# COLLEGE STUDENTS' MOTIVATION WHEN ACQUIRING A LANGUAGE OTHER THAN ENGLISH 

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A Dissertation Presented in Partial Fulfillment Of the Requirements for the Degree Doctor of Philosophy

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#### Abstract

Foreign languages have been studied since the beginning of civilization; in the past few decades, there has been increased interest in understanding the role of motivation in learning a foreign language. Less than a quarter of studies on learning languages other than English (LOTE) have studied motivation. The purpose of this quantitative causal-comparative study was to determine if there was a difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400 . The study consisted of 79 college students at the freshman to senior level enrolled in French at a novice to advanced level at each university. The instrument selected to measure participants' motivation was the Hybrid Questionnaire based on the Attitude/Motivation Test Battery and the L2 Motivation Self-System. Data were collected during French courses for face-to-face classes or at any location for online students and gathered electronically through Qualtrics. The one-way ANOVA statistical method by IBM SPSS 25, a statistics software, was used to analyze the data. The results showed no statistical difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400. To augment this study, future researchers should investigate if there is a difference in motivation between college students enrolled in online and face-to-face French courses. Future researchers should also continue to augment research in the field of LOTE.


Keywords: language other than English, LOTE, motivation, acquiring a foreign language in college, French language, language motivation, hybrid questionnaire

## Copyright Page

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## Dedication

I want to dedicate this doctoral dissertation to my family. First, to my parents Carmelo and Vita, who instilled in me the values of hard work, dedication, and the dream to always seek a better version of myself. They passed before I could finish my doctoral program. I hope you are proud of me in heaven for accomplishing this impressive milestone. Then, to my children Samaria and Luca, who supported me during my ups and downs and made me laugh when I needed it the most. Thank you to Samaria for always encouraging me to pursue my doctoral program while being available to listen to me and taking the time to read my doctoral dissertation and give me feedback-you have been an immense support to my stellar accomplishments. To Luca for always being positive, believing in me when I doubted the most, and being the light of God shining over me. You have constantly repeated that God knows my purpose.

Above all, I dedicate this research to God, who gave me motivation, wisdom, dedication, guidance, and determination through the doctoral process, strengthening me when I fell. Speaking languages is one of God's greatest gifts to humanity to communicate globally and spread the Word of God in every nation. May motivation be the vector of language acquisition.

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At Liberty University, the staff allowed me to combine my faith and academia while being able to pray with my professors. I appreciated feeling at ease writing "Blessings" in each of my Liberty University correspondence.

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## List of Abbreviations

Multivariate Analysis of Variance (ANOVA)
Dörnyei's L2 motivation self-system (L2MSS)
Foreign language (FL)
Gardner's attitude/motivation test battery (AMTB)
Institutional Review Board (IRB)
Language other than English (LOTE)
Native language (NL)
Second Language Acquisition (SLA)
Statistical Package for Social Sciences (SPSS)

## CHAPTER ONE: INTRODUCTION

## Overview

This chapter explores learners' motivation to acquire French as a foreign language (FL). This study discussed how recent studies demonstrated that motivation was essential when learning an FL. Importantly, less than $25 \%$ of the literature is dedicated to studying the role of motivation in learning a language other than English (LOTE). This chapter includes the study's historical, social, and theoretical framework. This quantitative causal-comparative study aimed to determine if there was a difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400.

Chapter One provides historical background on how French has impacted other nations over the centuries. The background includes an overview of the theoretical framework for this study. The problem statement encapsulates the scope of the recent literature on this topic. The purpose of this study is followed by the significance of the current study and the research questions. The chapter concludes with a list of key terms and their definitions.

## Background

Researchers have studied FLs since the beginning of time (McLelland, 2018). Children and adults acquire one or several languages for different reasons. The benefits of learning an FL have been studied extensively (Peters et al., 2019). Children and adults differ in their motivation to acquire an FL, learn differently, and prefer instruction via different pedagogical styles. For example, pupils can learn through educational games, role play, singing, writing, and reading. They learn a second language as an extracurricular or curricular subject, as parents choose the education tracks of their children. Because adults learn an FL intrinsically and extrinsically, they must know which motives and values are relevant (Keller, 2008).

Studies have shown that processes and strategies have been part of FL acquisition procedures. Moreover, motivation is important when learning an FL (Deldeniya et al., 2018; Hahlin \& Granfeldt, 2021; Kanoksilapatham et al., 2021; Zheng et al., 2020). However, a minority of literature has investigated the role of motivation when learning a foreign LOTE. Before investigating these topics, an historical background of learning French is provided in the following section.

## Historical Background

Given the study's focus on French, it is necessary to explore how the French language has influenced history. The historical background begins by explaining the influence of William the Conqueror in the $11^{\text {th }}$ century, discusses the Norman invasion and the rise of French in the European courts, and ends with the modern influence of the French language. This historical summary shows that French has a long and rich history, and its prominence continues to grow as France maintains an important role in global affairs.

In the $11^{\text {th }}$ century, William the Conqueror initiated the ascent of French in England by conquering the country. In the $15^{\text {th }}$ century, French grammar was solidified, and French became well-established in the English court. French also became popular in England (Baker, 2016; Douglas, 1964). The French language dominated England for 500 years from the $11^{\text {th }}$ to the $16^{\text {th }}$ century among nobles, the clergy, and merchants. Moreover, French remained popular at the English court until the $19^{\text {th }}$ century. The French administrative practices, judiciary, and diplomatic frameworks are still established in modern England.

In the $16^{\text {th }}$ century, a French grammar manuscript was written in Latin to incentivize an international audience to learn French. Authors using the French writing style for letters adapted new techniques to facilitate correspondence between merchants and diplomats among foreign
courts. The traditional Middle Ages correspondence was replaced with new rhetorical strategies, such as a journalistic approach, that focused on writing observations (Kittler, 2020).

From the $18^{\text {th }}$ to the $19^{\text {th }}$ century, French was spoken by the elite and court of Russia. As Russians utilized the French language in their empire, it influenced Russia's culture, literature, and history. Peter the Great gained inspiration from the $18^{\text {th }}$-century Western modernization of music, literature, architecture, ship construction, and art. As a result, French became the communication catalyst to access Western civilization. French was the prominent language of the nobles, the imperial court, and the new code of sociability (Offord et al., 2018). Elizabeth I, a Francophile, who reigned in Russia, promoted French; proficiency became necessary for nobles and intellectuals. French allowed Russian aristocrats to elevate their social status by attending salons, balls, and operas and playing cards while discussing art and politics. The Russian court was fascinated by the French court and their lifestyles. Russia used the French language, arts, culture, and diplomacy as an eloquent method to be part of the European noble courts. Catherine the Great corresponded in French with Denis Diderot, a French philosopher, and purchased Diderot's library, elevating her place in society and accelerating her integration with the European aristocracy. Russian writers began to compose and publish in French to introduce Russian literature to an international audience. The Francophonie prevailed in Europe as a symbol of nobility, eloquence, power, and diplomacy (Offord et al., 2018).

During the $19^{\text {th }}$ and $20^{\text {th }}$ centuries, the French language expanded globally with the rise of colonialism. Francophone subjects could become French citizens if they adopted the French language and culture. The minority nations could join the global arena by adopting the "eminent language." Language symbolizes culture, myth, and history (Shakib, 2011). In Francophone countries, the lingua franca was adopted as a communication vector. The French language
adoption influenced the Francophone countries' literature, culture, and language (Chidozie \& Eniayekan, 2013; Michelman, 1995).

Presently, the globalization of the French language elevates France's role in global politics. As a global language in contemporary international politics and markets, French allows France to compete with other dominant languages in the universal society. Currently, French is the fifth most spoken language in the world. Moreover, the worldwide extension of the French language augments "communication, interconnectivity, and uniformity of economic systems" (Chidozie \& Eniayekan, 2013, p. 12). The French government remains committed to advancing the French language by promoting the language and culture while developing French programs in education, entrepreneurship, and tourism.

Additionally, France remains dedicated to promoting the French language in Francophone countries. The Francophone world is rich with "creative hotbeds" ("French Diplomacy," n.d., para. 2) in Europe, Africa, North America, the Caribbean, the Middle East, and Asia Pacific. Finally, the French government remains dedicated to supporting the Francophone countries in their political and economic endeavors. Due to these efforts, the number of French speakers worldwide has increased by $9.6 \%$ since the last census of 2014 ("French Diplomacy," n.d.). French remains an elite language of diplomacy and eloquence (Offord et al., 2018).

In conclusion, William the Conqueror initiated the rise of the French language by diffusing the Anglo-Normand French in England, which continued to spread for 5 centuries. French became the language of diplomacy, European noble courts, and commerce. French was perceived as the language of opportunity, education, business, diplomacy, art, politics, literature,
and philosophy. Presently, French continues as the language of diplomacy on five continents, where the language unifies multicultural backgrounds.

## Social Background

The social context motivation for learning an FL is apparent in the literature review. First, the social context can be determined by the educational level. Peters et al. (2019) pointed out that the gap between English and French becomes narrower with education levels and years spent learning an FL. The gap between languages' fluency decreases when students spend more time learning two or more FLs.

Next, a lack of motivation to learn French may explain the language gap between English and French. Because English is seen as a global language, languages other than English (LOTE) suffer from negative effects and declined interest in acquiring them (Hahlin \& Granfeldt, 2021). Nevertheless, as motivated students become more proficient in an FL, they can improve their working memories because they are strengthened with the comprehension of the language and production systems (Ibarra Santacruz et al., 2020).

The more motivated children and adults are to learn an FL, the more they retain (Hussain et al., 2020; Jaekel et al., 2017; Kurt \& Kurt, 2018; Lamb, 2018; Peters et al., 2019; Teo et al., 2019). In particular, adults often learn an FL to achieve specific personal or professional goals. Their learning must be relevant to attainable goals (Kurt \& Kurt, 2018). Motivation can also be integrative, which means individuals desire to learn an FL and be part of the target language community. Instrumental motivation refers to acquiring an FL for practical or pragmatic reasons (Deldeniya et al., 2018). Learning FLs can increase working memory and augment professional and personal opportunities.

The motivation to learn FLs has interested researchers in the last few decades. In the past decade, nine studies have investigated motivation in French language acquisition utilizing Dörnyei's (2010) L2MSS questionnaire (Oakes \& Howard, 2019). Researchers have stated the popularity of using Gardner's (2004) AMTB questionnaire for investigating motivation in language learning in diverse contexts (Kanoksilapatham et al., 2021).

## Theoretical Background

This chapter's first critical component is understanding the French language's historical and social backgrounds. Next, it is important to understand the theories of learning languages. In particular, four theories support the study: the progressive theory of learning, the theory of social learning (constructivism), the theory of adult learning, and the theory of motivation.

First, the theory of progressive learning focuses on pragmatic principles. Education should be based on real-life experiences, hands-on activities, and collaborative learning (Williams, 2017). The theory of progressive learning is based on learners' interests (Gordon et al., 2019). Independent thinking is promoted to guide students to undertake their own experiences and experimentations. Language is also essential for communication and learning in a global society (Popkewitz, 1998).

The theory of social learning embraces the theory of learning, which explains how individuals construct the meaning of learning. Constructing and scaffolding knowledge is essential to understand how higher thinking occurs for more complex tasks. The subject should be taught meaningfully and with authentic experiences when learning specific content. When individuals interact socially, experiences become part of the learning. The social learning theory (constructivism) explains how individuals learn and think (A. Brown, 1994; Popkewitz, 1998).

The theory of adult learning aligned with the study because the research was conducted with young adults in college. Adult instruction was based on concrete application, collaborative learning, and problem-solving. Adults seemed predisposed to learn independently, are selfdirected, and apply their life and professional experiences, which could be implemented in their learning. Additionally, adults learn subject matter meaningful to their needs. Adults choose what and how they want to learn (Cox, 2006; Knowles, 1984).

Last, the theory of motivation involves internal and external stimuli that help to determine how individual behavior is influenced (Bandura, 1989; Keller, 2008). Motivational theories must be relevant based on values and motives. The social cognitive theory is essential when motivation is expressed. The theory explains that behavior, cognition, and environment are all interconnected and influence each other reciprocally (Bandura, 1989). The current study could answer the research question by exploring the different theories.

## Problem Statement

Most researchers investigating motivation focus on English as an FL. In the last few decades, studies have shown motivation as essential to learning an FL (Deldeniya et al., 2018; Hahlin \& Granfeldt, 2021; Oakes \& Howard, 2019; Zheng et al., 2020). Kurt and Kurt (2018) asserted that motivational tactics and strategies are essential for individuals as receptive to learning FLs. If students maintain a clear idea of why they enroll in FL studies, they stay motivated and surpass students who project negative perceptions.

Various researchers have defined the true motivation behind learning a LOTE using Gardner's (2004) AMTB or Dörnyei’s (2010) L2MSS instrument (Deldeniya et al., 2018; Hahlin \& Garndelet, 2021; Oakes \& Howard, 2019). Despite the significant body of literature analyzing motivation, less than $25 \%$ of studies have shown the motivation for learning a LOTE (Deldeniya
et al., 2018; Hahlin \& Granfeldt, 2021; Kwok \& Carson, 2018; Oakes \& Howard, 2019; Zheng et al., 2020). There is a need to gain greater insight into students' motivation to learn FLs other than English, especially French, and how students learn. Furthermore, the Hybrid Questionnaire created by Kanoksilapatham et al. (2021), which had a high reliability of 0.923 , had not been implemented in the literature yet. The motivation to learn French in college had also remained unexplored in literature.

In this quantitative research, motivation was quantified to obtain a potential causal comparative between college students enrolled in French 100, French 200, French 300, and French 400 . The problem was that more studies of LOTE were necessary to generalize across languages (Oakes \& Howard, 2019; Peters et al., 2019). The current body of literature has yet to address the motivation to learn French among college students enrolled in different course levels.

## Purpose Statement

The purpose of this quantitative causal-comparative study was to investigate if there was a difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400 courses. In this investigation, the independent variable was college students enrolled in the select courses (French 100, French 200, French 300, and French 400). The dependent variable was the motivation to learn French. Motivation was the willingness to accomplish an action. Motivation implies internal and external stimuli that define how individuals react (Bandura, 1989; Kanoksilapatham et al., 2021; Keller, 2008; Oakes \& Howard, 2019).

The population in the study was college students who were at least 18 years old. The sample was a subset of college students enrolled in French 100, French 200, French 300, and

French 400 courses at two universities. The study was conducted at a private university in central Virginia and a public university in central Florida.

## Significance of the Study

The research sought to augment the FL literature that examined motivation's role in learning a LOTE. Previous researchers have laid the foundation for this endeavor. Learning an FL can be complex and difficult but also highly beneficial. At any age, learning an FL is beneficial in facilitating professional endeavors, building social relationships, and improving mental functions such as working memory (Deldeniya et al., 2018; Kacetl \& Klimova, 2021; Kanoksilapatham et al., 2021; Klimova et al., 2020; Meniado, 2019; Peters et al., 2019). Moreover, some findings demonstrated that FL acquisition could develop phonology and working memory while impacting the first language.

When people acquire a new language, they improve the lexicon and grammatical processing in both languages (Marini et al., 2019). FL researchers have explored motivation extensively, finding it crucial in language learning, fluency, and proficiency; however, less than $25 \%$ of research has focused on the role of motivation in learning a LOTE (Deldeniya et al., 2018; Hahlin \& Granfeldt, 2021; Oakes \& Howard, 2019; Zheng et al., 2020). It is essential to conduct more research in a LOTE, particularly French, to generalize further the results already obtained (Oakes \& Howard, 2019; Peters et al., 2019).

Specifically, this study augmenting the existing body of literature might serve several audiences. This study could serve school district administrators and higher institutions in promoting FLs programs (Jaekel et al., 2017). This study could also provide insight for other researchers to investigate the difference in motivation between college students enrolled in French courses. In addition, the study could influence policymakers and educators to create
adequate programs to motivate students to learn FLs. In the current climate, there is concern about the decreasing interest in learning FLs in Anglophone countries. As English remains dominant, interest in other FLs is suffering. Understanding the role of motivation could aid various groups involved in promoting FLs. Overall, this study could increase the literature in the field of LOTE.

## Research Question

The study used the following research question:
RQ1: Is there a difference in motivation to learn French between college students enrolled in French 100, French 200, French 300, and French 400 ?

## Definitions

1. Backward transfer - Backward transfer is the influence of the FL on the native language (NL; Kartushina et al., 2016).
2. Foreign language -FL is a language other than an NL learned in an academic setting in an area where the language is not used (Deldeniya et al., 2018).
3. Francophone - Countries worldwide speak French as a first language or utilize French for administrative purposes (Offord et al., 2018).
4. Instrumental motivation - This motivation is the desire to learn an FL for practical or pragmatic use (Deldeniya et al., 2018).
5. Integrative motivation - This motivation is the desire to learn an FL and communicate within FL communities (Deldeniya et al., 2018).
6. Motivation - Motivation is an important stimulus to acquire an FL effectively (Deldeniya et al., 2018).
7. Negative transfer - Negative transfer is transferring knowledge from one language to another with different language patterns (Tremblay et al., 2016).
8. Positive transfer - Knowledge transfer occurs when two languages have similar language patterns (Tremblay et al., 2016).
9. Salon culture - Salon culture refers to specific places where articulated individuals meet to debate, learn, or compose manuscripts (Offord et al., 2018).
10. Second language - A second language is used to communicate daily in a community (Deldeniya et al., 2018).
11. Segmentation cues - Segmentation cues are a process to understand part of verbal communication (Tremblay et al., 2016).
12. Speech segmentation - Speech segmentation is a part of verbal communication (Tremblay et al., 2016).
13. Working memory - Working memory is the short memory that allows the brain to utilize it in cognitive tasks (Jaekel et al., 2017; Peters et al., 2019).

## CHAPTER TWO: LITERATURE REVIEW

## Overview

Chapter Two presents a systematic review of the literature to explore the processes and strategies of an FL acquisition and how motivation plays an essential component when learning an FL. This chapter presents a review of the current literature related to the topic of study. The first section includes discussions of the theories of learning and motivation, followed by a synthesis of recent literature regarding the mechanisms, strategies, and benefits of FL proficiency. The chapter also shows how motivation is indispensable in learning an FL. Lastly, the literature on motivation in acquiring a second language is addressed. In the end, a gap in the literature will be identified, presenting a viable need for the current study. The purpose of this quantitative causal-comparative study was to investigate if there was a difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400.

## Theoretical Framework

There were four theories relevant to the study. This section contains a discussion of these theories. First is the theory of learning progressivism, in which progressivists believe education should be relevant and influenced by experiences and interests. The theory of social learning emphasizes constructing and scaffolding information. The theory of adult education points out how adults learn differently than children. Finally, researchers have used the theory of motivation to study what motivates individuals to achieve goals or outcomes. Figure 1 highlights the theoretical framework of the study.

## Figure 1

The Theoretical Framework of the Research


## Theory of Learning (Progressivism)

The progressive theory focuses on education and social reforms; learning comes from experimentation, life and social experiences, and problem-solving. Dewey (1986) worked as a progressive educator. Dewey gained inspiration from Rousseau (1915) and shared the central ideas of progressivism with Vygotsky (1967), Montessori (1917), and Piaget (1972). Rousseau (1915) believed the purpose of educating children was to maximize their potential to be useful in their natural environment. Locke (1794) asserted that truth and knowledge are observed in empirical experiences. Locke stated that children are educated based on their natural inclinations, skills, and pragmatic subjects (Gutek, 2011). Dewey (1986) believed that children should optimize their learning in their natural state and maintain social experiences so they could become contributors to a better society. Dewey developed principles of education based on a
philosophy of pragmatism, which was fundamental to the progressive movement in education and society (Williams, 2017).

