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Mun Ying Kennis Cheng
An Exploration of the Relationship
Between Religion and Spirituality
and Acculturative Stress among
International Students in the
Western Massachusetts

ABSTRACT

This quantitative study examined the relationship between religion and spirituality and acculturative stress among international students (n=38) in two colleges in Western Massachusetts. This study utilized three well-validated tools to measure acculturative stress for international students, religion and spirituality, and intrinsic religious motivation to test the hypothesis that religion and spirituality can help international students lessen their acculturative stress. The findings suggested no significant correlation between the variables, possibly due to a small sample size. The results showed that over 55% of students had some type of religious affiliation, and over 63% indicated they either attended churches or practiced meditation and prayers. The results also indicated a high level of acculturative stress from the participants in the study, suggesting over 45% of the students may be in need of counseling and psychological intervention. This study makes recommendations for attending to the mental health needs and acculturative stress of international students.

**AN EXPLORATION OF THE RELATIONSHIP BETWEEN RELIGION AND
SPIRITUALITY AND ACCULTURATIVE STRESS AMONG INTERNATIONAL
STUDENTS IN THE WESTERN MASSACHUSETTS**

A project based upon an independent investigation,
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work.

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2017

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CHAPTER I

Introduction

The purpose of this study is to examine if religiosity and spirituality can lessen the acculturative stress of international students, while they are obtaining their higher education in the U.S. This quantitative study evaluates the relationship of religious involvement and/or spiritual practices and acculturative stress among international students studying in Western Massachusetts.

Many researchers have studied the topic of acculturative stress among international students (Akhtar & Kroner-Herwig, 2015; Bai, 2016; Ra & Trusty, 2015; Sullivan & KashubeckWest, 2015). Studies have focused on socio-demographic variables and other variables, such as coping styles or strategies, perceived support, social support, and language proficiency. This literature has indicated different levels of acculturative stress in relation to the different variables studied. Religion and spirituality are socio-cultural variables that seem to be neglected and overlooked by current scholars. Therefore, this study will be significant in that it examines data regarding this topic area. The purpose of collecting this data is to help higher educational institutions facilitate the transition of international students while they are studying in the U.S.

and to provide them with the appropriate services to support the students' well-being.

Literature Overview

Acculturative stress. International students are at high risk of acculturative stress due to different challenges in adjusting to living and learning in a new environment. Some possible

contributing factors of stress are lack of language proficiency, lack of social support, high academic expectation, guilty feelings of being the financial burden to the family at home, home sickness, and feelings of isolation derived from cultural differences in dietary or festivity celebrations.

According to Bai (2016), scholars have been paying more attention to acculturation among immigrants and refugees, rather than international students. However, international students are actually more vulnerable to acculturative stress. Bai (2016) investigated the predictor of acculturative stress among international students in a midsize U.S. Midwestern university. In her study, 186 international students participated in the survey, and 22.4% of the student participants exceeded the normal stress level that indicated the need for counseling and psychological intervention.

Religion. According to Koenig, King, and Carson (2012), the history of religion in health care can be traced back to prehistoric times before 3500BC when priests were involved in practice healing. Koenig et al. (2012) indicated that the resources for coping with stress include good medical and psychiatric care, adequate financial resources, support from family and friends, exercise, volunteering, and use of religion. They defined religion as "...beliefs, cognitions, and behaviors that, when operating together, can often help people face and overcome the most difficult of situations" (p. 81). Koenig et al. further indicated that religion enables people to cope with stress by providing a positive worldview, increasing empowerment and control, providing role models for suffering and answers to ultimate questions, and providing social support and durability. This study will consider religion as one of the variables influencing acculturation among international students.

Methodology Overview

This quantitative study employed online survey methods to examine the question: *Is there a relationship between acculturative stress and religion and spirituality among international students studying in Western Massachusetts?* For this research study, I hypothesize that the higher the level of religious involvement, the lower the level of acculturative stress.

Two survey tools were used for this study. One of them was the survey tool established by Sheridan, Burley, Hendricks, and Rose (2014) to measure religious practice and spirituality. The authors define religious practice as “public, communal, organized activities (for examples church attendance) reflecting particular beliefs and practices” (p. 7). Spiritual refers to “private, personal activities (for examples prayer, meditation and journaling) that may or may not be expressed through religious forms or institutions” (p. 7). The last question in this survey tool included the Intrinsic Religious Motivation Scale by Hoge (1972), which is a 10-question scale that measures the motivation behind religious activity.

The Acculturative Stress Scale for International Students (ASSIS), developed by Sandhu and Asrabadi (1994), was used to assess the acculturative stress of the participants. The authors define acculturative stress as the stress derived from cross-cultural adjustment of personal, social, and environmental changes when international students arrive in a foreign land. The stress is caused by cultural shock experiences.

In the current study, international students were defined as foreign students with F1 visas (self-support students) and J1 visas (exchange students). They were recruited from international student groups, including both undergraduates and graduate students with F1 and J1 visa status, currently enrolled within the Five College consortium network in Western Massachusetts.

