, where most languages make up less than 1% of the population.

**Table 2**

*Languages Spoken in North Texas*

Language	Percentage of the population
Only English	69.60
Spanish	22.18
Vietnamese	1.00
Chinese	0.74
Arabic	0.46
French	0.38
Korean	0.33
Tagalog	0.32
Russian	0.23
German	0.22
Other Indo-European	2.09
Other Asian/Pacific	1.46
Other/unspecified	1.00

*Note.* Data were adapted from the U.S. Census American Community Survey, five-year estimate of languages spoken at home for the population five years and older (U.S. Census Bureau, 2019).

In the United States, language requirements for high school graduation differ by state. Public schools in Texas offer and allow foreign language courses to fulfill an elective graduation requirement, but do not require students to study a foreign language in order to graduate high school. According to the Texas Education Agency (2019), the languages, other than English, for which high school students can earn credit include ASL, Arabic, Chinese, French, German, Hindi, Italian, Japanese, Korean, Latin, Portuguese, Russian, Spanish, Turkish, Urdu, and

Vietnamese; however, not all of the aforementioned languages are offered at every high school due to various factors such as demand and teacher availability.

The average academic success for public high school students in Texas is an 84% graduation rate. This average is consistent with the average graduation rate for the high schools surrounding the target university in North Texas (National Center for Education Statistics, 2020). In 2017, the target university reported a first-year retention rate of 74%, which is above the average for universities across Texas at 65% and nationwide at 69% (College Factual, 2017). The target university has a four-year graduation rate of 28% and six-year graduation rate of 49%. In comparison, universities across the United States have a four-year graduation rate is 35.8%, and six-year graduation rate is 46.4% (College Factual, 2017; Oxner, 2019).

### **Participants**

Participants should be accessed from the specific population (Gall et al., 2007). The sample size depends on the number of groups of the independent variable and must be evenly divided among the groups (Gall et al., 2007). For this study, four languages were selected and the number of participants sampled equaled at least 144, evenly divided among the 4 groups. The sample originated from the Modern Languages Department in a North Texas university, which offers eight different languages: American Sign Language (ASL), Arabic, Chinese, French, German, Korean, Russian, and Spanish. However, during the concurrent semester, only ASL, French, Korean, and Spanish offered a face-to-face first semester introductory course; therefore, students were selected from the first semester introductory course of these four languages. Students from web courses were not included as only three of the selected languages offer an online modality; moreover, students in web courses may not live in the target population of North Texas. As evidenced by Table 3, the sample consisted of 57 males, 123 females, and 10

non-binary across the four languages. Prior to enrolling in this course, 104 participants had experienced at least one year of previous study in the target language and 86 participants had never studied the target language in a formal setting. All participants were monolingual speakers of English. Native and heritage speakers of the target language were discouraged from enrolling in the introductory course and were encouraged to complete a placement test; however, not all students followed these guidelines. Students who are native or heritage speakers of the target language and students who speak at least one other language were removed from the sample, so they did not affect results.

**Table 3**

*Demographic Information*

TL	Number of students	Sex			Age		Years of exp.		University grade level			
		M	F	NB	18-24	>24	0	≥1	Fr	So	Ju	Se
ASL	55	08	42	05	45	10	11	44	17	14	12	12
French	41	19	21	01	27	14	33	08	15	12	07	07
Korean	36	09	26	01	35	01	32	04	29	04	02	01
Spanish	58	21	34	03	53	05	10	48	24	13	18	03
Total	190	57	123	10	160	30	86	104	85	43	39	23

*Note.* NB = non-binary; TL= target language; ASL= American Sign Language; Exp.= experience; Fr= freshman; So= sophomore; Ju= junior; Se=senior

### Setting

As evidenced by Table 4, the number of beginning level courses varied by language as well as the number of teachers assigned. Table 4 also includes the average level of education and years of experience of teachers, course components, textbook requirement, and the implementation of a supplemental online component for homework.

**Table 4**  
*Course Information*

Language	Number of courses	Number of teachers	AVG level of education of teachers		AVG years of exp.	Number of comp.	Textbook Y/N	Online Comp. Y/N
			Masters	Doctorate				
ASL	06	04	04	00	21	07	Y	N
French	04	02	02	00	24	08	Y	Y
Korean	04	02	02	00	25	07	Y	N
Spanish	08	04	03	01	27	07	Y	Y
Total	22	12	11	01	24	07	08	04

*Note.* ASL= American Sign Language; AVG= average; Exp.= experience; Comp.= component; Y= yes; N= no

### *American Sign Language*

According to the syllabus, the objective of the introductory level of ASL was to develop expressive and receptive skills. Topics included the manual alphabet, numbers, basic conversational production and comprehension, deaf culture, and grammar. The assigned textbook, *Learning American Sign Language* (Humphries et al., 2004), comprised six units. As evidenced by Table 5, the grade distribution was divided into 7 components and was based on a 1600-point scale. See Appendix A for the ASL syllabus.

**Table 5**  
*Grade Distribution for ASL*

Components	Number of assignments	Points
Research Paper	01	50
Lesson Quizzes	15	750
Fingerspelling Quizzes	10	400
Expressive Video	01	50
Book Report	01	50

Culture Exam	1	100
Final Exam	1	200
Total	13	1600

*Note.* No data available for the number of assignments for attendance and participation

### ***French***

According to the syllabus, the objective of the introductory level of French was to understand and communicate at a novice level. Emphasis was placed on the culture and language of French-speaking countries. The assigned textbook, *En Avant: Beginning French* (Anderson & Dolidon, 2019), comprised three chapters that scaffolded student learning outcomes. The course included an online component through *McGraw-Hill Connect* and *LearnSmart* that functioned as homework. As evidenced by Table 6, the grade distribution for the course comprises was divided into eight components. See Appendix A for the French syllabus.

**Table 6**

*Grade Distribution for French*

Components	Number of assignments	Percentage of grade
Participation	--	10
<i>Connect ALA</i>	06	05
<i>Connect WBLM</i>	09	15
Written quizzes	02	08
Video quizzes	02	05
Chapter exams	03	30
Presentations & Interview	04	17
Final exam	01	10
Total	27	100

*Note.* No data were included for the number of assignments for participation because it was based on weekly attendance

### ***Korean***

According to the syllabus, the objective of the introductory level of Korean was to develop skills in speaking, listening, reading, and writing. Dialogues and short passages were incorporated to emphasize knowledge on grammar and culture. The assigned textbook, *Integrated Korean* (Cho et al., 2019), comprised six chapters. As evidenced by Table 7, the grade distribution for the course comprised seven components. See Appendix A for the Korean syllabus.

**Table 7**

*Grade Distribution for Korean*

Components	Number of assignments	Percentage of grade
Workbook homework	12	15
Recording homework	06	05
Dialogue skit presentations	06	05
Vocabulary quizzes	12	08
Lesson tests	06	24
Written & Oral exams	03	33
Attendance & participation	--	10
Total	45	100

*Note.* No data were included for the number of assignments for participation because it was based on daily attendance

***Spanish***

According to the syllabus, the objective of the introductory level of Spanish was to develop skills in the areas of listening, reading, writing, and speaking in the Spanish language. Students' creative oral practice to promote speaking proficiency was emphasized. As was the mastery of grammar structures to enhance communication and comprehension. The assigned textbook, *Puntos de Partida* (Dorwick, 2021), comprised six chapters that scaffolded student learning outcomes. The course included an online component through *McGraw-Hill Connect* that

functioned as homework. As evidenced by Table 8, the grade distribution for the course comprised seven components. See Appendix A for the Spanish syllabus.

**Table 8**

*Grade Distribution for Spanish*

Components	Number of assignments	Percentage of grade
Final exam	01	15
Midterm exam	01	15
Assessments	04	35
Attendance	--	05
Participation	--	10
Connect ALA	10	10
<i>Connect</i> WBLM	10	10
Total	26	100

*Note.* No data were included for the number of assignments for participation because it was based on daily attendance. The lowest two *Connect* assignments were dropped.

### **Instrumentation**

The data collection methods that are appropriate for a causal-comparative research design include “standardized tests, questionnaires, interviews, and naturalistic observations” (Gall et al., 2007, p. 314). The chosen data collection methods for this study were a questionnaire and observational techniques. Student attitudes were measured by a questionnaire, and language choice were measured by course enrollment.

### **The Instrument**

The questionnaire that measured student attitudes toward L2 learning, herein called the instrument, was developed and left untitled by Lanvers et al. (2019). See Appendix D for the instrument. The purpose of this instrument was to measure the attitudes of 12 to 13-year-old students in the United Kingdom toward language learning. Lanvers et al. (2019) developed and

piloted the instrument initially with 18 Likert items but after an analysis of inter-item reliability with Cronbach  $\alpha$ , the researchers discarded three items. The final version was implemented as a pre-and-post questionnaire, before and after interventions to increase student awareness of the global dominance of English and the cognitive benefits of learning an L2. The current version of the instrument had not been implemented in other research studies at this point.

