ACCULTURATIVE STRESS, LONELINESS, AND DEPRESSIVE SYMPTOMS IN INTERNATIONAL STUDENTS: A MODERATION ANALYSIS OF RELIGIOUS FAITH AND SENSE OF MEANING

By

Heyde Marques Luz

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

Liberty University
May 2020
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ABSTRACT

This study examined religious faith and sense of meaning as moderators in the relationship between acculturative stress, loneliness, and depressive symptoms in international students (IS). This study explores the unique challenges faced by IS when attending higher education institutions in the United States that derive from acculturative stress and contribute to feelings of loneliness and depressive symptoms. A quantitative research design using linear multiple regression models was employed to investigate the interplay between the variables. The responses of 80 participants were analyzed. The findings indicated there is a significant relationship between acculturative stress, loneliness, and depressive symptoms. Moreover, sense of meaning moderated the relationship between acculturative stress and depressive symptoms. However, it was found that sense of meaning and religious faith combined did not moderate the relationship between acculturative stress and depressive symptoms. It was also found that sense of meaning and religious faith did not interact in the mediating relationship between acculturative stress, loneliness, and depressive symptoms.

**Keywords:** acculturative stress, loneliness, depressive symptoms, sense of meaning, religious faith, international students
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CHAPTER ONE
INTRODUCTION

International students represent 5% of all the learners' population in higher education, contributing $45 billion to the American economy in 2018 (Institute of International Education, 2018). As an expending part of the student body, international students bring an array of knowledge and specialized skills that enrich the intellectual field of their host institution, which consequently adds to the workforce (Smith & Khawaja, 2011). The first year of college comprises an important transitional stage requiring students to adjust quickly to their new environment (Chemers, Hu, & Garcia, 2001; Inkelas et al., 2007; Shim et al., 2010). Due to these changes, college students often struggle with new-found academic demands, higher levels of independence, and self-regulation. Likewise, international students experience the same difficulties as domestic learners but face additional challenges that are particular to this population, such as the unfamiliarity with social norms, institutional culture, and expectations (Huntley, 1993; Olivas & Li, 2006).

Acclimating to a new culture brings a unique need for adaptation to this population (Perry, 2012; Trice, 2003). Additionally, international students’ (IS) motivation for pursuing educational careers affects their preparation for managing cross-cultural transition (Zhou, Jindal-Snape, Topping, & Todman, 2008). Consequently, the adjustment problems and difficulties IS encounter heavily influence their academic development and mental health (Zhai, 2002). This prompts colleges and universities to carefully analyze perspectives and strategies to cater to the needs of this population.
Background of the Problem

The rise of globalization presents new opportunities and challenges for institutions of higher education in the United States such as the arrival of non-traditional students, including foreign learners (Brodi, 2010; Hanassab & Tidwell, 2002). International student mobility, which is the reception of foreign students as well as sending national students abroad, indicates the level of internationalization in higher education (Kehm, 2005). The movement gained force after World War II (Chellaraj, Maskus, & Mattoo, 2005), has gone through several stages of changes; moving from unorganized or self-organized to a variety of organized forms that involve specific programs and enterprises. Therefore, IS have become an integral part of higher education institutions (Arthur, 2001).

Moreover, international student mobility has also become a subject of economic matter and competitiveness, where schools strive to enroll the best talent (Kehm, 2005). Currently, there are more than one million international students enrolled in higher education institutions in the U.S. that heavily contribute to the revenue stream of tuition fees (Cantwell, 2019; IIE, 2018). Alongside the economic benefits, international students provide particular advantages to this population. They include contributions to innovation and knowledge development, as well as cultural diversity and creativity to their institution and host country (Belkhodia & Esses, 2013; Smith & Khawaja, 2011).

Acculturative stress

The environmental adjustment that foreigners go through is called acculturation, which involves one’s cultural change resulting from continuous first-hand contact (Berry, Kim, Minde, & Mok, 1987). One of the key obstacles ISs face when acculturating is the difference between their culture of origin and the host country environment (Wu, Garza, & Guzman, 2015). This
process may be psychologically challenging and difficult, bringing stress associated with acculturating to a new place. Previously known as culture shock (Chen, 1999), students experience acculturative stress due to migrating and quickly adapting to a new system (Poyrazli, Kavanaugh, Baker, & Al-Timimi, 2004; Smart & Smart, 1995; Zhou, Jindal-Snape, Topping, & Todman, 2008).

Several additional factors contribute to acculturative stress. For instance, language barriers coupled with unfamiliarity with school campuses influences ISs’ capacity to form meaningful relationships with their national counterparts (Perry, 2012). English proficiency is crucial for the success and social adjustment of international students (Sherry, Thomas, & Chui, 2010). Institutions of higher education institutions identified ISs’ performance in English-related skills, such as listening abilities, reading comprehension, writing, and oral communication, vocabulary expansion as markers greatly influencing students' mental disposition and academic development (Andrade, 2006). Moreover, ISs may feel particularly frustrated in their English communication skills due to their high academic achievements in their home country (Sawir, 2005; Yeh & Inose, 2003).

Social self-efficacy (SSE) is another component affected by acculturative stress. SSE is understood as the self-confidence one has to take an approach or take the initiative in social events and situations with nationals, which is also affected by one’s spoken communication and cultural values (Constantine, Okazaki, & Utsey, 2004; Lin, & Betz, 2009). Moreover, one’s ability to maintain those relationships influences one’s social self-efficacy (Fan & Mak, 1998). Additionally, ISs displaying avoidance in initiating contact with host students may be more prone to experiencing depressive symptoms (Constantine et al., 2004).
Consequently, social support who are exposure to acculturative stress becomes an issue for international students, as moving to another country may bring a deep feeling of loss and coupled with a lack of social support ultimately influences their confidence to build new relationships (Hayes & Lin, 1994). International students may also struggle with establishing a comparable social support system to what they have in their country of origin, leaving them feeling dissatisfied with their new-found relationships in America (Yeh & Inose, 2003). Furthermore, new social relationships cannot replace the emotional support necessary to endure acculturative stress (Ye, 2006).

**Loneliness and International Students**

Interpersonal relatedness and self-definition, the antithesis to loneliness, are two central developmental dimensions that are essential to refer to one's capacity to establish and maintain meaningful and satisfying interpersonal relationships, while concomitantly differentiating oneself (Luyten & Blatt, 2008). This allows individuals to cultivate a positive sense of self and overall healthy identity. Due to acculturative stress and factors contributing to the dynamics of transitioning to a new country, increase international student's susceptibility to feelings of loneliness (Sawir et al., 2008). Different cultural values, lack of friends, and social networks, along with unfamiliar cultural environments also exacerbates feelings of isolation (Sherry & Chui, 2010). A continuous state of loneliness may produce a sense of helplessness that could develop into other mental health problems, such as anxiety and depressive symptoms among international students (Chen, 1999; Yeh & Inose, 2003).

**Depressive Symptoms**

Several researchers investigated the positive relationship between acculturative stress and depressive symptoms, explicating how foreign students are more prone to experiencing
isolation and loneliness (Constantine, Okazaki, & Utsey, 2004; Hovey, 2000; Oh, Koeske, & Sales, 2002). Persisting feelings of social isolation may lead to depressive symptoms during their adaptation stage to host culture (Jung, Hecht, & Wadsworth, 2007). Taking into account the intense process of acculturative stress, including the lack of social support, social self-efficacy, and language barriers, international students were reticent in seeking help and underutilized mental health services (Mori, 2000).

**Sense of Meaning**

Initially investigated by Viktor Frankl (1963), ISs perceive meaning making as a life purpose or mission propelling one through life. They correlate it with spiritual concerns, a sense of self, and self-worth. Through two different dimensions, individuals try to comprehend life in conjunction with the external world, crafting a framework interconnecting one’s network of schemas (Steger, 2012). A sense of meaning is especially significant during stressful life events, and many researchers focused on the restoration of meaning in the context of situational distress (Park, 2010). Meaning in life is also a cognitive phenomenon, as it is comprised of one’s life beliefs and empiric structure (Halama & Bakosova, 2009). Thus, a sense of meaning is related to psychological well-being and coping with depressive symptoms (Van der Heyden & Beyers, 2015; Zika & Chamberlain, 1992).

**Religious Faith**

International students bring their faith and religious identities into their learning institutions, which also attaches to their meaning-making mechanisms (Smith & Baratta, 2016). Pargament et al. (2013) explicated how religious faith also works as a cognitive and emotional process to cope with underlying stressful events. Through faith, individuals can transform negative stances and reframe stressful situations, contributing to overall subjective well-being
(Ramirez-Johnson, Fayard, Garberoglio, & Jorge Ramirez, 2002; Schnittker, 2001). Moreover, Genia and Shal (1991) found religious faith successfully reduces depressive symptoms.

Statement of Problem

Undergraduate students navigate the challenges of adapting to a new reality during their first year of college. While some can adjust to life in higher education, many learners struggle with loneliness and depressive symptoms. International students are more vulnerable to feeling loneliness and depressive symptoms due to the acculturative stress they experience in their acculturation process (Oei & Notowidjojo, 1990; Rice, Choi, Zhang, Morero, & Anderson, 2012; Wei, Liao, Heppner, Chao, & Ku, 2012). A robust amount of research has addressed the problem of loneliness and depressive symptoms in the academic environment of this population (Chavajay, 2013; Hsu, Hailey, & Range, 1987; Sawir, Marginson, Deumert, Nyland, & Ramia, 2008; Sümer, Poyrazli, & Grahame, 2008; Trice, 2007). However, there is a lack of research in assessing the use of sense of meaning and faith to moderate the effects of acculturative stress, loneliness, and depressive symptoms in international students.

Purpose of the Study

There remains a dearth of current literature exploring the influence of faith and meaning on the relationship between loneliness and depression for international undergraduate students. In conducting this study, I proposed to investigate these variables using a mediation model. As investigators continue to explore ways of improving overall the higher education experience, my findings can contribute to filling a gap in the literature regarding the ramifications specific to the IS population.
Research Questions

RQ1: Does loneliness mediate the relationship between acculturative stress and depressive symptoms?

RQ2. Does religious faith and meaning-making moderate the relationship between acculturative stress and depressive symptoms in international students?

RQ3: Does faith and meaning-making moderate the relationship between acculturative stress, loneliness, and depressive symptoms in international students?

Assumptions and Limitations

The first assumption in this study was the expectation of finding a relationship between acculturative stress, loneliness, and depressive symptoms within the international student population. The second assumption was religious faith and sense of meaning affect loneliness and depressive symptoms, significantly presenting as symptoms of acculturative stress. Finally, I hypothesized religious faith and meaning making moderate the relationship between loneliness, acculturative stress, and depressive symptoms in international students.

There were also multiple limitations to this study. The religious faith explored in this research referred to the Judeo-Christian faith, which may have limited the generalization of the results to populations holding different faith views (Schmitt, Spears, & Branscombe, 2003). Moreover, although researchers often consider international students part of the minority population in the United States, the acculturative stress experienced by American minorities may differ from those who are in the immigratory journey (Constantine, Okazaki, & Utsey, 2004).

Definition of Terms

Acculturation. Acculturation is the culture change process that occurs as the result of continual first-hand contact, with psychological and social exchanges between two distinct
cultural groups (Berry, Kim, Minde, & Monk, 1987; Schwartz, Unger, Zamboanga, & Szapocnik, 2010). Those who live in foreign countries or regions, such as international students, immigrants, and refugees share this experience (Berry, 1986).

*Acculturative stress.* Previously described as culture stress, cultural shock, or culture fatigue (Smart & Smart, 1995), acculturative stress refers to the type of stress stemming from sources inherent in the process of acculturation (Berry, Kim, Minde, & Monk, 1987). Moreover, it also encompasses the losses one experiences when adjusting to a new set of beliefs, social behavior, and network, that may impact one's subjective well-being and mental health (Caplan, 2007).

*International students.* International students represent themselves as individuals who moved to another country in pursuit of tertiary or higher education (Bista, 2016). International students enrolled in American institutions on temporary visas, which distinguishes them from permanent residents, undocumented immigrants, or refugees (UNESCO, 2015).

*Depressive symptoms.* Major depressive disorder is characterized by noticeable changes of effect, cognition, and neurovegetative functions such as cognitive, motivational, and affective deficits lasting at least two weeks (APA, 2013; Brewin, 1985). Moreover, depressive symptoms include sadness, pessimism, loss of pleasure, suicidal ideation, loss of interest, fatigue, change in appetite, among other symptomology (Beck, Steer, & Brown, 2011).

*Loneliness.* Fromm-Reichmann (1959) and Van Dulmen and Goossens (2013) defined loneliness as a subjective experience of distressing occurrences in one's social relationships and network, which is smaller or less satisfying than what one desires. This incongruence may lead to social isolation, psychological distress, and negative feelings (Cacioppo et al., 2015).
*Sense of meaning.* Sense of meaning, or meaning making, refers to one's ability to recognize order, coherence, and purpose in life while maintaining hope through stressful periods (Frankl, 1985; Zika & Chambelain, 1992). Making sense of difficult situations is related to psychological well-being and plays a significant role in academic achievement in higher education (Mason, 2017).