Further details about the methods of this study are discussed in Chapter III.

Interest in this Topic and Importance for Social Work

There are three reasons that I am particularly interested in this research topic. As a student of color at Smith College School for Social Work, I personally experienced cultural shock and acculturative stress during my first year. Even though I had lived in this country for over 10 years, I still felt left out in this White dominant institution. As a therapist in training at the Smith College Counseling Services, I also thought of the international students and their struggles with cultural adjustment and academic stress when they first arrived in this foreign country. Lastly, as a Chinese Christian, I personally acknowledged that emotional and prayer supports from my pastor and my own religious involvement with attending Sunday services, Bible study, and prayer support group have been my source of strength in coping with various stress accumulating from attending this intensive Master of Social Work program, parenting three school age children, and being a spouse at the same time.

During my first year placement at an elementary school at the Amherst Regional School District, I had the opportunity to work with two sixth graders who were from Saudi Arabia and Pakistan respectively. Both of them immigrated to the U.S. when they were around 6 years old. They told me that their families are Muslims and they had to strictly follow their religious rituals, including reading and following the teaching of the Koran and participating in obligatory fasting. They told me that they were not able to share these religious values with their schoolmates, as others might not be able to respect the implications and values of Islam in their lives.

Through both personal experiences and clinical encounters, I realize that it is vital for professionals working in the counseling field to assess and understand the religious and spiritual values in clients' lives and the impact of religion and spirituality on psychological development.

The value of this research study for social work is that it examines the importance of religion and spirituality as a means helping people cope, and it has implications in work with international students in particular.

Conclusion

This quantitative study explores the relationship between acculturative stress and religion and spirituality among international students. The research analyzes results from a survey of 38 students from Mount Holyoke College and Smith College through online questionnaires. This study explored the hypothesis that acculturative stress, as measured by the ASSIS, will vary depending on the religious involvement and spirituality of the students, as measured by Sheridan et al. (2014) and Hoge (1972).

This thesis is organized in five chapters. Chapter II reviews the pertinent literature regarding acculturative stress among international students and the important implication of religion and spirituality in mental health practice. The review will provide further discussion about the significance of this thesis project. Chapter III describes the methods used to test this study's hypotheses. Chapter IV presents the findings based on the data collected from the survey questionnaires. Finally, Chapter V will discuss the limitations of this study's findings, its implications for clinical practices within college counseling and students' services, and suggestions for future research.

CHAPTER II

Literature Review

The purpose of this study is to examine if religiosity and spirituality can help international students cope with acculturative stress while they are obtaining their higher education in the U.S. This chapter consists of a review of various studies that discussed the issues of acculturative stress and the prevalence and impact of religion and spirituality as coping mechanisms for people who face the challenges of acculturation. The first section provides information about demographics and historical background regarding international students in the U.S. The second section consists of empirical literature on acculturative stress, which discusses the definition of acculturation and acculturative stress, the impact of acculturative stress on both physical and mental health, and the issue of acculturative stress among international students. The third section consists of empirical literature on the prevalence of religion and spirituality as coping mechanisms and their relation with one's psychological wellbeing.

Demographics and Historical Background

According to the Institute of International Education (IIE), there were over 9.7 million international students who studied in the U.S. for the academic year of 2014-2015, compared to 8.9 million for the year of 2013-2014. The number has increased for the past 10 years. The top five places of origin of international students were: China (31.2%), India (13.6%), South Korea (6.5%), Saudi Arabia (6.1%), and Canada (2.8%) (IIE, 2015).

As noted earlier, currently more than 30% of the international students in the U.S. are from China. Over 140 years ago, young Chinese scholars were sent to the U.S. to learn Western science and military technology. According to Chinese Educational Mission Connections (2016), the first group of six Chinese students, all boys, came to the U.S. in 1874, and they landed in

Springfield, Massachusetts. Chinese Education Mission Connections also indicated that those Chinese students participated in Sunday Christian services, and some of them eventually became Christian. Four groups for a total of 120 students came to the U.S. between the years of 1872 and 1875. These students were recalled and returned home prematurely due to conflicts over issues of individual freedom, participation in religious observances, and the assimilation of American culture. This historical background of cultural assimilation and religious involvement of Chinese scholars originally settled in the New England area aroused my interest in conducting this thesis research focused on international students in the Western Massachusetts area.

Definition of acculturation and acculturative stress. Anthropologists Redfield, Linton, and Herskovitz (1936) defined acculturation broadly as "...those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups" (p.149). Berry, Kim, Minde, and Mok (1987) indicate that acculturative stress is "a reduction in health status (including psychological, somatic and social aspects) of individuals who are undergoing acculturation, and for which there is evidence that these health phenomena are related systematically to acculturation phenomena" (p. 491). In other words, acculturative stress is one of the consequences of acculturation.