Validity scores were not included; however, the primary developer of the instrument was contacted for information on the validity of the instrument. The developer stated the instrument was validated during piloting but the data were not publicly available; therefore, only face validity could be assumed. This research provided further results to promote validity assessment of the instrument. Based on the Cronbach's alpha coefficients, the final version of the instrument had acceptable levels of reliability for two constructs and questionable levels of reliability for the third construct. As evidenced by Table 9, seven items related to valuing multilingualism (Cronbach  $\alpha = 0.759$ ), four items related to cognitive effects (Cronbach  $\alpha = 0.745$ ), and four items related to image of language learning in school (Cronbach  $\alpha = 0.672$ ). Despite a low Cronbach alpha for image of language in school, Lanvers et al. (2019) implemented the instrument without a rationale or further modifications; however, since the Cronbach alpha is below the .7 threshold, this construct was removed for the present study.

**Table 9**

*Reliability for the instrument*

Construct	Cronbach $\alpha$
<i>Valuing multilingualism</i>	0.759
<i>Cognitive effects</i>	0.745
<i>Image of language learning in school</i>	0.672

*Note.* Data were adapted from Lanvers et al. (2019)



The instrument comprised 17 questions. Items were purposefully mixed to include positively worded and negatively worded statements. The negatively worded items were reversed when data were entered into a statistics spreadsheet prior to analysis. nine items related to valuing multilingualism, three items related to cognitive effects, and five items related to image of language learning in school. The instrument used a five-point Likert scale that ranges from ‘totally disagree’ to ‘totally agree’ (Lanvers et al., 2019). Responses were as follows: *Totally Disagree = 1, Disagree = 2, Don’t Know = 3, Agree = 4, and Totally Agree = 5*. The first two constructs from the instrument, valuing multilingualism and cognitive effects, were selected as the dependent variables for RQ1 and RQ2. Valuing multilingualism comprised a possible score ranging from 9 to 45 points. Cognitive effects comprised a possible score ranging from 3 to 15 points.

The instrument also included demographic information regarding the participants’ age, gender, first language, and language choice. The instrument was administered online and required approximately 10 to 15 minutes to complete. Data were scored and analyzed solely by the researcher. Permission to employ the instrument was requested via email communication and granted by the primary developer (Lanvers et al., 2019). See Appendix A for permission to implement instrument.

### **Enrollment**

Observational techniques measured language choice through course enrollment, functioning as the dependent variable in RQ1 and RQ2. This variable was measured concurrently with student attitudes. When participants completed the instrument, they also identified the language course in which they had enrolled. All of the courses were introductory level and did not present any prerequisites besides acceptance into the university.

## **Procedures**

The researcher contacted the university and the modern languages department via email correspondence ahead of the IRB to confirm interest and that they would agree to the study. See Appendix B for permission. The IRB application was submitted for review and approval for Liberty University. See Appendix C for IRB approval. Once IRB approval was received, the researcher proceeded with data collection procedures, beginning with participants' approval. The instrument was converted to an online questionnaire through Google Forms, a verified online survey tool, rather than a printed version. Google Forms was chosen over Survey Monkey because the latter required a paid membership plan to create surveys with more than 10 questions. The researcher emailed teachers to help solicit student participation by posting the survey in the Canvas course and allowing class time to complete the survey, data were collected, and lastly, data were analyzed.

### **Google Forms**

To convert the instrument into Google Forms, the researcher entered [google.com/forms](https://www.google.com/forms) into a browser and signed-in with a Google account. At the top of the website under "start a new form," the researcher began the process to create the survey by clicking "blank." The researcher titled the form and provided a description that explains how to complete the questionnaire and that submitting the questionnaire was granting consent to participate in the study. Before adding the items from the instrument, the researcher created preliminary questions to attain participants' consent and demographic information. The researcher edited settings for the various type of answer choices and marked questions as required so that the participants could not submit the questionnaire without answering these questions.

Each item from the instrument were then added individually following the same steps.

First, the digitization process required replacement of “Untitled Question” with the first item from the questionnaire and changing the answer choices from “multiple choice” to “linear scale.” The scale was automatically established to range from 1 to 5, but there was only an option to label 1 as “totally disagree” and 5 as “totally agree.” Label for each number included, “Totally Disagree = 1, Disagree = 2, Don’t Know = 3, Agree = 4, Totally Agree = 5” to avoid confusion. Each question was marked as “required” so that the participants could not submit the questionnaire without answering all of the items. Next, the researcher duplicated the question and changed the question title to the second item, repeating these steps until the entire instrument had been digitized. The Google Form continuously saved the changes in Drive so no action was required. When digitization of the questionnaire was complete, the researcher clicked on “send” and obtained a shortened link to send to participants when it was time to collect data. See Appendix D for demographic questions, the instrument, and consent form.

### **Teachers**

Prior to data collection, with the help of the modern languages department head, an email was sent to all of the instructors who currently taught face-to-face beginning level language courses. Within the email, the researcher explained the research study and the instructors’ role in soliciting student participation. The email also included the survey link with instructions to post the survey link to Canvas so that students could easily access the questionnaire. See Appendix E for email correspondence.

### **Data Collection**

Students had 30 days to complete the survey and be included in the sample. The students also received email reminders with a link to the survey. See Appendix E for email correspondence. Student emails were accessed on behalf of the department. When students

clicked on the survey link, they were not prompted to sign-in or create an account with Google before having access to the instrument. This was to ensure that participants remained anonymous. Once participants had access, they first saw the consent form, then the demographic information and lastly the questions. At the end of the questionnaire, the students clicked submit and received an automated message from Google Forms indicating their responses were recorded. After the deadline, the researcher restricted access to the questionnaire by opening the Google Form and clicking on responses at the top and deselecting “accepting responses.” Then, the researcher downloaded the responses. After all data collections were complete, the researcher analyzed data.

### **Data Analysis**

The researcher investigated the causal-comparative relationship between a naturally occurring independent variable and the dependent variable for each RQ. In RQ1, the independent variable was language choice (ASL, French, Korean, or Spanish) and the dependent variable was valuing multilingualism scores. In RQ2, the independent variable was language choice (ASL, French, Korean, or Spanish) and the dependent variable was cognitive effects scores. Data analysis for each research question in this causal-comparative study involved a one-way ANOVA. Under this statistical technique, data were primarily analyzed by comparing “the amount of between-groups variance in individuals’ scores with the amount of within-groups variance” (Gall et al., 2007, p. 318).

### **Rationale**

Once data collection was complete, data were primarily analyzed by applying a test of statistical significance. The statistical technique for data analysis depends on the number of variables included in the study. ANOVA is applied when there are more than two unrelated

groups being studied. The current study incorporated two dependent variables and one independent variable measured in the form of four categories, forming a nominal scale. There are numerous statistical techniques that can be applied in causal-comparative studies under inferential statistics; however, the most appropriate statistical technique for this study was two one-way ANOVAs (Gall et al., 2007). Many researchers apply this statistical analysis when comparing more than two means. Asakereh et al. (2019) implemented one-way ANOVA to determine if there are differences in attitudes toward English as a *lingua franca* between pre-service and in-service English language teachers in public schools across Iran. Guillén-Gámez and Mayorga-Fernández (2020) applied one-way ANOVA to compare self-perceived competence and attitudes toward information and communication technologies between undergraduate students, graduate students, and teaching faculty. Özcan (2020) implemented one-way ANOVA to investigate if student attitudes toward Turkish language lessons differ in terms of their success, gender, number of siblings, and their parents' level of education. These peer-reviewed research studies applied one-way ANOVA to compare differences in the mean scores of a dependent variable between the independent groups (Gall et al., 2007; Laerd Statistics, 2017). The similar nature of these studies to the current study provided a research rationale for the appropriateness of the selected statistical technique.

### **One-Way ANOVA Assumptions**

The researcher began assumption testing as required by one-way ANOVA analysis (Laerd Statistics, 2017; Warner, 2020). The first three assumptions were not tested by a statistic or graph; instead, they were methodologically determined: (a) the dependent variable was measured at the continuous level; (b) the independent variable was categorical and was measured on a nominal scale; and (c) the assumption of independent observations to ensure no participants

were members of more than one group. Assumptions four through six were calculated statistically. The fourth assumption related to data screening: no significant outliers. The researcher used box-and-whisker plots to detect any outliers. Since outliers were present, the researcher determined how to deal with outliers based on if they were due to data entry errors, measurement errors, or genuinely unusual values (Laerd Statistics, 2017). The fifth assumption was normal distribution. To test for normality, the Shapiro-Wilk test was not used because there were more than 50 participants; instead, Normal Q-Q Plots were used. Finally, the assumption of the homogeneity of variances, using the Levene's test of equality of variances.