In the late 19th century, children were educated in a rigid and more traditional education system focused on memorizing and reciting. Dewey (1986) believed the educational model for children should be child-centered; education must be engaging and interactive. Dewey believed educators possessed the tools and the abilities to plan children's learning by creating childcentered curricula based on authentic experiences. In their literature review, Webber and Miller (2016) conducted scholarly research to define how teachers implement interdisciplinary, integrated, and inquiry-based methodologies through progressivism-based education to maintain student engagement. Instructors implement critical thinking in their subjects to make teaching relevant and augment teaching effectiveness (Webber \& Miller, 2016). Major teaching education journals were consulted to investigate the key elements of effective teacher education. Dewey (1986) laid out the foundation "a philosophical framework for interdisciplinary, integrated and inquiry-based curriculum, which was known the Progressive Movement" (Webber \& Miller, 2016, p. 1064).

Dewey attested that it is important to know students by observing them to define their needs, experiences, and interests (Garhart, 2013). Moreover, Dewey (1986) promoted critical thinking in teaching and learning that benefits education and society. For instance, if students encounter problematic situations, it is essential to define the problem to solve it. Dewey emphasized that critical thinking is essential to promote change in the world and, therefore, education directly influences society (Quay, 2016). The problem-solving approach is based on empirical methods and can be applied in education and society. Dewey (1986) asserted scientific methods were effective and could be applied to individuals (Gordon et al., 2019).

Taba (1967) and Tyler (2013) agreed with Dewey's (1986) philosophy. Taba (1967) and Tyler (2013) based their teaching philosophy on scientific methods. Taba (1967) and Tyler (2013) prioritized students' authentic experiences. Taba (1967) and Tyler (2013) gained inspiration from Dewey's (1986) theories of education. Taba (1967) and Tyler (2013) left legacies to promote learning through critical thinking by implementing principles (Costa \& Loveall, 2002; Cruickshank, 2018; Garhart, 2013).

Montessori (1917) was born in Italy at the end of the $19^{\text {th }}$ century. Montessori was a doctor in medicine, a philosopher, and an educator. In 1860, Italy was unified under the Royal House of Savoy. Giuseppe Garibaldi and Camillo Cavour advanced the unification, and a new area, commonly known as Il Risorgimento, began in Italy. Garibaldi wished for Italy to become a powerful, liberal, and strong nation (Gutek, 2011). Equally, Montessori (1917) believed that progressive theorists agreed that human growth and development revealed what is already present in a learning child. Children acquire skills and knowledge through experience; education should reflect authentic experiences and materials. Montessori believed children were motivated to learn by their instincts and natural environments. Montessori developed some principles of education based on observations and empirical work in clinically-based pedagogy. The researcher's philosophical principles of education were divided into three parts: (a) practical life skills; (b) motor and sensory training; and (c) literacy, computational skills, and subjects (Gutek, 2011). An essential component of Montessori's educational philosophy (1917) is to develop children's autonomy in all three domains. Children must work on their self-determination and character in a peaceful and prepared environment to work independently (Gutek, 2011).

Frierson (2016) asserted that Montessori (1917) argued the reason children are limited and incapable of independence is correlated with their environment. Children can gain
independence and self-governance by providing them with an adequate setting. Montessori stated that autonomy is not based on child development but is correlated with their environment or external conditions. Frierson (2016) argued that in addition to external conditions, internal attitudes such as suitable mental conditions are necessary to motivate child autonomy; both internal attitudes and mental conditions are interconnected; moreover, self-governance results from a child's motivation (Frierson, 2016).

Dewey (1938, 1986), Montessori (1917), and Vygotsky (1967) agreed that social experiences are vectors for learning (Frierson, 2016; Gutek, 2011; Popkewitz, 1998). Additionally, education should promote independent thinking and experimentation (Garhart, 2013). For instance, the example of children planning a garden illustrates social experiences. Throughout the process, they learn and investigate the growth of vegetables and nature (Dewey, 1938; Garhart, 2013; Williams, 2017).

Dewey (1986) posited that children's natural curiosity, interests, and activities guide them to experimentation. Progressive education is based on the child's interests and the principles centered on truth where truth is relative and changing (Gordon et al., 2019). Furthermore, progressive education is not a product to be learned, such as facts and motor skills, but a method that continues into adulthood. Education is life and learning acquired through experience. By socializing this educational approach, students can transform society by optimizing physical, cognitive, moral, and emotional capacities (Gordon et al., 2019).

## Theory of Social Learning (Constructivism)

The origin of constructivism can be traced to Socratic principles, where the teacher and learner communicate to construct knowledge by addressing questions (Amineh \& Asl, 2015; Bozkurt, 2017). Constructivism is a theory that embraces multiple theories. The theory embraces
the theory of learning, which explores how children construct the meaning of learning. By constructing and scaffolding knowledge, students can better understand the subject and achieve higher levels of thinking. Additionally, content knowledge must be meaningful when learning, and the subject should be taught effectively. When children learn new knowledge, they rely on their background knowledge to apply it to practice. They assimilate learning into actual knowledge, which augments previously acquired knowledge. Ayaz and Sekerci (2015) implemented the constructivist approach in a meta-analysis study to determine the effects of the constructivist learning approach on students' academic achievement. A total of 53 studies were included in the research. The meta-analysis study determined that the constructivist learning approach positively affected the student's academic achievements compared to traditional teaching methods. The research utilized a random effects model with a 0.910 and 1.402 confidence interval. Ayaz and Sekerci (2015) stated, "The overall effect of constructivist learning approach in relation to academic achievement of students is found to be 1.156 ( $95 \%$ CI, $S e=0.125)^{\prime \prime}$ (p. 143). Fifty of the 53 studies had positive results, except three had a negative effect. The highest values were observed in teaching science at the college level. Piaget (1972) created the development theory to define children's ability to develop physically and cognitively by using appropriate measures for their age. Vygotsky (1967) believed that knowledge originated from society and language is a vehicle for society. Constructivism is a theory that refers to how students learn and think. Learning is an active method (Amineh \& Asl, 2015; Bailey \& Pransky, 2005; Bozkurt, 2017; A. Brown, 1994; Popkewitz, 1998).

Vygotsky (1967), Montessori (1915), and Dewey (1986) worked as active psychologists during the Industrial Revolution and periods of modernization. These researchers believed science was essential in developing individuals and society. Social progress would prevail with
the rationality of science. Through science, people could improve their physical condition and become responsible citizens who actively and intelligently contribute to society. Through social administration and effective planning, new citizens were designed to behave rationally and competitively in a changing environment and develop skills such as self-control and problemsolving. In a classroom setting, the constructivist pedagogy goal is to form self-discipline and self-motivated individuals. Students learn problem-solving strategies so that they can authentically implement them as well (Ernest, 1999; Popkewitz, 1998).

## Theory of Adult Learning

The adult learning theory has existed for almost 200 years. Adults concurrently learn while they work. The term andragogy (adult education) was created by a German teacher, Alexander Kapp, in 1833 to describe the educational theory of Plato (Knowles, 1981). The terminology was utilized to describe adult learning through continuous education. The word andragogy was adopted by Knowles (1984) in the $20^{\text {th }}$ century. The adult learning theory differs from children's education. Adult instruction is created based on problem-based and collaborative learning. Knowles (1981) designed a learning theory called andragogy. Adults seem predisposed to be self-directing and have abundant experiences that can serve as resources for learning. Adults also learn a subject matter related to their needs or what they hope to accomplish.

Additionally, adults are intrinsically or extrinsically motivated to reach their goals, but, in general, they are more motivated to learn from internal incentives. Adults comprehend the rationale for learning and choose the method by which they learn. Adult education learning is also pragmatic, and adults must be able to apply learning to solve specific problems. Adults' learning process should be positive and encouraging (Cox, 2006; Knowles, 1984).

Gouthro (2019) stated that when educating adults, it is essential to implement and teach adult learning theory to provide individuals with an important analytical lens "to counter injustice and shape social action" (p. 60). Moreover, educators should create adult education practices derived from the adult learning theory. By implementing the adult learning theory, educators understand the complexity of teaching and learning processes. They can encourage adult students to explore theoretical adult learning to shape their professional, individual, political, economic, and social factors in their learning contexts. No data were reported in this article. Meyer and Murrell (2014) studied 39 higher education institutions that offered online adult education. The researchers developed an instrument of 26 items based on the literature covering faculty development via online teaching. The researchers found that $72 \%(n=29)$ of institutions utilized learning style theory as a foundation for their training activities, and 69\% implemented adult learning from Merriam (1987) and self-directed learning from Knowles (1981). Next, $64 \%$ used Kolb's (2014) experimental theories of learning model, followed by $59 \%$ that implemented Knowles's (1981) andragogy theories, and $54 \%$ utilized various instructional design models. Models of good practice were strongly favored at $79 \%$ compared to online research learning at $31 \%$ or the theory of learning at $23 \%$ during the faculty training. The findings showed that online learning pedagogies were fundamental to $92 \%$ of the respondents. Research online learning was less important, with $23 \%$ of the institutions that completed the survey.

## Theory of Motivation

The theory of motivation embraces motivational concepts, known as attention, relevance, confidence, satisfaction (ARCS), and the social cognitive theory (Keller, 2008). The theory of motivation combines internal and external stimuli to describe how individual behavior is
influenced by tasks and behaviors (Bandura, 1989; Keller, 2008). The motivational principles must remain relevant and based on values or motives. Confidence represents success, and people with confidence may obtain goals more easily than others. Performance is influenced by individuals' knowledge, abilities, and skills. Performance determines outcomes. Lastly, satisfaction is determined through performance and outcomes (Keller, 2008).

The social cognitive theory is important when it is referred to as motivation. The model of reciprocal causation states that behavior, cognition, and the environment are interconnected, influencing each other reciprocally and simultaneously (Bandura, 1989). According to Bandura (1989), reciprocal causation involves the interaction between thoughts and actions. A behavior becomes concrete when conceptualizing individuals' beliefs, self-perceptions, goals, and intentions. In addition, people's behaviors change, and individuals act differently based on their beliefs and feelings. People's natural and extrinsic factors are determined by thoughts and emotional reactions. Moreover, the physical, sensory, and neural systems influence behavior and oblige constraints and competence. The sensory systems act on the brain structures and are modified based on behavioral experiences. The intrinsic factors are defined by self-termination and self-belief concepts. Finally, social influences alter and increase cognitive competencies, emotional tendencies, and beliefs (Bandura, 1989).

Badubi (2017) compared motivation theories to help companies retain and motivate their biggest asset: employees. Badubi tried to help entities with suggestions to cultivate ethical environments, foster positive attitudes toward employees’ work, and mitigate risk factors. Badubi suggested that managers should design and align companies' visions and goals to bring job satisfaction and empower the workforce to have a voice in the professional domain. Equally important, the theory of motivation is crucial in education. Alkaabi et al. (2017) exposed that the
theory of education has been explored extensively in education as a single motivation theory but not as a multiple motivation theory in education research, which the study presented. Motivation is a complex entity, and many theories and models have evolved.

Regarding student motivation, it is essential to comprehend what influences students' motivation. How learners behave toward an activity could be complex. Alkaabi et al. created a student motivation research framework to gain an understanding of how behavior is formed. Internal and external processes arise from the close environment where behavior originates. The self-determination theory focuses on the interactions of inner motivational resources. The motivation theory framework aims to connect motivational theories and the mechanism that expresses certain behaviors to predict outcomes accurately.

Motivation and learning an FL are founded on progressive, constructive, adult learning, and motivation learning theories. The progressive theory provides the basis by addressing education as child-centered and specifying that learning must be meaningful and pragmatic. Social interactions and experiences facilitate the acquisition. Through the constructivist theory, Vygotsky (1967) stated that language is essential to transfer social experience to individuals. Dewey (1986) and Vygotsky (1967) believed that pragmatism is an important component of education and society (Popkewitz, 1998).

Learning FLs differs for adults. The adult learning theory is based on the adults' experiences and readiness. Adults are self-motivated and excel in their studies based on extrinsic and intrinsic factors (Cox, 2006; Knowles, 1984). Adults learn FLs for personal and professional reasons. Individuals are influenced by their cognitive processes, behaviors, and environment. Learners must feel confident to be successful, and motivation is measured by performance and outcomes (Keller, 2008).

The theory of learning (progressivism) was essential when learning an FL. The acquisition of the language was made through life and social experiences. The theory of social learning (constructivism) applied to this study because when one learned an FL, scaffolding strategies were necessary to understand and learn meaningfully. The theory of adult learning was relevant to this study because this research targeted adult students enrolled in French courses. Finally, the theory of motivation was the foundation of this study. Motivation played an essential role when learning an FL.

## Related Literature

The related literature section comprises a compilation of studies that address different sections regarding FL acquisition. The first section shows how second language acquisition influences NL with backward transfer and phonetics. Next, a portion of the literature includes a discussion of how students can acquire FLs through technology programs and strategies, and the positive outcomes that bilingual students benefit from are also discussed. The adult and children education systems are included in this section, as well as how these groups learn FLs differently. Last, the motivation component to acquire an FL for adults, teenagers, and children is addressed.

## Effects of Languages Transfer

Certain studies investigate the language transfer process and how foreign and NLs can influence each other. When an FL is similar to the NL, acquiring the language seems to be easier in reproducing sounds and transferring the background knowledge from the NL into the FL to create similar language patterns to acquire the new language. However, when the FL has different patterns and structures from the NL, the language transfer can create many errors and frustration. Learning a FL can be challenging, and motivation is essential to overcome the many obstacles encountered during the learning process.

In a bilingual program, the NL and FL interact, coexist, and influence each other reciprocally. The NL influences the FL when producing the language. The FL can affect NL production via "backward transfer at a phonetic level and identify various factors that modulate it" (Kartushina et al., 2016, p. 165). Kartushina et al. (2016) explored the forward transfer between the NL and the FL using background knowledge and production of the NL that influenced the FL acquisition. However, the backward transfer from the FL to the NL depends on the length of the language acquisition, the age, the pronunciation factors, the proficiency of the FL, and the learning immersion (Kartushina et al., 2016). High proficiency in the FL creates new sounds and pronunciation on the NL. For instance, a long stay in the country speaking the second language has demonstrated that the NL tends to drift toward the new FL sounds. If learners are not proficient in the FL, then the NL is not modified. Students may command the NL but not yet command the FL.

Moreover, it has been observed that when the FL becomes dominant, the FL influences the NL. When the FL becomes dominant, the NL shifts toward the FL similarities. Kartushina et al. (2016) stated, "There is deflection of [the NL] and [the FL] sounds away from one another relative to monolingual norm" (p. 164). However, intensive production of the FL is necessary to obtain high proficiency for the NL production to change. When pupils learn two languages simultaneously before age 3 , the sounds of the languages remain distinctive. For instance, in Canadian French/English bilingual programs, students show that the NL has not changed from the FL.

Although Kartushina et al. (2016) investigated the alteration of the NL from learning a FL; Tremblay et al. (2016) studied fundamental frequency second language speech segmentation, which could facilitate the phonological encoding of the second language. The
segmentation cues are useful when the NL and the FL are similar. For instance, Koreans had more difficulties verbally comprehending the fundamental frequency cues in French than English speakers listening to French. The cues to word boundaries are unlike across languages in French and Korean. However, the NL cues benefit the FL speech segmentation when both languages apply related patterns (Tremblay et al., 2016).

Researchers have explored the negative transfer from the NL to the FL, focusing on language differences (C. Chen, 2020; Kartushina et al., 2016; Tremblay et al., 2016). Researchers have also explored positive transfer, referring to the similarities of both languages (C. Chen, 2020; Kartushina et al., 2016; Tremblay et al., 2016). Therefore, the shift from the NL to the FL helps acquire the FL and gain command of the language (C. Chen, 2020). When similarities occur in the NL and the FL regarding pronunciation, verbal presentation, phonological encoding, vocabulary, syntax, and writing composition are minimized (Kartushina et al., 2016; Tremblay et al., 2016). Backward and positive transfers modulate the NL from the FL acquisition (C. Chen, 2020). A Growth Curve Analysis Listening Comprehension Test was conducted among French, English, and Korean listeners between their NLs and acquisition language. The French listeners' data demonstrated that the differential fixation line in the fundamental frequency (F0) condition had a convex shape. The $t$ value was positive (2.566). The English listeners' data showed that the $t$ value for the ( $F 0$ ) was negative ( -11.931 ), as shown by a concave shape. The Korean listeners' data had a negative $t$ value (-3.486). The interaction between $(F 0)$ and time was not reported: "Korean listeners had greater difficulty utilizing $(F 0)$ rice as a cue to word-final boundaries" (Tremblay et al., 2016, p. 1). The NL cues favor the FL speech segmentation when languages have similar patterns. For instance, English speakers can
better comprehend and perceive fundamental verbal cues in French than in Korean (Tremblay et al., 2016).
C. Chen (2020) demonstrated in her study that between Chinese (NL) and English (FL) syntax, there are similarities. Four tables were created to indicate that both languages have the same noun, verb, adjective, preposition, and adverb order. The second table showed similarities between English and Chinese syntax regarding simple sentences. It was underlined that syntactic similarities exist mainly in simple sentences. The third table demonstrated that both languages have similarities in using prepositions (preposition + object). The last table revealed commonalities between English and Chinese regarding noun and adjective modifiers. In both languages, nouns and adjectives are utilized to modify the noun. The inversion questions format exists in both languages as well. The native transfer between NL and FL occurred when reaching complexities in the FL, and similarities did not exist between both languages. Learning an FL means understanding the mechanisms of the language.

Additionally, Wyk and Mostert (2016) employed a causal-comparative research design to demonstrate the effects of the NL Afrikaans and gender on second language acquisition (English). Additionally, Wyk and Mostert investigated if the instruction in English benefited students by gender to acquire English as a second language. Wyk and Mostert (2016) compared two groups based "on a vocabulary test, a syntax test and an oral communication test" (p. 5). One group of students received instruction in their NL (Afrikaans), while the other group learned in the target language (English). Both groups functioned as independent variables and influenced the momentum of the research. The effect of the causal-comparative research was the dependent variable, representing the scores of the various English tests.

The statistical results showed the vocabulary test scores based on instruction in English or Afrikaans. The vocabulary scores of the Afrikaans group ranged from 45 to $100 \%$; on the other hand, the English group scored between $30 \%$ to $100 \%$. The mean gap between both groups was significant. The Afrikaans group achieved $78 \%$ and $78.3 \%$ for the English group. The Afrikaans group scored $13 \%$ to $93 \%$ for the syntax test, while the English group scored from 0 to $100 \%$. However, the data indicated that $52.5 \%$ of students scored less than $50 \%$ in the Afrikaans group compared to $31.6 \%$ in the English group. The Afrikaans group obtained a mean of 54.5, and the English group had a mean of 63.8.

There was an observed mean difference of $9.37 \%$ between both groups. In the oral communication test, the scores ranged from $20 \%$ to $90 \%$ for the Afrikaans group and $40 \%$ to $100 \%$ for the English group. The mean scores for both groups were above 60\%. However, the English group outperformed the Afrikaans group by $3.1 \%$ ( $65 \%$ and $62 \%$ ). The study also investigated if there were differences between female and male students' scores in all three tests. In the vocabulary test, $92.7 \%$ of females scored above $60 \%$ versus $76.6 \%$ of males. For the syntax tests, $33.5 \%$ of girls achieved below $60 \%$ compared to boys, who scored $55.9 \%$ below $60 \%$. There was a difference in mean scores between the females of $66.1 \%$ and $51.7 \%$ for the males. The data showed that males achieved low scores below $30 \%$ on the oral communication test. A female obtained the highest score.