Berry (2005) further states that the contemporary study of acculturation was developed from the study of European sovereignty over the indigenous people. Later on, the focus shifted to the study of immigrants when they settled into the receiving countries. Recently, the focus shifted again on inter-ethnic groups relating to each other in multicultural societies.

Emerging from cross-cultural psychology, Berry (2005) suggests that acculturation is a phenomenon that involves a long process of cultural and psychological changes among two or

more cultural groups. Acculturative stress derives from this process and can be generally defined as a stress reaction in response to life events that are embedded in the experiences of acculturation. Berry (2005) further indicates that the acculturation process requires different forms of mutual accommodation at both the individual and group levels, which leads to some longer-term psychological and sociocultural adaptations between both group levels. Reasons for acculturation include colonization, military invasion, migration, and sojourning (such as tourism, international study, and overseas relocation due to employment). The process often involves learning each other's languages, sharing food preferences, and adopting different forms of dress attire or traditional clothing and the social norms of each group.

In terms of acculturation strategies, Berry (2005) based the discussion upon two issues: (1) maintenance of heritage culture and identity and (2) relationships sought among groups. For the ethnocultural groups, the four common strategies proposed are integration, assimilation, separation, and marginalization. For the larger society, the four strategies are multiculturalism, melting pot, segregation, and exclusion.

Impact of acculturative stress. Berry (2005) suggests two approaches to conceptualize the consequences of acculturation: adjustment and acculturative stress. The first approach is called adjustment, which refers to the individual's behavior change during acculturation. The second approach is acculturative stress, which occurs when there is a greater level of conflict and the individual cannot simply adjust or assimilate to the new culture.

During the process of acculturation, the stress response has an impact on physical health, mental health, and cognitive and/or social skills. Berry's model of acculturative stress (as cited in Salant & Lauderdale, 2003) suggests there is an initial decline in the mental health status of an individual as a psychological response to acculturation, but the stress gradually lessens as the person becomes more adapted to the new culture.

Acculturation and physical health. According to the data collected by the U.S. Census Bureau, there were 40 million individuals in the foreign-born population in the U.S. (12.9% of the total population) during the year of 2010, compared to 9.7 million (5.4% of the total population) during 1960. Because of the constant growth of immigrants from different ethnic groups, Myers and Rodriguez (2003) reported that the National Center on Minority Health and Health Disparities (NCMHD) was established by the National Institutes of Health on January 2001. The center focuses on studies and research of the growing concern over the health disparities in health status, morbidity, and mortality in racial and ethnic minority groups.

Studies (Abraido-Lanza, Armbrister, Florez & Aguirre, 2006; Fox, Entinger, Buss, DeHaene & Wadhwa, 2015; Myers & Rodriguez, 2003; Salant & Lauderdale, 2003) indicate that further research is needed to explain both the theoretical and clinical implication between the relationship of acculturation and disease, because most studies on chronic disease tend to view acculturation as a risk factor.

Abraido-Lanza et al. (2006) explored the impact of acculturation among Latinos through the lens of public health. The authors agreed that acculturation may impact an individual's health condition as a result of coping with stress caused by discrimination, poverty, loss of social networks, exposure to different models of health behaviors, and changes in identity, behavioral prescriptions, beliefs, values, or norms. Evidence showed that high levels of acculturation among Latinos were associated with increased rates of cancer, infant mortality, and other indicators of poor physical and mental health. It also increased the rates of risky health behaviors, such as smoking, alcohol use, high body mass index. On the other hand, it should be fair to address that acculturation is also associated with several healthy behaviors, such as greater exercise and leisure-time physical activity. The authors recommended that further studies are needed to identify if acculturation can be both a risk and protective factor for health behaviors and if both

cultural resources and structural factors play a role. They proposed that a theory-based public health framework may be helpful to better understand these issues.

Fox et al. (2015) examined the intergenerational decline in health among Hispanic Americans. The authors focused on acculturation and acculturation-related processes in first-generation Hispanic immigrant mothers. They argued that when the immigrant mothers encounter acculturative stress, it affects the intrauterine development of an unborn child. The effects of genes and environment may alter the susceptibility for non-communicable chronic diseases (NCD). Consequently, a continuous cycle of intergenerational transmission of disease may occur.

Fox and colleagues (2015) pointed out that the idea that acculturation can be biologically transmitted across generations through the process of fetal programming to perpetuate intergenerational cycles of social disadvantage and poor health may have broad implications for public health and policy in the United States and elsewhere. They argued that the existing frameworks on the effects of acculturation and acculturation-related processes in Hispanic Americans' health were not adequate to address the issues related to the origin in regards to intergenerational transmission. They proposed a fetal programming perspective that would consider the biological continuity between generations and each subsequent generation and the cumulative effects of previous generations' acculturation experiences.