### **One-Way ANOVA Analysis**

One-way ANOVA analysis requires statistical significance where  $p < .05$ ;  $F$  statistic  $> F$  critical. Since the Null were rejected, the researcher identified differences between groups and incorporated a Post Hoc Tukey Test. For a one-way ANOVA, effect size is called partial eta squared ( $\eta_p^2$ ) and is generated by running the general linear module procedure. Effect size for  $\eta_p^2$  are 0.01, 0.06, and 0.14, indicating small, medium, and large, respectively.

## CHAPTER FOUR: FINDINGS

### Overview

The purpose of this quantitative, causal-comparative study was to determine if university student attitudes toward second language learning vary based on their language choice. Chapter four provides the findings of this study. The research questions and null hypotheses are listed, followed by descriptive statistics. The chapter concludes with the results of the study, organized according to each of the hypotheses.

### Research Questions

**RQ1:** Is there a difference in *valuing multilingualism* scores among university students enrolled in second language courses based on their choice of the language studied?

**RQ2:** Is there a difference in *cognitive effects* scores among university students enrolled in second language courses based on their choice of the language studied?

### Null Hypotheses

**H<sub>01</sub>:** There is no significant difference in *valuing multilingualism* scores among university students enrolled in second language courses based on their choice of the language studied (ASL, French, Korean, or Spanish).

**H<sub>02</sub>:** There is no significant difference in *cognitive effects* scores among university students enrolled in second language courses based on their choice of the language studied (ASL, French, Korean, or Spanish).

### Descriptive Statistics

For each group, descriptive statistics were obtained on the dependent variable (valuing multilingualism scores). Descriptive statistics are found in Table 10. Data are presented as mean  $\pm$  standard deviation. Student attitudes toward world languages and the global status of English

(valuing multilingualism score) increased from Spanish ( $n = 58, 35.6 \pm 4.8$ ), to French ( $n = 41, 36 \pm 3.9$ ), to ASL ( $n = 55, 37.9 \pm 4.3$ ), to Korean ( $n = 36, 38 \pm 3.9$ ) language groups, in that order. Scores for this construct range from 9 to 45 where a higher score represents a positive attitude toward valuing multilingualism and a low score represents a negative attitude toward valuing multilingualism.

**Table 10**

*Descriptive Statistics for Valuing Multilingualism*

Language	$n$	$M$	$SD$	$SE$	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
ASL	55	37.89	4.332	.584	36.72	39.06	23	45
French	41	36.00	3.860	.603	34.78	37.22	29	43
Korean	36	37.97	3.865	.644	36.66	39.28	26	43
Spanish	58	35.64	4.786	.628	34.38	36.90	21	43
Total	190	36.81	4.399	.319	36.18	37.44	21	45

For each group, descriptive statistics were obtained on the dependent variable (cognitive effects scores). Descriptive statistics are found in Table 11. Data are presented as mean  $\pm$  standard deviation. Student attitudes toward self-efficacy, cognitive attainability, and cognitive advantages of bilingualism (cognitive effects score) increased from Spanish ( $n = 58, 10.5 \pm 2.3$ ), to French ( $n = 41, 11 \pm 2.4$ ), to ASL ( $n = 55, 11.8 \pm 2.1$ ), to Korean ( $n = 36, 12 \pm 1.9$ ) language groups, in that order. Scores for this construct range from 3 to 15 where a higher score represents a positive attitude toward cognitive effects and a low score represents a negative attitude toward cognitive effects.



**Table 11***Descriptive Statistics for Cognitive Effects*

Language	<i>n</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	95% Confidence Interval for Mean			
					Lower Bound	Upper Bound	Min.	Max.
ASL	55	11.78	2.105	.284	11.21	12.35	5	15
French	41	10.98	2.372	.370	10.23	11.72	5	15
Korean	36	12.03	1.859	.310	11.40	12.66	7	15
Spanish	58	10.48	2.265	.297	9.89	11.08	4	15
Total	190	11.26	2.245	.163	10.94	11.58	4	15

## Results

A one-way ANOVA was conducted to determine if there was a difference in valuing multilingualism scores among university students enrolled in second language courses based on their choice of the language studied. A second one-way ANOVA was conducted to determine if there was a difference in cognitive effects scores among university students enrolled in second language courses based on their choice of the language studied. Participants were classified into four groups: ASL ( $n = 55$ ), French ( $n = 41$ ), Korean ( $n = 36$ ), and Spanish ( $n = 58$ ).

### H<sub>0</sub>1 – Valuing Multilingualism

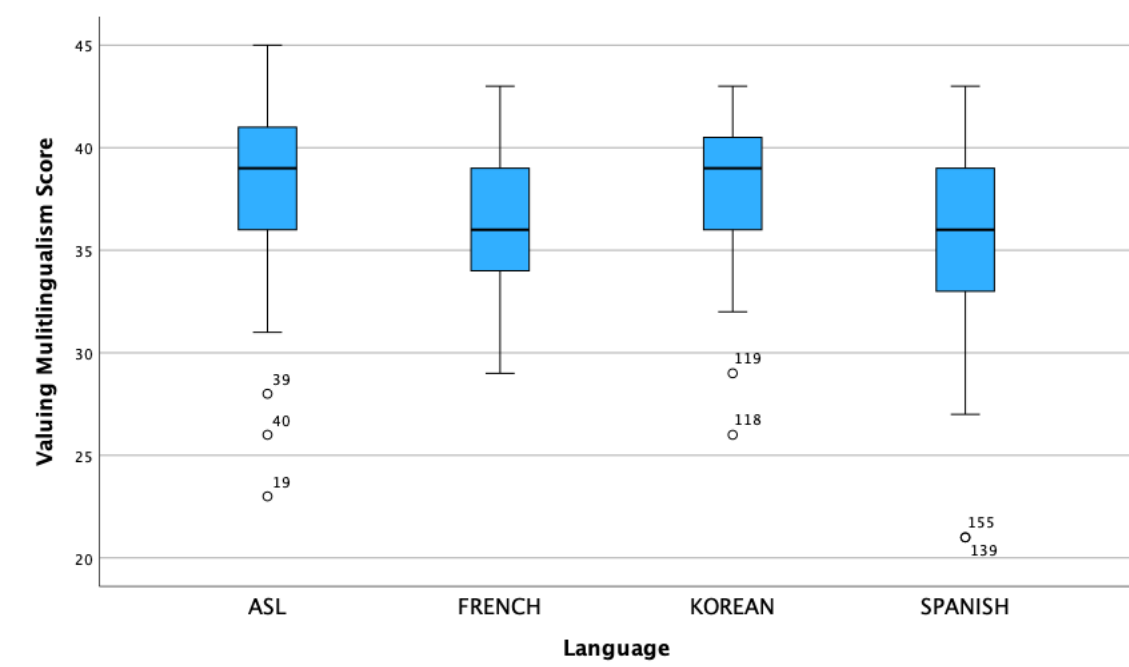
#### *Data Screening*

Data screening was conducted on each group's dependent variable. The researcher scanned for data entry errors and inconsistencies. No data errors or inconsistencies were identified. Box and whiskers plots were used to detect outliers in the dependent variable. Seven outliers (data points 19, 39, 40, 118, 119, 139, and 155) were denoted with an asterisk on the box and whisker plot. To deal with the outliers, a one-way ANOVA was run with and without the outliers to compare the results and decide whether the two results differ to the point of drawing different conclusions. Comparison of the two results did not present differences that would draw

different conclusions. Both result in a statistically significant result; however, the differences are more prominent in the post hoc test. Since the results were not materially affected, the outliers were included in the analysis. See Figure 1 for the box and whisker plots.

**Figure 1**

*Box and Whisker Plots (Valuing Multilingualism)*



### ***Assumptions***

**Assumption of No Significant Outliers.** The assumption of no significant outliers was part of data screening, presented above. See Figure 1 for the box and whisker plots. This assumption was violated as seven outliers were identified; however, the outliers were included in the analysis because they did not materially affect results.

**Assumption of Normal Distribution.** Visual interpretation of Normal Q-Q Plots was used to determine if data is normally distributed rather than the Shapiro-Wilk test for normality because the sample size is greater than 50 participants. Valuing multilingualism score was normally distributed for the French group but not for the ASL, Korean, and Spanish groups, as

assessed by Normal Q-Q Plots. Although the assumption of normality was violated for three groups, the groups are similarly skewed; therefore, the researcher decided to carry on regardless as a one-way ANOVA is considered robust to deviations from normality and these deviations are not always problematic (Field, 2018; Laerd Statistics, 2017). Normal Q-Q Plots of valuing multilingualism score are included for each language group. See Figure 2 for ASL, Figure 3 for French, Figure 4 for Korean, and Figure 5 for Spanish.