Additionally, $83.4 \%$ of females achieved scores from 60 to $100 \%$. On the other hand, $73.6 \%$ of males scored in the same range as the females. The females' mean was $10 \%$ higher than the males at $68.3 \%$ and $58.5 \%$, respectively. This research was relevant to the study because the causal-comparative research design was applied. The effects show that the female gender scored higher in the English assessments than males. The results could indicate that the instructions in

English helped the female students to acquire English more effectively. It is essential to understand the mechanism of languages and the positive and negative transfer of an FL into the NL to facilitate learning and augment motivation.

## Computer Based-Learning

The fast digital and multimedia expansion market has propagated language learning in virtual reality (VR) mode. Between 2004 and 2013, VR of language learning increased significantly. The 3D technology language learning facilitates kinesics learning and improves verbal communication in virtual worlds (Lin \& Lan, 2015). The virtual learning environment (VLE) has connected abstract and real knowledge through educational methods. Combining social communication tools, artificial intelligence, and theme-based VR has promoted genuine and immersive learning environments to aid FL learning (Lin \& Lan, 2015). Computer-assisted language learning is based on theoretically grounded principles to support the pedagogy and values in learning FLs (Lin \& Lan, 2015). Interactive simulations support self-directed learning environments. Gaming and interactive simulation produced more positive effects than traditional learning (Acquah \& Katz, 2020; Lin \& Lan, 2015; Mohsen, 2016).

Acquah and Katz (2020) conducted a systematic literature review investigating the effectiveness of digital educational games on second language acquisition between 2014 and 2018, from elementary to high school in Asia and the Middle East, where the FL was English. Acquah and Katz initially selected 578 papers, but only 26 were reliable for the study. Ten studies utilized experimental research $38 \%$, eight used quasi-experimental $31 \%$, four used action or design-based research $15 \%$, two used correlation $8 \%$, and one used a case study $4 \%$. Acquah and Katz also found that English was the most common language studied at 77\%, with other studies focusing on German, Spanish, Chinese, and Italian. The game features instant feedback,
positive impact, self-efficacy, and learning performance. The outcomes for digital learning an FL were positive, $77 \%$. It was reported that $61.5 \%$ had positive outcomes in language acquisition, $15 \%$ reported no significant impact, and $23 \%$ reported mixed results. In the participatory behavior, $50 \%$ reported that the behavior of the learners was positive, $3 \%$ was negative, $6 \%$ was no significant impact, and $6 \%$ reported mixed results. The participatory competencies (interaction and communication) showed that $30 \%$ were positive and $4 \%$ had no significant impact. The digital FL acquisition was positive, with $30.7 \%$ in a formal learning environment with educator facilitation, $23 \%$ in a formal learning environment without an educator facilitator, and $3.8 \%$ in an informal learning environment. Digital learning games are efficient tools that can be implemented in school settings and for informal education (Acquah \& Katz, 2020).

Digital game-based language learning is self-directed learning games and can enhance motivation and learning outcomes (Acquah \& Katz, 2020; Lin \& Lan, 2015). Mohsen (2016) conducted a study about acquiring English vocabulary through a virtual knee implementation educational game based on an experimental study. The control group viewed the same surgery on a video. After the analysis of the data, results indicated that the group who participated in the virtual surgical game scored higher on the test than the control group who only watched the video $(M=8.66, S E=.79$ versus $M=7, S E=.97)$. Virtual games can facilitate the FL acquisition (Lin \& Lan, 2015; Mohsen, 2016). Computer-based simulation has improved vocabulary retention and enhanced listening comprehension (Acquah \& Katz, 2020; Lin \& Lan, 2015; Mohsen, 2016).

## The Processes of Learning a Foreign Language

Bilingual programs present advantages over monolingual students. In a study, Baird et al. (2016) stated that children could identify cognates and false cognates before they could read.

Cognates "comprise from one third of a half of the average, educated English speaker's vocabulary" (Baird et al., 2016, p. 448). Multilingual speakers are proficient in languages with "etymological" roots, such as English, French, Spanish, Italian, and Portuguese. They benefit from understanding cognates. The vocabulary is very extensive, and, for example, everyday words in French or Spanish are considered academic language and articulated lexically in English, such as utiliser, to utilize; un voyage, a voyage; and accuerdo, accord. The lexical portfolio is more developed in bilingual or multilingual speakers, auguring knowledge and verbal and listening comprehension (Baird et al., 2016). Learning cognates and syntax structures enhance proficiency in FL, reinforces the NL in grammatical structure, and offers a wider range of articulated vocabulary (Baird et al., 2016; Vyn et al., 2019). The cross-language transfer that includes cognates has also improved FL retention and developed a wider lexicon in the NL (Baird et al., 2016; Pham et al., 2017).

Baird et al. (2016) studied bilingualism in 54 elementary students who were low or highly proficient Spanish-English and Vietnamese-English speakers. There was a pretest and posttest and training of 3 weeks, which taught students vocabulary through storybooks, flashcards, games, and the definitions of words. The training and the tests were in Spanish or Vietnamese. MANOVA was implemented to conduct within and between group analyses. The results for the target word learning in NL in pretraining for low Vietnamese ( $M=5.8 . S D=1.5$ ), low Spanish $(M=3.7 . S D=1.9)$, and high Spanish $(M=4.3, S D=1.7)$. For posttraining for low Vietnamese ( $M=7.1, S D=0.8$ ), low Spanish $(M=5.9, S D=1.7)$, and high Spanish ( $M=5.8$, $S D=1.9$ ). For the words translated from NL onto FL, the pretraining was low Vietnamese ( $M=$ $11.5, S D=5.6)$, low Spanish $(M=11.8, S D=4.7)$, and high Spanish $(M=10.9, S D=6.3)$. The posttraining results were for low Vietnamese ( $M=13.5, S D=6.8$ ), low Spanish ( $M=13.1, S D=$
6.4), and high Spanish ( $M=12.8, S D=6.4$ ). Regarding learning the $N L$, all groups showed gains. The effect sizes ranged from .22 to .88 . When comparing across groups, the high Spanish group indicated the most learning in NL, with the medium effect sizes ranging from . 16 (syntagmatic knowledge) to .22 (communicative adequacy). The high Spanish group improved in FL after the training. The large effect sizes ranged from .27 to .48 in English. In the English definitions, the medium effect size was .15 . The study showed that bilingual children could learn new words and definitions. Children with strong NL and FL indicated the most NL and crosslanguage learning in FL (Pham et al., 2017).

Marini et al. (2019) indicated that monolingual students' verbal short-term memory and working memory scores were lower than bilingual students. For monolingual students, forward digital recall is equal to $5.15(2.09)$ - range: $0-11$; non-word repetition equals to $13.23(2.31)-$ range: $7-15$; and backward digit recall is equal to $1.10(1.33)$ - range: $0-4$. On the other hand, the bilingual students scored 7.16 (1.46) - range: 5-10 on the forward digit recall; 14.55(1.34) range: 8-15 for the non-word repetition; and 1.55 (1.34) - range: $0-4$ for the backward digit recall (Marini et al., 2019). One advantage for bilingual or high-fluency students is that their working memory is constantly active. Additionally, when children acquire a new language, they improve their lexicon and grammatical processing in both languages (Marini et al., 2019).

Processing is substantially slower when acquiring both languages simultaneously, and bilinguals often score lower than monolingual students. For instance, bilingual students scored lower in lexical comprehension, 14.48 (1.48) - range: 11-17, versus monolingual students, 15.32 (1.14) - range: 13-18. Monolingual and bilingual students scored almost equally on grammatical comprehension, 29.58 (5.33) - range: 10-37, and 29.10 (7.73) - range: 10-37, respectively. However, the bilingual students' assessment scores are higher than monolingual in sentence
completion, 7.97 (3.14) - range: $3-14$, versus 7.61 (2.29) - range: $4-12$, for monolinguals, and phonological discrimination, 28.55(2.77) - range 17-30, versus, 27.29 (4.50) - range: 10-30 (Marini et al., 2019).

Moreover, Van Hell and Dijkstra (2002) studied trilingual first-year students at the University of Amsterdam studying psychology. This study aimed to determine the fluency of English and French as FLs and Dutch as the NL. A proficiency test of cognates and non-cognates assessed students in all three languages. For the assessment of the Dutch-English cognates, students obtained a mean of $(M=373)$ in Dutch French cognates $(M=317)$ and non-cognates ( $M$ $=304)$. The results about the effect of the word type were significant. Candidates' scores demonstrated they were fluent in Dutch, somewhat less fluent in English, and the least fluent in French. The first group of students was more proficient in English than French. A NewmanKeuls test verified that the students were most fluent in Dutch (their NL), somewhat less fluent in English, and least fluent in French for all differences (Van Hell \& Dijkstra, 2002). In the second group, students had a higher level of fluency in French; however, the test demonstrated that English and French scores were the same. In the first group, students had fewer academic years of French than in the second group. The first and second French, French, and English groups averaged equally. The mastery of the languages was reflected in the scores. Van Hell and Dijkstra (2002) stated, "The trilinguals were most fluent in Dutch and equally fluent in French and English" (p. 782). When students recognize the meaning of the languages, all three languages are activated through visual word processing (J. Chen \& Liu, 2020; Van Hell \& Dijkstra, 2002).

## Adults and Children as Foreign Language Learners

Brain plasticity permits people, through the implementation of mental models and the use of neural pathways, to understand, apply, practice, and recall the information when needed. When learning is understood, practiced, retrieved, and implemented, the memory consolidates into a cohesive representation to strengthen and multiply the neural routes to retrieve knowledge when needed. Through consolidation, the brain recognizes the information and stabilizes the memory traces, and the information or skills are retrieved from the long-term memory. During new instruction, students connect long-term memories and prior knowledge to the new information to make sense of it, a process known as reconsolidation. When learning occurs, the brain transforms the sensory perceptions into meaningful representations in the brain. This process is called encoding, which is chemical and electrical changes that form a mental representation of what has been observed or learned. The brain creates process encoding because the information remains in short-term memory. By practicing and retrieving information, retention occurs; the information is transferred into long-term memory (P. C. Brown et al., 2014).

Klimova et al. (2020) wanted to demonstrate that cognitive decline in the elderly population could be prevented by learning an FL. Klimova et al. exhibited no significant difference between the experimental and control groups in acquiring an FL to improve cognitive abilities. Nevertheless, learning an FL remains beneficial, as it improves the mental well-being of older individuals through social interactions (Klimova et al., 2020). Kacetl and Klimova (2021) determined that a mature population could benefit from learning. Specifically, individuals can practice the FL when traveling, increase social interactions, improve cognitive skills, and optimize well-being. Adequate learning strategies for adults are fundamental to acquiring an FL.

Moreover, Grossmann et al. (2021) demonstrated a positive effect on older adults who take an intensive FL course. This experience could improve their executive functions and cognitive processes, including working memory, self-control, and flexible thinking essential for healthy minds. However, when students enroll in FL studies in college, they know why they study a specific language. For instance, students are interested in the culture and history of the language they acquire or have professional interests (Teo et al., 2019). On the other hand, children learn FLs because the parents speak other languages besides the NL. They are enrolled in bilingual or international programs to become fluent in the FLs studied (Lamb, 2018).

## Adult Education

Learning an FL during adulthood can present benefits. For seniors, learning an FL could be a preventive intervention. Research has shown that acquiring an FL may boost the cognitive functions of seniors and "preserve lifelong brain plasticity" (Klimova et al., 2020, p. 2). Klimova et al. (2020) used experimental and control groups. The researchers aimed to observe if learning an FL for 3 months would slow down signs of aging and improve seniors' cognitive functions. The control group pretest was $27(26.8,29)$, and the posttest was $28.5(27,30) p$-value 0.018 . The experimental group pretest showed $28(26,28.8)$, and the posttest was $28.5(27,30) p$-value 0.462. The scores in the posttest and pretest were $0.5(-1,1.75)$, with a minimum value of -4 and a maximum value of 4 . The control group improved in the posttest from the pretest and could have been motivated to improve their scores. The experimental group improved by 0.5 . The Montreal Cognitive Assessment (MoCA) score between groups indicated $F(1,40)=0.506, p=$ 0.481. The test between subjects indicated no significant effect of factor time, $F(1,40)=3,73, p$ $=0.061$. There was no significant interaction between factors and time, $F(1,40)=0.956 p=$ 0.645. Participants' self-reports revealed that practicing FL instruction improved mental well-
being by creating social connections (Klimova et al., 2020). Bilingualism also contributes to the resistance to cognitive decline in elderly populations (Klimova et al., 2020).

In their method literature review, Kacetl and Klimova (2021) selected 19 articles out of 124 studies to demonstrate that learning an FL in older adult healthy populations could have suitable benefits for improving cognitive skills, increasing opportunities to travel abroad where the target language is spoken, developing social interactions with a group of learners, and improving their overall well-being. A mature population requires different metacognitive learning strategies, such as taking notes to help understand and memorize, organizing the learning, and asking questions. Kacetl and Klimova (2021) and Klimova et al. (2020) agreed that face-to-face courses in a friendly learning environment are adequate for traditional learners. Learning strategies, such as the student-centered model and communicative methods, were essential for these learners' profiles. Older adults learning an FL also need a slower teaching speed to help them comprehend and retain the information. The length and quality of exposure, real-life experiences, familiar topics, and relevant material are fundamental to acquiring meaningful FL information. For mature adults, the fact they studied an FL became beneficial and enjoyable to them, and they felt a sense of accomplishment. Kacetl and Klimova (2021) mentioned that older adults would benefit from social inclusion, happiness, and motivation, which affects their mental health and overall well-being. However, as it relates to the improvement of cognitive processes, no data were provided.

Other teaching and learning strategies are presented in another study. In an experimental research endeavor, 60 Iranian students between 16 and 18 years old learning English FL (EFL) were chosen among 120 preintermediate English levels based on the Oxford Quick Placement Test (OQPT). Namaziandost et al. (2020) investigated the impact of spaced and massed
instruction (two teaching strategies) on FL. The results were analyzed using a motivation questionnaire and a reading attitude survey. The sample of students was equally divided into two experimental groups: the spaced and massed groups. The spaced group teaching was divided into three sections of 20 minutes.

On the other hand, the massed group received instruction in a 60-minute course. The results pre and posttests were analyzed by utilizing a sample $t$ test. Namaziandost et al. (2020) compared the pretest and posttests on the Motivation Reading Questionnaire (MRQ) on massed instruction (MI; $M=37.63$ ) and $(M=38.33)$ for the posttest. Spaced instruction (SI) for the pretest was 38.80 , and the posttest was 49.93 . The Reading Attitude Survey (RAS) compared the posttest of MI and SI. The MI was lower $(M=23.06)$ than the $\operatorname{SI}(M=34.26)$. A significant difference $(M=11.13)$ existed between the pretest and posttest in the MRQ in the spaced instruction. The difference between pre and posttests in the RAS with $(M=12.60)$ was also significant. Spaced instruction is more effective than mass teaching (Namaziandost et al., 2020).

On the other hand, young adults learn FLs to advance their professional careers and social and personal goals (Anshan, 2018). Africa-China relations have attracted numerous talented artists, professionals, and students to live in China and study Chinese. There are different motivations for studying in China. In 2010, African countries offered $50.01 \%$ of college scholarships to study in Asia. This opportunity is ideal for African students to pursue further studies in China. In 2014, 41.61\% applied for medical science, $21.56 \%$ chose to engineer, and $13.94 \%$ selected business and management studies. African students are the second largest community in China, and they play a role as a bridge between different cultures and continents. From 1996 to 2015, there were 236,241 African students in China. The number of students was

1,040 in 1996; in 2016, the number was 61,594 . African students were enrolled in various universities in China.

In 2016, the Shanghai government also attributed scholarships to 99,800 African students from undergraduate to doctoral programs. However, international students must learn Chinese before they can apply for scholarships. African countries and China have collaborated in different domains. Since the 1960s, China has dispatched Chinese medical teams to Africa. In the 1970s, China collaborated with Tanzania and Zambia to build a railway, Tanzania Zambia Railway (TAZARA). Since the 1970s, China has invested considerably in Africa to develop its international economy. In 2017, the African students' job fair took place in Beijing so that Chinese companies would employ international students to work on the African continent (Anshan, 2018).

## Child Education

Children learn in a classroom setting through educational games, vocabulary implementation, reading, and writing. The proficiency of FL is correlated with the type of instruction and age. Older students acquire more complex FL abilities than younger students in primary schools (Jaekel et al., 2017; Peters et al., 2019). Jaekel et al. (2017) conducted a longitudinal study in elementary school ( 5,130 students from 31 schools) to observe the longterm effects of an early start (Year 1) compared to later exposure. Jaekel et al. investigated how exposure time affects the acquisition of language. Jaekel et al. focused on reading and listening to English comprehension. The sample of 3.340 students was retained and assessed at the end of Years 5 and 7. In Year 5, early start (ES) participants outperformed the late start (LS) participants 514.24 to 486.49 in reading and listening 517.24 to 483.64 . However, in Year 7, the (LS) students outperformed the (ES) learners by 516.55 to 482.57 in reading and 508.45 to 491.1
in listening. The (LS) participants scored 34 points higher in reading and 17.35 points in listening comprehension than (ES) participants. The results could be explained by older learners being at an advantage by learning FL at a higher level over students who started in Year 1 in the elementary school setting where FL was taught at a basic level (Jaekel et al., 2017).

Out-of-school exposure is equally important to practice and enhance the FL. For instance, time spent viewing films in the target language, speaking with their parents, and socializing with native speakers allows for enhancement. Over time, findings indicated that students performed better in the FL than in the NL (Peters et al., 2019). The 139 participants' NL was Dutch, (FL) French, and (FL) English. Participants were in either high school or their first year in college. Students studied French from four to over 9 years and studied English from 1 to over 5 years. Despite the years that students spent acquiring French (4.31 to 9.09) and English (1.02 to 5.23) years, students outperformed in English vocabulary scores than French due to the out-of-school English exposure. The second year had English females $(M=39.94, S D=19.24)$ and males $(M$ $=53.19, S D=21.50)$, as well as French females $(M=23.49, S D=8.44)$ and males $(25.15, S D=$ 10.42). In the fourth year of high school, females in English scored ( $M=60.35, S D=15.75$ ), and males scored $(M=76.61, S D=15.33)$; in French, females scored $(M=43.11, S D=12.81)$, and males scored $(M=46.39, S D=10.65)$. At the university level, the English scores for females were shown $(M=83.17, S D=9.63)$; male scores were shown $(M=81.41, S D=12.84)$; in French, female participants were scored $(M=63.63, S D=11.28)$, and males were scored ( $M=$ 60.83, $S D=13.42$ ). Participants were more exposed to English media, that being audiovisual with or without English subtitles. Participants stated in a questionnaire that they had higher exposure to English outside the academic school courses. English test scores were between $81 \%$
to $89 \%$, and French scores were $43 \%$ to $46 \%$; females scored lower than males in high school but scored higher in college for English and French vocabulary tests (Peters et al., 2019).

Pfenninger and Singleton (2019) affirmed that children learning an FL before 5 years old could not only become bilingual, but FL and NL would be operated instantly and from the same region of the brain, and both languages would be considered native. The advantage for bilingual students is their cognitive system is constantly operating. Cognitive processes expand the working memory capacity, which augments attention and helps students develop problemsolving skills (Alderson et al., 2016; Lamb, 2018; Lanvers et al., 2019; Marini et al., 2019).