Salant and Lauderdale (2003) emphasized that most of the theoretical work in studying acculturative stress was obtained from the Hispanic population, the largest immigrant group, which might imply some limitations when applying to other ethnic groups. The authors recommended that researchers studying acculturation and health needed to clearly state a conceptual model of acculturation. They need to create a theory of the interrelation of acculturation and health and the historical experiences of different ethnic groups. It is also

important to consider that gender and socioeconomic status may change the effects of acculturation on health. Lastly, the authors suggested the importance of considering crossdisciplinary approaches and integrating acculturation models from different disciplines for future studies.

Acculturation and mental health. Bulut and Gayman (2016) investigated the role of acculturation strategies and its impact on the mental health of Latino and Asian immigrants and the implication on public health policies. The results indicated that recent arrivals and immigrants who felt isolated from both the mainstream culture and their ethnic identity (labeled the *marginalization class*) scored high on the self-rated mental health scale and thus required more mental health services. Immigrants who maintained their ethnic identity and participated in the host culture (labeled the *bicultural class*) reported significantly better mental health. Bulut and Gayman based their ideas on Berry's (2005) original definition of acculturation strategies among ethnocultural groups.

Bulut and Gayman's (2016) study suggested that many immigrants were able to develop competency in more than one culture. Therefore, when studying acculturation and mental health, it is also important to include a measure of ethnic identity and emphasize the benefits of feeling connected to both the host society and society of origin. The authors indicated that biculturalism can only be achieved if the host society is open to cultural diversity. They suggested public policies in providing more institutional supports including multicultural curricula in schools and culturally sensitive and competent health care to support the mental wellbeing of immigrants. In contrast, policies that impose segregation and separation may hinder acculturation to the larger society and have adverse impacts on the immigrants' mental health.

Organista, Organista, and Kurasaki (2003) indicated that the relationship between acculturation and mental health can be affected by different factors; for example, whether the

migration is voluntary or not, the receptiveness of the host society, and the resemblance between the culture of origin and the new culture. The authors discussed the relationship between acculturation and the mental health of ethnic minorities such as African Americans, American Indians, Asian American, and Latinos.

Acculturative stress among international students. As one of the acculturating groups, international students are particularly vulnerable to acculturative stress due to language barriers, academic burdens, separation from home, cultural differences, lack of social support, and barriers to seek professional help. During this process of cultural and learning style adjustment, international students might experience confusion and anxiety and feelings of marginality and alienation. Some students might need counseling and mental health intervention. It is important to consider that the adjustment problems may vary by country of origin, race and ethnicity, and language proficiency (Akhtar & Kroner-Herwig, 2015; Bai, 2016; Sullivan & Kashubeck-West, 2015).

In the social and behavioral sciences, there is a rich theoretical literature on acculturation. There are also different scales and measures of acculturation for different ethnic groups, such as African-American scales, Asian-American scales, Caucasian scales, and Hispanic scales (Davis & Engel, 2011). Sandhu and Asrabadi (1994) developed the Acculturative Stress Scale for International Students (ASSIS) in assessing the acculturative stress among international students. The authors attempted to construct an instrument to measure the adjustment problems of international students under the themes of perceived discrimination, homesickness, fear, guilt, perceived hatred, and stress due to cultural shock, which were identified as major contributing factors for acculturative stress. The scale is a 36-item scale in Likert format. This scale is used in the current study, and further explanation of this measure will be discussed in Chapter III.

Under the topic of acculturative stress among international students, many scholars explored the roles of social support, acculturation modes, perceived support from the universities, coping styles and coping strategies, socio-demographic variables, and cultural influences in relation to acculturative stress among international students. No known study examines the relationship of religion and spirituality and acculturative stress among international students, although many studies and researchers have concluded that religion and spirituality can serve as a potential factor for lessening stress for people facing health issues or during stressful times.

Empirical Literature on Religion and Spirituality

In 2012, the Pew Research Center indicated that 80% of Americans practice some type of religion. During an interview with the American Psychological Association, Pargament (2013) also agreed that people often turn to their faith to seek comfort and support during stressful moments. Pargament indicated that many studies showed that religion and spirituality are resources for growth for patients dealing with mental health. Therefore it is important for clinicians to be sensitive and to receive more training in facilitating the conversations and assessments that involve clients' religious and spiritual practices.

Religious coping. According to Koenig et al. (2012), the studies of religion, spirituality, and health are gaining increasing attention in behavioral science and medical journals since 1990. Currently, 90% of medical schools in the United States offer courses on religion, spirituality, and medicine.

Angus Reid Strategies (as cited in Koenig et al., 2012) conducted a survey of 5800 adults in Australia, Britain, Canada, China, Egypt, France, Germany, India, Israel, Italy, Japan,

Lebanon, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Spain, Turkey, and the United States during the year of 2006. They asked the participants about the importance of religion in their daily lives, and 48% of respondents indicated that religion was very important.

Koenig et al. (2012) discussed the topic “How might religion help?” They proposed 10 major themes: positive worldview, meaning and purpose, psychological integration, hope and motivation, empowerment and control, role models for suffering, guidance for decision-making, answers to ultimate questions, social support, and durability. The following summarizes these themes.