**Figure 2**

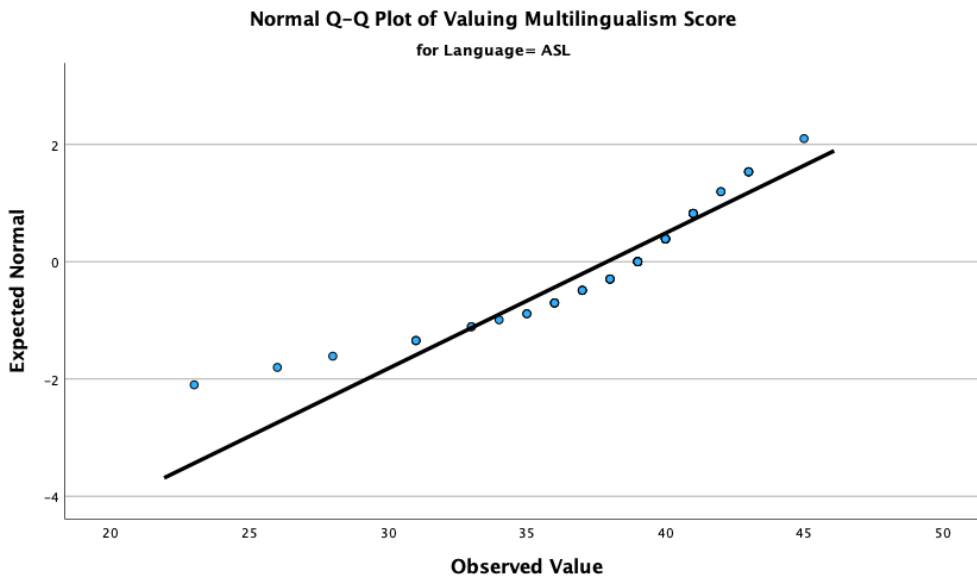


Figure 3

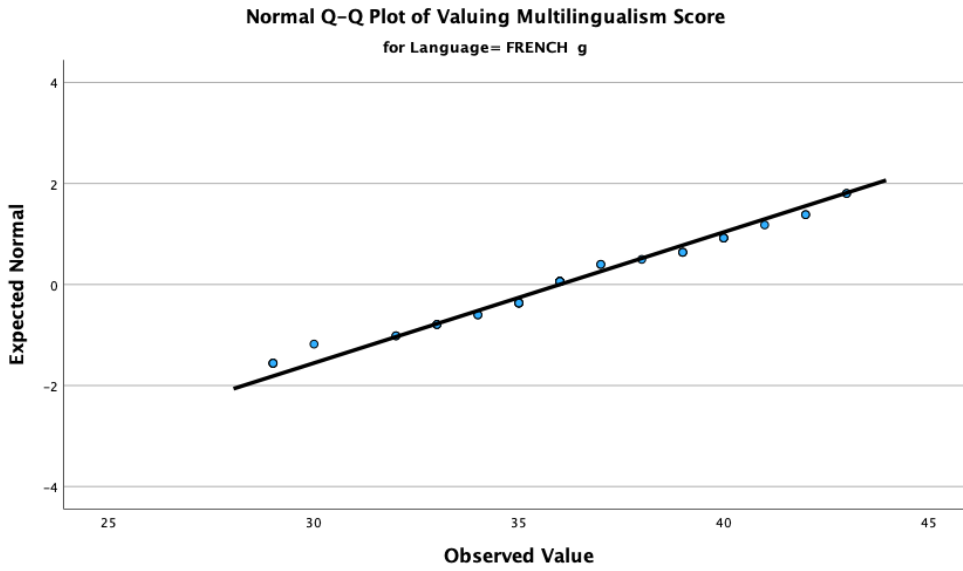


Figure 4

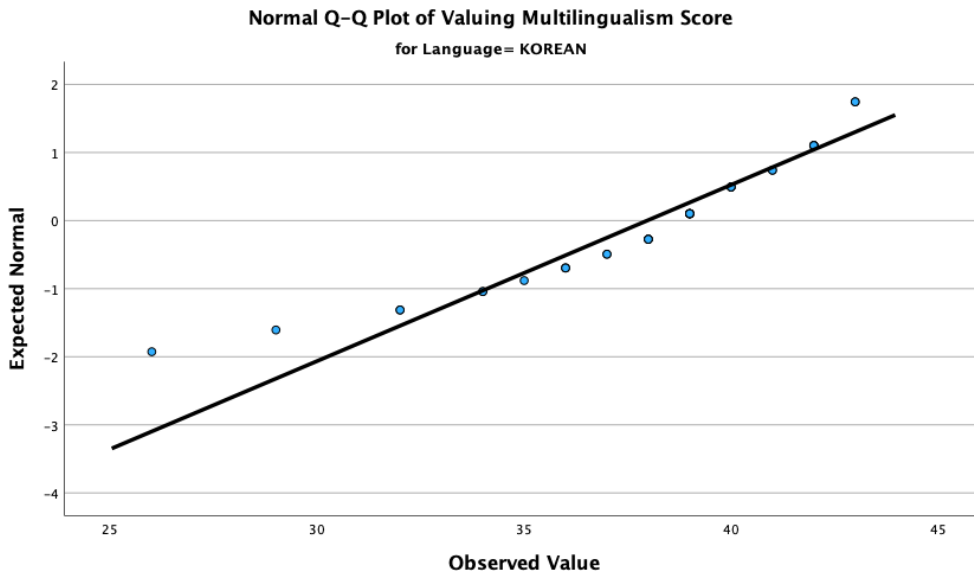
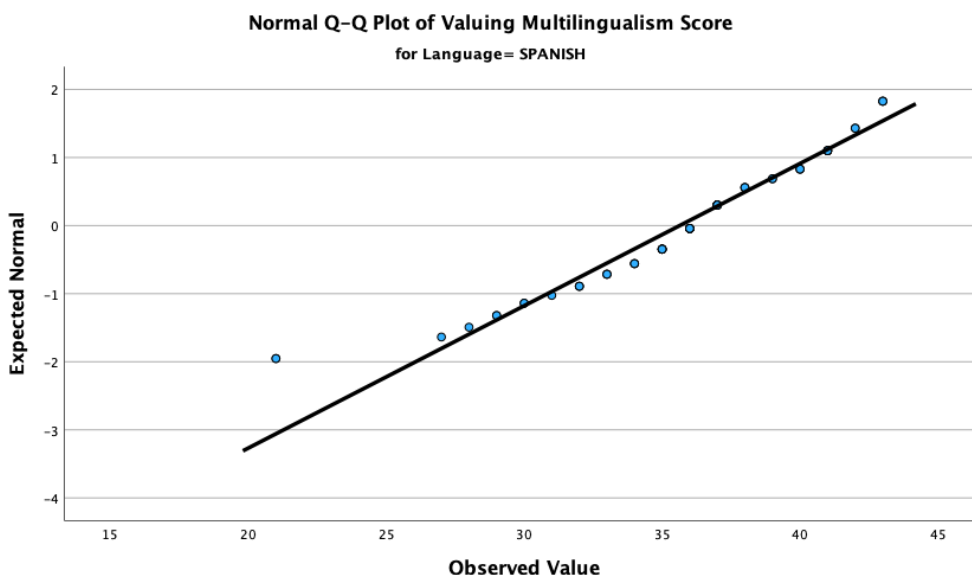


Figure 5



**Assumption of Homogeneity of Variance.** The assumption of homogeneity of variance was examined using Leven's test. No violation was found where  $p = .655$ . The assumption of homogeneity of variance was met.

### ***Results for Null Hypothesis One***

An ANOVA was used to test the null hypothesis regarding student attitudes toward world languages and the global status of English (valuing multilingualism score). The null hypothesis was rejected at a 95% confidence level where  $F(3, 186) = 3.958, p < .009, \eta_p^2 = .060$ . The effect size was medium. Because the null was rejected, post hoc analysis was conducted using a Tukey test to compare all possible pairs of group means. Based on this test, there was a significant difference between the Spanish group and the ASL group with an increase of 2.3, (95% CI, .16 to 4.35,  $p = .03$ ). However, no other group differences were statistically significant. See Table 12 for Multiple Comparisons of Groups.