However, children with special learning needs have been denied FLs learning. In a longitudinal quantitative study, Peker and Regalla (2021) focused on inclusion for pupils with learning disabilities in mainstream courses. Prekindergarten students' first (English) and second language (French) vocabulary development was examined. Data were collected from standardized and classroom tests (pretest and posttest) over 2 years. Of 60 students, 37 were diagnosed as special needs pupils requiring an Individual Education Plan (IEP). Students' NL posttests mean was higher than the pretests for the classroom assessments and standardized tests $(M=97.50, S D=16.50 ; M=89.24, S D=19.09)$. Students demonstrated a moderate effect size, which indicated a moderate improvement for the numbers (1 to 10 ) $d=0.47$. According to ANCOVA results, there was no statistical significance, $F(1.54)=3.75, p=.058$, in posttest scores between the groups regarding the NL vocabulary. There was no statistical significance in the thematic unit tests of the FL. Students with IEPs and without were compared.

Overall, students with IEPs scored lower in standardized tests in English ( $M=89.58, S D$ $=14.89)$ versus non-IEP students $(M=109.45, S D=12.20)$. IEP students could learn an FL, but the scores were lower $(M=12.00, S D=5.63)$ than for standard students $(M=16.46, S D=3.17$;

Peker \& Regalla, 2021). Students with disabilities can successfully learn FLs with appropriate tools, instruction, and methodologies. Students with learning disabilities present weaknesses in language processing skills.

By applying specific learning and teaching strategies, students with learning disabilities can enhance overall linguistic skills, improve the NL, and promote confidence and a positive attitude toward learning an FL (Peker \& Regalla, 2021). For instance, P. C. Brown et al. (2014) described how learning occurs. Skills, tools, and different strategies acquire knowledge. Massed, spaced, interleaved, and varied practices are processes to aid information to be understood, practiced, and retrieved. These active learning strategies stimulate a higher order of thinking. Massed practice is compared to a boot camp, the information is presented and learned in a short period, such as weekends, but learning stays in the short memory and is lost quickly. Spaced practice occurs when learning is extended over time. Knowledge is slowly acquired because it requires more effort to retrieve information learned; however, learning strengthens, and retention lasts longer. Interleaved practice allows one to learn different skills or subjects alternatively. The strategies of learning of P. C. Brown et al. (2014) could be implemented for all types of students learning an FL at any level.

## The Effects of Motivation to Learn a Foreign Language

A set of new motivational tactics and strategies have been infused into classroom instructions to motivate students to learn an FL. According to Kurt and Kurt (2018), study lesson plans were strategically established and implemented in a 10-week-long course. The lesson plan was modified weekly according to what the researchers observed the previous week. A motivational model was implemented to motivate the students to acquire an FL. Classroom instructors must project a clear understanding of how to motivate students.

Motivational strategies are applied to keep students motivated in the long term (Kurt \& Kurt, 2018). Saito et al. (2018) stated that a positive attitude activates intrinsic or extrinsic motivation for learning to occur. Students who present positive dispositions such as enjoinment and a clear vision of their future tend to outperform FL acquisition individuals who are anxious and negative. Grossmann et al. (2021), Kacetl and Klimova (2021), and Klimova et al. (2020) underlined that third-age adults are intrinsically motivated to learn an FL at a later age. Concurrently, Grossmann et al. (2021), Kacetl and Klimova (2021), and Klimova et al. (2020) reported that older adult groups were intrinsically motivated to learn an FL because they would benefit from social interactions and well-being improvement.

## Adult Motivation

Due to the increase of globalization and professional competitiveness, adults are often motivated to learn an FL. Often, they are motivated by their own defined motivation to undertake FLs studies. However, it is reported that learning a modern language is difficult. Often, adults are discouraged from pursuing and becoming efficient in an FL. Therefore, motivational models have been established to motivate learners (Kurt \& Kurt, 2018; Lanvers, 2017). Kurt and Kurt (2018) showed the motivation model attention, relevance, confidence, and satisfaction (ARCSM) could help students be motivated and acquire English. In a 10-week qualitative study, 30 students participated in the study while attending English college courses as a second language. The ARCSM model and motivational tactics and strategies were implemented during the students' regular hours of instruction. Every week, after 10 hours of instruction, students could leave anonymous comments through a program, Visser, about the three most challenging and positive motivational influences they experienced the previous week. Students reported that classroom
instruction influenced their motivation. Additionally, participants commented that cooperative activities helped them to understand and retain important points of the lessons.

Moreover, students found verbal activities highly beneficial and motivating to process the FL. Students found the English instructor highly motivating (Kurt \& Kurt, 2018), raising their attention and interest levels. Thus, instructors should design lesson plans to capture and maintain students' attention, such as implementing attention strategies, for instance, "small bites" instruction. Additionally, the subject must be relevant to traditional and nontraditional students. It should be pertinent to their personal and professional lives, and the learning strategies and positive experiences should stimulate FL acquisition (Kacetl \& Klimova, 2021; Kurt \& Kurt, 2018; Lanvers, 2017; Teo et al., 2019).

In another study, motivation is associated with an ensemble of learning strategies and community support. The scope of the study was to determine the relationship between the Saudi EFL and the Pakistani students and how they were intrinsically motivated to learn English. The study was directed based on "students' passion for learning English, desire for self-improvement and caring for achievement" (Hussain et al., 2020, p. 19). Succeeding on exams was a high priority for both groups. Saudi students (38\%) and Pakistanis (48\%) agreed they could perform well on the English language exams. Both groups agreed they could develop proficiency in English as a second language. When both groups, the Saudis (36\%) and the Pakistanis (38\%), failed to understand complex concepts in the English language, they did not give up. Moreover, $68 \%$ of Pakistanis felt confident about doing well in their assessments. However, there was a lack of extrinsic motivation compared to $60 \%$ of the Saudis (Hussain et al., 2020).

Learning strategies, the environment, and resources are essential to increase motivation when acquiring an FL. Saudis 76\% and Pakistanis $82 \%$ agreed that hands-on classroom activities
enhanced learning and improved test scores. Pakistanis made more effort in group activities to obtain high assessment scores. They expressed satisfaction with their high scores. Only $40 \%$ of Saudis, compared to $80 \%$ of Pakistanis, seek social acceptance and appreciation from their classmates and instructors, which motivates them to excel in English as a second language. Notably, $88 \%$ of Pakistanis versus $78 \%$ of Saudi learners felt confident reading English books independently.

Moreover, $38 \%$ of Saudis thought books were not interesting; therefore, they were unmotivated to learn. Because Saudis were unmotivated to read, books might have come from the educators' instruction. The teachers' role in the learning environment is very crucial. Instructors provided strategies to be implemented in activities. However, Saudis utilized more modern and interactive materials to learn English (Hussain et al., 2020).

Saudis and Pakistanis compared intrinsic and extrinsic motivation. Saudis and Pakistanis found that both groups were intrinsically motivated to learn English. However, the Saudis show lower extrinsic motivation than the Pakistanis due to a scarce English learning environment. Their social interactions did not promote English learning. On the other hand, the extrinsic motivation for the Pakistanis was defined as having highly motivated English instructors, adequate resources in the classroom, financial scholarships, and applicability to university instruction. Additionally, Saudis and Pakistanis suggested that highly qualified instructors were necessary to motivate Saudi students intrinsically. Moreover, Saudis need to be actively engaged in social learning activities in the target language to create a positive and engaging learning environment in a classroom setting (Hussain et al., 2020)

Finally, Kacetl and Klimova (2021) claimed that the third-age population tends to be highly motivated to learn an FL, as most motivation is intrinsic. Older adults have vast
experience in various topics. They are intrinsically motivated to explore ways to acquire or relearn an FL through hands-on activities and relevant materials that reflect real-life situations. Even though the first desire for an elderly population tends to be intrinsic motivation, they benefit from extrinsic motivation, such as practicing the FL socially and when traveling abroad. Additionally, they can maintain or improve cognitive skills, such as their working memories, which hold the information stored in the brain (in the short memory), and are used to execute physical or cognitive tasks. Overall, Grossmann et al. (2021), Kacetl and Klimova (2021), and Klimova et al. (2020) stated that learning an FL could improve the well-being of older adult populations who tend to be in good health.

## Children and Adolescent Motivation

In Europe, $50 \%$ of the population consider themselves fluent in speaking an FL at a functional bilingual level. The pupils' population is linguistically diversified in elementary school, and the multilingual school body has increased over time. Pfenninger and Singleton (2019) stated that bilingual students can better learn an FL in a supported environment. At an early age, FL acquisition could be beneficial in a bilingual education setting (at school and home). Kacetl and Klimova (2021) added that a younger population learns an FL faster if they are exposed to natural settings constantly, as opposed to only academic settings where the acquisition of an FL can be limited in frequency and resources. Pfenninger and Singleton (2019) underlined that students are motivated to learn in an adequate and stimulated environment, and parents' support helps to encourage learning. The longitudinal study aimed to observe if age was a prominent factor for late starter (LS) students who began to learn an FL in middle school. The study also investigated the impact of learning an FL compared to early starter (ES) students who
learned an FL in elementary schools. At the first data collection, the students were 13 to 14 years (mean age 13.4).

The students' ages at the second measurement ranged from 18 to 19 years (mean age 18.6). The ES students received 5 more years of English as a second language (EFL) education than the LS learners. There were 325 ES candidates and 311 LS participants. In the first data collection, the ES students outperformed the LS in receptive vocabulary, written lexical richness, written fluency, oral lexical richness and accuracy, and written grammatical judgments. Age was a weak predictor of FL learning outcomes for ES and LS. However, there was a significant interaction between age and bilingual/biliteracy at the end of secondary school; receptive vocabulary was higher than productive vocabulary, written lexical richness, and written fluency. Oral complexity was the lowest. The relationships between parental involvement and support and bilingual education were measured. There was significant interaction within the contextual factors, such as linguistic richness, which explains the involvement of parents in students' reading and written fluency. LS were fast learners. However, ES bilingual and illiterate students were affected by age in terms of benefiting long-term and outperforming the other group. The benefits of being young when learning an FL are that when students are enrolled in a bilingual program, they receive substantial parent support and a supportive learning environment in contrast to LS monolinguals and non-biliterate students (Pfenninger \& Singleton, 2019).

Three articles were selected that address motivation for learners acquiring a LOTE. Deldeniya et al. (2018) investigated two different motivations: integrative (the desire to learn a language and be part of the community) and instrumental (learning the language for pragmatic purposes) for students learning Japanese as an FL. These researchers also utilized Gardner's (2004) AMTB. The study aimed to demonstrate students' attitude and type of motivation when
learning Japanese in Sri Lanka. The researchers stipulated the difference between a second language and an FL. FLs are acquired in a formal education setting in the community where the language is not utilized.

On the other hand, a second language is used in a community as a daily means of communication (Deldeniya et al., 2018). Results indicated that students learned Japanese as an FL for better professional opportunities, with $45.2 \%$ and $40.4 \%$ indicating the reason for learning the language was to visit Japan and study. Last, $91.2 \%$ reported continuing to learn and practice Japanese after graduation. Students were motivated equally regarding integrative and instrumental motivation.

Another study was conducted in Sweden and studied French as a FL. French as a third language has declined even though multilingualism has been promoted in Europe for many decades. English is seen as the second language in Sweden (Hahlin \& Granfeldt, 2021). Hahlin and Granfeldt (2021) investigated how to motivate students to learn French in high school. The study was conducted for 1 semester and implemented a quasi-experimental method. The control class contained 14 students, and 45 were in the experimental group. Data were gathered through pre and posttests, focus group interviews, and questionnaires. Results indicated that the overall intervention was insignificant. However, the intended effort positively affected students with the highest level of French. Girls did better than boys in terms of French acquisition. Hahlin and Granfeldt underlined the characteristics, self-image, and activities affected by gender.

Oakes and Howard (2019) investigated the effects of motivation on a LOTE. In this case, French was studied in Sweden and Poland, with 522 college students acquiring French and English. The instrument to measure motivation was the L2MSS by Dörnyei (2010). Using different instruments, Deldeniya et al. (2018) and Oakes and Howard (2019) investigated college
students' integrative and instrumental motivation. Oakes and Howard (2019) indicated that the L2MSS was utilized 11 times in similar studies with the same target language in the past decade. Oakes and Howard reported that students were more proficient in English than French and studied English longer. Oakes and Howard indicated the ideal L2self (integrative motivation) was important for French and English proficiency for both groups of students. Learners in both languages expressed interest in the culture of the target language they were studying. However, students who learned French had opportunities to visit Francophone countries and immerse themselves in the culture and the target language. Oakes and Howard reported that students' French language had a stronger integrative motivation component than the English language. Instrumental motivation was the same for English and French learners. The L2MSS has contributed to inspecting the motivation for FL acquisition. However, motivation might be complex to analyze, and all aspects might not be captured (Oakes \& Howard, 2019).

## Motivation Based on Socio-Economic Status and Location

Alejo and Piquer-Píriz (2016) stated that the motivation to acquire FLs depends on low, middle, and upper social classes; the parent's education level; and the parent's second language level of proficiency. Students who had parents with a bachelor's or a master's degree were more motivated to become proficient in an FL (Khansir et al., 2016). The attitude of the students toward learning was significant " $(F=1,37=6.014, p=.019$, partial eta-squared $=.122$, power $=$ .598)" (Alejo \& Piquer-Píriz, 2016, p. 255). Additionally, students originating from middle- or high-affluent classes have the financial ability to travel and engage in private lessons for extra support and become efficient in the target language more rapidly (Alejo \& Piquer-Píriz, 2016). Students from lower socioeconomic statuses negatively view learning FLs because they cannot
afford to travel abroad. Furthermore, learners from lower socioeconomic backgrounds have a different perspective on learning FLs for their future than those from more affluent families.

In a rural environment, there are fewer opportunities for students to be exposed to a multi-linguistic sector versus learners living in a city. Alejo and Piquer-Píriz (2016) conducted a study on rural students who experienced insufficient access to an FL and received less support but were willing to learn more to overcome their knowledge gap. Urban students started learning the FL (English) before age 6 (73\%). The rural students started after the age of $6(40 \%)$. Urban students received more private lessons (76.9\%) than rural students (50\%). The social milieu, urban versus rural, was calculated. The urban milieu seemed more favorable to learning languages than the rural area. The interaction between the social milieu and overall academic achievement was reported. Students who lived in the urban area scored better than the rural students. The attitude toward learning was reported.

For rural schools, students from lower-income families underperformed compared to urban students from more affluent families. The motivation survey in the study indicated that urban students had parents who graduated from college as undergraduates and at the graduate level. They also had more opportunities to travel and practice English outside the classroom. Students who had more support to take private lessons were less anxious to learn English and try to acquire the FL. On the other hand, rural students had a slower level of English, less support in taking private lessons, and started to learn the FL after 6 years old. They were more anxious to learn an FL, but they were willing to make efforts to overcome their under achievements (Alejo \& Piquer-Píriz, 2016). The motivation to learn FLs could depend on social status, parents’ education, and exposition to the target language.

## Summary

FLs are essential in helping individuals learn general culture despite their complexity and technicality. In an FL learning setting, the progressive theory of learning follows pragmatic principles and focuses on child-centered education. Dewey believed that children and adults learn through social interactions and experiences with the appropriate physical and mental development and learning. According to the constructivist learning theory, children construct the meaning of learning by scaffolding knowledge from basic to complex. The adult learning theory is based on experiences, problems, and collaboration. The motivation theory defines purposeful effort as wanting to accomplish certain goals, and the achievement of the performance determines the consequences of attainment and reflects the level of satisfaction.

Learning an FL can be beneficial in terms of enhancing comprehension of the native syntax and vocabulary and enhancing working memory. However, negative and positive effects can occur in a cross-cultural mode. Technology and computer-based learning through learning games and simulations can enhance FL acquisition. Additionally, educational strategies to acquire an FL are implemented to facilitate learning, such as cognate and false cognate knowledge, cross-language transfer, and instructional practices relevant to student language proficiency.

Adults, teenagers, and children learn FLs differently and have different reasons for pursuing these studies. For example, children learn by playing and engaging in informal activities. Parents decide to register their children in FL classes and support them in their learning. Children can benefit from cognitive processes while learning a new language. Teenagers usually learn languages are part of school programs; they play video games, listen to music and watch foreign movies to help augment their acquisition of an FL. On the other hand,
adults make their own decision to acquire a language. Their motivation can be personal or professional. Adults might not experience the same cognitive process benefits as children, yet learning a new language benefits their mental health and personal endeavors.

When examining all studies, learning an FL can be a complex task. Motivation is an essential component when acquiring a second language. There is a gap in explaining the role of motivation in learning a LOTE in higher learning. Moreover, students' motivation regarding FL acquisition (French) at all course levels has not yet been explored. The present study investigated if there was a difference in the motivation to learn French for college students enrolled in French 100, French 200, French 300, and French 400.

## CHAPTER THREE: METHODS

## Overview

The purpose of this quantitative causal-comparative study was to investigate if there was a difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400 courses. The study aimed to examine the cause and effect between the independent and the dependent variables. The one-way ANOVA statistical test was utilized to investigate the relationship between both variables. Chapter Three includes a discussion of the study's design, including the definitions of the variables. The research questions, hypothesis, participants and setting, instrumentation, procedures, and data analysis are presented.

## Design

A quantitative, causal-comparative research design was employed for this study. The research design allows for investigating a potential relationship between the independent and the dependent variables and whether the French course levels that the college students were enrolled in (independent variable) explained the motivation to learn French scores (dependent variable). Regarding the independent variable, the French courses were defined by the college class nomenclature (Oakes \& Howard, 2019). Students were enrolled in French 100, French 200, French 300, and French 400. For the dependent variable, Deldeniya et al. (2018) defined motivation to learn an FL as "the main component of effective language acquisition" (p. 12).

Applying a causal-comparative design was recommended in this study because the participants could not be selected randomly or assigned to groups. Equally, causal relationships allowed one to identify important phenomena' causes and effects (see Gall et al., 2007). The limitations of the design included that the relationship between the dependent and the independent variable was suggested and not actual because the independent variable could not be
manipulated (see Gall et al., 2007). The causal-comparative design was reliable for this study because it had been utilized in FL learning and education to determine cause-effect relationships between two or more variables (Gall et al., 2007). The causal-comparative research design was used to observe if there was a difference in motivation to learn French between college students enrolled in different levels of French courses.

The design examines the cause-and-effect relationships between the independent and the dependent variables in three prior studies. Wyk and Mostert (2016) employed a causalcomparative research design to demonstrate the effects of the NL Afrikaans and gender on second language acquisition (English). Additionally, Wyk and Mostert investigated if gender influenced whether the instruction in English benefited students in acquiring English as a second language. Moreover, Ulger (2019) examined the cause-and-effect relationship between the dependent variable (effect), which represents creative thinking scores, and the independent variable (cause) of individual disciplines. The comparison between individual disciplines and grade levels demonstrated the performance and scores in creative thinking. Finally, Martino (2021) utilized a causal-comparative study to investigate the relationship between career and technical education educator quality and students' achievements in postsecondary career certificate programs in Florida. Students who obtained the certificate programs created employability based on their fields of study and achievement scores.

## Research Question

The study used the following research question:
RQ1: Is there a difference in motivation to learn French between college students enrolled in French 100, French 200, French 300, and French 400 ?