Positive worldview. Most religions believe in a loving, merciful God. They also believe in a continued existence after death and that human life is special and worthy of respect and care.

Meaning and purpose. Religious beliefs emphasize that life has a unique purpose guided by the divine, and that positive experiences and negative experiences are related to that purpose. Obstacles or negative life events are viewed as a learning opportunity that can help people grow and bring out something good, such as wisdom and compassion.

Psychological integration. With religions giving meaning and purposeful explanation to negative events, it helps to reconstruct worldviews and help people to move on. The authors indicated that it can be difficult for people to move on psychologically or socially if they are not able to understand and integrate these negative experiences.

Hope and motivation. Religion gives people hope that there are better times ahead and the motivation to work hard toward recovery.

Empowerment and control. Religion can empower people when they are feeling weak and vulnerable. Through prayer and rituals, people can feel that they are not totally controlled by the difficult life events or sickness.

Role models for suffering. Most religions have stories of spiritual people undergoing hardship and how they gain happiness and satisfaction in life through their faith of God or divine. These role models provide guidance to people when responding to hardship by not simply giving up or turning to some common unhealthy coping behaviors, such as sex, alcohol or drugs for escape.

Guidance for decision-making. Most religions have rules for living and behaving that lead to a happier life in the long run, which help reduce the frequency of stressful life experiences. For example, there are rules that forbid stealing, revenge, cheating on a spouse, and unhealthy drug or alcohol use, which reduce the possibility of imprisonment, divorce, or addiction.

Answers to ultimate questions. All major world religions provide cohesive, relatively absolute, and generally satisfying answers to existential questions such as, “Where did I come from?” Such answers give purpose, meaning, hope, and reassurance.

Social support. Most religions encourage getting together for regular meetings, praying, and singing. These meetings generally will follow by fellowship and supportive social interactions. Through these interactions, friendships and bonds are created. When stressful life situations occur, there are friends and family around to provide emotional supports and encouragement through prayers. All of these supports help to reduce the feelings of loneliness and isolation and increase feelings of connection to people and the world as a whole.

Durability. Religion remains attainable during difficult times while other coping resources might become unavailable. Religion is a long-lasting coping resource that can be utilized in every situation and at any time, as long as the person is conscious and able to mobilize religious beliefs and behaviors.

Religion and psychological well-being. A number of the above themes discussed by Koenig et al. (2012) were evidenced in a research study exploring the health and mental health among African-American family caregivers of elders residing in the community. According to Sheridan et al. (2014), their study showed that religion and spirituality emerged as an important resource for the caregivers when they were coping with stress in providing care to their elders. The study utilized four scales and one open-ended question to assess the role of religion and spirituality. The open-ended question asked in the questionnaire was: “Keeping your current caregiving situation in mind, do you think your involvement in religious or spiritual activities helps you with your physical and emotional health? If so, How?” (p. 9). A majority of the participants (95%) recognized that religious involvement and spiritual activities were used as a resource for coping with their own health and psychological well-being. The results showed relatively low average scores on both distress subscales on Relationship Distress and Emotional Distress, and generally high scores on both Provisional Meaning and Ultimate Meaning of providing caregiving the elders.

Moreira-Almeida, Neto, and Koenig (2006) conducted a large systematic review of 850 studies on the relationship between religion and mental health published during the 20th century, including studies conducted in Brazil. This review showed that the majority of the wellconducted studies found that higher levels of religious involvement were positively associated with indicators of psychological well-being. Because of this significant finding and supporting evidence, the authors urge other researchers to continue improving the understanding in this topic area and its implication in clinical practice.

Both Koenig et al. (2012) and Moreira-Almeida et al. (2006) suggest there are also arguments about the negative effects of religious coping and the conflicts with traditional

medical and psychiatric treatment. For example, some people might use religious coping negatively through passively waiting for God to control the situation or through redefining the stressor as a punishment from God, as an act of the devil, or even questioning God's love. Therefore, the authors suggested that it is important to consider whether the benefits of religious coping override its negative aspects.

Koenig et al. (2012) proposed that more studies are needed to further investigate the question of whether religious involvement can be objectively shown in correlation with mental health and adjustment to stress. Longitudinal research is needed to predict better health by following subjects over time, and clinical trials are needed to indicate a benefit for religious interventions.

Conclusion

In this chapter, I discussed the impact of acculturative stress on both health and mental health and the significance of religion and spirituality as a means of coping in times of stress. This literature review provided a grounding discussion about the significance of this thesis project. Chapter III will describe the methods and measures used to test this study's hypotheses.

CHAPTER III

Methodology

This study was an experimental investigation to examine if religiosity and spirituality can lessen the acculturative stress of international students, while they are obtaining their higher education in the U.S. As mentioned in the previous chapters, studies have shown that religious involvement and spirituality can serve as a coping mechanism and lessen stress (Koenig et al., 2012; Moreira-Almeida et al., 2006; Sheridan et al., 2014). The focus of this study was to understand if religious and spirituality can lessen the acculturative stress for international students. This chapter will review the research design, sample, sample recruitment, data collection, data analysis, and ethical issues for this study.