*Religious faith.* Park (2005b) defined religious faith as they search for significance in a relationship with the Sacred. It also refers to the inner attitude, conviction, or trust in the supreme God, stressing salvation and grace ("Faith," 2020). Religious faith positively relates to psychological well-being, a positive sense of meaning, and view of self (Chamberlain & Zika, 1992; Jung, 2015).

*Culture.* Culture is a historically conveyed compilation of beliefs, social norms, behavior, and the perception of the social environment in which people develop and perpetuate their knowledge and attitude towards life (Kral et al., 2011). It also encompasses the ideas regarded as worthwhile and transmittable to future generations. These notions include language and economic systems, educational and political values, philosophy, and religious principles, as well as ideas of unstated assumptions (Triandis, 2002).

*Ethnicity.* This term denotes that people of a nation or a tribe share common nationality, culture, race, and religion (Anderson & Nickerson, 2005). The common tradition of values and customs influence one’s identity in the larger societal context, often sharing a common ancestry, kinship, and place of origin (Delgado-Romero, Galván, Maschino, & Rowland, 2005).

**Significance of the Study**

Initially, I investigated the issue of depressive symptoms and loneliness shown through acculturative stress in the growing population of international students. Secondly, I addressed the
interplay of faith and sense of meaning as moderators in the relationship between loneliness and depressive symptoms. Moreover, the findings in this research may assist multicultural centers of colleges and universities in developing effective prevention and intervention programs that help students achieve academic success. Thus, retention rates for international students improve. Lastly, in conducting the research, I added to the clinical knowledge as it pertains to one's ability to cope with cultural stressors through meaning-making and faith, which may help clinicians develop appropriate interventions for this population.

Organization of the Remaining Chapters

Chapter 2 contains research related to the concepts described above. I expand on the history of international students in higher education in the United States, and the unique challenges international students face when acculturating to the American culture, such as loneliness and depressive symptoms. I also explore sense of meaning and religious faith as moderators for the relationship between acculturative stress, loneliness, and depressive symptoms. In Chapter 3, I describe data collection methods, research instruments, and measures, as well as the analysis procedures. which I present the results and analysis of in the following chapter. In the final chapter, I discuss the results derived from the research, its implications, and directions for future studies.

Chapter Summary

Included in this introductory chapter is my review of the importance of the international student population to the American higher educational system, emphasizing the cultural and economic contributions achieved thus far. I also provided the research questions, defining the variables used, and describing the purpose and significance of the investigation. The next chapter will explore the literature related to the concepts.
CHAPTER TWO

REVIEW OF THE LITERATURE

The purpose of this study was to investigate the effect of religious faith and sense of meaning in international students’ who experience loneliness, depressive symptoms, accompanied by acculturative stress (Oppenheimer, 1984). In this chapter, I give a brief overview of the history of higher education in America, address the importance and contributions of international students in higher education, as well as the unique challenges the population encounters in the academic environment. Furthermore, I assess the definition of acculturation and the influence of acculturative stress felt by international students. Additionally, I discuss self-definition and interpersonal relatedness along with its relationship to loneliness. Moreover, the chapter covers depressive symptoms, the definition and influence of sense of meaning (meaning making), and religious faith on international students in higher education.

Challenges mark the first year of college, as students attempt to acclimate to a new environment (Levens, Elrahal, & Sagui, 2016). Coping with stress leads to loneliness, isolation, and depressive symptoms (Garett, Liu, & Young, 2017). Previous researchers documented a positive association between loneliness and depressive symptoms (Ge, Chun, & Heng, 2017; Wei, Russell, & Zakalik, 2005). In moments of life adjustment, such as transitioning to college, feelings of loneliness may become more pronounced leading to depressive symptoms (Wilbert & Rupert, 1986). Furr, Westefeld, McConnel, and Jenkins (2001) conducted a study designed to evaluate the various issues related to suicidality in college student populations. Among 1,455 college students from four different universities, 53% indicated they had experienced depression in their first years of college, and 51% cited loneliness as one of the causes of depressive symptoms (Furr et al., 2001).
International students (IS) are more vulnerable to experiencing loneliness and depressive symptoms due to adjustment difficulties related to the acculturation process. (Zhang & Jung, 2017). When these difficulties arise, acculturative stress takes place, influencing international students’ experience in higher education, as well as contributing to feelings of isolation, mistrust, powerless, and depression (Chavajay & Skowronek, 2008). Although loneliness and depression are everyday experiences in first-year college students, loneliness as a variable is under-investigate in the international student population. Throughout this chapter, I will review relevant literature related to loneliness, depressive symptoms, and acculturative stress in international students. I also provide a theoretical foundation to investigate religious faith and sense of meaning as potential moderators in the relationship of the cited variables above.

The History of Higher Education in America

The history of higher education in America started in 1636 when the Great and General Court of Massachusetts Bay contributed 400 pounds towards building a new college, which laid way to form Harvard University (Thwing, 1906; Geiger, 2015). The challenge of finding qualified leaders to teach in the new college was immense, as most of the educated men who arrived in the colony were clergymen deeply committed by covenant to prioritize their congregation. The necessity of sending newcomers who were proficient scholars became essential to the success and implementation of higher education.

Although American higher education institutions were predominantly extensions of religious affiliations, by the twentieth century, the European enlightenment era caused the severing of prior relationships (Audretsch, 2007). New traditions, harboring freedom of thought, learning, intellectual exchange, research, and scholarship became prominent features of
universities, with the primary objective of increasing individual self-improvement to contribute to the social principle of civic mindedness (Aucutt, 2019).

Following the end of World War II, there was a shift in the characteristics of higher education. In 1915, 5.5% of young adults began to attend some college, and 1.7% of 21-year-olds received first degrees, in a phenomenon that became known as mass higher education (Geiger, 2015). This was the highest rate of participation in secondary school thus far, surpassing that of any other country, and bringing changes in the interrelationship between culture, career, and knowledge. The rise of federal funding for universities also allowed for more substantial access to education for the overall population altering the higher education industry (Goldin & Katz, 1999). American research universities began to flourish, creating new leaders in educational quality.

In the next three decades, universities grew in numbers, expanding their enrollment and widening their scope of operations. The increased enrollment required additional resources and increases in specialized departments (Goldin & Katz, 1999). Mass higher education brought students with different abilities, motivations, and desires to traditional colleges and universities. In 1940, American higher education became a reflection of American society. Although prestigious universities reserved the rights to the intellectual selection, the American society was more open and democratic than any other developed country, which began to show in the diversity of campus post-world war II (Geiger, 2015).

Changes in society affected the expansion of higher education in America, alongside the democratization of education around the world (Trow, 1962). Conversely, globalization reinforced and contributed to a worldwide increase of interconnectivity and interdependence of economies, politics, societies, and cultures (Mok, 2000). Before long, the discourse of equality
reached higher education, which when coupled with advancements in science and technology, encouraged the enrollment of international students (Little & Green, 2009; Schofer & Meyer, 2005).

**International Students in Higher Education**

Moving to a different country is a life-changing decision that involves various reasons and motives, which include economic status, political influences, and religious motivation (Chirkov, Vanteenkiste, Tao, & Lynch, 2007). These different factors play essential roles in one's migration and adaptation processes. Psychological approaches investigate one's immigration story on an individual level. One of the approaches utilized is McClelland's three-motive model of human motivation, which demonstrates how individuals who migrate internationally have higher levels of achievement, power motivation, and a strong desire for economic success (Boneva & Frieze, 2001).

Cross-border education traces back to the second and fifth century when Sophist pupils followed their teachers to Athens and other regions to learn philosophy (Akanwa, 2015). In the thirteenth century, the University of Paris opened its doors to scholars outside France to teach their students (Lee & Rice, 2007). Moreover, it appears the academy’s use of common language in scholarly instruction such as Latin, throughout the centuries has incentivized the flow of students in Europe throughout the Middle Ages (Altbach, 1989). Andrade (2006) defined international students as individuals enrolled in higher education institutions on a temporary student visa and speak English as a second language.

The earliest IS contact registered in the United States dates back to the late eighteenth century, followed by an exponential growth in numbers in the twentieth century, when international education focused on diplomacy, state development, intending to build cultural and
political ties (Lee & Rice, 2007). More recently, with the development of globalization in education, the desire to study in specific institutions added status and value, which made education a highly marketable product (Cudmore, 2005; Lee & Rice, 2007).

The global market motivated the enrollment of international students and recruitment agencies heavily pursue students overseas (Lee & Rice, 2007). Consequently, the number of international students on American campuses increased. For the years of 2017-2018, the Institute of International Education (IIE) reported 1,094,792 international students in the United States, making up 5.5% of the student population in higher education (IIE, 2018).

In addition to the economic benefits, internationally diverse students bring educational and cultural value U.S. higher educational system (Mamiseishvili, 2012). As the number of international students increases, so does the exposure of American students to academic prestige, financial revenue, cultural exchange, and global understanding, which equips them with cultural sensitivity and skills to interact with people from a diverse background (Wu, Garza, & Guzman, 2015). For instance, international students rank higher in their home countries based on the academic excellence of the university they attend. Moreover, universities increased their efforts to attract and recruit international students, as it is within the institution's best interest to retain these students and gain the educational, cultural, and economic benefits of having a diverse student body (Mamiseishvili, 2012).

The interest of higher education institutions in increasing opportunities for IS stems from several factors, the most important being the economic advantages universities gain from recruiting this diverse population (Andrade, 2015). According to the Open Doors Report, IS contributed more than $42.4 billion to the American economy in 2018 (IIE, 2018). International
students pay full tuition, which brings many benefits to their institutions and the states and national economy (Lee & Rice, 2007).

In addition to contributing to national revenue, ISs provide a source of cultural diversity necessary in a globalized world. They add to intercultural learning, increased diversity, and cultural awareness, as well as forming political alliances capable of enduring years following college graduation. International students who stay in the country of study often fill in positions only a few nationals qualify to hold, while remaining committed to the ideals and values of productivity and excellence.

Habu (2000) documented the first motivation to engage globalization in higher education was commercial, where students represented economic units. The second reason for globalizing education was the promise it held to enhance the free exchange of ideas in creating communities of scholars capable of crossing national boundaries. The last encompassed diversity. However, alongside the great benefits, some challenges are unique to this population.

Focusing on economic revenue the ISs bring narrows the emphasis on the students' cross-cultural and academic experience (Hanassab, 2006; Lee & Rice, 2007). Furthermore, ISs deal with the lack of a supportive network, becoming proficient in the English language, and becoming acquainted with their new environment (Hassab & Tidwell, 2002; Yeh & Inose, 2003). Moreover, the lack of academic support ISs experience often leads them to refrain from seeking assistance (Olivas & Li, 2006). This adds to the cultural differences experienced by students and the difficulties they face in their migration story.

**Unique Challenges to International Students**

In this section, I explore the concepts of acculturation process, acculturative stress, along with factors contributing to stressful situations, such as language barriers, social efficacy, and
social support. I also discuss the effect of loneliness and depressive symptoms in the acculturative process of international students. Finally, I investigate the sense of meaning and religious faith as possible moderators for the interplay of acculturative stress, loneliness, and depressive symptoms in the IS population.

**Acculturation Process**

The definitions of acculturation developed over several years. Redfield, Linton, and Herskovits (1936) defined acculturation as the phenomena resulting from groups of different cultures coming into continuous first-hand contact, bringing subsequent changes in the original cultural patterns of both groups. Graves (1967) added to the literature by concluding three specific conditions for acculturated change occur. They included adequate exposure to the dominant group behaviors and beliefs, identification with host culture as a reference, and access to resources or goals of the new culture. Graves (1967) also distinguished between group and individual levels of acculturation and subsequently coined the term "psychological acculturation" as well.

Later researchers also included psychological acculturation domains including behavior, values, knowledge, and cultural identity (Kim, Atkinson, & Umemoto, 2001). One’s cultural identity embraces an individual’s attitudes towards their cultural identification, attitudes towards the host and original group, and level of comfort with the dominant group (Kim et al., 2001). Defining cultural knowledge included culturally specific information. Therefore, to explore one's overall process of acculturation, all four dimensions required further examination.

Recent acculturation theory suggested acculturation happens in two dimensions, home culture and host culture (Berry & Sam, 1997, Berry et al., 2005). Berry et al. (2005) provided a four-mode acculturation model, explaining how the integration, assimilation, separation, and
marginalization influences mental health. Immigrants who adhere to their home costumes and host cultures choose the integration strategy, whereas those who absorb host culture and reject home culture adopt the assimilation strategy (Berry et al., 2005). Researchers determined when individuals choose to maintain the home culture and reject host culture, they adopt the separation strategy. Marginalization occurs when individuals reject both host and home cultures. Among these dimensions, integration aligns with the best mental health outcomes, as it allows individuals to hold values of both cultures while being able to function and manage conflicts that arise between two cultural systems (Berry, 2005; Ward & Kennedy, 1994; Zhang & Goodson, 2011).