**Table 12***Multiple Comparisons of Groups*

## Pairwise Comparisons

Dependent Variable: Valuing Multilingualism

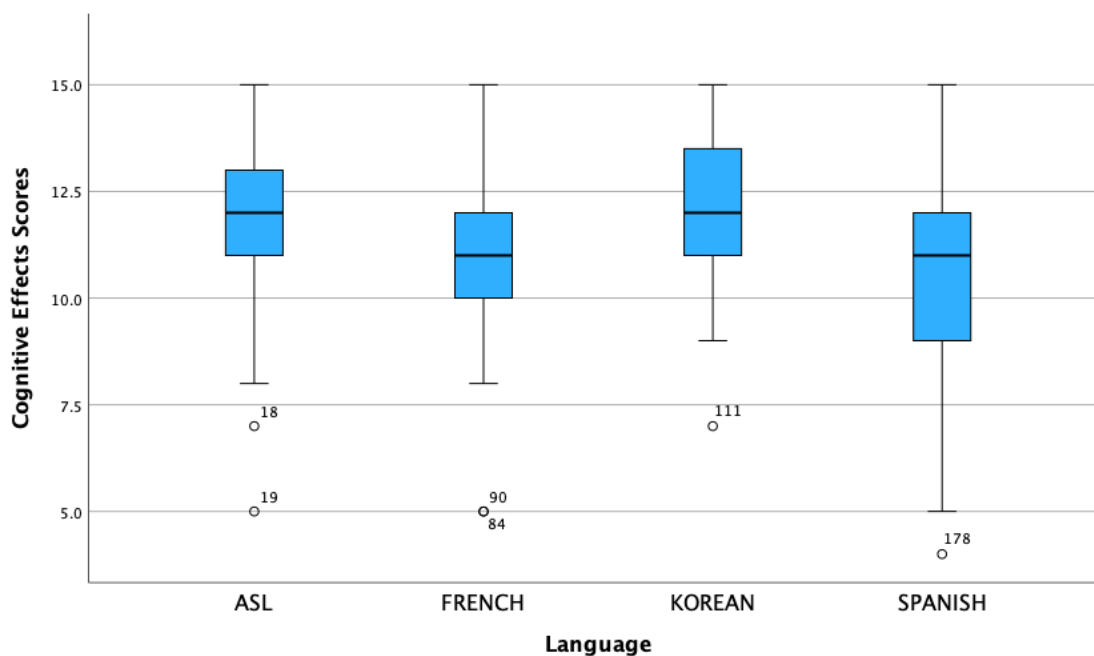
(I) group	(J) group	Mean		Sig.	95% Confidence Interval for difference	
		Difference (I-J)	SE		Lower Bound	Upper Bound
ASL	FRENCH	1.891	.887	.147	-.41	4.19
	KOREAN	-.081	.922	1.000	-2.47	2.31
	SPANISH	2.253*	.809	.030	.16	4.35
FRENCH	ASL	-1.891	.887	.147	-4.19	.41
	KOREAN	-1.972	.982	.189	-4.52	.57
	SPANISH	.362	.877	.976	-1.91	2.64
KOREAN	ASL	.081	.922	1.000	-2.31	2.47
	FRENCH	1.972	.982	.189	-.57	4.52
	SPANISH	2.334	.912	.054	-.03	4.70
SPANISH	ASL	-2.253*	.809	.030	-4.35	-.16
	FRENCH	-.362	.877	.976	-2.64	1.91
	KOREAN	-2.334	.912	.054	-4.70	.03

\*The mean difference is significant at the .05 level

## **H<sub>0</sub>2 – Cognitive Effects**

### ***Data Screening***

Data screening was conducted on each group's dependent variable. The researcher scanned for data entry errors and inconsistencies. No data errors or inconsistencies were identified. Box and whiskers plots were used to detect outliers in the dependent variable. Six outliers (data points 18, 19, 84, 90, 111, and 178) were denoted with an asterisk on the box and whisker plot. To deal with the outliers, a one-way ANOVA was first run with the intention of running the one-way ANOVA without the outliers to compare the results and decide whether the two results differ to the point of drawing different conclusions. However, when removing all the outliers and when only removing the most extreme outlier, more outliers were identified. To avoid affecting the results by modifying or changing the data, the outliers were included in the analysis. See Figure 6 for the box and whisker plots.

**Figure 6***Box and Whisker Plots (Cognitive Effects)***Assumptions**

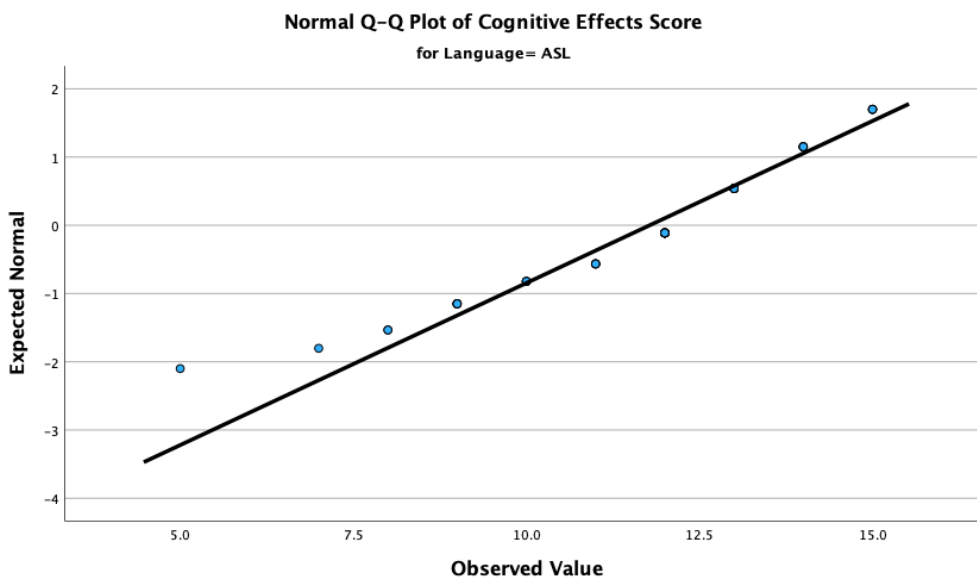
**Assumption of No Significant Outliers.** The assumption of no significant outliers was part of data screening, presented above. See Figure 6 for the box and whisker plots. This assumption was violated as six outliers were identified; however, the outliers were included in the analysis to avoid affecting the results.

**Assumption of Normal Distribution.** Visual interpretation of Normal Q-Q Plots was used to determine if data is normally distributed rather than the Shapiro-Wilk test for normality because the sample size is greater than 50 participants. Cognitive effects score was not normally distributed for the ASL, French, Korean, and Spanish groups, as assessed by Normal Q-Q Plots. Although the assumption of normality was violated, the groups are similarly skewed; therefore, the researcher decided to carry on regardless as a one-way ANOVA is considered robust to



deviations from normality and these deviations are not always problematic (Laerd Statistics, 2017). Normal Q-Q Plots of cognitive effects score are included for each language group. See Figure 7 for ASL, Figure 8 for French, Figure 9 or Korean, and Figure 10 for Spanish.