Research Design

This research was conducted using the cross-sectional quantitative method of an online survey. According to Engel and Schutt (2013), one of the advantages of survey research is efficiency, because it tends to provide information about a large group of people and can capture more data points and a snapshot of the population studied. With quantitative survey research, there are fewer ethical issues, since the questionnaire is anonymous and answers are confidential. Each survey was assigned with an identification number and submitted online through a survey hosting service, Qualtrics.

Ethical Considerations

This study was approved by the Human Subjects Review Boards and the IRB of the institutions involved in this study (Appendix A, B, and C). At the beginning of the survey, participants were provided with consent forms (Appendix D) with a description of the purpose of the study. Students participated in this study on a voluntary basis and were provided with resources if they needed assistance regarding their concerns with their stress while studying in the U.S. In addition, the confidentiality of the participants was protected by safe storage of the data and immediate deletion once the study was completed.

Sample and Recruitment

The sample of this study consisted of 38 international students from Smith College and Mount Holyoke College. The initial proposal aimed to recruit students from the five-college consortium. Preliminary approvals were received from four of the colleges, omitting Amherst College, which did not allow any outside research recruitment of their students.

After receiving approval from the Human Subject Committee at the Smith College School for Social Work, I then submitted the approval letter to the HSRB to Smith College, Mount Holyoke, UMASS-Amherst, and Hampshire College to request permission to conduct this study and recruit their international students. I requested the following permission in recruiting international students on their campus: access to the international students' email account so that the recruitment email (Appendix E) and online survey (Appendix F) could be mailed; permission to distribute the recruitment email and online survey to the Office for International Students Affairs; and permission to post the recruitment and online survey on the International Students' social media pages (for example, Facebook).

IRB Approval was received from three of the colleges, including Smith College, Mount

Holyoke College and Hampshire College. After reviewing the HSRB application, UMASS Amherst IRB declined to approve this study because they had recently conducted a similar survey of campus climate experiences.

All three colleges declined to allow access to their international students' email information or post the recruitment on social media page for international students. Recruitment email with the link to the online survey was sent to a total of 711 international students twice during the month of February 2017 by the Dean of International Students at Mount Holyoke College to recruit students at Mount Holyoke College. Announcement with the link to the survey was posted on the webpage for International Students and Scholars of Smith College during the Month of March 2017 through the April 10, 2017 to recruit students at Smith College. The Office of the Dean of faculty from Hampshire College also agreed to post the recruitment on their March announcement.

Outreach emails were also sent to various students groups, including the International Students Club (ISC) at UMASS-Amherst and Chinese Inter-regional Student Cultural Organization (CISCO), South Asian Organization (EKTA), Smith African & Caribbean Students Association (SACAS), and Vietnamese Students Association (VSA) at Smith College. With these recruitment efforts, the response rate was still lower than expected 50 participants' requirement by the end of the data collection period.

Data Collection Instrument Design

The online survey (Appendix F) format was organized as follows: (1) first page— introduction and purpose of study; (2) second page – prescreening page listing inclusion criteria, ending with “if you meet all of the above criteria and are interested in learning more about the study, check this box; if not, please click on escape at the top of the page and thank you for your interest;” (3) page three – informed consent form and agreement box at the end, which if

checked, took participants to the survey. The survey was a total of 47 items and took approximately 15-20 minutes to complete. In the survey, participants were asked to complete: (1) demographic information (questions of age, gender, native country, field of study, source of financial support); (2) Acculturative Stress Scale for International Students (Sandhu & Asrabadi, 1994)); and (3) Religion and Spirituality scale (Hoge, 1972; Sheridan et al., 2014).

This research idea was initially generated from Bai (2016), who conducted a study in a Midwestern University to examine if perceived support is a predictor of acculturative stress among international students in the United States. Her study utilized the Acculturative Stress Scale for International Students (ASSIS) developed by Sandhu and Asrabadi (1994) in assessing acculturative stress. I personally contacted Dr. Sandhu and requested permission to utilize this measure for my study; full permission was granted. The ASSIS tool consisted of 36 Likert Scale questions with 1= strongly disagree, 2= disagree, 3= not sure, 4 = agree, 5 = strongly agree. Sample questions included: “Homesickness for my country bothers me. It hurts when people don’t understand my cultural values.”

The Religion and Spirituality scale (Hoge, 1972; Sheridan et al., 2014) consisted of 11 questions. Sheridan et al. (2014) developed and used the first 10 questions in their study to examine the rewards and resources of African American caregivers of elders. My thesis advisor referred me to this tool to measure religiosity and spirituality. Through her connection, I was able to communicate directly with Dr. Sheridan and receive permission to use this tool.