This intercultural adaption process happens at a group-level, which comprehends the acquisition of cultural characteristics of a group, institutions, and practices (Wu & Mak, 2012; Zhou, Jindal-Snape, Topping, & Todman, 2008). On a psychological level, it encompasses psychological and behavioral changes in a person’s repertoire, which includes academic performance (Berry & Sam, 1997; Berry, 2005). Academic adjustment describes the suitability between students and the academic setting, encompassing learning styles, educational and cultural background, along with language proficiency (Andrade, 2006). For ISs, academic adjustment is only one of the components they need to overcome in the acculturation process.

Two models capture the acculturation dimensions, unidirectional model (UDM), and the bidirectional model (BDM) (Arcia, Kinner, Bailey, & Correa, 2001; Rudmin, 2009; Wu & Mak, 2012; Zhou et al., 2008). The first represents the standard view of acculturation, where one assumes unilinear progress towards cultural assimilation. Those accepting this framework view the culture of origin and host culture as opposing rather than counterbalancing; where cultural
adaptation occurs in many layers including language skills, social interaction, and economic status.

Alternatively, using the BDM approach researchers sought to find a balance between acculturation and identity. They view this model of acculturation in two orientations, one's relationship with the culture of origin and one's relationship with the new culture (Zhou et al., 2008). BDM documents how acculturation involves language acquisition, economic, and social behaviors. Recent scholars advocated for the bilinear perspective, as it proposes identification with host cultures does not diminish how students acknowledge the other (Zhang & Goodson, 2011). The bilinear model also brings an essential change in the measurement of acculturation, as most of the earlier studies regarding acculturation and mental health based on unilinear models, assume one’s adherence to one culture lens (Zhang & Goodson, 2011). However, few studies have adopted the bilinear acculturation model when investigating international students’ adjustment in America. But those who found a positive association between psychological and sociocultural adjustment occurs when individuals adhere to host culture (Zhang & Goodson, 2011).

Nevertheless, the acculturative process may also account for psychological stress, primarily if maladjustment is associated with the inability to acclimate to the host culture (Wu & Wak, 2012). Similarly, higher levels of assimilation correlate to less psychological distress. Therefore, individuals need to create strategies to help them develop habits congruent with the cultural environment surrounding them and based on an individual’s attitudes towards cultural maintenance and host group relationships (Berry, 1997; Kosic, 2004).

Cultural learning and stress coping models have become prominent in theories that investigate acculturation (Zhou et al., 2008). Individuals who are in cultural transit are
proactively responding to concerns that stem from cultural change, which also impacts their psychological adjustment and adaption to the new environment, their effect, behavior, and cognition. This process may provide positive outcomes, such as cognitive flexibility or negative experiences, such as acculturative stress (Belsky et al., 2015; Christmas & Barker, 2014).

**Acculturative Stress**

Transitioning to the United States may pose numerous challenges for ISs with potential detriments to one's mental health (Constantine, Okazaki, & Utsey, 2004). While there are high expectations for their experience in higher education institutions in America, IS may undergo psychological distress associated with social dysfunctions, such as interpersonal distress, low self-esteem, racial or ethnic discrimination, and sadness. Stress emerges as a generalized physiological and psychological state induced by the experience of tension in the environment, provoking a reduction of healthy function (Berry, Kim, Minde, & Mok, 1987). Acculturative stress refers to a specific category grounded in the acculturation process and connected to adaptive behaviors associated with adjusting to a new environment. It can lead to emotional suffering, such as hopelessness, feelings of inferiority, loneliness, and perceived discrimination (Berry, 2006; Yeh & Inose, 2003). Now perceived as acculturative stress, the term previously referred to as *cultural shock*, identified contact-induced stress. Both American and ISs share academic stressors potentially involving family-related pressures, academic requirements, financial issues, class environment, and overall academic stress. However, the perception of academic stress and coping strategies may vary across cultures (Misra & Castillo, 2004).

ISs experience deprivation of their traditional sources of emotional support, social relationships, and mechanical means of communication (Duru & Poyrazli, 2007). These factors may lead to stressful life transitions and cultural adjustments. Previous researchers found the
more acculturated the students, the higher are the levels of adjustment to their host culture (Constantive, Okazaki, & Utsey, 2004). Contrariwise, students who experience profound levels of acculturative stress tend to also develop other mental health issues, such as loneliness and depression (Constantive, Okazaki, & Utsey, 2004). Different factors play into the dynamics of acculturative stress, as described later in the text. The areas consistently emerging as severe predictors of acculturative stress in literature were language proficiency and social support (Duru & Poyrazli, 2007).

**Language barrier.** (Duru and Poyrazli, 2007) noted the ISs studying in the United States, with the ability to communicate effectively in English may be more able to navigate the challenges associated with adjusting to a new country. The inability to speak English fluently may negatively affect the academic and psychosocial adjustment of international students as communication plays a significant role in the stress reaction in students. Researchers found language proficiency deeply linked to academic performance, self-efficacy, academic difficulties, adjustment, and social interactions (Poyrazli, 2001; Poyrazli et al., 2002). It may be particularly difficult for ISs to translate their academic ability to English, as many of them attained high academic achievement in their home countries (Mori, 2000; Yeh & Inose, 2003). The difficulties with learning the English idiom and becoming proficient in the language correlates with academic stress. Challenges and pressures to succeed in the academic environment, that is also culturally different, results in psychological stress (Misra & Castillo, 2004).

Furthermore, the difficulties in learning the language of the mainstream cultural group limit their ability to engage in meaningful conversations (Doucerain, Varnamkhaasti, Segalowitz, & Rider, 2015). Consequently, the limited conversations may hinder ISs from
engaging socially with their American peers as well (Yeh & Inose, 2003). Therefore, the restricted knowledge of linguistic and sociocultural elements that influence communication may lead to feelings of incomprehension and frustration, which encumbers international students from familiarizing themselves with a new social environment (Lacina, 2002).

**Social self-efficacy.** Language learning is deeply associated with social skills functioning. Social self-efficacy is one aspect of effective social skills that is vital for one’s acculturation process and adjustment. Social self-efficacy refers to believing they can initiate interpersonal social contact and develop new relationships (Wei, Russel, & Zakalik, 2005). Researchers reported self-efficacy moderates the relationship between stressful life situations and depressive symptoms (Maciejewski, Prigerson, & Mazure, 2000). Contrarily, people deem lonely individuals as having less interpersonally competent, which may also lead to the conclusion ISs who struggle with social self-efficacy due to acculturative stress components (i.e., language barriers) may also develop depressive symptoms.

Social interaction with host nationals may include activities, which encourage emotional connectedness, such as engaging in conversations, having meals, practicing sports, community activities, and academic work (Zhang & Goodson, 2011). Moreover, evidence shows the more international students interact with their host counterparts, the more successful they are in adjusting to their new cultural reality. For instance, the Intergroup Contact Theory (ICT) explained how direct contact with different cultural groups reduce prejudice on an individual and group level (Pettigrew & Tropp, 2006). ICT also explicated that optimal contact conditions also generate equal status within contact events, the pursuit of common goals, group cooperation, and the creation of new relationships.
**Social support.** Social support is a complex process occurring in a person-environment interaction (Choi, 1997). The dynamic process encompasses transactions between individuals and social networks heavily influenced by culture. International students try to understand the patterns of social interaction to formulate acceptable behavior, which enhances their understanding of cultural differences (Thompson, 2018). Cultural differences may also influence international students' ability to form and maintain relationships. For instance, diverse cultures perceive social support and friendships differently. Members of collectivistic cultures tend to view social support and group harmony as a priority (Schreie et al., 2010). However, those from individualistic backgrounds value assertiveness and expression of individual desires (Schreie et al., 2010).

Lee, Koeske, and Sales (2004) positively related social support to subject well-being and provide a powerful coping resource in stressful life changes, such as the stress of adapting to a new culture. Other researchers added how social support validates one’s self-identity and self-esteem, providing emotional support (Bhochhibhoya, Dong, & Branscum, 2017). Inversely, the lack of meaningful relationships could lead to psychological distress, with symptoms of sadness, loss, hopelessness, and isolation, congruent with depressive symptoms. Overall, researchers demonstrated a strong association between lack of social support and loneliness (O'Reilly, Ryan, & Hickey, 2010).

Social connectedness also provides guidance on feelings, thoughts, and behaviors, where individuals can feel comfortable and confident in social contexts. Individuals who feel connected are less likely to experience mental health and interpersonal dysfunctions, such as distress and depressive symptoms (Ang, 2016). International students who formulated social connectedness to the host culture presented higher ethnic identification, had an open instance to learning the
American culture, and developed social skills, which facilitated sociocultural adjustment (Zhang & Goodson, 2011).

**Self-definition and Interpersonal Relatedness**

Glover (2000) discussed the essential benefits college years play in a student’s life. The researcher highlighted the experiences as contributing to their ability to achieve important developmental milestones (Glover, 2000). Higher education institutions report consistent increases in the number of students seeking clinical mental health services, especially for depression and anxiety (Beiter et al., 2015). They identified causal factors such as failure to successfully transition between adolescence and adulthood, the newness of the college environment, and the loss of support group influence one’s identity formation, self-definition, and relatedness (Luyten & Blatt, 2013). This shifting overlaps with the further development of their self-definition, while concomitantly balancing the autonomy and relatedness determined as congruent to this stage (Luyten & Blatt, 2013).

Luyten and Blatt (2013) described self-definition as the need to ascertain a coherent, differentiated, realistic, established, and positive sense of self. While they reported interpersonal relatedness, the antithesis of loneliness, as a need to establish deep, stable, supportive, and protective relationships (Luyten & Blatt, 2016). These two processes work synergistically towards one's healthy development of self and one's relationships.

There are two aspects of self-definition in Rutter's conceptualization of self-concept development, self-evaluations of agency in social functioning (self-efficacy), and general feelings of self-worth (Kuperminc, Blatt, Shahar, Henrich, & Leadbeater, 2004). Self-concepts reflect one’s perception of competence in different areas of life, including academics, social skills, and general personality characteristics. However, there is an expectation for students to
balance their academic regime while they also network and form new relationships. Failure to meet these expectations can lead to feelings of shame, sadness, and loneliness (McIntyre, Worsley, Corcoran, Woods, & Bentall, 2018). The negative consequences heighten international college student's susceptibility to loneliness and depressive symptoms (Moeller & Seehuus, 2019). Many international college students who experience acculturative stress do not seek professional help due to language barriers, cultural differences, and mistrust (Constantine, Okazaki, & Utsey, 2004; Sue & Sue, 2019). Those who alternatively choose to utilize indigenous coping methods may develop feelings of isolation, loneliness, and depression (Constantine et al., 2004; Sue & Sue, 2019).

Loneliness

Fromm-Reichmann (1959) was the first to explore the problem of loneliness from a scientific perspective. The author explained how loneliness is a painful and frightening experience most individuals would go long lengths to avoid. Characterized as the incongruence between one’s preferred and actual relationships, the discrepant emotions may lead to negative feelings, including psychological distress and isolation. (Cacioppo et al., 2015; Van Dulmen, & Goossens, 2013).

Researchers recognize loneliness as a global health concern and correlated it as potentially predictive of other psychological comorbidities and physical health issues (Hyland et al., 2019). For instance, lonely individuals are more prone to anxiety, anger, negativity, and overall feel less secure (Cacioppo et al., 2000). Prior investigators also found the effect of the psychological stress of loneliness in the hypothalamic-pituitary-adrenal (HPA) axis causes adverse health outcomes (Drake, Sladek, & Doane, 2016). Moreover, Nicpon et al. (2006)
connected loneliness to attention deficit disorder, which directly influences a student’s academic performance.

One inadequately investigated component of loneliness is the role of dysfunctional cognitive assessment strategies and its connection and maintenance of loneliness (Wilbert & Rupert, 1986). Researchers conducted longitudinal studies of first-year college student’s social adjustment, which revealed their attitudes toward differentiated momentary and chronic loneliness. Students who adjusted to the college environment swiftly developed a more positive expectation regarding creating relationships and attributed the causation of their loneliness to situational factors (Russell, Cutrona, Rose, & Yurko, 1984).