**Figure 7**



**Figure 8**

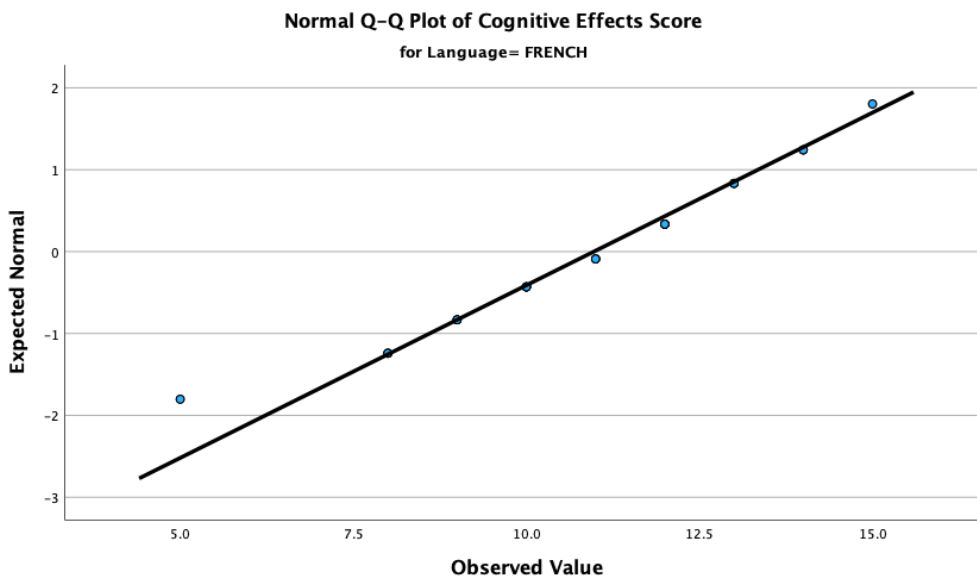


Figure 9

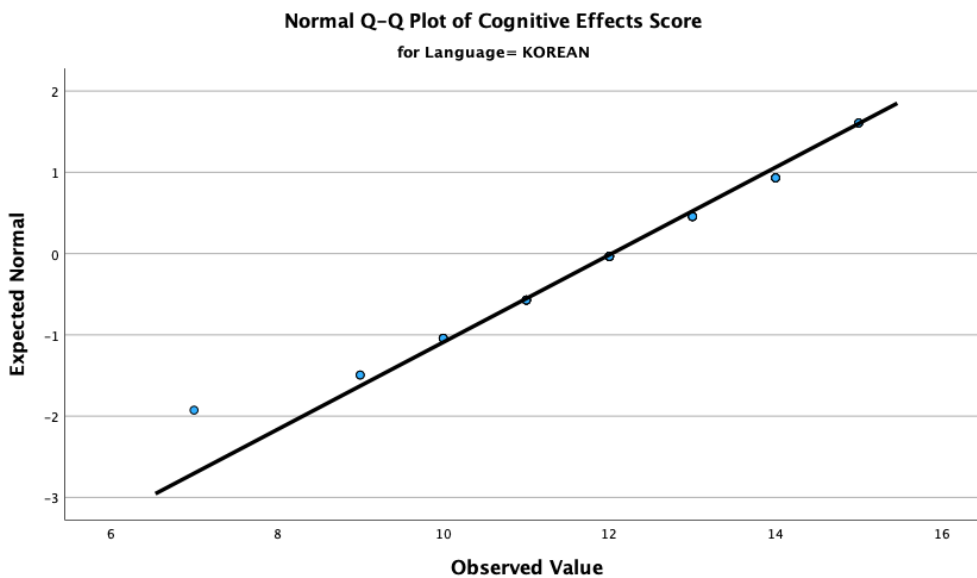
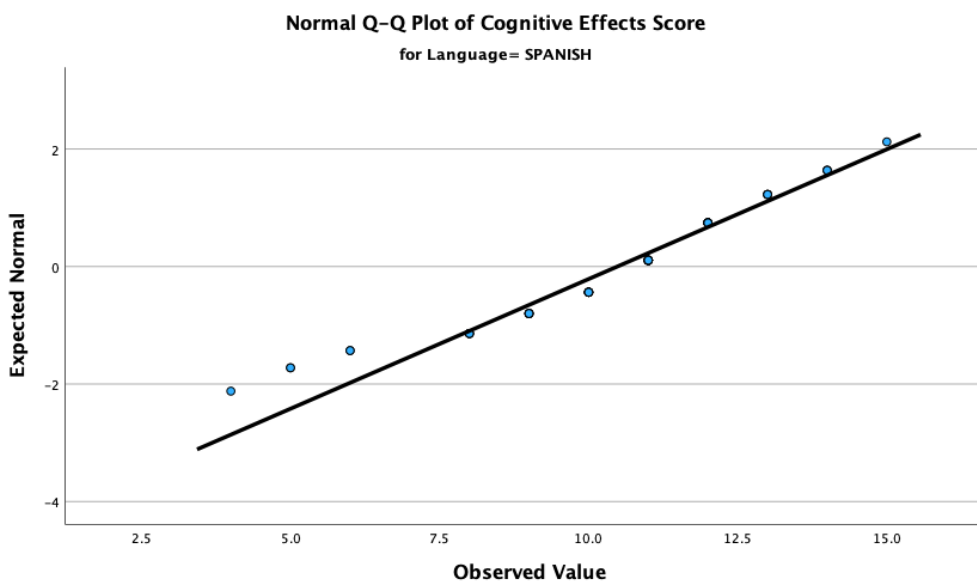


Figure 10



**Assumption of Homogeneity of Variance.** The assumption of homogeneity of variance was examined using Leven's test. No violation was found where  $p = .520$ . The assumption of homogeneity of variance was met.

### ***Results for Null Hypothesis Two***

An ANOVA was used to test the null hypothesis regarding student attitudes toward self-efficacy, cognitive attainability, and cognitive advantages of bilingualism (cognitive effects score). The null hypothesis was rejected at a 95% confidence level were  $F(3, 186) = 5.266, p < .002, \eta_p^2 = .078$ . The effect size was medium. Because the null was rejected, post hoc analysis was conducted using a Tukey test to compare all possible pairs of group means. Based on this test, there was a significant difference between the Spanish group and the ASL group with an increase of 1.3 (95% CI, .24 to 2.36,  $p = .009$ ). There was also a significant difference between the Spanish group and the Korean group with an increase of 1.5 (95% CI, .35 to 2.74,  $p = .005$ ). However, no other group differences were statistically significant. See Table 13 for Multiple Comparisons of Groups.

**Table 13**

#### *Multiple Comparisons of Groups*

##### Pairwise Comparisons

Dependent Variable: Cognitive Effects

(I) group	(J) group	Mean Difference (I-J)	SE	Sig.	95% Confidence Interval for difference	
					Lower Bound	Upper Bound
ASL	FRENCH	.806	.448	.277	-.36	1.97
	KOREAN	-.246	.466	.952	-1.45	.96
	SPANISH	1.299*	.409	.009	.24	2.36
FRENCH	ASL	-.806	.448	.277	-1.97	.36
	KOREAN	-1.052	.496	.150	-2.34	.23

	SPANISH	.493	.443	.683	-.66	1.64
KOREAN	ASL	.246	.466	.952	-.96	1.45
	FRENCH	1.052	.496	.150	-.23	2.34
	SPANISH	1.545*	.461	.005	.35	2.74
SPANISH	ASL	-1.299*	.409	.009	-2.36	-.24
	FRENCH	-.493	.443	.683	-1.64	.66
	KOREAN	-1.545*	.461	.005	-2.74	-.35

\*The mean difference is significant at the .05 level

## CHAPTER FIVE: CONCLUSIONS

### Overview

Chapter five presents the conclusions of the current study. As such, it addresses each research question in light of the results, literature, other studies, and theory. Implications for the study are presented, and limitations are identified. The chapter concludes with recommendations for future research.

### Discussion

This quantitative, causal-comparative study sought to determine if university student attitudes toward second language learning vary based on their language choice. Current literature in second language acquisition primarily focuses on English as a second language; additionally, studies that address languages other than English are primarily conducted in the United Kingdom. The nature of this study addressed this gap in the literature and added to the existing body of knowledge to ascertain student attitudes toward L2 learning based on the language of study.

### **H<sub>0</sub>1 – Valuing Multilingualism**

The first null hypothesis states that there is no difference in valuing multilingualism scores among university students enrolled in second language courses based on their choice of the language studied (ASL, French, Korean, or Spanish). Results of a one-way ANOVA indicate that student attitudes toward world languages and the global status of English (valuing multilingualism score) were statistically significantly different for different language groups,  $F(3, 186) = 3.958, p < .009, \omega^2 = 0.045$ . The researcher can reject the null hypothesis and accept the alternative hypothesis based on these results. Results also indicate that all groups had positive attitudes toward valuing multilingualism. This finding supports other research that shows that

students value languages based on their relevance to authentic contexts such as travel, business, and entertainment (Bower, 2019; Enkin & Correa, 2018; Mills & Moulton, 2017; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017). Although the reasons were not identified in this study, the results highlight a difference between languages supporting these other studies that indicate students value languages differently.

This study's findings also contradict many other studies that found that the mentality that knowing English makes learning another language irrelevant is prevalent among students in countries where English is the dominant language and that this mentality has caused a decrease in foreign language enrollment in universities across the US (Clayton, 2016; Dörnyei & Al-Hoorie, 2017; Duff, 2017; Huhtala et al., 2019; Lanvers, 2017a; Lanvers, 2017b; Lanvers et al., 2019, 2020; Looney & Lusin, 2019; Vidal Rodeiro, 2017). In this study, valuing multilingualism score increased from Spanish ( $n = 58, 35.6 \pm 4.8$ ), to French ( $n = 41, 36 \pm 3.9$ ), to ASL ( $n = 55, 37.9 \pm 4.3$ ), to Korean ( $n = 36, 38 \pm 3.9$ ) language groups, in that order. Tukey-Kramer post hoc analysis revealed that the increase in valuing multilingualism score from the Spanish group to the ASL group (2.3, 95% CI (.16 to 4.35)) was statistically significant ( $p = .03$ ). However, no other group differences were statistically significant. Although the group means for this study differed, each group's mean was classified as having positive attitudes toward valuing multilingualism. These positive attitudes indicate that these monolingual speakers of English do not hold the same ideology of students in other countries where English is the dominant language. The findings of this study show that these students do not believe that English is the only relevant language and therefore the decrease in foreign language enrollment cannot be attributed to a negative view of multilingualism in this population. Furthermore, research shows that European languages are ranked the highest in terms of value whereas minority languages are considered irrelevant

despite their presence in the students' communities (Bower, 2019; Enkin & Correa, 2018; Mills & Moulton, 2017; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017). This study's findings contradict this research because the European languages, Spanish and French, had the lowest scores whereas the minority languages, ASL and Korean, had the highest scores. Additionally, the Spanish language group had the highest number of enrollment and participation in the study which supports the self-determination theory about unconscious motivation, indicating preference for something after repeated exposure (Dörnyei & Al-Hoorie, 2017). Having the highest enrollment and participation indicates that participants had a preference for Spanish over the other three language groups because of their repeated exposure to the language. It can be inferred that this population had repeated exposure to Spanish because of the research site's proximity to Mexico, the population is 25.3% Hispanic, and Spanish is one of the most commonly offered foreign language courses in high schools (Parrish, 2020; Texas Counties, 2014).