## Hypothesis

The null hypothesis for this study was the following:
$\mathbf{H}_{\mathbf{0}} \mathbf{1}$ : There are no differences in motivation to learn French scores between college students enrolled in French 100, French 200, French 300, and French 400.

## Participants and Setting

The participants for the study were drawn from a convenience sample of college students in central Florida and Virginia who were taking a French course during the 2023 spring semester. The sample consisted of preexisting, naturally occurring groups. In this section, the population sample is identified in both universities. Finally, the setting section shows the processes behind the study.

## Population

In 2021, 93,349 students were enrolled at Eagle University (pseudonym), a private university in central Virginia. There were 47,988 undergraduates and 45,361 students at the graduate level. The student body comprised $59 \%$ female and $41 \%$ male individuals. White students represented $60.9 \%, 19.1 \%$ were unknown, $8 \%$ were African American, $5.8 \%$ were Hispanic, and $1.5 \%$ were Asian. The average household income was $\$ 75,300$ annually (Liberty University, n.d.-a, n.d.-b).

In 2021, 68,475 students enrolled at Freedom University (pseudonym), a state university in Central Florida. The students were $45 \%$ male and $55 \%$ female. The students' ethnicities were $53 \%$ White, $11 \%$ Black, $24 \%$ Hispanic, and $6 \%$ Asian. The median household income was $\$ 62,518$ annually. Approximately $30 \%$ of students were considered low-income (University of Central Florida, n.d.). In a causal-comparative study, when the sample of participants is selected, it must be rationally homogeneous. Otherwise, the causal relationship between variables might
be affected if the participants differ (Gall et al., 2007). The target population was undergraduate students at both universities. The convenience sample comprised college students enrolled in French courses from the first to the fourth year.

## Participants

A sample accurately represents a population where selected members are part of a research project (Gall et al., 2007). A small sample size might not be sufficient to determine group differences (Gall et al., 2007). The sample size for this causal-comparative was set at 160 participants (40 participants in each of the four groups of the independent variable), which exceeded the minimum of 144 for one-way ANOVA when assuming a medium effect size with a statistical power of .7 and alpha level, $\alpha=.05$ (Gall et al., 2007, p. 145).

Only 79 participants were retained for this study. Four groups corresponded to the level in which students were enrolled in the French courses such as French 100 (novice), French 200 (intermediate), French 300 (advanced), and French 400 (superior) level courses at both locations: Eagle University and Freedom University. All participants were enrolled in French courses at any level, from novice to superior, such as French 100 (27 participants), French 200 (34 participants), French 300 (5 participants), and French 400 (13 participants). The French language was selected in this study because the researcher's NL is French.

College students enrolled in French 100, French 200, French 300, and French 400 represented the demography of the present study. The dependent variable was motivation, and the independent variable was the French course levels of 100, 200, 300, and 400. There were four groups comprising the independent variable. The total sample comprised 79 college students. The following list represents these groups enrolled in French courses during the 2023 spring semester at both institutions: Eagle and Freedom University:

- Group $1(n=27)$ - French 100
- Group $2(n=24)$ - French 200
- Group $3(n=5)$ - French 300
- Group 4 ( $n=13$ ) - French 400

Table 1 shows the demographic information of the participants who completed the motivation survey. Most college students enrolled in different French course levels were female, with $75.9 \%$. Most participants were between 18 and 28 years old and were enrolled in French courses ( $97.5 \%$ ). For this study, most students were White ( $65.8 \%$ ), and the first language spoken was English (84.8\%). Almost all participants were full-time students (93.7\%). In addition, the researcher wanted to gather information on the students' intended major to provide further context on the participants. The study included a question asking students what their current major is. The potential responses were pulled from the university websites listing the top 10 majors. After collecting the data, the majority were not majoring in the top 10 majors, according to the schools.

Table 1 shows that for $58.2 \%$ of the students who completed the survey, their major was "Other" and did not reflect the general tendency of college majors of both universities. One-third of the college students learned French for 1 year; $15.2 \%$ of the participants studied French for 2 years. The percentage decreased from the first to the second year ( $16.4 \%$; see Table 2 for demographic information).

Table 1
Demographic Information of College Students Enrolled in French Course Levels $(\mathrm{N}=79)$

| Variables | $n$ | \% |
| :---: | :---: | :---: |
| Genders |  |  |
| Male | 16 | 20.3 |
| Female | 60 | 75.9 |
| Non-binary/third | 2 | 2,5 |
| Prefer not to say | 1 | 1.3 |
| Age |  |  |
| 18-28 | 77 | 97.5 |
| Above 50 | 2 | 2.5 |
| Race and Ethnicity |  |  |
| American Indian or Alaska Native | 3 | 3.8 |
| Asian | 3 | 3.8 |
| Black or African American | 10 | 12.7 |
| Hispanic or Latino | 11 | 13.9 |
| White | 52 | 65.8 |
| Native Language |  |  |
| English | 67 | 84.8 |
| French | 1 | 1.3 |
| French Creole | 2 | 2.5 |
| German | 1 | 1.3 |
| Portuguese | 3 | 3.8 |
| Spanish | 2 | 2.5 |
| Tagalog Vietnamese | 1 | 1.3 |
| Other | 2 | 2.5 |
| Status of a Student |  |  |
| Full-Time | 74 | 93.7 |
| Part-Time | 5 | 6.3 |
| Student College Major |  |  |
| Biology | 1 | 1.3 |
| Business | 3 | 3.8 |
| Administration/Management |  |  |
| Education | 1 | 1.3 |
| Engineering | 1 | 1.3 |
| Finance and Accounting | 1 | 1.3 |
| Health Sciences | 3 | 3.8 |
| Hospitality Administration/Management | 3 | 3.8 |
| Political Science | 6 | 7.6 |
| Psychology | 14 | 17.7 |
| Other | 46 | 58.2 |
| Number of Years Studying French |  |  |
| 1 Year | 25 | 31.6 |
| 2 Years | 12 | 15.2 |
| 3 Years | 11 | 13.9 |
| 4 Years | 12 | 15.2 |
| 5 Years | 2 | 2.5 |
| 6 Years | 5 | 6.3 |
| Over 6 Years | 12 | 15.2 |

## Groups

The four groups of participants contained French 100 (27 participants), French 200 (34 participants), French 300 ( 5 participants), and French 400 (13 participants) were naturally occurring groups (Gall et al., 2007). Participants were at least 18 years old, and the universities’ student demographics did not represent the sample size. In 2021, at Freedom University, about 45\% of students were males, and 55\% were females. At Eagle University, about 59\% of students were females, and $41 \%$ were males. Because the sample size was 79 participants for both universities, the sample size for males in both universities was 16 ( $20.3 \%$ ), and the sample size for females was 60 ( $75.9 \%$ ). Two students identified themselves as nonbinary/third, and one participant preferred not to say their gender. The students' demographic components included their age, gender, ethnicity, NL, college major, French course enrolled, and how many years they learned French.

## Setting

The study took place in two universities; one was a private university in Virginia, and the other was a public university in Central Florida. The study was conducted for the world language department. The Motivation Questionnaire (demographic information and the Hybrid Questionnaire) was administered online in one Qualtrics survey. Students had 2 weeks to complete the survey. Professors could have selected one course for students to complete the survey to increase participation.

## Instrumentation

The Hybrid Questionnaire was based on Gardner's (2004) AMTB and Dörnyei's (2010)
L2 MSS. The researcher measured college students' motivation to learn French as an FL at Eagle University and Freedom University. This researcher identified the Hybrid Questionnaire
instrument to measure the dependent variable (see Appendix C for the instrument;
Kanoksilapatham et al., 2021). Originally, Kanoksilapatham et al. (2021) developed the hybrid questionnaire to create a shorter survey based on Gardner's (2004) AMTB and Dörnyei's (2010) L2MSS surveys. The purpose of the hybrid questionnaire was to measure the motivation of college students learning English as an FL in Thailand. In this study, the purpose of this instrument was to measure the motivation to learn French for college students enrolled in French 100, French 200, French 300, and French 400.

In the study of Kanoksilapatham et al. (2021), the hybrid questionnaire was created utilizing Gardner's (2004) AMTB and Dörnyei's (2010) L2MSS survey. Because both questionnaires were overlapping, they were regrouped by section. Kanoksilapatham et al. (2021) stated that Gardner's (2004) AMTB and Dörnyei’s (2010) L2MSS contained similarities and differences in how to conceptualize motivation; for instance, the L2MSS questionnaire included four more segments than Gardner's (2004) AMTB (English anxiety, integrativeness, cultural interest and attitude toward L2 community). Both questionnaires were lengthy; Gardner's (2004) AMTB included 104 questions, and Dörnyei's (2010) L2MSS survey had 140 questions. The robust nature of these questionnaires could present implementation constraints and discourage students from completing the survey.

Kanoksilapatham et al. (2021) included a hybrid questionnaire of 26 questions. Five experts evaluated the content of the hybrid questionnaire for its validity and reliability. The experts calculated the Index of Item-Objective Congruence (IOC), and the index value of IOC was .60 , which was satisfactory for the content (Kanoksilapatham et al., 2021). In addition, the Hybrid Questionnaire was trialed to obtain a high level of feasibility, credibility, and reliability. The Hybrid Questionnaire demonstrated high reliability calculated by Cronbach's alpha of 0.923.

The Hybrid Questionnaire was divided into five sections. The first section was the ideal L2 self and contained four questions. These questions asked students to view themselves as successful and proficient in English. The second section was ought-to self and included two questions. These questions outlined the importance of being accepted by their friends and family. The third segment included six questions for instrumentality. Students learned English for practical reasons. The fourth sector was ethnocentrism and integrativeness, which contained six questions. Students were interested in interacting in communities speaking English. The last segment measured students' attitudes toward learning English, which included seven questions (Kanoksilapatham et al., 2021).

The hybrid questionnaire contains a 5-point Likert scale from strongly agree to strongly disagree $($ strongly agree $=5$, agree $=4$, neutral $=3$, disagree $=2$, and strongly disagree $=1)$. The possible scores ranged from 1 to 5 points. A score of 1 point was the lowest possible, meaning that students had no motivation to learn English as an FL, and 5 points indicated that students were very motivated to learn English as an FL. The mean was calculated based on the 5point Likert scale. Kanoksilapatham et al. (2021) administered the hybrid questionnaire using Google Forms to facilitate cell phone use. However, one of the eight universities requested that the survey be administered on paper. The researchers scored the survey (Kanoksilapatham et al., 2021). The Hybrid Questionnaire instrument had not been referenced in other peer review articles because the research implementing the Hybrid Questionnaire was published recently, in June 2021.

In this study, the Hybrid Questionnaire instrument measured college students' motivation to learn French as an FL. The Hybrid Questionnaire was implemented entirely for the survey. The possible range was from 1 to 5 points. A score of 1 point indicated candidates were
unmotivated to learn French; on the other hand, a score of 5 demonstrated high student motivation. The Hybrid Questionnaire was concise to keep the attention of the students. The hybrid questionnaire obtained more robust results and a higher Cronbach's alpha reliability coefficient of . 923 than Gardner's (2004) AMTB and Dörnyei's (2010) L2MSS alone (Kanoksilapatham et al., 2021). Deldeniya et al. (2018) utilized Gardner's (2004) AMTB survey to measure integrative and instrumental motivation. Cocca et al. (2017) stated, "Gardner (2010) recognized motivation as a joint of external and internal forces determining the beginning, direction, intensity and persistence of a certain behavior" (p. 149). Cronbach's alpha analyses demonstrated acceptable reliability on the integrative and instrumental motivation since the alpha was 0.7. Alejo and Piquer-Píriz (2016) utilized the L2MSS instrument to measure language acquisition. Cronbach's alpha coefficient was 0.68 , which indicated that the internal consistency was questionable. Table 2 (below) reports the reliability of each instrument discussed in this section.

In this study, the Hybrid Questionnaire was administered in a Qualtrics survey to facilitate computer or cell phone use. The completion time to answer the Hybrid Questionnaire was about 15 minutes or less. The researcher scored the instrument using the Qualtrics survey. Data from the survey were entered into SPSS 25 software to analyze the data and survey to obtain a total score for each participant. The Hybrid Questionnaire was modified in this study; French replaced the English word because the questionnaire was given to college students learning French. The authorization to modify the Hybrid Questionnaire was provided to the researcher (see Appendix E for permission to modify the instrument).

## Table 2

Cronbach's Alpha Analyses - High Reliability

| Motivation | Cronbach's alpha |
| :--- | :---: |
| Gardner's (2004) AMTB | .7 |
| Dörnyei (2010) L2MSS | .68 |
| Hybrid Questionnaire | .923 |

The Hybrid Questionnaire was utilized in this study to measure the motivation of students learning French at Eagle University and Freedom University.

## Procedures

The approval to conduct the study at Freedom University and Eagle University was requested according to Eagle University's IRB protocol (Appendix I). In addition, the researcher obtained permission from the department chair of interdisciplinary studies at Eagle University, the department chairs of modern languages at Eagle University and Freedom University by submitting a signed letter or time-stamped/date email to confirm that students could participate in the study (Appendices F, G, and H). After the approval was granted, the researcher emailed the French language professors. French professors received the recruitment email, follow-up (Appendices J and K), and the participant letter. The link to the questionnaire was included in the participant letter (Appendix A). The survey was accessible on the digital platform Qualtrics. Only French professors and students had access to the questionnaire.

Afterward, French professors emailed all their students with the participant letter, which included a direct link to the questionnaire. Students had a maximum of 2 weeks to complete the hybrid questionnaire. Some professors opted to allot class time for the completion of the survey. College courses are a minimum of 50 minutes, and participants would have had sufficient time to complete the survey in class with the permission of their French professors. Those who did not have class time had 2 weeks to complete the study outside their classroom time.

Incentives have been shown to increase response rates (Gall et al., 2007). The survey participants could win one of three online gift cards valued at $\$ 50$ if they completed the entire survey on Qualtrics. Email addresses were requested for candidates wishing to participate in the drawing to win a $\$ 50$ gift card. Participants opened a link to enter their emails at the end of the hybrid survey. The data were recorded separately from the hybrid questionnaire to maintain participants' anonymity.

## Qualtrics: Hybrid Questionnaire

The researcher created and digitized the Motivation Hybrid Questionnaire in one Qualtrics survey. The consent statement was placed on the first page of the survey; students read the consent and clicked on "agree" to proceed with the survey. Next, the students' demographic components included age, gender, ethnicity, full- or part-time student status, college major, French course enrollment, and how many years they learned French. Finally, there were 26 questions for the hybrid questionnaire. The questions were displayed together. One question was added for participants to enter their emails to win a $\$ 50$ gift card. Students clicked on the arrow in the direction they wanted to go to navigate forward and backward through the questions.

## Data Collection

The data were collected during the spring semester of 2023. French professors were contacted by email by the researcher at both universities to present the research and asked if they might utilize a one-course session for students to complete the digital hybrid questionnaire. The participant letter, including the hybrid questionnaire link, was emailed to the French professors. They shared it with all their students for them to open the link and complete the questionnaire. Students agreeing to participate in the study read the participants' consent form (Appendix B) at the beginning of the Qualtrics survey explaining the purpose of the study and participants' rights.

Students needed to click a checkbox to acknowledge their consent, and then they could start the survey questions. Students completed the Motivation Hybrid Questionnaire during a one-course session or within 2 weeks. The researcher scanned all the data gathered in Qualtrics for inconsistencies, such as incomplete surveys. For each group contained French 100 (27 participants), French 200 (34 participants), French 300 (5 participants), and French 400 (13 participants). All participants who entered their email qualified for the drawing for the three $\$ 50$ gift cards; 31 participants entered their email addresses. The data were available to the researcher instantly on Qualtrics. The assessment was secured through the Qualtrics survey. Only the study's researcher could access the data populated instantly by the students' answers. Access to the survey would remain secured with a password. For the study, the data were analyzed in the SPSS 25 software.

## Data Analysis

In this study, a one-way ANOVA was utilized. The descriptive statistics and the one-way analysis of variance ANOVA were computed in SPSS 25. Gall et al. (2007) described descriptive statistics as techniques to classify numerical data. Descriptive statistics were reported for the dependent variable (motivation) for each independent variable group (French course levels). The mean and standard deviation (minimum and maximum) scores were measured for each dependent variable group. The one-way ANOVA was chosen because it best determined if the independent variable significantly affects the dependent variable. The one-way ANOVA is appropriate when a researcher seeks to determine if there is a difference in the dependent variable between groups of the independent variable (Gall et al., 2007).

Moreover, the dependent variable, the score that benchmarks the motivation to learn French, was continuous. The independent variable was categorical and consisted of two or more
groups (Gall et al., 2007), represented by four groups of college students enrolled in a French course (French 100, French 200, French 300, and French 400). The one-way ANOVA was utilized without repeated measurement. For instance, a student taking a 100-level French course was not found in another group. The research question in the one-way ANOVA data analysis investigated whether there was a difference between groups of the independent variable concerning the dependent variable. The one-way ANOVA was conducted to test the hypothesis, which underlined no differences in the means of different groups; the mean was calculated in each group (Gall et al., 2007).

## Assumption Testing

To answer the research question, one-way ANOVA was utilized. Three assumptions are associated with the one-way ANOVA model: the absence of significant outliers, the assumption of normality, and the assumption of homogeneity of variance. The data screening was conducted for each group's dependent variable. The data were scanned to detect inconsistencies. A box and whiskers plot was constructed to detect the outliers of each group's dependent variable. Extreme bivariate outliers can augment the data's variability, reducing statistical power (Gall et al., 2007).

The one-way ANOVA requires that the assumption of normality is met. Normality was examined using the Kolmogorov-Smirnov test because the sample size was more than 50 participants. The assumption of normality is met if $p>.05$ (Gall et al., 2007). Moreover, the oneway ANOVA requires the assumption of variance homogeneity to be met. The assumption of variance's homogeneity was examined using Levene's test. The assumption of homogeneity of variance was met if $p>.05$. This test measured if the null hypothesis and the error variance of the dependent variable were equal across groups (Gall et al., 2007). In this study, the hypothesis was tested.

Furthermore, the effect size measures the strength of the relationship between variables (Nassaji, 2021). The effect size was reported using partial eta squared ( $\eta_{\text {part }}^{2}$ ). Three different effect sizes are 0.2 small, 0.5 medium, and 0.8 large (Gall. et al., 2007). The study calculated the effect size between college students enrolled in French 100, French 200, French 300, and French 400. The $p$-value determined if a finding was significant or not. The null hypothesis was rejected if $p<.05$. The Tukey test (a post hoc test) was required to confirm where the differences occurred between groups if $p<.05$. The alpha level for the study was determined at $\alpha=.05$ as a standard for significance. This score indicated that a 5\% risk of difference could exist among groups (Gall et al., 2007). The results of the data analysis are presented in Chapter Four.

## CHAPTER FOUR: FINDINGS

## Overview

The purpose of this quantitative causal-comparative study was to compare the differences in motivation between the mean of college students enrolled in different French courses. The research question investigated if there is a difference in motivation to learn French between college students enrolled in French 100, French 200, French 300, and French 400. The researcher analyzed the motivation levels of college students in four different levels of French courses. Chapter Four includes the research question, the null hypothesis, data screening, descriptive statistics, assumption testing, and results.

## Research Question

The study used the following research question:
RQ1: Is there a difference in motivation to learn French between college students enrolled in French 100, French 200, French 300, and French 400 ?