Perlman and Peplau (1981) found difficulties when attempting to distinguish the behavioral manifestations of loneliness from the accompanying attitudes, actions, and coping strategies styles. Furthermore, social skill deficits precede lonely feelings (Jones, Hobbs, & Hockenbury, 1982). In interpersonal situations, lonely individuals often demonstrate undesirable patterns of group relationships and expectations of receiving negative ratings from partners. Russel et al. (1984) also found subjective satisfaction with the relationship were better predictors of loneliness than quantitative measures of students' social involvement. Moreover, other researchers discovered individuals who experience loneliness often hold negative patterns of judgment of self and others (Jones, Hobbs, & Hockenbury, 1982). This limits students' self-disclosure, decreases their willingness to share opinions with others, and/or offer solutions for interpersonal problems. These cognitive distortions deeply influence the individuals' self-relatedness and ability to create and maintain relationships.
Loneliness and International Students

There are two subtypes of loneliness; social, which is related to reductions in community network size, and emotional, which speaks to the deficits of intimate and deep relationships. International students are particularly vulnerable to feelings of loneliness and isolation when coming to the U.S. as they experience the loss of the intimate relationship as well as the reduction of network size (Wu, Garza, & Guzman, 2015). Furthermore, to avoid loneliness, one must feel emotionally connected to others, which makes the subjectivity and perception of a hostile or friendly nature of one's social environment a characteristic of the problem (Cacioppo et al., 2015).

Components of acculturative stress, such as the ones exemplified previously, also contribute to ISs’ alienation and loneliness (Chavajay & Skowronek, 2008). For example, researchers conducted a study in Australia, which documented that among 900 ISs, 41% experienced stress related to acculturation (Russell, Rosenthal, & Thomson, 2010). Whereas, individuals who developed meaningful relationships were able to adjust to the cultural environment with greater ease.

Relatedness and social connectedness are significant predictive factors of acculturative stress. They can also affect people’s perception of their emotions, cognitions, and emotional response to their social network (Vanhalst, Luyckx, Raes, & Goossens, 2012). Inversely, the lack of social relationships contributes to feelings of loneliness. Moreover, loneliness is strongly related to depressive symptoms (Kim, 2001, Vanhalst, Luycks, Raes, & Goossens, 2012; Wei, Russel, & Zakalik, 2005). Though extremely necessary and poignant, this subject remains under-investigated within the IS population.
Depression and International Students

The fifth edition of the *Diagnostic and Statistical Manual for Mental Disorders* (DSM-5, APA, 2013) describes major depressive disorder as a condition characterized by discrete episodes lasting two weeks or more, during which individuals demonstrate changes in effect, cognitive skills, and neuro-vegetative functions. Symptoms include depressed mood (often reported as "sadness, empty, hopeless, among others.), loss of interest or pleasure, changes in weight and eating habits, insomnia or hypersomnia nearly every day, fatigue, diminished ability to think or concentrate, feelings of worthlessness or excessive guilt. Cross-sectional and longitudinal researchers found a positive relationship between loneliness as a predictor of depressive symptoms (Cacioppo et al., 2006; Nolen-Hoeksema & Ahrens, 2002). The levels of loneliness and depressive symptoms may vary across lifespan. However, the negative emotions accompanying loneliness (such as isolation, sadness, sense of loss for meaning) remain constant (Zeligman, Varney, Gheesling, & Placeres, 2018). These emotions are congruent with the symptomology of depression, as described above.

According to Blatt and Zuroff (1992), types of depression fall into two categories; the anaclitic (or dependent) and an introjection (or self-critical). Characteristics of anaclitic include feelings of loneliness and helplessness, where the individual presents intense fears of being uncared for and abandoned. In this situation, individuals strive to keep close physical contact with others, with a deep need to belong and feel loved. Contrarily, introjective depression encompasses feelings of self-criticism, unworthiness, inferiority, failure, and guilt. Individuals who present this type of depression constantly self-evaluate and criticize themselves. They are fearful of abandonment and strive for excessive achievement and perfection. Although
introjective depressed people achieve many great things, they seldom feel the satisfaction stemming from their success (Blatt & Zuroff, 1992).

It is essential to keep these two perspectives in mind when evaluating ISs' experiences in American higher education institutions, as many of them may present both. Similar to loneliness, depression may affect all age groups, however, some groups are more prone to depression than others, particularly college students. Zeligman, Varney, Gheesling, and Placeres (2018) demonstrated a robust relationship between students’ college experience of loneliness and depression.

Several reasons contribute to college student’s vulnerability to depression, such as stress-arousing and anxiety-provoking situations, as well as intense periods of transitions (Wei, Russell, & Zakalik, 2005). Additionally, at this developmental stage, young adults start looking to create life goals and search for personal meaning in their existence. The discrepancy in student’s expectations of relatedness profoundly affects their view of self. Kirsh and Kuier (2002) suggested the rates of depression must be understood in a sociocultural context, instead of an individualist focus, which researchers ground a majority of depression theories.

**Sense of Meaning**

Meaning in life emerged as a clinical construct in the studies of the psychiatrist Victor Frankl (1963), when he explored his imprisonment in a Nazi concentration camp. His experience prompted him to investigate how he and those around him managed to create meaning while captive in one of the most horrific places in the history of humanity. Since then, many researchers articulated meaning-making in conjunction with psychological functioning, as well as subjective wellbeing. Moreover, meaning in life is a concept that places great importance on
existential theories, which mainstream psychologists heavily influenced (Zika & Chamberlain, 1992).

Zika and Chamberlain (1992) defined a sense of meaning as the understanding of order, coherence, and purpose in one's life, the pursuit, and achievement of meaningful goals accompanied by a sense fulfillment. The central construct of meaning is a connection, where two different components belong to the same category, even if they are physically two separate entities (Park, 2010). In other words, meaning connects an individual’s experiences. As it is a nonphysical reality, the human mind appreciates the relationship (Snyder & Lopez, 2005). Researchers theorized the search for meaning is one of the primary motivations in an individual's life (Frankl, 1985). Additionally, meaning making is a psychological variable promoting well-being, but also serves as a protection against negative outcomes (Morgan & Farsides, 2009).

Concurrent with changes in one’s belief system, a person’s sense of meaning undergoes continuing transformation across the lifespan. Individuals who present a great sense of meaning in life foster optimism, which positively associates with subjective well-being in periods of stress and adversity (Jung, 2015). Furthermore, the meaning connected to one’s expectations of relationships, allows individuals to make sense of their experiences (Proulx & Michael 2012).

Meaning making also refers to a process of recovering global meaning when disruptions by unpleasant events occur, but vary in degree of severity (Park, 2005b). Stressful events may cause crises of meaning, trigger questions regarding life’s purpose, suffering, and justice. When encountering stressful events, people assess the meaning of the situation while attempting to determine if the given meaning is congruent with their global meaning.

Inversely, meaning-making is particularly essential when confronting highly stressful life experiences, which drove recent researchers to focus on the restoration of meaning after stress-
inducing situations (Park, 2010). Park and Folkman (1997) proposed a model for meaning-making that encompasses the tenants of (a) global meaning or orienting systems that provide individuals with a cognitive framework capable of assisting them in interpreting their experiences and motivation, (b) meaning attribution in situations of potential challenge and stress, (c) the discrepancy between the assigned meaning in a stressful situation to one's global meaning often dictated by the amount of distress experienced (d) the incongruity initiates the process of meaning-making, (e) in this process, individuals attempt to reduce the inconsistency in their appraised and global meaning, which leads them to restore their sense of the world as meaningful and worthwhile, and (f) when successful, the appraisal brings better adjustment to the stressful event. The model can be applied to the experience of ISs in American higher education institutions, as the stress of acculturation adjustment may lead to loneliness feelings and depressive symptoms. Moreover, sense of meaning intrinsically connects to faith and spirituality (Steffler & Murdoch, 2018). In this model, faith is a system of meaning that includes global beliefs encompassing conceptions regarding life’s purpose, death, and afterlife, global goals about God’s plan for one’s life, and evaluating situational meanings (for instance, if God is an active or passive agent in their life) (Wortman & Park, 2009). Therefore, it is crucial to explore how sense of meaning and faith interplay in IS’s lives when they experience acculturation, acculturative stress, loneliness, and depressive symptoms.

**Religious Faith**

Religious faith, spirituality, and science are three frequently investigated methods for meaning making (Lysne & Wachholtz, 2011). For the purposes of this study, I integrate religion and the Christian faith into one variable, which I refer to as religious faith. The component will
also include elements of spirituality, as many researchers emphasized the intrinsic relationship between the variables.

Park (2005b) understood religion as the search for significance in the manner it relates to sacredness. The relationship between religious faith and meaning is close and multifaceted, as it serves as lenses in which people may perceive, understand, and interpret reality (Park, 2005a; Whitford & Olver, 2012). Because it influences beliefs, goals, and emotions, religious faith closely relates to the concepts of meaning. Religious meaning systems inform both global beliefs and goals, providing a belief system that sustains the comprehension of life’s joys and sufferings (Park, 2005b). It also proposes a core schema encompassing beliefs about self, the world, along with mundane and extraordinary occurrences. An association exists between higher religious faith and increased coping, greater perceived social support (Pardini, Plane, Sherman, & Stump, 2000). Lower levels of anxiety correlate with positive associations of mental health (Pardini et al., 2000).

When confronted with stressful events, individuals may feel disoriented and challenged concerning their cognitive perception of the world, meaning, and purpose in life (Tedeschi & Caloun, 1995). In these times, individuals who rely on religious faith or spiritual beliefs tend to manage crises more effectively, bringing universal meaning that gives the event spiritual significance (Vis & Boynton, 2008).

Information people process after stressful events cannot escape spiritual reflection (Gehrke, 2008; Vis & Boynton, 2008). It seems religious faith reappraisals may change the meaning of a stressful experience to positive, encouraging individuals to make more benign reattributions by construing the situation in a beneficial way (Marcia, 2010). Moreover, reframing traumatic events provides hope, maximizing the possibility of personal growth.
Therefore, I aimed to explore how sense of meaning and religious faith affected acculturative stress, loneliness, and depressive symptoms in ISs.

**Chapter Summary**

International students encounter different barriers that influence their academic journey in higher education, as well as their mental health and overall well-being. Nonetheless, it is essential to understand the significance of ISs attending American universities. Throughout this chapter, I provided an explanation of the importance of ISs to American higher education institutions. Moreover, I explored the definition and effect of the acculturation process and the stress that may arise from it. Additionally, I assess loneliness and depressive symptoms in IS. Finally, I reviewed the definitions of sense of meaning and religious faith, and their influence in moderating painful and distressing experiences, such as cultural transitions in academic environments.
CHAPTER THREE

METHODS

The purpose of this quantitative study was to analyze the effect of faith and sense of meaning as moderators in mediating relationships between loneliness, depressive symptoms, and acculturative stress in international students (IS) at large southeastern university. I used reliable and validated online assessments to collect data. In this chapter, I present the methodology used to investigate the relationship between the variables presented in the study and provide a brief explanation of each scale measures used to analyze the variables. I also include the purpose of the study, as well as the problem statement, along with describing the research questions and hypotheses. A review of the research design, and the process of participants' selection, along with data processing and analysis leads to an explanation of the ethical considerations, followed by a summary of the chapter.

Research Design

I used a linear multiple regression analysis to investigate all research questions and hypotheses. Multiple regression analysis is one of the most widely employed statistical procedures for scholarly research due to its applicability to different types of data and issues, interpretation easiness, robustness, and availability (Mason & Perreault Jr, 1991). Regression analysis fundamentally examines the relationships between variables. It is important to note how multiple regression models with more than one mediator commonly theorize and assess behavioral science research (Hayes, 2015).

Selection of Participants

I recruited participants from a southeastern university’s IS population. For this study, participants were enlisted through Qualtrics panel. Qualtrics is a web-based survey software that
allows for online surveys to be built and allocated. The survey for this study was available via weblink.

To determine the sample size for this research, I used a power test through g*power 3.1. Working with a medium effect size (.15) and a .80 power necessitated a sample of 92. Inclusion criteria required each participant: 1) be 18 years old or older, 2) be currently enrolled in a higher education program, and 3) be on a temporary international student visa (F-1), a foreign worker dependent visa (H4), and temporary nonimmigrant religious worker dependent visa (R2). Exclusions criteria included: (a) having an ongoing mental disorder, (b) currently taking medication to treat a mental disorder, (c) having a medical diagnosis such as thyroid problems that may lead to depression or depressive symptoms, and (4) concurrently struggling with suicidal ideation. I did not discriminate against participants based on their ethnicity, cultural background, gender, sexual preference, or religious affiliation.

Moreover, subjects received an email inviting them to participate in the study (see Appendix A). To incentivize participants, I raffled two gift cards to general and retail stores at the end of the survey.

Measures

Demographics

In addition to demographic information (see Appendix B), I used several congruent measures to investigate the relationship between the stated variables. Currently, there are approximately 850 international students enrolled in educational programs in the United States. The students come from different countries, varying in nationality, age, cultural background, ethnicity, race, gender, and religion. I collected demographical information from participants who registered to be part of the study (See Appendix B).
The Revised UCLA Loneliness Scale

Currently, the Revised UCLA Loneliness Scale (R-ULS; Russe, Peplau, & Cutrona, 1980) is one of the most used measures to assess loneliness, with a reliability score of .89 (Vassar & Crosby, 2008). Moreover, in studies using college student samples, the scaled showed a high internal consistency of .96 (Russel, Peplau, & Cutrona, 1980). The R-ULS is a revised version of the original University of California, Los Angeles Loneliness Scale. Russell, Peplau, and Cutron (1980) published a revised scale with ten new items while maintaining the ten original questions (Russell et al., 1980; Schmidt & Sermat, 1983). The revised UCLA Loneliness Scale consists of 20 items, where half of the items reflect satisfaction with social relationships, and half reflect dissatisfaction. Additionally, the scale is reliable in cross-cultural studies of various populations (Kim, 1997; Neto & Barros, 2003), including those in educational settings (Dussault, Fernet, Austin, & Leroux, 2009).