Current research shows that first-year university students in the UK generally have positive attitudes toward L2 learning at the beginning of the semester; however, their attitudes are negatively formed as they continue in post-secondary L2 programs (Hanna et al., 2020; Knouse et al., 2021). Data collection for the current study occurred at the end of one semester and the beginning of the following semester; however, the majority of data were collected at the beginning of the semester. The findings from this study support the research about students in the UK in that they hold positive attitudes toward valuing multilingualism at the beginning of the semester.

## **H<sub>0</sub>2 – Cognitive Effects**

The second null hypothesis states no difference in cognitive effects scores among university students enrolled in second language courses based on their choice of the language studied (ASL, French, Korean, or Spanish). Results of a one-way ANOVA indicate that student attitudes toward self-efficacy, cognitive attainability, and cognitive advantages of bilingualism (cognitive effects score) were statistically significantly different for different language groups,  $F(3, 186) = 5.266, p < .002, \omega^2 = 0.063$ . The researcher can reject the null hypothesis and accept the alternative hypothesis based on these results. These results support other research findings that indicate that perceived applicability influences student choice in enrolling in a foreign language course (Bower, 2019; Parrish & Lanvers, 2019).

Cognitive effects score increased from Spanish ( $n = 58, 10.5 \pm 2.3$ ), to French ( $n = 41, 11 \pm 2.4$ ), to ASL ( $n = 55, 11.8 \pm 2.1$ ), to Korean ( $n = 36, 12 \pm 1.9$ ) language groups, in that order. Tukey-Kramer post hoc analysis revealed that the increase in cognitive effects score from the Spanish group to the ASL group (1.3, 95% CI (.24 to 2.36)) was statistically significant ( $p = .009$ ), as well as the increase from the Spanish group to the Korean group (1.5, 95% CI (.35 to 2.74),  $p = .005$ ), but no other group differences were statistically significant. Although the group means for this study differed, each group's mean was classified as having positive attitudes toward cognitive effects. This finding supports current research that indicates that L2 learners' perceptions of achievement are high, and they perceive their exam grades as an accurate representation of their achievement; furthermore, most students regard oral proficiency as one of the most valuable language skills despite demonstrating the lowest proficiency in speaking (Enkin & Correa, 2018). This study's findings indicating positive attitude toward cognitive effects contradict other studies that correlate the decline in second language enrollment in US universities to students experiencing difficulty and disengagement in first-year L2 courses



(Hanna et al., 2020). The university where this research was conducted has indeed experienced lower enrollment in recent years compared to in the past much like other universities and K-12 schools in the US, UK, and Australia (American Councils for International Education, 2017; Copeka, 2015; Delahunty & O'Shea, 2019; Hanna et al., 2020; Looney & Lusin, 2019). However, this study's findings suggest that this decline in enrollment cannot be attributed to students experiencing difficulty or disengagement because participant responses of positive attitudes toward cognitive effects suggest otherwise. The number of enrollments for each language group does, however, support the self-determination theory and unconscious motivation that explain that a person will prefer something that they have been exposed to repeatedly (Dörnyei & Al-Hoorie, 2017). The participants of this study live in an area where Spanish is commonly heard in the community and were exposed to Spanish or French in their secondary education as these are the most commonly offered language courses in the area (Parrish, 2020). In alignment with this theory, participants had the most repeated exposure to Spanish and the Spanish language group also had the highest enrollment and participation in this study.

Furthermore, findings regarding positive attitudes toward cognitive effects contradict research that indicates that students enroll in courses they perceive to be relevant or valuable to their future and careers (Mills & Moulton, 2017; Vidal Rodeiro, 2017). The Korean group had the highest cognitive effect scores, significantly different than the Spanish group ( $p = .005$ ). Yet, the Korean group had the least amount of students enrolled and formed the smallest group of participants. Spanish had the lowest cognitive effect scores and the most students enrolled, forming the largest participant group. Additionally, research indicates that many students in anglophone countries view learning a language other than English as unimportant, without

substantial gain, and inapplicable in the workplace (Mills & Moulton, 2017; Vidal Rodeiro, 2017). However, the results from this study indicate that these students have positive attitudes toward the cognitive effects that learning a second language can offer. This suggests that the students in all four language groups view the language as beneficial, valuable, and, relevant to their education and the career field due to the cognitive advantages and applicability of bilingualism.

### **Implications**

A majority of L2 research is centered around English as a second or foreign language. Even L2 research conducted in the United States has a higher focus on international students learning ESL than on American students learning a language other than English. The majority of L2 research that addresses languages other than English focus on secondary students in the United Kingdom. Little research exists regarding the attitudes and perceptions of post-secondary language students in other anglophone countries. The existing gap in the literature regarding attitude and the perceived value of languages among university students in the United States created a pressing need for the current study (Dörnyei & Al-Hoorie, 2017; Duff, 2017; Knouse et al., 2021; Lanvers et al., 2019, 2020; Mills & Moulton, 2017; Parrish, 2020; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017). The nature of this study with a focus on monolingual students in the US learning a second language other than English helps close the gap in literature. The results of this study indicate that student attitudes toward valuing multilingualism and cognitive effects are statistically significantly different between language groups. Despite the differences, mean scores for each group were positive for both valuing multilingualism and cognitive effects. Positive attitudes toward valuing multilingualism imply that students have positive attitudes or thoughts toward world languages and do not believe that the global status of English indicates

English as the only relevant language. This finding implies that previous studies regarding anglophone student perceptions of other languages being irrelevant cannot be generalized to the population in this study. Positive attitudes toward cognitive effects imply that students have positive attitudes toward self-efficacy, cognitive attainability, and cognitive advantages of bilingualism. This finding adds to the existing body of research indicating that language learners regard language skills and valuable and relevant in the career field and for travel, business, and entertainment (Bower, 2019; Enkin & Correa, 2018; Mills & Moulton, 2017; Parrish & Lanvers, 2019; Vidal Rodeiro, 2017). These results help improve the conditions, lives, and work environment of others because these positive attitudes create an inclusive work and community environment for speakers of other languages. In the workplace, these results imply that multilingualism is viewed as a valuable skill that can be utilized to reach a more diverse clientele and can generate valuable opportunities for international business. These positive attitudes also create a greater sense of community among different cultural groups, allowing people to make connections and share culturally specific practices and ideas that would otherwise remain occult due to language barriers. With such a diverse population, positive attitudes toward world languages and the cognitive advantages of bilingualism will ultimately generate a more integrated society.

Another observation is that Spanish had the highest enrollment and participation in the study; however, their scores on the attitude scale were the lowest for valuing multilingualism and cognitive effects. Enrollment numbers and participation for each group may imply their exposure level to each language before enrollment. In Texas, Spanish is commonly heard because of its proximity to Mexico. Students are also exposed to Spanish and French during high school as these are the most commonly offered foreign language courses in secondary schools (Parrish,

2020). Enrollment for these languages aligns with self-determination theory and unconscious motivation (Dörnyei & Al-Hoorie, 2017), wherein the preference for something after frequent exposure is considered unconscious motivation, the preference for English over other languages in anglophone countries can be described as unconscious motivation because of repeated exposure to the language.

### **Limitations**

Based on the nature of this study and the data, limitations exist and are noted here. Data collection occurred in two separate semesters instead of in one instance. The first set of participants who completed the survey had already completed the first semester of the language course. Unfortunately, there were not enough participants to analyze data, and a second round of data collection was completed at the beginning of the next semester. All responses were included in the study in order to reach the minimum number of participants for data analysis. The use of responses from the beginning of the semester and the end of the semester may have impacted the group means because studies show that student attitudes toward learning a second language shift from positive at the beginning of the semester to negative at the end of the semester (Hanna et al., 2020; Knouse et al., 2021). Due to the two attempts at data collection, a student may have completed the survey twice if they failed and reenrolled in the course the following semester. The anonymity of the survey could not be controlled for this situation. Additionally, although the survey was sent to a specific group, there was no way to determine who was taking it to ensure they fit the criteria and whether they completed the survey multiple times. Participants may have

also been dishonest with their responses and may have chosen more positive answers based on what they thought would be considered the most appropriate answer.

Another limitation is the diversity of the population. Participants varied in age and grade classification with the inclusion of non-traditional students. At the university setting, controlling for factors that may influence the group mean is difficult. The student population is also very diverse in terms of students who classify as transfer, out-of-state, and international. Although these students may classify as monolingual speakers of English, they may hold a different view of second language acquisition than their peers who classify as local students; therefore, their attitudes toward learning an L2 may have affected the group mean. Lastly, group means may have been affected by the inclusion of outliers. Although the results of the one-way ANOVA were similar with and without the outliers for valuing multilingualism, more groups were significantly statistically different without the outliers. More outliers were identified when removing the outliers that appeared for cognitive effects to compare means; therefore, the outliers were kept.