## Null Hypothesis

The null hypothesis for this study was the following:
$\mathbf{H}_{\mathbf{0}} \mathbf{1}$ : There are no differences in motivation to learn French scores between college students enrolled in French 100, French 200, French 300, and French 400.

## Data Screening

The data from Eagle and Freedom University were combined. The sample size of 79 students was grouped according to their level of French: French 100, French 200, French 300, and French 400. The categories of motivation (strongly agree $=5$, agree $=4$, neutral $=3$, disagree $=2$, strongly disagree $=1$ ) were added together to obtain one overall rating for each category of the independent variable and determine college students' motivation to learn French.

The data screening was conducted on the dependent variable, which was the motivation to learn French. The researcher sorted the data on each variable and scanned for inconsistencies. No data errors or inconsistencies were identified. Box and whiskers plots were utilized to identify outliers in the dependent variable. A star key showed one extreme outlier. Candidate 7 was enrolled in the French 100-course level and scored 1.4. Two true outliers (identified by two small circles) were also found. These outliers represent the natural variation in the population of college students enrolled in a French course level at Freedom and Eagle University (Warner, 2013). Outliers 7, 8, and 27 were college students enrolled in the French 100-course level who completed the motivation survey and scored $1.4,1.8$, and 2.4 , respectively. These scores were the lowest in the questionnaire. The researcher retained the extreme and true outliers in the data because they represented the sample size (see Figure 2 for box and whisker plots, including data for motivation, to learn French between college students enrolled in French course levels). The outliers can also be seen on the chart.

## Figure 2

## Box and Whisker Plot for French Course Levels



## Descriptive Statistics

Descriptive statistics were obtained for each dependent variable group: French course levels $100,200,300$, and 400 . The study's sample size was 79 participants who completed the motivation survey at the beginning of the spring semester of 2023 at Freedom and Eagle University. The motivation of college students to learn French scores was based on 26 questions from the hybrid questionnaire. The motivation score was based on the mean of each course level: French 100, French 200, French 300, and French 400. The score could range from 1 to 5 for each category. A score of 1 indicated the lowest score, showing that participants were unmotivated to learn French. In contrast, a score of 5 is considered the highest and demonstrates that college students were highly motivated to learn French. The lowest score earned was 1.4 (French 100), and the highest was 4.65 (French 200).

The total sample size of the study was 79 participants from the French 100, French 200, French 300, and French 400-course levels. Based on the descriptive statistics in Table 3, French 300 had the smallest sample size of five participants. French 200 had the largest sample size of 34 participants, and the standard deviation was the second largest with ( $S D=.57$ ); the data were clustered around the mean. French 400 had a sample size of 13 participants with an average standard deviation of .38. The highest standard deviation level of .71 was for the French 100, with a minimum score of 1.4 . French 400 maintained the highest mean of $(M=3.81)$. French 100 had a sample size of 27 participants; the mean was the lowest of $(M=3.45)$ and the highest standard deviation of ( $S D=.71$ ). French 300 had a minimum score of 3.12 , but the second highest mean of $(M=3.71)$. French 400 was the most motivated group to learn French, with a mean of ( $M=3.81$ ), and French 100 was the least motivated group to learn French $(M=3.45)$. Despite these results, the difference between the French 100 and French 400 levels was
insignificant at .39 , and the means of the four French course levels were close in value. The standard deviations were close in value as well. Overall, the descriptive statistics did not sustain a significant difference in the mean. Table 3 shows the descriptive statistics of the participants enrolled in French course levels.

## Table 3

Descriptive Statistics: Motivation by Group ( $\mathrm{N}=79$ )

|  | French course levels | $n$ | Min | Max | $M$ | $S D$ |
| :--- | :--- | :---: | :--- | :--- | :---: | :---: |
| 100 | Motivation | 27 | 1.40 | 4.50 | 3.4548 | .71724 |
|  | Valid $N$ (listwise) | 27 |  |  |  |  |
| 200 | Motivation | 34 | 2.19 | 4.65 | 3.6009 | .57214 |
|  | Valid $N$ (listwise) | 34 |  |  |  |  |
| 300 | Motivation | 5 | 3.12 | 4.00 | 3.7160 | .38273 |
|  | Valid $N$ (listwise) | 5 |  |  |  |  |
| 400 | Motivation | 13 | 3.23 | 4.38 | 3.8131 | .38795 |

## Assumption Testing: Assumption of Normality

The one-way ANOVA statistical method requires that the assumption of normality be met. The normality assumption was conducted addressing the four French course-level groups. Normality was examined utilizing the Kolmogorov-Smirnov because the sample size was greater than 50 participants (Warner, 2013). For the normality assumption to be met, the $p$-value must be superior to .05 for each group. In this study, the $p$-value for each group was $p>.05$ except for French $100, p<.05$. The normality assumption can be considered met. The test demonstrated that motivation scores for all groups except French 100 indicate normal distribution.

Not all populations from which the sample was selected had a $p$-value superior to .05 . The sample size was equally distributed throughout the four groups except for French 100.

A Q-Plot of French 100 shows that the data are close to the line representing the nearly normal distribution (see Figure 3 for the normal distribution).

## Figure 3

Q-Plot of French 100 Course Level ( $\mathrm{N}=27$ )


The assumption of normality can be considered met ( $p>.05$; see Table 4 for the normality test). Figure 4 visually represents the assumption of normality for the motivation of college students enrolled in different French course levels.

Table 4
Tests of Normality

| French course levels | Kolmogorov-Smirnov $^{\text {a }}$ |  |  | Shapiro-Wilk |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Statistic | $d f$ | Sig. | Statistic | $d f$ | Sig. |  |
|  | .192 | 27 | .012 | .883 | 27 | .006 |  |
| Motivation | 100 | .080 | 34 | $.200^{*}$ | .980 | 34 | .764 |
|  |  |  |  |  |  |  | 200 |

## Figure 4

Motivation of College Students to Learn French Enrolled in French Course Levels ( $\mathrm{N}=79$ )


One-way ANOVA also requires the assumption of homogeneity of variance (Levene's test) to be examined. The assumption of equal variance was met $(p>.05)$ where $p=.535$. Table 5 shows the results of Levene's test of homogeneity of variances.

Table 5
Levene's Test of Homogeneity of Variances

|  |  | Levene Statistic | $d f 1$ | $d f 2$ | Sig. |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Motivation | Based on $M$ | .735 | 3 | 75 | .535 |
|  | Based on Median  <br> Based on Median and with .791 | 3 | 75 | .502 |  |
|  | adjusted $d f$ | .791 | 3 | 59.161 | .504 |
|  | Based on trimmed $M$ | .669 | 3 | 75 | .574 |

## Results: Hypothesis

The null hypothesis for this study was the following: There are no differences in motivation to learn French scores between college students enrolled in French 100, French 200, French 300, and French 400. The one-way ANOVA was run to see if there was a significant difference in motivation among college students enrolled in French 100, 200, 300, and 400course levels. The independent variable was college students enrolled in French 100, French 200, French 300, and French 400, and the dependent variable was the motivation to learn French. The researcher failed to reject ( $p>.05$ ) the null hypothesis at the $95 \%$ confidence level, where $F(3$, $75)=1.151, p=0.334$. Partial eta squared equaled $\left(\eta_{\text {part }}^{2}=.044\right)$. The effect size was small; consequently, there was no statistical difference in motivation to learn French among French 100 $(M=3.45, S D=.71)$, French $200(M=3.6, S D=.57)$, French $300(M=3.71, S D=.38)$, and French $400(M=3.81, S D=.38)$. Because the researcher failed to reject the null hypothesis $p>$ .05, a Tukey test (post hoc) analysis was not required to determine where the differences occurred between groups (see Table 6 for Tests of the Between-Subjects Effect).

## Table 6

Tests of Between-Subjects Effects: Dependent Variable: Motivation

| Source | Type III $S S$ | $d f$ | $M S$ | $F$ | Sig. | Partial $R^{2}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected model | $1.223^{\mathrm{a}}$ | 3 | .408 | 1.151 | .334 | .044 |
| Intercept | 619.491 | 1 | 619.491 | 1748.686 | .000 | .959 |
| Course level | 1.223 | 3 | .408 | 1.151 | .334 | .044 |
| Error | 26.570 | 75 | .354 |  |  |  |
| Total | 1047.748 | 79 |  |  |  |  |
| Corrected Total | 27.793 | 78 |  |  |  |  |
| a. $R$ Squared $=.044$ (Adjusted $R$ Squared $=.006)$ |  |  |  |  |  |  |

Figure 5 gives a visual overview of college students' motivation in French course levels. The difference in motivation between French course levels is not significant.

## Figure 5

Bar Graph of Mean Motivation Scores by Group


## CHAPTER FIVE: CONCLUSIONS

## Overview

Chapter Five summarizes the analysis results regarding the research question and the null hypothesis. This chapter includes the discussion, implications, limitations, and recommendations for future research sections about the study. This quantitative causal-comparative research showed no significant difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400 course levels. The findings of this study demonstrate a relationship to previous theories and research. The results of this study augment the existing literature, which analyzes students' motivation to learn an FL.

## Discussion

The purpose of this quantitative causal-comparative study was to investigate if there is a difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400 course levels. This study is significant because the data were gathered based on college students enrolled in French course levels during the spring 2023 semester at Eagle and Freedom University. The Hybrid Questionnaire was utilized to ascertain the college student's level of motivation. The data were regrouped and summed based on the four different French course levels to obtain the motivation mean of each group and to analyze if there was a difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400 course levels. Moreover, motivation in FLs studies has been explored extensively. However, less than $25 \%$ of research is conducted on motivation in learning a LOTE (Deldeniya et al., 2018; Hahlin \& Granfeldt, 2021; Oakes \& Howard, 2019; Zheng et al., 2020). This study was one of the few investigating motivation among college students learning a LOTE. French was the target language of the study because the researcher is a French educator. This
study's results demonstrated no significant difference in the means between college students enrolled in French 100, French 200, French 300, and French 400.

It is important to highlight French students' motivation in different course levels even though the study was insignificant. Kanoksilapatham et al. (2021) created a measurement to evaluate the degree of motivation as follows: $1.00-1.80=$ very low degree of motivation, $1.81-$ $2.60=$ slightly low degree of motivation, 2.61-3.40 $=$ moderate degree of motivation, 3.41-4.20 $=$ slightly high degree of motivation, and $4.21-5.00=$ very high degree of motivation. According to the criteria of evaluation of motivation of Kanoksilapatham et al. (2021), the means of the different levels of French courses: French $100(M=3.45)$, French $200(M=3.60)$, French 300 $(M=3.71)$ and French $400(M=3.81)$ are all part of the category "slightly high degree of motivation," which is the second highest criteria of motivation. As a result, this indicates that students must be highly motivated to learn an FL. Research covering the motivation of learning a LOTE is underdeveloped, and the field would benefit from an increased understanding of the role of motivation in learning.

Furthermore, the small sample size of 79 participants made it difficult to determine if the null hypothesis was incorrectly accepted. The current study was designed to investigate the research question and the null hypothesis regarding the motivation of college students enrolled in French course levels. The researcher failed to reject the null hypothesis and demonstrated no difference in motivation between college students enrolled in French 100, French 200, French 300, and French 400. The quantitative causal-comparative research was analyzed by utilizing SPSS25 software. The population for the sample size included college students enrolled in French course levels at two universities in Florida and Virginia. The study used the following research question:

RQ1: Is there a difference in motivation to learn French between college students enrolled in French 100, French 200, French 300, and French 400 ?

The null hypothesis for this study was the following:
$\mathbf{H}_{\mathbf{0}} \mathbf{1}$ : There are no differences in motivation to learn French scores between college students enrolled in French 100, French 200, French 300, and French 400.

The results supported previous studies that motivation is an essential factor for success in language learning (Deldeniya et al., 2018; Hahlin \& Granfeldt, 2021; Hussain et al., 2020; Kanoksilapatham et al., 2021; Kurt \& Kurt, 2018; Lamb, 2018). The present research was reliable based on the data collection methods, statistical analysis, and comparison to other similar literature. Regarding the previous literature, Hahlin and Granfeldt (2021) investigated motivation in learning a LOTE in a quasi-experimental intervention study with pre and posttests. Teo et al. (2019) studied motivation regarding attitudes of Chinese college students learning a LOTE (Japanese) to determine if the motivation to learn the language facilitated cross-cultural exchanges with Japanese individuals. Kanoksilapatham et al. (2021) developed a Hybrid Motivation Questionnaire to explore the motivation of college students in Thailand to learn English as an FL. Kanoksilapatham et al. conducted an interview and analyzed the data qualitatively. This present study did not conduct quasi-experimental research or a qualitative investigation. Instead, it implemented the Hybrid Motivation Questionnaire to analyze college students' motivation to learn French at different levels.

In a quasi-experimental study, Hahlin and Granfeldt (2021) analyzed how to motivate high school students enrolled in French courses as a second FL (SFL) in Sweden, where French has become a vulnerable language. After the pretest was conducted on motivation, the researchers implemented three activities. The posttest indicated higher means for the control
group. Hahlin and Granfeldt calculated the correlation coefficient and found that the relationship was strong and valid in adolescents learning French as SFL. The present study did not calculate the correlation coefficient between college students enrolled in a French course. The results indicated that overall there was no significant effect of the intervention. Likewise, in this study, the researcher investigated the motivation of college students enrolled in French courses. There was no statistical difference in motivation to learn French.

Teo et al. (2019) investigated the motivation to learn Japanese in Chinese universities. The study explored that students could better understand the culture by learning an FL, such as Japanese, and cultural exchanges between college students of both countries could increase. The motivation to learn Japanese was explored in terms of students' attitudes. Similarly, in this study, the motivation of LOTE was investigated at the university level. In this study, college student motivation was regrouped by French course levels and represented by the mean and standard deviation on each French course level. Teo et al. calculated the means of motivation (attitude) for 27 items on their survey based on the regulated group and cultural interest group. Teo et al. rejected the null hypothesis, whereas the researcher failed to reject it in this study. Moreover, there was no significant difference in means between the two groups. Teo et al. and the present study had no statistically significant results.

Kanoksilapatham et al. (2021) created a hybrid questionnaire based on the frameworks of Gardner's (2004) and Dörnyei's (2010) surveys to measure the role of motivation in learning English among college students in public universities in Thailand enrolled in first-year sciences and humanities. This study utilized the same hybrid questionnaire to gather college students' motivation in French course levels. Kanoksilapatham et al. (2021) regrouped every survey item (26 questions) into five categories to calculate the motivation level of college students learning

English as an FL enrolled in science and humanity disciplines. The degree of motivation was calculated. It was found that both groups were very high to slightly highly motivated to learn English. The results revealed differences in motivation between groups, sciences, and humanities. Kanoksilapatham et al. analyzed all the questionnaire items in five categories for two distinctive college student groups. This study focused on the mean differences between college students enrolled in four different course levels.

In the present study, the categories of the survey were not recorded. Kanoksilapatham et al. (2021) reported the mean for each subcategory, whereas this study computed the mean for each French course level. Moreover, both studies utilized the 5-point Likert scale (1 to 5) to calculate the means of students' motivation to learn an FL. Furthermore, Kanoksilapatham et al. conducted a large-scale study with 2,641 participants from different universities throughout Thailand. Kanoksilapatham et al. found their research statistically significant, whereas this study only had 79 usable surveys from two universities, and the results were not statistically significant.

Learning a LOTE has become a domain of concern (Hahlin \& Granfeldt, 2021). The present study supported previously established theoretical frameworks, such as the theory of learning (progressivism), the theory of social learning (constructivism), the theory of adult learning, and the theory of motivation. The theory of learning addresses student-centered principles. The acquisition of an FL must be meaningful and pragmatic for students to learn and become proficient in a language. The theory of social learning underlines that social interaction is indispensable to acquiring and implementing a language. Dewey (1938) and Popkewitz (1998) believed that pragmatism is important in education and society. Learning an FL is pragmatic and essential to communicate globally in diverse societies. Because this study was conducted in a
university setting, the adult learning theory was applicable as the students were motivated to learn based on extrinsic and intrinsic components (Cox, 2006; Knowles, 1984).

The theory of motivation plays a crucial role in connecting motives to certain behaviors, which could predict outcomes efficiently. The current study supports the previously cited theories investigating motivation for learning FLs. The present study shows no significant difference between the means of the four French course levels studied. Keller's (2008) ARCS motivational theory underlined that it is necessary to provide a systematic motivation model addressing the four categories of the ARCS motivation theory to understand the factors that influence motivation to learn attention, relevance, confidence, and satisfaction (Kurt \& Kurt, 2018; Refat et al., 2020). In conclusion, the motivation of college students to learn an FL, such as French, can improve when educators understand the importance of motivation by identifying the four elements of the ARCS motivation theory.

## Implications

The study of motivation to learn FLs is not new. However, less than $25 \%$ of the research conducted on motivation has investigated LOTE (Deldeniya et al., 2018; Hahlin \& Granfeldt, 2021; Oakes \& Howard, 2019; Zheng et al., 2020). More studies must be conducted on LOTE to generalize the results across languages (Oakes \& Howard, 2019; Peters et al., 2019).

Additionally, despite policies to promote LOTE and multiculturalism, many countries have encountered challenges in the educational system where the dropout rates of FLs have become alarming. Moreover, a concern is that French as an FL has become a vulnerable language among FLs other than English in Sweden. It is essential to investigate motivation to increase knowledge in this domain (Hahlin \& Granfeldt, 2021). In addition, it is crucial to understand college
students' motivation and design motivational instruction to increase the number of college students wanting to learn French as FL (Kurt \& Kurt, 2018).

This study offers two novel components regarding contributions to the existing literature: the utilization of the Hybrid Questionnaire and the comparison of different French course levels. It is important to mention that this study was the first that used the Hybrid Questionnaire after Kanoksilapatham et al. (2021) created it. The Hybrid Questionnaire had a Cronbach's alpha of .923, which showed high reliability compared to Gardner's (2004) AMTB, where the Cronbach's alpha was .7, and Dörnyei (2010) L2MSS's Cronbach's alpha was .68. To conduct FLs motivation research, the Hybrid Questionnaire instrument is highly effective, and it is shorter than the other two. Utilizing the Hybrid Questionnaire is essential to FL motivation research as it is a highly reliable instrument to measure motivation.

In addition, this study was the first to investigate differences in motivation among varying course levels. This researcher investigated differences in motivation among college students enrolled in four different course levels: French 100, French 200, French 300, and French 400. Examining motivation across these levels provides insight into the effects of compounding French education, as students at the upper levels often chose to continue their studies rather than fulfill a requirement. Related to this concept, the outliers in the study provide notable insights. This study shows that motivation at the French 100 level is the lowest. However, based on Kanoksilapatham et al.'s (2021) idea of the (mean) interpretation of the degree of motivation, this study found that the mean of all French course levels scored a "slightly high degree of motivation" (p. 20). This study presented novel factors to help stakeholders better understand the changes needed to optimize learning, given that motivation was essential to learning an FL.

## Limitations

This study's limitations regarding internal and external validity should be addressed. The internal validities refer to the degree of confidence so that other factors do not influence the cause-and-effect relationship tested in this study. In contrast, external validities represent the results that can be generalized to other circumstances (Bernstein, 2018). In this study, the internal validities addressed four limitations, and the external validities presented three.