One example item of this scale is: “How often do you pray privately in places other than a church, synagogue or mosque?” The last question in the survey included the Intrinsic Religious Motivation Scale by Hoge (1972), which is a 10-item Likert Scale question scale with 1= strongly disagree, 2 = moderately disagree, 3= moderately agree, and 4= strongly agree. This

question measures the motivation behind religious activity. An example item is: “My religious or spiritual beliefs are what really lie behind my whole approach to life”.

The two domains of dependent variables were *acculturative stress* and *religiosity and spirituality*. The independent variable was *international students*, with subgroups of students from each of the two institutions.

Data Analysis

The goal of this study was to determine if there is an association between the level of acculturative stress and the level of religious involvement and spirituality among international students. This study considered religion as one of the variables influencing acculturation among international students. For this research study, I hypothesized that the higher the level of religious involvement, the lower the level of acculturative stress.

The potential association between stress factors, such as sources of financial support and native language, were also explored. The scales for this study were analyzed using Pearson’s correlational statistics, oneway ANOVA, and T-Test through Statistical Package for Social Work (SPSS) software.

Validity and Reliability

Both instruments used in this study were developed and used by previous surveys and proved to be valid and reliable. Because the ASSIS scale has been cited by almost 500 other studies and the Intrinsic Religious Motivation Scale has been cited by over 600 other studies since they were developed, the validity and reliability can be guaranteed.

CHAPTER IV

Findings

The purpose of this research study was to explore how acculturative stress among international students is influenced by the students' religion or spirituality. This quantitative research study employed three well-validated measurement tools—Acculturative Stress Scale for International Students (ASSIS) developed by Sandhu and Asrabadi (1994), Intrinsic Religious Motivation Scale by Hoge (1972) and Religious and Spirituality scale by Sheridan et al. (2014). An online anonymous survey was used to explore the research question, which was *Is there a relationship between religion and spirituality and acculturative stress among international students studying in Western Massachusetts?* This chapter will cover the findings of the study in two sections: (1) demographic characteristics of the participants, and (2) data corresponding to the research questions. The data for individual scoring of ASSIS will be presented. The findings of the six different items on the ASSIS scale, including Perceived Discrimination, Homesickness, Perceived Hate, Fear, Stress Due to Change/Culture Shock and Guilt, will also be presented in this chapter.

Participant Demographics

The data from 38 participants were used for this study. A total of 71 people accessed the online survey, but only 38 signed the consent form and completed the survey. Of the 33 invalid responses, 13 cases were removed because the screening questions were left blank, and 5 said no to the screening questions. The screening criteria was that the participant must be at least 18 years old, an international student with J1 or F1 visa, and currently enrolled in a 4-year college or university in Western Massachusetts. Two cases were removed because they did not agree to the consent form, 6 left the consent form blank, and 7 individuals signed the consent form but did not complete the survey. Therefore, the final sample size was 38.

Table 1

<i>Demographic Characteristics of Participants</i>		
	Frequency (n)	Percent (%)
Gender		
Female	37	97.4
Prefer not to answer	1	2.6
College/University		
Smith College	8	21.1
Mount Holyoke College	30	78.9
Age (years)		
18	5	13.2
19	9	23.7
20	12	31.6
21	4	10.5
22	4	10.5
23	3	7.9
Undergraduate/graduate student		
Undergraduate	37	97.4
Missing data	1	2.6
Native Country		
Bangladesh	2	5.3
Botswana	1	2.6
China	8	21.1
Ghana	1	2.6
Greece	1	2.6
India	5	13.2
Jordan	2	5.3
Korea	1	2.6
Nigeria	1	2.6
Pakistan	3	7.9
Russia	1	2.6
South Korea	1	2.6
Sri Lanka	1	2.6
UK	1	2.6
Vietnam	4	10.5
Zimbabwe	3	7.9

As presented in Table 1, out of the 38 participants, 78.9% (n=30) were from Mount Holyoke College, and 21.1% (n=8) were from Smith College. There were no responses from Hampshire College, although this study was also approval by their IRB. Out of the 38

participants, 97.4% (n=37) identified themselves as female and one of them preferred not to answer this question. The age of the participants ranged from 18 to 23 years old; 97.4% (n=37) identified as undergraduate students, and 1 participant did not answer this question. As for country of origin, the participants were from 16 different countries. China had the most, with 8 (21%) students, followed by India with 5 (13%); Vietnam, 4; Pakistan, 3; Zimbabwe, 3; Bangladesh, 2; Jordan, 2; and with 1 student from each of the following countries: Botswana, Ghana, Greece, Korea, Nigeria, Russia, South Korea, Sri Lanka, and UK.

Stress Factors and Religious Factors

Table 2

Stress Factors

	Frequency (n)	Percent (%)
Sources of Financial Support		
Families	22	57.9
College/University	12	31.6
Families and Financial Aid	2	5.2
Personal Funds and Wages	1	2.6
Work Study Money	1	2.6
Language		
English is My Native Language	12	31.6
I learned English as a Second Language in my Native Country	25	65.8
Missing data	1	2.6

Table 2 displays the two possible stress factors for international students: sources of financial support and language. Twenty-two (57.9%) participants indicated that their sources of financial support were from families, while 12 (31.6%) participants said they were from college or university; 2 (5.2%) participants said their supports were from both family and financial aid; 1 participant used their personal funds and wages; and 1 participant had work-study money.