The Beck Depression Inventory-II

The Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 2011) is a 21-item self-report measure that assesses major depression symptoms according to the diagnostic criteria found in the Diagnostic and Statistical Manual for Mental Disorders-5th edition (APA, 2013; Garcia-Batista et al., 2018). Summing items create a score, with higher scores indicating higher levels of depression (Garcia-Batista et al., 2018; Steer et al., 1997). The BDI-II used in multiple studies historically demonstrates good internal consistency and test-retest reliability with adolescents and adult populations, including college students (Storch, Roberti, & Roth, 2004). It has a coefficient alpha of .92 for clinical outpatients, and .93 for nonclinical samples (Beck, Steer, & Brown, 1996). Internal consistency refers to the reliability of the study, signifying the absence of random errors (Gibbert, Ruigrok, & Wicki, 2008). Consequently, subsequent
researchers arrive at the same insights if they conduct the study following the exact steps of previous investigators.

Additionally, the internal consistency of this scale is high, and its validity supports positive correlations with self-reported measures of depression. Moreover, researchers use the BDI-II, cross-culturally as it is translated to different languages for studies involving ethnically diverse college students (Carmody, 2005; Ghassemzadeh et al., 2005; Wiebe & Penley, 2005).

**The Acculturative Stress Scale for International Students**

Sandhu and Asrabadi (1994) developed the Acculturative Stress Scale for International Students (ASSIS) which consists of a 36-item, 5-point Likert-type scale (Akhtar & Kröner-herwig, 2015). The scale covers seven factors including perceived discrimination, homesickness, perceived hatred, fear, culture shock, guilt, and miscellaneous emotions (Akhtar & Kröner-herwig, 2015). The sum of these items represents the total score of acculturative stress, where the higher the score, the more acculturative stress a person suffers. In previous studies, ASSIS demonstrated construct validity that supported a positive correlation with depression, with an alpha coefficient ranging from 0.92 to 0.95 (Nguyen & Meirmanov, 2019).

**The Meaning in Life Questionnaire**

The Meaning in Life Questionnaire (MLQ) is a 10-item self-report inventory developed by Steger et al., (2006) to measure perceived life meaning and search for meaning. Participants rate their feelings and attitudes regarding meaning on a 7-point scale ranging from 1 (absolutely untrue) to 7 (absolutely true). The MLQ has two scales, Presence and Search, where presence assesses someone's perception of life as meaningful, and Search investigates their motivation to find meaning in life (Schulenberg, Strack, & Buchanan, 2011). The MLQ presents good internal
consistency, with coefficient alphas ranging from 0.80 to 0.90. Moreover, the MLQ’s validity support is evident when comparing to the Purpose in Life text and Life Regard Index.

**The Santa Clara Strength of Religious Faith Questionnaire**

The Santa Clara Strength of Religious Faith Questionnaire (SCSORF; Plante & Boccacini, 1997) is a 10-item scale with a 4-point scale designed to measure the strength of religious faith. Previous studies among samples of students in the USA suggested SCSORF is a reliable measure with strong internal reliability (Plante & Boccaccini, 1997b). Moreover, SCSORF works cross-culturally with European undergraduate university students as well (Lewis et al., 2001). Factor analyses support the SCSRFQ's internal consistency reliability, with coefficients ranging from 0.95 to 0.97. (Cummings et al., 2015; Wnuk, 2017).

**Research Procedures**

**Data Collection**

For this study, the Institutional Review Board (IRB) of Liberty University provided approval prior to data collection. I administered the items and scales described above and collected the results using Qualtrics, a web-based survey tool. I explained the premise and purpose of the study to the participants prior to them responding to questions posed in the various scales. The informed consent process included directions and explanations for completing the scales. After uploading the collected data into IBM SPSS Statistics version 26, I reviewed it for any irregularities, such as incomplete surveys, and missing information (Hayes, 2013). Moreover, data screening also accounted for outliers, which I individually considered for inclusion or exclusion in the study.
Research Questions

In conducting this research, I explored the following overarching questions:

RQ1: Does loneliness mediate the relationship between acculturative stress and depressive symptoms?

H1a: Concurrent with previous research, it is expected to be found a positive relationship between acculturative stress, loneliness, and depressive symptoms.

H1o: There is no relationship between acculturative stress, loneliness, and depressive symptoms.

RQ2: Do religious faith and meaning making moderate the relationship between loneliness and depressive symptoms that derive from acculturative stress in international students?

H2a: This study hypothesizes that religious faith and meaning making moderate the relationship between loneliness, depressive symptoms that derive from acculturative stress in international students.

H2o: There is no significant moderation between loneliness, depressive symptoms that derive from acculturative stress in international students.

RQ3: Do faith and meaning making moderate the relationship between loneliness, acculturative stress, and depressive symptoms in international students?

H3a: This study hoped to find that faith and meaning making significantly moderate the relationship between loneliness, acculturative stress, and depressive symptoms in international students.
H3o: Faith and meaning-making do not significantly moderate the relationship between loneliness, acculturative stress, and depressive symptoms in the international students’ population.

Data Processing and Analysis

I gathered data from participants through the Qualtrics survey tool, uploaded into the IBM SPSS version 26 software, and evaluated it for incomplete information or surveys. In screening the responses for possible outliers, I analyzed and excluded them as necessary. Using a moderated mediation model comprised of two variables can convey a linear function of a moderator, where M mediates the effects of X on Y and moderated by W1 and W2 (Hayes, 2015; Hayes, 2018). Deemed simple, the calculation of a moderated mediation requires a few regression coefficients from the full model incorporating the mediation and moderation components. For inferences about the outcome of regression coefficients, I employed the bootstrap confidence interval, as its performance proves effective, simple to understand, and often available in the software (Hayes, 2015). To create a bootstrap confidence interval for the index of moderated mediation, I generated a bootstrap sample of the initial data, assessed the regression coefficients for the statistical model in the bootstrap sample, and calculated the index of moderated mediation (Disatnik & Sivan, 2016; Hayes, 2015; Hayes, 2018).

Ethical Considerations

To ensure participants' well-being and protection, I conducted several ethical measures before collecting data. The first step towards preserving participants’ welfare was to obtain approval from Liberty University’s Institutional Review Board (IRB), alongside consultation and supervision. Moreover, I followed the ethical guidelines for research listed on the American Counseling Association Code of Ethics. Additionally, I provided informed consent containing
details regarding the survey to participants prior to initiating the study (see Appendix C). Participants consented to completing the instruments included in the study prior to beginning the process. Participants who did not agree to the informed consent did not receive access to the surveys.

It is essential to understand these ethical guidelines ensured participants' well-being was of utmost priority, including their right to remain anonymous. Therefore, the web-based online survey tool Qualtrics, safeguarded subjects’ identifying information, which remained unavailable to the researcher. Moreover, as this study did not provide any experiential treatment, participants did not have treatment withheld, enter into placebo treatment or treatment plus. Hence, this measure prevented participants from harm. Nonetheless, if participants became triggered, or went through psychological distress due to the nature of this study, I provided information regarding mental assistance at the end of the survey.

**Chapter Summary**

In this chapter, I provided a review of the purpose of the study, research questions, along with hypotheses. In addressing the research design, I included the method of recruitment, inclusion, and exclusion criterion regarding participation. I also offered a brief discussion regarding the research instrument, as well as the data analysis procedures and the steps towards data processing.
CHAPTER 4

RESULTS

The purpose of this study was to investigate the effect of religious faith and sense of meaning as potential moderators in the relationship between acculturative stress, loneliness, and depressive symptoms in the international student (IS) population currently enrolled in higher educational institutions. Understanding the experiences of IS may result in better prepared mental health clinicians, counselor educators, and administrators who attend to this population. Moreover, the possible interactions between these variables may contribute to the body of literature, enhancing the knowledge and awareness regarding the sojourner students.

Data Screening

I collected a sample of 80 (N=80) students through Qualtrics panel. Among the participants, 43 were females, and 37 were males. I screened the data obtained from this survey for outliers and inconsistencies.

Participants Demographics

In reviewing the demographics of the participants who met the criteria (N=80) I determined 55% of the participants were females, while 45% were males. Students’ age ranged from 18 to 64 years old (M=1.55, SD=.89). Most of this sample identified their ethnic background as Asian (38.8%), followed by Caucasian (18.8%), Latino or Hispanic (17.5%), whereas those who were of African descent accounted for 16.3%, two or more ethnicities (1.3%), and unknown (7.5%).
The participants’ visa status varied, where the majority accounted for international student’s visa status (F-1) with 91.2%, foreign worker dependent (H4) accounted for 2.9%, temporary non-immigrant religious worker dependents amounted to 2.0%, and those who did not have a current visa accounted for 3.9%. Most students reported they were originally from Asia (36.3%), North America (18.8%), South America (13.8%), Africa (8.8%), Europe (7.5%), Central America (5%), Pacific Islands (2.5%), Australia (1.3%), and other (6.3%). Participants living in the United States for 2 to 4 years accounted for 36.3%, whereas 27.5% stated they have lived in the U.S. for 5 to 6 years, 21.3% attended American colleges for 0-1 years, 8.8% for 7 to 9 years and 6.3% have studied in the U.S. for 10 or more years.

Participants also reported their highest level of education, with 52.5% indicating to have a high school degree, 25% endorsed having a bachelor’s degree, and 15% a master’s degree. In the sample, 57.9% of the participants spoke English fluently, 12.4% spoke Spanish, 6.6% spoke Portuguese, 8.3% Mandarin, 5% spoke French, 2.5% Arabic, and 24.5% reported they spoke another unlisted language. The religious background of the participants reflected 94.9% were Catholic/Christian, 1.3% were Jewish, 1.3% Muslim, 1.3% Hindu, and 1.3% other. Participants reported their marital status, in which single accounted for 77.5% of the sample, married for 17.5%, separated or divorced for 3.8%, and widowed for 1.3% (See Table 4.1).

<p>| Table 4.1 |
| --- | --- |
| <strong>Demographical Characteristics</strong> |
| Student characteristics | Survey Response |
| Visa |
| International Student Visa | 91.2% |
| Foreign Worker Dependent | 2.9% |
| Temporary Nonimmigrant | 2.0% |
| Religious Worker Dependent |
| I do not have a visa that currently allows me to study | 3.9% |</p>
<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>63.7%</td>
</tr>
<tr>
<td>25-34</td>
<td>23.8%</td>
</tr>
<tr>
<td>35-44</td>
<td>8.8%</td>
</tr>
<tr>
<td>45-54</td>
<td>1.3%</td>
</tr>
<tr>
<td>55-64</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>45%</td>
</tr>
<tr>
<td>Female</td>
<td>55%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>18.8%</td>
</tr>
<tr>
<td>African</td>
<td>16.3%</td>
</tr>
<tr>
<td>Latino or Hispanic</td>
<td>17.5%</td>
</tr>
<tr>
<td>Asian</td>
<td>38.8%</td>
</tr>
<tr>
<td>Two or More</td>
<td>1.3%</td>
</tr>
<tr>
<td>Other/Unknown</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Home</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>18.8%</td>
</tr>
<tr>
<td>Central America</td>
<td>5%</td>
</tr>
<tr>
<td>South America</td>
<td>13.8%</td>
</tr>
<tr>
<td>Europe</td>
<td>7.5%</td>
</tr>
<tr>
<td>Africa</td>
<td>8.8%</td>
</tr>
<tr>
<td>Asia</td>
<td>36.3%</td>
</tr>
<tr>
<td>Australia</td>
<td>1.3%</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>2.5%</td>
</tr>
<tr>
<td>Other</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years in the U.S.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>21.3%</td>
</tr>
<tr>
<td>2-4</td>
<td>36.3%</td>
</tr>
<tr>
<td>5-6</td>
<td>27.5%</td>
</tr>
<tr>
<td>7-9</td>
<td>8.8%</td>
</tr>
<tr>
<td>10+</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest Level of Education</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School’s Degree</td>
<td>52.5%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>25%</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>15%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>77.5%</td>
</tr>
<tr>
<td>Married</td>
<td>17.5%</td>
</tr>
<tr>
<td>Separated/Divorced</td>
<td>3.8%</td>
</tr>
<tr>
<td>Widowed</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Religion</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catholicism/Christianity</td>
<td>94.9%</td>
</tr>
<tr>
<td>Judaism</td>
<td>1.3%</td>
</tr>
<tr>
<td>Islam</td>
<td>1.3%</td>
</tr>
<tr>
<td>Hinduism</td>
<td>1.3%</td>
</tr>
</tbody>
</table>
Other Languages

<table>
<thead>
<tr>
<th>Fluent Languages</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>57.9%</td>
</tr>
<tr>
<td>Spanish</td>
<td>12.4%</td>
</tr>
<tr>
<td>Portuguese</td>
<td>6.6%</td>
</tr>
<tr>
<td>French</td>
<td>5%</td>
</tr>
<tr>
<td>Mandarin</td>
<td>8.3%</td>
</tr>
<tr>
<td>Arabic</td>
<td>2.5%</td>
</tr>
<tr>
<td>Other</td>
<td>24.8%</td>
</tr>
</tbody>
</table>

Data Analysis

The first analysis performed in this study was Pearson’s r to confirm the correlation between the variables proposed in the mediation and moderation models (see Table 4.1). The hypothesized path for the mediation model discussed in hypothesis 1, asserted acculturative stress represented X (a path), loneliness as M (b path), and depressive symptoms were the outcome variable Y (c path). Hypothesis 2 included a moderation model that conjectured the relationship between acculturative stress (X) and depressive symptoms would be impacted by faith (W) and sense of meaning (Z). Finally, hypothesis 3 assumed that faith (W) and sense of meaning (Z) moderated the mediating relationship between acculturative stress (X), loneliness (M), and depressive symptom (Y). Due to the small sample size, the moderating variables, I tested sense of meaning and religious faith separately in hypothesis 3.