The first internal limitation refers to the researcher's choices when conducting this study.
Gall et al. (2007) stated,
The causal-comparative design is a type of non-experimental investigation in which researchers seek to identify cause-and-effect relationships by forming groups of individuals in whom the independent variable is present or absent -determining whether the groups differ on the dependent variable. (p. 306)

Moreover, the causal-comparative design limitation restricts the independent variable from being manipulated, and the relationship between variables is an indication and not real (Gall et al., 2007). Another limitation of the causal-comparative study was that it was not as effective as an experimental design causal-comparative design because cause and effect already took place and were examined as ex post facto (Gall et al., 2007). A time constraint was another limitation of this study. Even though the time for students to complete the survey was increased, no further responses were received. Out of 97 surveys received, only 79 of the questionnaires were valid, which was less than the target number of responses (144). The last limitation was the setting in which the data were gathered. Participant letters, including a motivation survey, were sent twice via email to French professors to share with their students. Data were gathered online; students were not monitored when they answered the questionnaire. The setting could have
affected participants regarding how they answered the survey. Every measure was made to ensure the integrity of this study.

This study had three external limitations: the sample size, lack of motivation to complete the survey, and time allocated to answer the questionnaire. The sample size of this study did not represent the overall student population from both universities: Freedom and Eagle University. In this study, the students who completed the survey were $75.9 \%$ female and $20.3 \%$ male. On average, males represented $43 \%$, and females represented $57 \%$ of the Eagle and Freedom University student population. This study showed that the White ethnicity was overrepresented, with $66 \%$ of participants compared to the average of $57 \%$ of the student body at both universities; however, the Latino population was under $14 \%$. On average, Hispanics represented $15 \%$ of the overall population of both universities. Another significant limitation was the sample size requirement for this study. The target sample size for this causal-comparative study was determined at 160 participants when assuming a medium effect size with a statistical power of 0.7 and alpha level, $\alpha=.05$. A minimum sample of 144 participants was required. Only 79 complete questionnaires were useable for this study. A low response rate could affect the credibility of the results.

Moreover, in some cases, a Type II error could occur, in which case the null hypothesis could be wrongly accepted, and no difference is reported between the groups studied (Gall et al., 2007). The results of the present study have demonstrated no statistical difference among the variables of this study. However, this study has a small sample size of 79 participants, which could have increased the margin of error, and the results were shown as insignificant. However, other researchers can investigate the same parameters set differently to obtain statistical differences.

The present study relied on voluntary participation. Students who participated in the study must have been motivated to learn French and complete the survey. Many students enrolled in French courses at universities in Central Florida and Virginia did not seem to have strong incentives to answer the questionnaire despite the chance to win a $\$ 50$ gift card. Moreover, students had to dedicate 15 minutes to complete the exercise, read the consent form, and complete the 35 questions. The time necessary to participate in the study might have discouraged many students.

## Recommendations for Future Research

The current study was notable because it showed motivation as a key to learning a foreign LOTE. This study uses a superior instrument to reveal nuances between class levels, which can provide valuable insights to optimize student learning. Researching the difference between the means of French course levels was essential. For decades, motivation to learn FLs has been explored extensively. However, motivation to acquire a LOTE remains underrepresented among the existing body of research in this field of study. With a better understanding of what leads to motivation to learn a foreign LOTE, faculty and stakeholders can strategically plan college courses and outside-classroom learning tailored to students' needs, which can then increase motivation and language proficiency. Lamb (2018) stated that a positive attitude toward learning an FL increases motivation, and acquiring FL occurs faster. The researcher recommends conducting further studies on the motivation of college students to learn French to bolster the results, which include the following:

1. Replicate this study with a larger sample size representing the student population in the selected institutions.
2. This study should be replicated at universities that share similar institutional characteristics.
3. It would be valuable to compare the data on motivation between college students enrolled in public and private universities. This study did not differentiate the public and private university data.
4. As more French courses are offered online, augmenting this study by comparing the motivation of college students enrolled in online and face-to-face courses is also recommended. This type of study could give feedback to institutions to improve French courses.
5. In this study, the outliers in French 100 were the least motivated group with a minimum of $1.4 / 5$ overall score on the survey and $p=.012$ in the normality test, which was lesser than $p<.05$. These components are worth further investigation.

These studies may help inform education planning, improving the student experience and preparing students to be motivated members of a global marketplace.

## REFERENCES

Acquah, E., \& Katz, H. T. (2020). Digital game-based L2 learning outcomes for primary through high-school students: A systematic literature review. Computer \& Education, 143, 1-19. https://doi.org/10.1016/j.compedu.2019.103667

Alderson, J. C., Huhta, A., \& Nieminen, L. (2016). Characteristics of weak and strong readers in a foreign language. The Modern Language Journal, 100(4), 853-879. https://doi.org/10.1111/modl. 12367

Alejo, R., \& Piquer-Píriz, A. (2016). Urban vs. Rural CLIL: An analysis of input-related variables, motivation and language attainment. Language, Culture and Curriculum, 29(3), 245-262. https://doi.org/10.1080/07908318.2016.1154068

Alkaabi, S. A., Alkaabi, W., \& Swinburne, G. V. (2017). Researching student motivation. Contemporary Issues in Education Research, 10(3), 193-202. https://doi.org/10.19030/cier.v10i3.9985

Amineh, R. J., \& Asl, H. D. (2015). Review of constructivism and social constructivism. Journal of Social Sciences, Literature and Languages, 1(1), 9-16. http://www.jnasci./

Anshan, L. (2018). African students in China: Research, reality and reflection. African Studies Quarterly, 17(4), 5-44. https://asq.africa.ufl.edu/wp-content/uploads/sites/168/2_Li_Anshan.HD-ed-2.pdf

Ayaz, M. F., \& Sekerci, H. (2015). The effects of the constructivist learning approach on students' academic achievement: A meta-analysis study, The Turkish Online Journal of Educational Technology, 14(4), 143-157. http://tojet.net/volumes/v14i4.pdf\#page=152

Badubi, R. M. (2017). Theories of motivation and their application in organizations: A risk analysis. International Journal of Innovation and Economic Development, 3(3), 44-51. https://doi.org/10.18775/ijied.1849-7551-7020.2015.33.2004

Bailey, F., \& Pransky, K. (2005). Are "other people's children" constructivist learners too? Theory Into Practice, 44(1), 19-26. https://doi.org/10.1207/s15430421tip4401_4

Baird, S. A., Palacios, N., \& Kibler, A. (2016). The cognate and false cognate knowledge of young emergent bilinguals. Language Learning, 66(2), 448-470. https://doi.org/10.1111/lang. 12160

Baker, C. (2016). The effects of the Norman conquest on the English language. Tenor of Our Times, 5(5), 41-47. https://scholarworks.harding.edu/cgi/viewcontent.cgi?article=1060\&context=tenor

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), Annals of child development. Six theories of child development (Vol. 6, pp. 1-60). JAI Press.

Bernstein, J. L. (2018). Unifying SoTL methodology: Internal and external validity. Teaching and Learning Inquiry, 6(2), 115-126. https://doi.org/10.20343/teachlearninqu.6.2.9

Bozkurt, G. (2017). Social constructivism: Does it succeed in reconciling individual cognition with social teaching and learning practices in mathematics? Journal of Education and Practice, 8(3), 210-218. https://core.ac.uk/reader/234639800

Brown, A. (1994). The advancement of learning. Education Researcher, 23(8), 4-12. https://doi.org/10.3102/0013189X023008004

Brown, P. C., Roediger, H. L., \& MacDaniel, M. A. (2014). Make it stick: The science of successful learning. ProQuest Ebook.

Chen, C. (2020). A study of positive transfer of native language and second language teaching methods. Theory and Practice in Language Studies, 10(3), 306-312. https://doi.org/10.17507/tpls.1003.06

Chen, J., \& Liu, H. (2020). The effect of the non-task language when trilingual people use two languages in a language switching experiment, Original Research, 11(754), 1-12. https://doi.org/10.3389/fpsyg.2020.00754

Chidozie, F. C., \& Eniayekan, E. A. (2013). Globalising the French language: Neo-colonialism or development? International Affairs and Global Strategy, 16, 11-21. https://core.ac.uk/download/pdf/234670534.pdf

Cocca, M., Pérez Garcia, J. A., Zamarripa, J. I., Demetriou, Y., \& Cocca, A. (2017).
Psychometric parameters of the attitudes/motivation test battery instrument in a Mexican environment. Journal of Sport Psychology, 26(2), 149-155. https://www.redalyc.org/pdf/2351/235152045021.pdf

Costa, A. L., \& Loveall, R. A. (2002). The legacy of Hilda Taba. Journal of Curriculum and Supervision, 18(1), 56-62. https://innovateinstructionignitelearning.com/wp-content/uploads/2020/04/On-Taba-Costa.-PDF.pdf

Cox, E. (2006). An adult learning approach to coaching. In D. Stober \& A. M. Grant (Eds.), Evidence based coaching handbook (pp.193-217). Hoboken.

Cruickshank, V. (2018). Considering Tyler's curriculum model and physical education. Journal of Education and Educational Development, 5(1), 207-214. http://jmsnew.iobmresearch.com/index.php/joeed/article/view/156

Deldeniya, M., Haiti, A., \& Ferdous Azam, S. M. (2018). An analysis of students' motivation and attitude toward learning Japanese language as a foreign language in secondary schools in Sri Lanka. European Journal of Foreign Language Teaching, 3(4), 11-24. https://doi.org/10.46827/ejfl.v0i0.1913

Dewey, J. (1938). Experience in education. Macmillan.
Dewey, J. (1986, September). Experience and education. The Educational Forum, 50(3), 241252. https://doi.org/10.1080/00131728609335764

Dörnyei, Z. (2010). Questionnaires in second language research: Construction, administration, processing. Routledge.

Douglas, D. C. (1964). William the conqueror. University of California Press.
Ernest, P. (1999). Social constructivism as a philosophy of mathematics: Radical constructivism rehabilitated. State University of New York Press.

French Diplomacy. (n.d.). Ministère de l'Europe et des affaires étrangères. https://www.diplomatie.gouv.fr/en/

Frierson, P. (2016). Making room for children's autonomy: Maria Montessori's case for seeing children's incapacity for autonomy as an external failing. Journal of Philosophy of Education, 50(3), 332-350. https://doi.org/10.1111/1467-9752.12134

Gall, M. D., Gall, P., \& Borg, W. R. (2007). Educational research: An introduction (8 ${ }^{\text {th }}$ ed.). Pearson.

Gardner, R. C. (2004). Attitude motivation test battery: International AMTB project. https://publish.uwo.ca/~gardner/docs/englishamtb.pdf

Garhart, M. C. (2013). Theories of childhood: An introduction to Dewey, Montessori, Erickson, Piaget \& Vygotsky. ProQuest Ebook Central.

Gordon, W. R., Taylor, R. T., \& Oliva, P. F. (2019). Developing the curriculum: Improved outcomes through systems approaches ( $9^{\text {th }}$ ed.). Pearson.

Gouthro, P. A. (2019). Taking time to learn: The importance of theory for adult education. Adult Education Quarterly, 69(1), 60-78. https://doi.org/10.1177/0741713618815656

Grossmann, J. A., Koelsch, V. M., Degimenci, M. G., Aschenbrenner, S., Teichmann, B., \& Meyer, P. (2021). Effects of foreign language learning on executive functions in healthy older adults: study protocol for a randomized controlled trial. BioMed Central Geriatrics, 21(122), 1-14. https://doi.org/10.1186/s12877-021-02051-x

Gutek, G. L. (2011). Historical and philosophical foundation of education: A biographical introduction. Pearson.

Hahlin, C. R., \& Granfeldt, J. (2021). Strengthening L3 French motivation: The differential Impact of vision-enhancing activities. Languages, 6(47), 1-16. https://doi.org/10.3390/languages6010047

Hussain, M. S., Salam, A., \& Farid, A. (2020). Students' motivation in English language learning (ELL): An exploratory study of motivational factors for EFL and ESL adults learners. International Journal of Applied Linguistics \&English Literature, 9(4), 14-28. https://doi.org/10.7575/aiac.ijalel.v.9n.4p. 15

Ibarra Santacruz, D., Hidalgo Davila, H. A., \& Peredes Castillo, E. S. (2020). Games for working memory training in foreign language learning. Mextesol Journal, 44(4), 1-23. https://www.mextesol.net/journal/index.php?page=journal\&id_article=22082

Jaekel, N., Schurig, M., Florian, M., \& Ritter, M. (2017). From early starters to late finishers? A longitudinal study of early foreign language learning in school. Language Learning, 67(3), 631-668. https://doi.org/10.1111/lang. 12242

Kacetl, J., \& Klimova, B. (2021). Third-age learners and approaches to language teaching. Education Sciences, 11(310), 1-9. https://doi.org/103390/edusci11070310

Kanoksilapatham, B., Khamkhien, A., Kitkha, P., \& Na Nongkhai, A. (2021). Motivation of Thai university students from two disciplinary backgrounds using a hybrid questionnaire. LEARN Journal: Language Education and Acquisition Research Network, 14(1), 455491. https://so04.tci-thaijo.org/index.php/LEARN/article/view/248699

Kartushina, N., Frauenfelder, U. H., \& Golestani, N. (2016). How and when does the second language influence the production of native speech sounds: A literature review. Language Learning, 66(2), 155-186. https://doi.org/10.1111/lang. 12187

Keller, J. (2008). An integrative theory of motivation volition, and performance. Tech. Inst. Cognition and Learning, 6, 79-104. http://terrikrause.com/Content/documents/Keller2008IntegrativeTheory.pdf

Khansir, A. A., Jafarizadegan, N., \& Karampoor, F. (2016). Relation between socio-economic status and motivation of learners in learning English as a foreign language. Theory and Practice in Language Studies, 6(4), 1-12. https://doi.org/10.17507/tpls.0604.11

Kittler, J. (2020). "The pen is so noble and an excellent instrument:" How the medieval merchants and renaissance diplomats invented the new writing style. Journalism Studies, 21(10), 1403-1419. https://doi.org/10.1080/1461670X.2020.1755346

Klimova, B., Slaninova, G., Prazak, P., Kacetl, J., \& Valis, M. (2020). Enhancing cognitive performance of healthy Czech seniors through non-native language learning-A mixedmethods pilot study. Brain Sciences, 10(9), Article 573. https://doi.org/10.3390/brainsci10090573

Knowles, M. S. (1981). The modern practice of adult education: From pedagogy to andragogy. Prentice Hall Regents.

Knowles, M. S. (1984). The adult learner: A neglected species (3rd ed.). Gulf Publishing.
Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. Financial Times Press.

Kurt, P. Y., \& Kurt, H. (2018). Instructional practices that motivate students to learn English. Journal of Education and Future, 2, 119-139. https://doi.org/10.30786/jef. 408616

Kwok, C. K., \& Carson, L. (2018). Integrativeness and intended effort in language learning motivation amongst some adult learners of Japanese. Language Learning in Higher Education, 8(2), 265-279. https://doi.org/10.1515/cercles-2018-0016

Lamb, M. (2018). When motivation research motivates: Issues in long-term empirical Investigations. Innovation in Language Learning and Teaching, 12(4), 357-370. https://doi.org/10.1080/17501229.2016.1251438

Lanvers, U. (2017). Contradictory others and the habitus of languages: Surveying the L2 motivation landscape in the United Kingdom. The Modern Language Journal, 101(3), 517-537. https://doi.org/10.1111/modl. 12410

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. The Language Learning Journal, 47(1), 88-104.
https://doi.org/10.1080/09571736.2016.1196384
Liberty University. (n.d.-a). Liberty University demographics \& diversity report. $\underline{\text { https://www.collegefactual.com/colleges/liberty-university/student-life/diversity/ }}$

Liberty University. (n.d.-b). Quick facts. https://www.liberty.edu/about/liberty-university-quickfacts/

Lin, T. J., \& Lan, Y. J. (2015). Language learning in virtual reality environments: Past, present and future. Journal of Educational Technology \& Society, 18(4), 486-497. https://www.jstor.org/stable/jeductechsoci.18.4.486

Locke, J. (1794). The works of John Locke (Vol. 1). T. Longman.
Marini, A., Elisseeva, N., \& Fabbro, F. (2019). Impact of early second-language acquisition on the development of first language and verbal short-term and working memory. International Journal of Bilingual Education and Bilingualism, 22(2), 165-176. https://doi.org/10.1080/13670050.2016.1238865

Martino, L. M. (2021). Postsecondary teacher quality and student achievement in Florida's career certificate programs using a causal-comparative study. Career and Technical Research, 46(1), 16-33. https://doi.org/10.5328/cter46.1.16

McLelland, N. (2018). The history of language learning and teaching in Britain. The Language Learning Journal, 46(1), 6-16. https://doi.org/10.1080/09571736.2017.1382052

Meniado, J. C. (2019). Evaluating the English proficiency of faculty members of a higher education institution: Using results to develop responsive professional development program. International Journal of English Linguistics, 9(2), 54-64. https://doi.org/10.5539/ijel.v9n2p52

Merriam, S. B. (1987). Adult learning and theory building: A review. Adult Education Quarterly, 37(4), 187-198. https://doi.org/10.1177/0001848187037004001

Meyer, K. A., \& Murrell, V. S. (2014). A national study of theories and their importance for faculty development for online teaching. Online Journal of Distance Learning Administration, 27(2), 1-25. https://ojdla.com/archive/summer172/Meyer_Murrell172.pdf

Michelman, F. (1995). French and British colonial languages policies: A comparative view of their impact on African literature. Research in African Literatures, 26(4), 216-225. https://www.jstor.org/stable/3820239

Mohsen, M. A. (2016). The use of the computer-based simulation to aid comprehension and incidental vocabulary. Journal of Educational Computing, 54(6), 863-884. https://doi.org/10.1177/0735633116639954

Montessori, M. (1917). The advanced Montessori method (Vol. 1). Frederick A. Stokes Company.

Namaziandost, E., Dehkordi, M. K., Alipour, P., \& Tilwani, S. A. (2020). The impact of spaced and massed instruction on foreign language reading motivation and reading attitude among preintermediate EFL learners. Journal of Teacher Education for Sustainability, 22(2), 104-120. https://doi.org/10.2478/jtes-2020-0019

Nassaji, H. (2021). Effect sizes in quantitative and qualitative research. Language Teaching Research, 25(5), 681-684. https://doi.org/10.1177/13621688211040882

Oakes, L., \& Howard, M. (2019). Learning French as a foreign language in a globalised world: An empirical critique of the L2 motivation self system. International Journal of Bilingual Education and Bilingualism, 25(1), 166-182.
https://doi.org/10.1080/13670050.2019.1642847

Offord, D., Rjéoutski, V., \& Argent, G. (2018). The French language in Russia: A social, political, cultural, and literary history. Amsterdam University Press.

Peker, H., \& Regalla, M. (2021). Making exemption the exception, not the rule: Inclusion for all students in foreign language education. Foreign Language Annals, 54, 73-90. $\underline{\text { https://doi.org/10.1111/flan. } 12513}$

Peters, E., Noreillie, A. S., Heylen, K., Bulté, M., \& Desmet, P. (2019). The impact of instruction and out-of-school exposure to foreign language input on learners' vocabulary knowledge in two languages. Language Learning, 69(3), 747-782.
https://doi.org/10.1111/lang. 12351
Pfenninger, S., \& Singleton, D. (2019). Starting age overshadowed: The primary of differential the primary of differential environmental and family support effects on second language attainment in an instructional context. Journal of Research in Language Studies, 69(S1), 207-234. https://doi.org/10.1111/lang. 12318

Pham, G., Donovan, D., Dam, Q., \& Contant, A. (2017). Learning words and definitions in two languages: what promotes cross-language transfer? Language Learning, 68(1), 206-233. https://doi.org/10.1111/lang. 12274

Piaget, J. (1972). Intellectual evolution from adolescence to adulthood. Human Development, 15(1), 1-12. https://doi.org/10.1159/000271225

Popkewitz, T. S. (1998). Dewey, Vygotsky, and the social administration of the individual: Constructivist pedagogy as systems of ideas in historical spaces. American Educational Research Association, 35(4), 535-570. https://doi.org/10.2307/1163459

Quay, P. (2016). 'Not democratic education' but 'democracy and education': Reconsidering Dewey's oft misunderstood introduction to the philosophy of education. Educational Philosophy and Theory, 48(10), 1013-1028. https://doi.org/10.1080/00131857.2016.1174098

Refat, N., Kassim, H., Rahman, M. A., \& Razali, R. B. (2020). Measuring student motivation on the use of a mobile assisted grammar learning tool. PloS One, 15(8). https://doi.org/10.1371/journal.pone. 0236862

Rousseau, J. J. (1915). The original manuscripts and authentic editions (Vol. 2). University Press.