### **Recommendations for Future Research**

The current study focused on differences in attitudes between language groups, but many other aspects may influence attitudes toward learning a second language. The following list encompasses other variables that may be considered for future research to identify if there is a difference in attitudes toward learning an L2 based on these factors.

- The researcher should analyze differences in attitude based on gender.
- Analyze the differences in attitude based on gender to determine if there are significant differences between male, female, and non-binary students.

- Investigate the differences in attitude based on the number of years of experience learning the language to explore if there is a positive correlation between experience and attitude.
- Examine the differences in attitude based on age groups or grade classification to determine if attitudes differ or change as the learner ages.
- Analyze the differences in attitude based on enrollment numbers between groups to explore a possible relationship between low enrollment and positive attitudes.
- Analyze the difference in attitude between monolingual and multilingual speakers to determine if positive attitudes increase with the number of languages spoken.
- Investigate the differences in attitudes based on education to analyze possible differences between secondary students, college students, and non-student adults.
- Study the differences in attitudes based on region to explore differences between students in Texas and other students across the nation.
- Examine differences in attitudes at the beginning of the semester versus at the end of the semester to determine if attitudes change over time.

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
## APPENDIX A

[ASL SYLLABUS](#)[FRENCH SYLLABUS](#)[KOREAN SYLLABUS](#)[SPANISH SYLLABUS](#)

Permission to implement instrument:

Request to use questionnaire 🗑️ 2 🔍 📄

🔔 This message was sent with High importance.

 China Barreto, Jazmin Marielis  
To: [REDACTED] 😊 ↶ ↷ ⋮  
Sun 6/27/2021 9:56 PM

Dear Ursula,

I am a doctoral student (School of Education, Liberty University) and I am in the initial process of finding an instrument for my dissertation. I am researching the relationship between university student attitudes toward language learning and their language choice. With your permission, I am interested in using the questionnaire you used in your article, "People can be smarter with two languages..." (2016).  
<https://doi.org/10.1080/09571736.2016.1196384>


The article says to contact you to request this questionnaire. If possible, please send me the questionnaire at your earliest convenience.


Thank you,  
Jazmin China Barreto


---

Request to use questionnaire 🗑️ 2 🔍 📄

🔔 This message was sent with High importance.

 Ursula Lanvers [REDACTED]  
To: China Barreto, Jazmin Marielis 😊 📎 ↶ ↷ ⋮  
Mon 6/28/2021 3:56 AM

 StudentQuestionnairePOSTTeachi...  
30 KB

 Questionnaire StudentPRETeachin...  
33 KB

2 attachments (63 KB) 📁 Save all to OneDrive - UT Arlington ⬇️ Download all

Here you are!  
BW  
u

...

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Dr Ursula Lanvers  
Programme Leader for PhD Applied Linguistics  
Associate Professor/Senior Lecturer in Language Education  
Department of Education  
[REDACTED]  
[REDACTED]  
Office hour: Wednesday 3-4pm.

## APPENDIX B



DEPARTMENT OF  
MODERN LANGUAGES

March 21, 2023

Dear Jazmin China Barreto:

After careful review of your research proposal entitled University student choice and attitudes toward second language learning: A causal-comparative study, I have decided to grant you permission to access our membership list and contact our faculty and invite them to participate in your study.

Check the following boxes, as applicable:

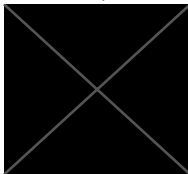
I will provide our membership list to Jazmin China Barreto, and Jazmin China Barreto may use the list to contact our members to invite them to participate in her research study.

I grant permission for Jazmin China Barreto to contact students enrolled in 1441 ASL, French, Korean, and Spanish to invite them to participate in her research study.

I will not provide potential participant information to Jazmin China Barreto, but we agree to send/provide her study information to students enrolled in 1441 ASL, French, Korean, and Spanish on her behalf.

I am requesting a copy of the results upon study completion and/or publication.

Sincerely,



Ignacio Ruiz-Pérez, Ph.D.  
Professor of Spanish  
Chair  
Department of Modern Languages





## APPENDIX C

Date: 10-16-2023

**IRB #:** IRB-FY22-23-1266

**Title:** University student choice and attitudes toward second language learning: A causal-comparative study

**Creation Date:** 3-21-2023

**End Date:**

**Status:** Approved

**Principal Investigator:** Jazmin Chinaea




**Review Board:** Research Ethics Office

**Sponsor:**

### Study History

<b>Submission Type</b>	Initial	<b>Review Type</b>	Exempt	<b>Decision</b>	<span style="color: red;">Exempt</span>
<b>Submission Type</b>	Modification	<b>Review Type</b>	Unassigned	<b>Decision</b>	

### Key Study Contacts

<b>Member</b>	Constance Pearson	<b>Role</b>	Co-Principal Investigator	
<b>Member</b>	Jazmin Chinaea	<b>Role</b>	Principal Investigator	
<b>Member</b>	Jazmin Chinaea	<b>Role</b>	Primary Contact	

## APPENDIX D

### Demographic Questions and The Instrument *Removed to comply with copyright*

Lanvers, U., Hultgren, K., & Gayton, A. M. (2019). ‘People can be smarter with two languages’:

Changing anglophone students’ attitudes to language learning through teaching

linguistics. *Language Learning Journal*, 47(1), 88e104.

<https://doi.org/10.1080/09571736.2016.1196384>

### Consent

**Title of the Project:** University student choice and attitudes toward second language learning: A causal-comparative study

**Principal Investigator:** Jazmin M. China Barreto, Doctoral Candidate, School of Education, Liberty University

#### Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be a college student enrolled in a 1441 modern language course (ASL, French, Korean, Spanish), a native speaker of English, cannot be an international student, and cannot be fluent in another language. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

#### What is the study about and why is it being done?

The purpose of the study is to see if students studying ASL, French, Korean, or Spanish have similar or different attitudes toward learning a second language.

#### What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Participate in the following online survey that will take approximately 10-15 minutes to complete.

#### How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include additional information and data to literature in the field of second language acquisition focused on languages other than English.

#### What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

#### How will personal information be protected?

Liberty University

IRB-FY22-23-1266

Approved on 5-4-2023

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous.
- Data will be stored on a password-locked computer. After three years, all electronic records will be deleted

#### Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or the University of Texas at Arlington. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

#### What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

#### Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Jazmin China Barreto. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at



You may also contact the researcher's faculty sponsor, Dr. Pearson, at

#### Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is



*Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.*

#### Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. If you have any questions about the study later, you can contact the researcher using the information provided above.

Liberty University  
 IRB-FY22-23-1266  
 Approved on 5-4-2023

## APPENDIX E

### Email correspondence to instructors

Permission for **research** study 0 7 v Q v +

Dear Instructor,


As a doctoral candidate in the School of Education, at Liberty University, I am conducting **research** as part of the requirements for a doctoral degree. The purpose of my **research** is to see if students studying ASL, French, Korean, or Spanish have similar or different attitudes toward learning a second language, and I am writing to invite your students to join my study.

Participants must be a college student enrolled in a 1441 modern language course (ASL, French, Korean, Spanish), a native speaker of English, cannot be an international student, and also cannot be fluent in another language. Participants will be asked to participate in an online survey that will take approximately 10-15 minutes to complete. Participation will be completely anonymous, and no personal, identifying information will be collected.

Please share this information with your 1441 campus students by posting an announcement on Canvas with the following survey link and allowing your students a few minutes to take the survey in class the day of the final exam. For easy access, show them the attached QR code.

To participate, please click here ([SURVEY](#)) to complete the study survey.  
OR: <https://forms.gle/GF87cxeKCcgd7R8f7>

A consent document is provided as the first page of the survey. The consent document contains additional information about my **research**. After you have read the consent form, please click the button to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the survey.

Sincerely,  
Jazmin M. China Barreto  
Doctoral Candidate, Liberty University  
Spanish Lecturer, 

### Email correspondence to students

Dear Potential Participant,

As a doctoral candidate in the School of Education, at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to see if students studying ASL, French, Korean, or Spanish have similar or different attitudes toward learning a second language, and I am writing to invite you to join my study.

Participants must be a college student enrolled in a 1441 modern language course (ASL, French, Korean, Spanish), a native speaker of English, cannot be an international student, and also cannot be fluent in another language. Participants will be asked to participate in an online survey that will take approximately 10-15 minutes to complete. Participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please click here ([SURVEY](#)) to complete the study survey.  
OR: <https://forms.gle/GF87cxeKCcgd7R8f7>

A consent document is provided as the first page of the survey. The consent document contains additional information about my research. After you have read the consent form, please click the button to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the survey.

Sincerely,  
Jazmin M. China Barreto  
Doctoral Candidate, Liberty University  
Spanish Lecturer, 