Table 4.2
Pearson’s Correlations, Means, and Standard Deviations

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Depressive Symptoms</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Religious Faith</td>
<td>-.262*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Sense of Meaning</td>
<td>-.460**</td>
<td>.558**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mediation Analysis

The first hypothesis theorized there would be a positive relationship between acculturative stress, loneliness, and depressive symptoms. Thus, loneliness would mediate the relationship between acculturative stress and depressive symptoms. A positive interaction was found between acculturative stress and loneliness (a path), where $b = .014$, $t(78)=5.771$, $p<.001$, $R^2= .299$ (see Table 4.3, Figure 4.1). This finding is congruent with previous studies exploring aspects of acculturative stress, such as social self-efficacy and social support (Maciejewski, Schreie et al., 2010; Prigerson, & Mazure, 2000; Wei, Russel, & Zakalik, 2005; Zhang & Goodson, 2011) as factors contributing to loneliness (Cacioppo et al., 2015; Hibhoya, Dong, & Branscum, 2017; Van Dulmen, & Goossens, 2013).

I also found a positive interaction between loneliness and depressive symptoms variables (b path), where $b=7.98$, $t(77)=4.09$, $p<.001$. This result reiterates the vast body of research, which infers loneliness predicts depressive symptoms (Nolen-Hoeksema & Ahrens, 2002; Cacioppo et al., 2006). Moreover, there was a positive interaction between acculturative stress and depressive symptoms (c path), as $b = .121$, $t(77)=2.39$, $p=.019$. This finding is consistent with previous empirical evidence obtained in literature, which explains why depressive symptoms in college students must be understood in light of their socio-cultural context, adding value to one’s cultural experiences (Blatt & Zuroff, 1992; Kirsh & Kuier, 2002; Zeligman, Varney, Gheesling,
& Placeres, 2018). Hence, the indirect effect of loneliness in the relationship between acculturative stress and depressive symptoms indicates mediation, where indirect=.113, SE=.05, 95% CI [.043,.179].

**Table 4.3**
*Model 4 Conditional Mediation Analysis*

<table>
<thead>
<tr>
<th>Source</th>
<th>b</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .547, ( R^2 = .299 ), ( MSE = .240 ), ( F (1, 78) = 33.309 ), ( p &lt; .001 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>.0141</td>
<td>.002</td>
<td>5.771</td>
<td>&lt; .001</td>
<td>.009</td>
<td>.019</td>
</tr>
<tr>
<td>Depressive Symptoms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .618, ( R^2 = .381 ), ( MSE = 71.162 ), ( F (2, 77) = 23.733 ), ( p &lt; .001 )</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>.121</td>
<td>.050</td>
<td>2.399</td>
<td>.019</td>
<td>.021</td>
<td>.221</td>
</tr>
<tr>
<td>Loneliness</td>
<td>7.982</td>
<td>1.950</td>
<td>4.094</td>
<td>&lt; .001</td>
<td>4.100</td>
<td>11.864</td>
</tr>
</tbody>
</table>
Moderation Analysis

The second hypothesis sought to investigate if religious faith and meaning making moderated the relationship between depressive symptoms and acculturative stress. As formulated previously, it was found a positive relationship between acculturative stress and depressive symptoms ($c_1$ path), where $b = .25$, $t(5) = 2.09$, $p < .039$. However, the moderation hypothesis was not supported, which indicated faith and sense of meaning did not affect the relationship between acculturative stress and depressive symptoms (See Table 4.4, Figure 4.2). The relationship between acculturative stress and faith ($c_4$ path) were not significant, with the interaction $F(1,74) = 0.1675$, $p = 0.6836$, $R^2 = 0.0015$. This result was unexpected, as the literature suggested religious faith provides a belief system that assists individuals in their comprehension of life's joyful and sorrowful moments, providing individuals with increased coping skills and a greater sense of social support (Pardini, Plane, Sheman, & Stump, 2000; Park, 2005).
Similarly, acculturative stress and sense of meaning did not impact the relationship with depressive symptoms, with interaction $F(1, 74) = 3.0830, p = 0.0833, R^2 = 0.0276$. This result was also unexpected, as research suggested a sense of meaning is a process signifying meaning following disruption due to stressful events that may trigger inquiries regarding life's purpose, suffering, and justice (Park, 2005b; Park, 2010). Furthermore, the relationship between acculturative stress, faith, and sense of meaning was not statistically significant, with interaction $= F(1, 74) = 0.0280, p = 0.2157, R^2 = 0.0280$. This result indicated faith and sense of meaning do not moderate the relationship between acculturative stress and depressive symptoms.

Table 4.4  
Model 2 Conditional Moderation Analysis

<table>
<thead>
<tr>
<th>Source</th>
<th>b</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive Symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R = .582, $R^2 = .338$, $MSE = 79.202$, $F (5, 74) = 7.566$, $p &lt; .001$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>.529</td>
<td>.253</td>
<td>2.095</td>
<td>.040</td>
<td>.026</td>
<td>1.033</td>
</tr>
<tr>
<td>Religious Faith</td>
<td>-.196</td>
<td>.468</td>
<td>-.419</td>
<td>.676</td>
<td>-1.129</td>
<td>.737</td>
</tr>
<tr>
<td>Acculturative Stress x Faith</td>
<td>.002</td>
<td>.005</td>
<td>.409</td>
<td>.683</td>
<td>-.009</td>
<td>.0129</td>
</tr>
<tr>
<td>Sense of Meaning</td>
<td>.576</td>
<td>.473</td>
<td>1.218</td>
<td>.227</td>
<td>-.366</td>
<td>1.517</td>
</tr>
<tr>
<td>Acculturative Stress x Sense of Meaning</td>
<td>-.009</td>
<td>.005</td>
<td>-1.756</td>
<td>.083</td>
<td>-.019</td>
<td>.001</td>
</tr>
</tbody>
</table>
Figure 4.2. *Model 2 Conditional Moderation Analysis*

**Moderated Mediation Analysis**

**Moderator: Meaning.** The third hypothesis hoped to reveal whether faith and meaning making significantly moderated the relationship between acculturative stress, loneliness, and depressive symptoms in the IS population. Due to the small sample size (N=80), I tested the two moderator variables separately. The first moderated mediation model investigated the relationship between acculturative stress and loneliness moderated by sense of meaning (path a$^3$) was not statistically significant, as $b=.0002$, $t(3)=.72$, $p=.47$, $R^2=.58$, indicating meaning making does not affect the relationship between acculturative stress and loneliness. This result is contrary to the hypothetical assumption concerning the stress experienced by international students in their acculturation would be positively affected by meaning making, reducing feelings of loneliness. I based the supposition on the empirical evidence that meaning making is a psychological variable, which promotes well-being and also serves as a protection against adverse outcomes such as loneliness (Morgan & Farsides, 2009).
In the second moderated mediation, I examined the relationship between acculturative stress and depressive symptoms when moderated by sense of meaning (c^3' path). Conversely, the interaction between acculturative stress and depressive symptoms was significantly affected by sense of meaning, \( b=-.009, t(4)=-2.4, p<.05 \). This finding is congruent with the evidence found in literature, which attests how essential sense of meaning is when one encounters highly stressful life experiences such as acculturation and depressive symptoms (Park, 2010). Nonetheless, these interactions do not indicate a moderated mediation, as the overall index=.001, SE=.001, 95%CI[-.0015,.005] (see Table 4.5, Figure 4.3).

**Moderator: Religious Faith.** The third hypothesis also investigated the moderating effect of religious faith in the relationship between acculturative stress, loneliness, and depressive symptoms. The interaction between acculturative stress and loneliness was not moderated by religious faith, where \( b=.0001, t(75)=.3150, p=.75, R^2=.4179 \). As explicated previously, I based this assumption on research studies revealing higher religious faith was associated with coping mechanisms in times of stressful situations and positively associated with mental health (Pardini, Plane, Sherman, & Stump, 2000). I also examined if religious faith moderated the relationship between acculturative stress and depressive symptoms. The results \( b=-.0045, t(75)=-1.04, p=.29, R^2=.4179 \), demonstrated religious faith does not impact the interaction between acculturative stress and depressive symptoms. This finding was also unexpected, as faith has been associated with higher levels of reappraisals that reframe stressful situations into positive experiences, assisting individuals in making reattributions of hurtful events in a more beneficial manner (Marcia, 2010). Therefore, faith does not moderate this interaction, as indirect=.0006, SE=.0020, 95%CI[-.0052,.0028] (See Table 4.6, Figure 4.4).
Table 4.5
*Model 8 Moderated Mediation Analysis*

<table>
<thead>
<tr>
<th>Source</th>
<th>b</th>
<th>s</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>.011</td>
<td>.008</td>
<td>1.350</td>
<td>.181</td>
<td>-.005</td>
<td>.028</td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>.013</td>
<td>.025</td>
<td>-5.32</td>
<td>.597</td>
<td>-.063</td>
<td>.037</td>
</tr>
<tr>
<td>Religious Faith</td>
<td>.0001</td>
<td>.0003</td>
<td>.315</td>
<td>.754</td>
<td>-.0004</td>
<td>.001</td>
</tr>
<tr>
<td>Faith</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive Symptoms</td>
<td>.255</td>
<td>.143</td>
<td>1.790</td>
<td>.077</td>
<td>-.029</td>
<td>.539</td>
</tr>
<tr>
<td>Loneliness</td>
<td>7.717</td>
<td>1.926</td>
<td>4.008</td>
<td>.0001</td>
<td>3.882</td>
<td>11.553</td>
</tr>
<tr>
<td>Religious Faith</td>
<td>.194</td>
<td>.420</td>
<td>.461</td>
<td>.646</td>
<td>-.643</td>
<td>1.031</td>
</tr>
<tr>
<td>Acculturative Stress x</td>
<td>-.005</td>
<td>.004</td>
<td>-1.047</td>
<td>.298</td>
<td>-.013</td>
<td>.004</td>
</tr>
</tbody>
</table>

Table 4.6
*Model 8 Moderated Mediation Analysis*

<table>
<thead>
<tr>
<th>Source</th>
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<th>se.</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loneliness</td>
<td>.003</td>
<td>.012</td>
<td>.228</td>
<td>.820</td>
<td>-.021</td>
<td>.027</td>
</tr>
<tr>
<td>Acculturative Stress</td>
<td>-.030</td>
<td>.025</td>
<td>-1.218</td>
<td>.227</td>
<td>-.079</td>
<td>.019</td>
</tr>
<tr>
<td>Sense of Meaning</td>
<td>.0002</td>
<td>.0002</td>
<td>.719</td>
<td>.474</td>
<td>-.0003</td>
<td>.001</td>
</tr>
<tr>
<td>Meaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive Symptoms</td>
<td>.670</td>
<td>.449</td>
<td>65.024</td>
<td>15.304</td>
<td>15.304</td>
<td>p &lt; .001</td>
</tr>
</tbody>
</table>
Acculturative Stress  |  .555  |  .201  |  2.758  |  .007  |  .154  |  .957  
Loneliness          |  7.533 |  1.922 |  3.918  |  .002  |  3.703 |  11.362 
Meaning            |  .768  |  .414  |  1.853  |  .068  |  -.058 |  1.593  
Acculturative Stress x | -0.010 |  .004  | -2.407  |  .019  |  -.017 |  -.002  

Meaning

Figure 4.3 Model 8 Moderated Mediation Analysis
Chapter Summary

I used a sample of 80 students enrolled in a southern higher education institution to conduct this study. Using a mediation analysis provided an answer for the first research question: Does loneliness mediate the relationship between acculturative stress and depressive symptoms? This first hypothesis was supported, as the loneliness had a positive indirect effect on the interaction between acculturative stress and depressive symptoms.