Saito, K., Dewaele, J. M., Abe, M., \& In'nami, Y. (2018). Motivation, emotion, learning and experience, second language comprehensibility development in Classroom settings: A cross-sectional and longitudinal study. Language Learning, 68(3), 709-743. https://doi.org/10.1111/lang. 12297

Shakib, M. K. (2011). The position of language in development of colonization. Journal of Language and Culture, 2(7), 117-123. https://academicjournals.org/article/article1379500755_Shakib.pdf

Taba, H. (1967). Teachers' handbook for elementary social studies (ED039206). ERIC. https://eric.ed.gov/?id=ED039206

Teo, T., Weng-Hoi, C. K., Gao, X., \& Lu, L. (2019). What motivates Chinese university students to learn Japanese? Understanding their motivation in terms of 'posture.' The Modern Language Journal, 103(1), 327-342. https://doi.org/10.1111/modl. 12546

Tremblay, A., Broersma, M., Coughlin, C. E., \& Choi, J. (2016). Effects of the native language on the learning of fundamental frequency in second-language speech segmentation. Frontiers in Psychology, 7, Article 985. https://doi.org/10.3389/fpsyg.2016.00985

Tyler, R. W. (2013). Basic principles of curriculum and instruction. University of Chicago Press.
Ulger, K. (2019). Comparing the effects of art education and science education on creative thinking in high school students. Arts Education Policy Review, 120(2), 57-79. https://doi.org/10.1080/10632913.2017.1334612

University of Central Florida. (n.d.). UCF facts 2021-2022 archive. https://www.ucf.edu/aboutucf/facts/

Van Hell, J. G., \& Dijkstra, T. (2002). Foreign language can influence native language performance in exclusively native contexts. Psychonomic Bulletin \& Review, 9(4), 780789. https://doi.org/10.3758/BF03196335

Vygotsky, L. S. (1967). Play and its role in the mental development of the child. Soviet Psychology, 5(3), 6-18. https://doi.org/10.2753/RPO1061-040505036

Vyn, R., Wesely, P. M., \& Neubauer, D. (2019). Exploring the effects of foreign language Instructional practices on student proficiency development. Foreign Language Annals, 52(1), 45-65. https://doi.org/10.1111/flan. 12382

Warner, R. M. (2013). Applied statistics: From bivariate through multivariate techniques. SAGE Publications.

Webber, G., \& Miller, D. (2016). Progressive pedagogies and teacher education: A review of the literature. McJill Journal of Education, 51(3), 1061-1081. https://doi.org/10.7202/1039628ar

Williams, M. K. (2017). John Dewey in the $21^{\text {st }}$ century. Journal of Inquiry \& Action in Education, 9(1), 91-102. https://digitalcommons.buffalostate.edu/jiae/vol9/iss1/7/

Wyk, J., \& Mostert, M. L. (2016). The influence of mother tongue and gender on the acquisition of English (L2). The case of Afrikaans in Windhoek schools, Nambia. Cogent Education, 3(1), 1-12. https://doi.org/10.1080/2331186X.2016.1210997

Zheng, Y., Lu, X., \& Ren, W. (2020). Tracking the evolution of Chinese learners' multilingual motivation through a longitudinal methodology. The Modern Language Journal, 104(4), 781-803. https://doi.org/10.1111/modl. 12672

## APPENDIX A: PARTICIPANT LETTER

IRB-FY22-23-380
Dear Fellow Liberty University or UCF Students:
As a graduate student in the School of Education at Liberty University, I am conducting a research as part of the requirements for a Doctor of Philosophy in Education ( PhD ). The purpose of this quantitative causal-comparative study is to investigate if there is a difference in motivation to learn French between college students enrolled in French 100, French 200, French 300 and French 400. Your educational experience taking a French course as a foreign language is important to this research.

If you are at least 18 years old, taking a French language course at Liberty University or at UCF and you are willing to participate. You will be asked to take a survey.

The survey contains demographic questions and 26 motivation questions. It should take approximately 15 minutes or less for you to complete the survey. Your participation will be anonymous, and no personal data will be collected. However, if you would like the chance to win a $\$ 50$ gift card, please enter your email using the link at the end of the survey. All the data will be deleted after a period of three years.

Please open the link: https://liberty.co1.qualtrics.com/jfe/form/SV Ofd8tCaFZvEyLps
An informed consent document is provided as the first question in the survey. Please read the consent information then select YES, I AGREE to participate in the survey.

It would be an honor if you could participate in this study.
Please complete this survey by February, $1^{\text {st }} 2023$.
Thank you for your time and consideration.
Sincerely,
Maria O'Brien
Ph.D. candidate

## APPENDIX B: CONSENT FORM

The Liberty University Institutional Review Board
Has approved this document for use from
12/6/22 to -
IRB-FY22-23-380

## Consent

Title of the Project: Quantitative Research
Principal Investigator: Maria O'Brien, PhD candidate,

## Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be 18 years old and be enrolled in a French language course. Be a part time of full time college student. Please take time to read this entire consent before you agree to be part in this research project.

## Background Information

The purpose of this quantitative causal-comparative study is to observe if there is a difference in motivation to learn French between college students enrolled in French 100, French 200, French 300 and French 400.

## Procedure

You will answer a demographic section survey and a motivation hybrid questionnaire of 26 questions in 15 minutes or less.

## Benefits

Benefits to society: augment public knowledge on the topic of college students' motivation to learn a foreign language other than English.

## Risks

There are no risks in this study.

## Confidentiality

The records of this study will be kept private. Published studies will not include any information that will make it possible to identify a subject. 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.


## Compensation

Participants will have a chance to win a $\$ 50$ online gift card by participating in the survey. Email addresses will be requested for a random compensation purposes. For anonymity, the email addresses will be stored apart from the survey.

## Voluntary Participation

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

## How to Withdraw from the Study

If you want to withdraw from the study, please exit the survey and close your internet browser. Your answers will be discarded.

## Contacts and Questions

The researcher conducting this study is Maria O'Brien. If you have any questions, you are encouraged to contact her at

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 Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu

## Statement of Consent

I have read and understood the above information. I consent to participate in the study by answering the questions of the survey.
() Yes, I agree to participate in the study.
( ) No, I choose not to participate in the study.

# APPENDIX C: MOTIVATION QUESTIONNAIRE <br> <br> Demographic Information 

 <br> <br> Demographic Information}

1- Please indicate your age range:

| $18-28$ | () |
| :--- | :--- |
| $29-39$ | () |
| $40-50$ | () |
| Above 50 | () |

2- Please indicate your gender:
Male ()
Female ()
Non-binary/third gender ()
Prefer not to say ()
3- Please indicate your race/ethnicity:
American Indian or Alaska Native ()
Asian ()
Black or African American ()
Hispanic or Latino ()
Native Hawaiian or Other Pacific Islander ()
White ()
4- Please indicate your native language:
Arabic ()
Chinese ()
English ()
French ()
French Creole ()
German ()
Portuguese ()
Russian ()
Spanish ()
Tagalog Vietnamese ()
Other ()
5- Please indicate your status as a student:
Full time ()
Part time ()
6- Please indicate your college major:
Biology
Business/Administration/Management
Criminal Justice

| Education | () |
| :--- | :---: |
| Engineering | () |
| Finance and Accounting | () |
| Health Sciences | () |
| Hospitality Administration/Management | () |
| Nursing | () |
| Political Science | () |
| Psychology | () |
| Other | () |

7- Please indicate your French course level you are enrolled this semester:
100 level course ()
200 level course ()
300 level course ()
400 level course ()
8- Please indicate how many years you have studied French in your life time:

| 1 year | () |
| :--- | :--- |
| 2 years | () |
| 3years | () |
| 4 years | () |
| 5 years | () |
| 6 years | () |
| Over 6 years | () |

## Hybrid Questionnaire

9- I can imagine myself using French when I think of my future career.

| Strongly | Agree | Neutral | Disagree |
| :--- | :--- | :--- | :--- | | Strongly |
| :--- |
| Agree |

10-I can imagine myself using French effectively in general communication.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  |  |

11-I can imagine myself attaining and understanding all aspects of French.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

12-I can imagine myself using French fluently in communicating with foreign friends.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  |  |

13-French is important to me because people surrounding me (parents and family members) expect me to learn French.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

14- French is important to me because it will help me gain acceptance among people surrounding me (family members, professors and friends)

| Strongly | Agree | Neutral | Disagree |
| :--- | :--- | :--- | :--- | | Strongly |
| :--- |
| Agree |$\quad 4$ isagree

15- I study French because French is necessary for my career (in getting a good job, incentive, promotions).

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

16- I study French because it is necessary for my further studies.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

17- I study French because I want to study or work abroad.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

18- I study French because the things I want to do in the future require me to use French.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Disagree |

19- I study French because French is a compulsory subject.

| Strongly <br> Agree | Agree | Neutral | Disagree |
| :--- | :--- | :--- | :--- | | Strongly |
| :--- |
| Disagree |

20- I study French because I would like to travel internationally.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

21-French is important to me because it will help me understand the values and customs of other cultures.

| Strongly <br> Agree | Agree | Neutral | Disagree |
| :--- | :--- | :--- | :--- | | Strongly |
| :--- |
| Disagree |

22- French is important to me because it will allow me to meet and get to know foreigners.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

23- French is important to me because I like French songs.

| Strongly | Agree | Neutral | Disagree |
| :--- | :--- | :--- | :--- | | Strongly |
| :--- |
| Agree |$\quad 4$ Disagree

24-French is important to me because I like French movies and TV programs.
Strongly Agree Neutral Disagree Strongly
Agree
Disagree
25-French is important to me because I like French books, journals and magazines.
Strongly Agree Neutral Disagree Strongly
Agree
Disagree
26-French is important to me because I like to use social media for updates and to read news in French.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

27- In general I like studying French.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

28- I like my French teachers (their teaching methods, answering their questions, etc.).

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

29- I like the content and instructional material used in my French courses.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

30-I like the activities in my French courses.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

31- If possible, I would like to study French more.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

32-I still want to learn French.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  |  |

33- I still want to learn French even though it is not necessary.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  |  |

34- I really pay attention to learning French.

| Strongly | Agree | Neutral | Disagree | Strongly |
| :---: | :---: | :---: | :---: | :---: |
| Agree |  |  |  | Disagree |

# APPENDIX D: AUTHORIZATION TO UTILIZE THE HYBRID QUESTIONNAIRE 

From: Budsaba Kanoksilapatham [kanoksib@hotmail.com](mailto:kanoksib@hotmail.com)<br>Sent: Friday, February 18, 2022 6:26 AM<br>To: MT O'Brien [activepresentations@hotmail.com](mailto:activepresentations@hotmail.com)<br>Subject: Re: Gardener's AMTB (2004) survey in your article (2021)<br>Dear Maria,<br>Thank you very much for your interest in our paper on motivation published in LEARN. I would not mind letting you use our hybrid motivation questionnaire and indeed it is our honor. However, I would like to make sure that it is the one you are after. As you can see from the title of the article, it is a hybrid questionnaire resulted from the combination of AMTB and Dornyei' motivation questionnaire (of 104 and 140 items, respectively, I think). Given the length of these two scholars' questionnaires, we were afraid that our Thai students might not survive. Thus, the hybrid questionnaire serves the purpose. For your information, this hybrid questionnaire was validated by renowned scholars in motivation in England, so we are very confident of its validity and reliability.<br>Yes, pls go ahead and make use of our questionnaire. Good luck with your dissertation!

BB
Budsaba Kanoksilapatham, PhD
Professor of English

## APPENDIX E: AUTHORIZATION TO MODIFY THE HYBRID QUESTIONNAIRE

Re: Hybrid questionnaire in your article (2021)
(1) Flag for follow up.

BK Budsaba Kanoksilapatham [kanoksib@hotmail.com](mailto:kanoksib@hotmail.com)
To: You

Hi Maria,

Of course, with my permission. Please feel free to make full use of the motivation article published last year.

Yes, I did use a five Likert scale as you described in your email. I look forward to hearing from you, particularly about your findings.

Budsaba Kanoksilapatham, PhD
Professor of English

## APPENDIX F: THE DEPARTMENT OF INTERDISCIPLINARY STUDIES'

## AUTHORIZATION

PhD candidate conducting a research for college students taking French online
Conner, Jamaica (Interdisciplinary Studies) 四
To: O'Brien, Maria
To whom it may concern,
I approve of Maria Teresa O'Brien conducting her study of "investigation about motivation to learn French between college
students" using the instrument: a motivation questionnaire (hybrid questionnaire) to ask CFRE 101 students questions via the
motivation survey online through Canvas.
God bless you,
Jamaica Conner '98, M.Ed. '08, MFA
Department Chair, Interdisciplinary Studies
College of Arts and Sciences
Associate Professor of English
Liberty University I Training Champions for Christ since 1971
…
\& Reply $\rightarrow$ Forward

## APPENDIX G: THE DEPARTMENT OF MODERN LANGUAGES' AUTHORIZATION

Conducting a research in the Department of Modern Language at Liberty University

```
Miller, Annik A (Modern Languages)
To: O'Brien, Maria
```

```
\squareG<<<<<<<
```

\squareG<<<<<<<
Fri 7/8/2022 9:30 AM

```

Good morning Maria,
I approve of your request to conduct research with the students in the Modern Language Department at Liberty University in the context of your doctoral studies.
Don't hesitate to ask if you have additional questions!

Dr. Annik Miller
Chair and Associate Professor of German and French
Department of Modern Languages

\section*{(434) 582-2448}

UNIVERSITY

Liberty University | Training Champions for Christ since 1971

\title{
APPENDIX H: THE DEPARTMENT OF MODERN LANGUAGES \& LITERATURES'
}

\section*{AUTHORIZATION}
```

UNIVERSITY OF CENTRAL FLORIDA

```

\section*{Modern Languages and Literatures}
P.O. Box 161348

Orlando, FL 32816-1348
6 July 2022

To whom it may concern,

This is to acknowledge that Maria-Teresa O'Brien has department-level approval to administer a survey, as part of her doctoral research, to students in our French and Francophone Studies program. I understand that Ms. O'Brien will be in compliance with all institutional policies and IRBrelated procedures, and expects to begin this phase of research in Summer or Fall 2022.

Sincerely,

\section*{Geri Smith \(\begin{gathered}\text { Digitally signed by Gei Smith } \\ \text { otate 202207.06 } 1119918\end{gathered}\) \\ \(-040^{\prime}\)}

Geri L. Smith, PhD
Professor of French and Chair

\section*{APPENDIX I: IRB APPROVAL}

\title{
LIBERTY UNIVERSITY. \\ INSTITUTIONAL REVIEW BOARD
}

December 6, 2022

Maria O'Brien

Re:IRB Exemption - IRB-FY22-23-380 COLLEGE STUDENTS' MOTIVATION WHEN ACQUIRING A LANGUAGE OTHER THAN ENGLISH

Dear Maria O'Brien,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that ondy includes interactions.involving educationaltests. (coquitive diagonostis, aptitude achievement) supvex procedures intepiew. procedures or obsemationof public behavior cincluding. visual or auditoryrecordingh
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you planto provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemptionstatus. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemptionstatus, please email us at irb@liberty.edu.

Sincerely,
G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research
Research Ethics Office

\title{
APPENDIX J: RECRUITMENT EMAIL
}

IRB-FY22-23-380
Dear department chair and professor,
As a PhD candidate in the School of Education at Liberty University, I am conducting research as part of a Doctor of Philosophy (Ph.D.) degree. The purpose of my research is to better understand the motivation of college students enrolled in French courses, and I am writing you to invite all college students enrolled in a French course to participate in my study.

If you or other professors in the department of moder languages and/or interdisciplinary studies who teach any French courses at Liberty University or at University of Central Florida whether residential or online and are willing to participate, you will be asked to send the participant letter including a link of the consent form and the motivation hybrid questionnaire to all students enrolled in a French course. It should take about 15 minutes for students to read the participant letter, the consent form and complete the survey. The students' participation will be completely anonymous, and no personally identifiable information will be collected as part of data collection. Results of the study will be shared in aggregate form only, which will prevent any potential identification of individual participants.

In order for students to participate in the study, please send them the attached participant letter including the link of the questionnaire. The first question is the consent form. Participants will select YES to complete the survey only if they agree to participate in the research.

If students choose to participate, they will have the option to enter in a raffle drawing to receive a \(\$ 50\) Visa gift card.

Sincerely,
Maria O'Brien
Ph.D. candidate

\section*{APPENDIX K: RECRUITMENT EMAIL FOLLOW-UP}

IRB-FY22-23-380
Dear department chair and professor,
As a PhD candidate in the School of Education at Liberty University, I am conducting research as part of a Doctor of Philosophy (Ph.D.) degree. The purpose of my research is to better understand the motivation of college students enrolled in French courses, and I am writing you to invite all college students enrolled in a French course to participate in my study.

Last week, you received an email inviting students enrolled in a French course to participate in this research study. The follow-up email is being sent to remind all students enrolled in a French course to complete the survey if they would like to participate. The deadline for participation is February \(1^{\text {st, }}, 2023\). The students' participation in this study will contribute valuable insight to determine how college students are motivated to learn French as a second language and how to motivate students to acquire it.

If you or other professors in the department of modern languages and/or interdisciplinary studies who teach any French courses at Liberty University or at University of Central Florida whether residential or online and are willing to participate, you will be asked to send the participant letter including the consent form and the motivation hybrid questionnaire to all students enrolled in a French course. It should take about 15 minutes for students to read the participant letter, the consent form and complete the survey. The students' participation will be completely anonymous, and no personally identifiable information will be collected as part of data collection. Results of the study will be shared in aggregate form only, which will prevent any potential identification of individual participants.

In order for students to participate in the study, please send them the attached participant letter including the link of the survey. The first question is the consent form. Participants will select YES to complete the survey only if they agree to participate in the research.

If students choose to participate, they will have the option to enter in a raffle drawing to receive a \(\$ 50\) Visa gift card.

Sincerely,
Maria O'Brien
Ph.D. candidate

\section*{APPENDIX L: AUTHORIZATION TO PUBLISH THE HYBRID QUESTIONNAIRE}
[External] Re: Important: Permission to publish the hybrid questionnaire in my doctoral dissertation
 G

\title{
Budsaba Kanoksilapatham <kanoksib@hotmail.com> :) \& ...
}

To: O'Brien, Maria
Sat 7/15/2023 1:03 PM
[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

To whom it may concern,

I am writing this email to assure you that Ms. Maria O'Brien has received my permission to include my hybrid questionnaire in her dissertation. Please do not hesitate to contact me at this email if you need further information.

Budsaba Kanoksilapatham, PhD
Professor of English```