To investigate the second question, I incorporated a moderation analysis to answer: Do religious faith and meaning making moderate the relationship between acculturative stress and depressive symptoms in international students? This relationship did not support the hypothesis that religious faith and sense of meaning affect the relationship between acculturative stress and depressive symptoms.
Finally, I conducted two moderated mediation models to examine if religious faith and sense of meaning moderated the mediated relationship between acculturative stress, loneliness, and depression. The result did not support the assumption of a moderated mediation in either of the models. Yet, the overall results provide valuable information I discuss in detail in Chapter 5.
CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I grounded this study on previous research linking acculturative stress to depressive symptoms and loneliness in the international students' (IS) population who attend American higher education institutions (Berry, 2006; Berry, Kim, Minde, & Mok, 1987; Chavajay & Skowronek, 2008; Constantine, Okazaki, & Utsey, 2004; Yeh & Inose, 2003; Zhang & Jung, 2017). The findings add to the international counseling research, as well as the growing body of research on ISs and mental health. Both areas under-investigated present as critical to the counseling profession.

Wu and Wak (2012) defined acculturation stress as the inability to acclimate to a new host culture. Some of the factors playing into the dynamics of acculturative stress include language barriers (Poyrazli et al., 2002; Yeh & Inose, 2003; Misra & Castillo, 2004; Duru & Poyrazli, 2007), social self-efficacy (Maciejewski, Prigerson, & Mazure, 2000; Wei, Russel, & Zakalik, 2005; Pettigrew & Tropp, 2006; Zhang & Goodson, 2011), and social support (Ang, 2016; Schreie et al., 2010; Zhang & Goodson, 2011; Bhochhibhoya, Dong, & Branscum, 2017; Thompson, 2018). Furthermore, empirical evidence points to loneliness and depression as one of the prominent mental health issues international students face when pursuing their college degrees (Bek, 2017; Sawir et al., 2008; Wei et al., 2008).

The previous chapter also included the results of the data analysis demonstrating the effect of sense of meaning and religious faith when moderating the relationship between acculturative stress, loneliness, and depressive symptoms. This chapter provides implications for clinicians and counselor educators, discussion for each of the research questions, and suggestions for future research.
Summary of Findings and Implications

I recruited participants for this research study through Qualtrics panel in April 2020. After screening, a sample of 80 students completed the survey, which included five different scales. Fifty-five percent females and 45% males composed the study population. All participants were currently enrolled in a higher education program but varied in the type of visa (91.2%). A diverse sample population represented several different countries, mostly from Asia (36.3%) and North America (18.8%). Students’ age ranged from 18 to 64 years old (M=1.55, SD=.89). Participants' visa status included international student visa (F-1), foreign worker dependent (H4), and temporary non-immigrant religious work dependent (R2). Students' nationality varied, where most of the participants reported being from Asia (36.3%), followed by North America (18.8%), South America (13.8%), Africa (8.8%), Europe (7.5%), Central America (5%), Pacific Islands (2.5%), Australia (1.3%), and other (6.3%).

Students also varied in their ethnicity, which is consistent with the demographics cited above. It is important to note race and ethnicity differed. Although ethnicity may include race, it also encompasses shared group traditions, historical or familial relations, as well as culture, language, and kinship (Delgado-Romero, Galván, Maschino, & Rowland, 2005). Moreover, the amount of time students had been in the United States also varied from 1 to 10 or more years. I included three research questions in this study and discuss them below.

Research Question 1

The first research question sought to determine whether loneliness mediated the relationship between acculturative stress and depressive symptoms. This hypothesis was supported, as I found a positive interaction between acculturative stress and loneliness, \( b = .014, t(78)=5.771, p<.001, R^2= .299 \). Moreover, loneliness predicted depressive symptoms, with
$b=7.98 \ t(77)=4.09, \ p<.001, \text{ and } R^2=.299$. The indirect effect indicated a mediation between the variables, where indirect=.113, SE=.05, 95% CI[.043,.179].

While researchers investigated these variables separately in previous studies, only minimal exploration regarding a mediation model exists (Janta, Lugosi, & Brown, 2014; Sapranaviciute, Padaiga, & Pauzienė, 2013; Sümer, Poyrazli, & Grahame, 2008; Tsai, Wang, & Wei, 2017). These findings add to the body of literature and explicate the interrelationship between these variables, providing a better understanding of the challenges ISs face when working to achieve a degree in an American higher education institution. Moreover, comprehending this connection may assist clinicians, and counselor educators in integrating specific techniques potentially helpful to international students, which I discuss in depth below.

**Research Question 2**

The second research question asked if religious faith and meaning making moderate the relationship between acculturative stress and depressive symptoms. This hypothesis was not supported, as religious faith and sense of meaning did not produce a significant interaction between the independent and dependent variables. This result was unexpected, as research shows how individuals often use religious and spiritual resources to attribute meaning to adverse circumstances (Yanez et al., 2009; Park, 2005a). However, since spirituality and religious faith are complex in nature, it is possible stressful situations might trigger feelings of disappointment and anger towards God (Exline & Rose, 2005).

SARS-CoV-2 global pandemic may have affected individuals who participated in the research, which could enhance acculturative stress students experience. In turn, this may have influenced students’ perception of religious faith and coping skills, as faith often serves as a coping mechanism (Pardini, Plane, Sheman, & Stump, 2000; Park, 2005). Furthermore, religious
coping often involves social and cognitive activities, such as church gathering and prayer groups for community support (Bryant-Davis & Wong, 2013). The need for social distancing is another consideration when considering recent changes in their thoughts and behaviors. As explicated previously, the lack of social support aggravates acculturative stress, feelings of loneliness, and depressive symptoms (Ang, 2016; O'Reilly, Ryan, & Hickey, 2010). Those required to quarantine might experience an exacerbation of these systems. Likewise, concerns over the COVID-19 pandemic may also influence the participants’ ability to restore global meaning based on disruption by unpleasant events, triggering questions about suffering and life’s purpose (Park, 2005b). Nonetheless, both of these results are valuable, as they contribute to the growing body of research in several domains.

**Research Question 3**

The third question sought to discover if faith and meaning making moderated the relationship between acculturative stress and depressive symptoms when mediated by loneliness in international students. Due to the small sample size (N=80), I tested the two moderating variables independently. Sense of meaning did not moderate the mediating relationship between acculturative stress and loneliness. The assumption for this interaction was based on empirical findings in the literature, which indicated that sense of meaning aligns with one’s expectations of relationships, allowing individuals to make sense of them (Morgan & Farsides, 2009; Proulx & Michael, 2012; Jung, 2015). Through meaning making, individuals also develop re-attributions to their global meaning allowing them to reframe negative experiences, including those pertaining to interpersonal relationships (To, 2016). However, achieving the possible re-attribution of meaning occurs when students develop new skills (language fluency) and relationships in their acculturation process, directly affecting their social self-efficacy while
increasing their sense of loneliness (Skuza, 2007). Participants of this study may still be in the early stages of acculturation (most of this sample has been in the U.S. for 2-4 years), lacking a sense of community, and still struggling to become fluent in the English language.

Meaning making, however, moderated the relationship between acculturative stress and depressive symptoms. This finding is congruent with previous research reviews (Zika & Chamberlain, 1992), where meaning in life is a consistent predictor of positive affect in college students (Pan et al., 2008). Furthermore, researchers found a sense of meaning as a protective factor in the acculturation process since its components encompass leisure activities, personal growth, and meeting basic needs (Pan, 2011). This result contributes to the literature, documenting how a sense of meaning crucially reframes stressful life situations, including acculturative experiences and depression (Park, 2010). Nevertheless, the overall moderated mediation model did not find significant results, with index=.001, SE=.001, 95%CI[-.0015,.005].

The following moderated mediation model investigated if religious faith moderated the mediating relationship between acculturative stress, loneliness, and depressive symptoms. Researchers observed how religious faith did not affect the mediating interaction between acculturative stress and loneliness. This assumption, based on the role of religious faith in mental health found in literature, provided a sense of belonging and community (Mitha & Adatia, 2016; Vis & Boynton, 2008). Moreover, after facing distressing situations, individuals engage in efforts to develop their own coping strategies, which may result in positive outcomes, such as social support and enhanced self-esteem (Kim & Kim, 2013). As explained before, participants may be perceiving their acculturation as a struggle, augmenting their acculturative stress. Consecutively, students reported an inability to attain healthy coping skills utilizing faith components.
Correspondingly, faith did not moderate the relationship between acculturative stress and depressive symptoms. It is probable the cognitive attributes toward acculturation, such as the degree of acceptance of cultural diversity, may affect this result (Navara & James, 2005). It is also possible the participants’ religious orientation and cognitive rigidity influenced their view of stress hindering their abilities to cope with acculturative stress and depressive symptoms (Navarra & James, 2005). Albeit unexpected, the results found in this study still interposes a valuable reflection on the intersectionality of the variables investigated in the lives of ISs while attending American colleges and universities. I discuss the implications for the field and the study limitations below.

**Limitations**

There are several limitations to this study. The first limitation is the assumption all items of the instruments measure the dimensions they propose to evaluate. Although supported in the literature for the validity and reliability of these instruments, their effective reliably remains an assumption (Akhtar & Kröner-herwig, 2015; BDI-II; Beck et al., 2011; Nguyen & Meirmanov, 2019; Russell et al., 1980; Schmidt & Sermat, 1983).

A second limitation rests in the sample size of participants, as it restricts the study's statistical power. Numerous reasons may account for the low percentage of participants, one of which is the global pandemic outbreak. Many international students had to either relocate back to their countries of origin or find new living and academic arrangements. Contrariwise, students experienced impediments when visiting their families during summer, because of the closure of several airports and borders. The new reality followed the COVID-19 outbreak may also have hindered students from becoming acquainted with the online survey link, thus disrupting their ability to participate.
Moreover, most participants grew up in collectivistic cultures and more likely to feel lonely than those raised in individualistic cultures (Lykes & Kemmelmeier, 2014). Exacerbated by social distancing, these feelings of loneliness, coupled with transitioning residential schooling to an e-learning environment, disrupted their ability to maintain relationships (Yum, 2003). Additionally, I collected the sample amidst the end of the semester, when students were preoccupied with final exams and papers. These factors, accompanied by adapting to online learning and academic stress, may have also contributed to a greater sense of loneliness and depressive symptoms (Stoliker & Lafreniere, 2015). Furthermore, the sense of helplessness and fear during the CoVid-19 pandemic may have also affected the students’ ability to maintain a resilient posture disrupting familiar coping skills, such as faith (Kachanoff, Bigman, Kapsaskis, & Gray, 2020).

The Qualtrics panel used to recruit participants for this study is another possible limitation. I assumed using the survey tool would recruit a diverse sample pool. There is some doubt regarding the diversity in this population, as most participants reported being Christians (Catholics and Protestants). Because I proposed to investigate only one type of faith, it naturally excluded a more in-depth understanding of how other types of faiths may affect students’ experience in higher education when managing acculturative stress, loneliness, and depression. Moreover, I only explored one type of faith, which potentially steered the results. I restricted the sampling pool to one institution, potentially limiting the number of participants. The small sample size constrained the effect size and research power. Finally, this research used a web-based survey panel to gather data, assuming the participants had access to computers and the internet, excluding those who do not have access to computers or the internet.
Implication for Counselors

Several areas in this study have clinical implications for the mental health field. Firstly, as multicultural competence grows in the counseling field and becomes central to ethical practice, clinicians must understand the unique cultural issues to the IS population (Yoon & Portman, 2004). Using the outcomes of the study highlights the importance of exploring the acculturation process along with associated factors, as they may influence the ISs’ well-being while also representing a source of anxiety to these students. It is also crucial for counselors to recognize the negative effects of acculturative stress may have ISs’ mental health and the possible ramifications to their academic achievement (Berry, Kim, Minde, & Mok, 1987; Berry, 2006; Duru & Poyrazli, 2007; Yeh & Inose, 2003).

Secondly, I also investigated loneliness and depression in connection to the stress originating from acculturation. Counselors must cognize how the interplay between these variables influence students’ self-definition and interpersonal relatedness. These two areas remain essential to self-efficacy and self-concept, where an individual develops a coherent, realistic, and differentiated sense of self while establishing supportive and protective relationships (Luyten & Blatt, 2016). Furthermore, these two themes reinforce one’s feelings of self-worth, which connect to higher levels of self-esteem and inversely relate to depressive symptoms (Kuperminc, Blatt, Shahar, Henrich, & Leadbeater, 2004; Orth, Robins, & Roberts, 2008).

Thirdly, seeking appropriate techniques to help international students develop their self-confidence in pursuing and building new relationships is crucial in their personal development in a new culture. Therefore, counselors should be aware of the level of social interaction, self-
efficacy, and support international students can achieve while acculturating to their new academic and campus life.

Additionally, many international college students who experience acculturative stress do not seek professional help due to language barriers, cultural differences, cultural mistrust, opting to utilize indigenous coping methods (Constantine, Okazaki, & Utsey, 2004; Sue & Sue, 2019). Counselors must continue to develop their cultural competencies to provide an effective treatment that incorporates culturally appropriate strategies. Tailoring treatments to this population’s needs will help students not only diminish the effects of acculturative stress but also thrive in their new environment (Popadiuk & Arthur, 2004). Moreover, counselors should consider techniques to help international students face the consequences of the COVID-19 pandemic in their academic and personal lives. For instance, ISs with academic difficulties, experience a possible delay in their graduation plans. Furthermore, IS may have family members infected with the novel coronavirus in their country of origin. These situations may heighten acculturative stress, feelings of loneliness, and depressive symptoms.

Employing theoretical frameworks that assist in restoring global meaning may be significant in helping students process their acculturative stress (Arthur & McMahon, 2005). For example, systems theory may be more appropriate, as many international students come from collectivistic cultures (Arthur & McMahon, 2005). Moreover, assisting students in processing their perceptions of academic struggles through career counseling may also prove beneficial in helping students balance their academic expectations, while also referring them to departments to support them in developing their scholarly voice (Arthur & Popadiuk, 2010).
Implications for Counselor Educators and Supervisors

With the rise of globalization, international students will likely continue to pursue their degrees in American schools (Shields, 2013). Therefore, counselor educators must become knowledgeable and acquire the necessary skills to work with this population. I identify a number of implications for counselor educators and supervisors (CES) throughout this study. Primarily, CACREP standards require counselor educators and supervisors to become well-versed in the multifaceted cultural competencies (CACREP, 2016).

Cultural competency ensures the preparation of professors and supervisors to walk with ISs in the challenges of higher education and the victories alike. Sue & Sue (2019) asserted how clinicians and CES should develop three cultural competencies, awareness, knowledge, and skills. Competent counselors actively engage in the process of becoming self-aware of their own assumptions regarding biases, values, and human behavior. This generates knowledge and insight into the counselors’ worldview, prompting them to accept the different perspectives of how the world functions. Through understanding and accepting cultural differences, counselors integrate culturally appropriate and relevant intervention strategies when working with diverse clients.

Furthermore, although some of the acculturative stress IS experience is similar to the American minorities, there are distinct concerns unique to this population. As previously explicated, language barriers affect ISs’ self-efficacy, which directly influences their academic success. Moreover, ISs related their lack of familiarity with the new academic culture (Poyrazli, 2001; Poyrazli et al., 2002).

Advocating for ISs also entails incorporating information regarding a specific group in multicultural counseling lectures, as many textbook materials tend to cover American minorities,
and do not provide enough information regarding IS. Professors educating future counselors to become culturally competent, stimulate mental health clinicians to incorporate skills, techniques, and theories beneficial to ISs (Ng, 2006). Consequently, it is crucial for professors to understand the implications of acculturations for IS. Hence, counselor educators must become conversant with their university systems and departments who provide IS with the needed help and support. For instance, informing international students of the writing center may help them understand academic expectations. Moreover, CES could provide mentoring to international students, which provides psychological support, career guidance, and role modeling culminating in better retention rates (Ku, Lahman, Yeh, & Cheng, 2008).

**Recommendations for Future Research**

The findings in this study are multi-layered, involving implications for counselors, counselor educators, and supervisors. Future researchers should continue to explore the ramifications of acculturative stress in ISs’ mental health and well-being. Though I analyzed loneliness and depressive symptoms, it would be interesting to investigate the incidences of anxiety in ISs, as it has a potential relationship with acculturative stress (Fritz, Chin, & DeMarinis, 2008; Sümer, Poyrazli, & Grahame, 2008).

Because I limited my target population to one type of religious belief, future researchers should broaden the investigation of other faiths and spiritual practices, demonstrating respect for the diversity ISs represent. This could also provide further insight into religious practices that provide coping skills in adversity, enhancing the plurality of treatment integration when counseling a diverse population. Further studies, such as qualitative ones, could also focus solely on the integration of non-western methods of healing in treatment plans as well as the utilization of faith practices as part of therapy (Bojuwoye & Sodi, 2010; Gingrich & Worthington Jr, 2007).
Future researchers should replicate the moderation between acculturative stress, sense of meaning, and depression with a larger sample size. As I noted significant moderation, a larger sample would afford a higher statistical power, contributing to the literature findings. In turn, new studies on the topic would also encourage the exploration of new techniques facilitating clients’ discovery of meaning in stressful times.

Finally, another focal point of future studies would be addressing the acculturative stress expatriates face when entering a new culture or re-entering their place of origin (Thornberry, 2015). Expatriates likely face what is commonly known as "reverse cultural shock" (RCS) (Gaw, 1995; Presbitero, 2016). Likewise, third culture kids (TCKs), such as missionary kids (MKs) or children of military families, who often live in the margins of two cultures also experience acculturative stress potentially contributing to developing mental health issues (Peterson & Plamondon, 2009; Sue & Sue, 2019). As many TCKs tend to return to the United States to attend American colleges and universities, future studies regarding sense of meaning as a moderator would provide more tools to serve this population. Moreover, national students who may leave the country to go on youth expeditions become prone to experiencing RCS (Allison, Davis-Berman, & Berman, 2012). However, their level of distress may be related to the amount of time spent overseas, the intensity of the experiences lived abroad, and the students’ ability to convey those experiences in their communication (Carne, 2011).

**Chapter Summary**

This chapter reviewed a summary of the findings of chapter four, clinical implications for counselors, educational implications for counselor educators and supervisors, as well as research limitations, and recommendations for future research. There were three main findings for the research questions. First, I discovered mediation between acculturative stress, loneliness, and
depressive symptoms. Second, religious faith and sense of meaning combined do not moderate the relationship between acculturative stress and depression. Third, I did not find a moderated mediation between sense of meaning, religious faith, acculturative stress, loneliness, and depressive symptoms. Although not significant in the moderated mediation, sense of meaning did moderate the interaction between acculturative stress and depression. Foci for future research would include replicating the findings with a larger sample size, investigating the interplay between sense of meaning and acculturative stress, broadening the scope of religious belief systems representative of the diversity of ISs, and including TCKs when investigating the variables presented in this research.

Summary of Study

An investigation into the literature concerning acculturative stress, loneliness, and depressive symptoms demonstrated a lack of connection between these three variables. However, researchers addressed depression among national college students. Additionally, there remains a dearth of literature focused on sense of meaning and religious faith in combination, and how it provides a protective layer against the stress students experience in their acculturation process. I found a correlation between these variables, where loneliness mediated the interaction between acculturative stress and depressive symptoms. However, the moderation analysis proposed in this research did not find any significant interaction, nor the moderated mediation.

I recruited participants through the Qualtrics panel, resulting in 126 potential participants, however, 80 students met the eligibility criteria. In applying a multiple linear regression analysis of Hayes’ model 2, 4, and 8, I investigated the interaction between the variables cited above. The empirical evidence contributes to the body of literature, along with providing information for mental health clinicians, counselor educators, and supervisors. Moreover, this study sheds light
on a population often overlooked in the higher education system but represents the diversity of programs.
REFERENCES


Smithsonian Institute (n.d). Retrieved from


APPENDIX A

Dear International Student,

My name is Heyde Luz. I am a doctoral student at Liberty University's Counselor Education program. I am kindly inviting you to participate in a research study I am conducting titled: "Acculturative Stress, Loneliness, and Depressive Symptoms in International Students: a moderation analysis of faith and sense of meaning." This study intends to investigate the impact of faith and sense of meaning in the acculturative stress, loneliness, and depressive symptoms experienced by international students.

This study involves completing one basic demographic questionnaire and five survey scales: The Acculturative Stress Scale for International Student, Revised UCLA Loneliness Scale, The Beck Depression Inventory-II, The Meaning in Life Questionnaire, and The Santa Clara Strength of Religious Faith Questionnaire.

Your participation is voluntary, and you may withdraw from the study at any time. This research is completely anonymous. Therefore, you will not be required to provide your name or other identifying information.

If you would like to participate in the study, please read the Informed Consent letter below and begin the study by clicking on the survey link.

At the end of the survey, you will be invited to enter a raffle for two gift cards to general stores and one iPad mini.

Your participation in this research is much appreciated, as it will provide vital information about International Students' mental health during their pursuit of a higher educational degree.
APPENDIX B

Demographic Questions

1) How old are you?
   a) 18-24
   b) 25-34
   c) 35-44
   d) 45-54
   e) 55-64
   f) 65 or older

2) What is your gender?
   a) Female
   b) Male

3) What is your age?
   a) 18-24
   b) 25-30
   c) 35-45
   d) 45-55
   e) 55 or older

4) What is your current visa?
   a) International Student Visa (F-1)
   b) Foreign Worker Dependent (H4)
   c) Temporary nonimmigrant Religious Worker Dependent (R2)
   d) I do not have a visa that allows me to study

5) What is your ethnicity?
   a) Caucasian
   b) African
   c) Latino or Hispanic
   d) Asian
   e) Two or More
   f) Other/Unknown
   g) Prefer not to say

6) Where is your home located?
a) Central America
b) South America
c) Europe
d) Africa
e) Asia
f) Australia
g) Pacific Islands
h) Other: ______

7) How long have you been in the United States?
   a) 0-1 year
   b) 2-4
   c) 4-6
   d) 7-9
   e) 10 or more

8) What is the highest degree or level of education you have completed?
   a) Bachelor's Degree
   b) Master's Degree
   c) Ph.D. or higher
   d) Trade School

9) What is your marital status?
   a) Single
   b) Married
   c) Separated/ Divorced
   d) Widowed

10) What is your religion?
    a) Catholicism/Christianity
    b) Judaism
    c) Islam
    d) Buddhism
    e) Hinduism
    f) Other: ______

11) Which languages do you speak fluently?
    a) English
    b) Spanish
    c) Portuguese
    d) French
e) Mandarin
f) Arabic
g) Other
APPENDIX C

Consent

Title of the Project: The Impact of Religious Faith and Sense of Meaning in moderating Acculturative Stress, Loneliness, and Depressive Symptoms in International Students
Principal Investigator: Heyde Luz, Doctoral Student, Liberty University

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 of age or older, currently enrolled in an online or residential higher education program, on a temporary international student visa, H4 visa (H1B dependent), or R2 visa (R1 dependent), and currently pursuing an undergraduate or graduate degree. Taking part in this research project is voluntary.

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

What is the study about and why is it being done?
The purpose of the study is to investigate how sense of meaning and faith may impact the relationship between acculturative stress, loneliness, and depressive symptoms within the international student population. Through this research, I hope to understand international students’ mental health while they pursue an undergraduate or graduate degree in American colleges and universities. Moreover, the data collected in this study will add to the body of literature and help mental health clinicians better serve this population.

What will happen if you take part in this study?
If you agree to be in this study, I would ask you to do the following things:
1. Click on the link to go to the survey
2. Begin demographic questionnaire
3. Answer the survey questions

How could you or others benefit from this study?
Participants should not expect to receive a direct benefit from taking part in this study.

What risks might you experience from being in this study?
The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?
Published reports will not include any information that will make it possible to identify a subject. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.
- Participant responses will be anonymous. Participant responses will be kept confidential through the use of [pseudonyms/codes]
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

## How will you be compensated for being part of the study?
Participants will be able to join a raffle to win two $50 Target gift card, one $50 Amazon gift card, and one $50 Walmart card. Email addresses will be requested for compensation purposes; however, they will be pulled and separated from your responses to maintain your anonymity.

## Is study participation voluntary?
Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. 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.

## What should you do if you decide to withdraw from the study?
If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

## Whom do you contact if you have questions or concerns about the study?
The researcher conducting this study is Heyde Luz. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at hmarquesluz@liberty.edu. You may also contact the researcher’s faculty sponsor, John Thomas, at jcthomas2@liberty.edu.

## Whom do you contact if you have questions about your rights as a research participant?
If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu

## Your Consent
Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher/study team using the information provided above.
APPENDIX D

Screening Questions

1) Are you 18 years of age or older?
   g) Yes
   h) No

2) Are currently enrolled in a higher education program?
   a) Yes
   b) No

3) What is your current visa?
   e) International Student Visa (F-1)
   f) Foreign Worker Dependent (H4)
   g) Temporary nonimmigrant Religious Worker Dependent (R2)
   h) I do not have a visa that currently allows me to study

4) Do you have an ongoing mental disorder?
   a) Yes
   b) No

5) Are you currently taking medication to treat a mental disorder?
   f) Yes
   g) No

6) Do you have a medical diagnosis, such as thyroid problems, that may lead to depression or depressive symptoms?
   a) Yes
   b) No

7) Are concurrently struggling with suicidal ideation
   a) Yes
   b) No