Regarding language, 12 (31.6%) participants reported that English was their first language, while 25 (65.8%) learned English as a second language in their native countries.

Table 3

Religious and Spirituality Factors

	Frequency (n)	Percent (%)
Religious Affiliation		
Christian	8	21.1
Muslim	7	18.4
Buddhism	4	10.5
Hindu	1	2.6
Hindu, Unitarian Universalist	1	2.6
None	10	26.3
Missing data	7	18.4
Description Best fits Yourself		
Religious But Not Spiritual	1	2.6
Spiritual But not Religious	12	31.6
Both Religious and Spiritual	11	28.9
Neither Religious Nor Spiritual	8	21.1
Missing Data	6	15.8

Table 3 displays the Religious and Spirituality Factors data for this study. For religious affiliation, 8 (21.1%) participants identified as Christian, 7 (18.4%) identified as Muslim, 4 (10.5%) identified with Buddhism, 1 (2.6%) was Hindu, 1 (2.6%) was Hindu and Universalist, 10 (26.3%) participants answered none, and 7 (18.4%) participants did not answer this question. Therefore, the total number of students with religious affiliation were 21 (55.3%) compared to 10 (26.3%) students with no religious affiliation.

As discussed in the previous chapter, in this study *religious* is referred to as public, communal, organized activities (e.g., church attendance) reflecting particular beliefs and practices, whereas *spiritual* is referred to as private, personal activities (e.g., prayer/meditation, journaling) that may or may not be expressed through religious forms or institutions. In this

study, 1 (2.6%) participant said she was religious but not spiritual, 12 (31.6%) said they were spiritual but not religious, 11 (28.9%) said they were both religious and spiritual, 8 (21.1%) said that they were neither religious nor spiritual, and there were 6 (15.8%) participants who chose not to answer this question.

Acculturative Stress Level of International Students

The Acculturative Stress Scale for International Students (ASSIS) consisted of 36 Likert scale question. The possible total scoring ranged from 36 to 180, and the higher score indicated greater acculturative stress perceived by the participants. For the ASSIS score results, 33 valid responses were used since 5 participants did not completed all of the questions.

Table 4

ASSIS Scores Statistics

ASSIS-Total: 36 Questions	57	170	108		23.37734
Perceived Discrimination Items: 8 Questions	13	40	23.9394	26	6.46597
Homesickness Items: 4 Questions	4	18	10.5758	10	3.35438
Perceived Hate Items: 5 Questions	6	25	16.9697	20	4.49652
Fear Items: 4 Questions	7	20	14.2121	13	3.06958
Stress Due to Change or Culture Shock Items: 3 Questions	4	15	8.2424	8	2.41131
Guilt Items: 2 Questions	2	10	6.3636	4	2.49773
Miscellaneous Items: 10 Questions	16	50	29.6061	24	7.76989
	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>Mode</u>	<u>SD</u>
				94	

Table 4 indicated a mean of 108 and average of 94 (SD= 23.37734) on the ASSIS total scores. The table also included the statistics on the six different items of the ASSIS scale, which included perceived discrimination, homesickness, perceived hate, fear, stress due to change or culture shock and guilt.

Table 5

Individual ASSIS Total Scores

ASSIS Scores	Frequency (n=33)	Percent (%)
57	1	1.4
68	1	1.4
77	1	1.4
78	1	1.4
82	1	1.4
88	1	1.4
91	1	1.4
94	3	4.2
98	1	1.4
99	1	1.4
100	1	1.4
101	1	1.4
107	2	2.8
108	2	2.8
109	1	1.4
112	1	1.4
115	1	1.4
118	1	1.4
119	1	1.4
120	1	1.4
121	1	1.4
122	1	1.4
124	1	1.4
126	1	1.4
134	1	1.4
139	1	1.4
140	1	1.4
144	1	1.4

Table 5 showed the total ASSIS score ranged from 57 to 170, and 3 students scored 94, 2 students scored 107, and 2 students scored 108. According to Sandhu and Asrabadi (1994), scores higher than 109 indicate a warning sign for the need for counseling and psychological intervention. In this study, 15 (45.5%) out of the 33 participants scored 109 or higher.

Correlations among Acculturative Stress and Religious and Spirituality

Two statistical tests were run to answer the research question. Pearson correlations were run to determine if there was a relationship between ASSIS (total and subscales) and the Intrinsic Religious Motivation Scale. No significant correlations were found.

Table 6

Correlations between ASSIS Scale and Intrinsic Religious Motivation Scale

Scale	Pearson Correlation	Sig. (2-tailed)
ASSIS total	-0.009	0.963
ASSIS Perceived Discrimination Items	-0.038	0.846
ASSIS Homesick Items	0.159	0.418
ASSIS Perceived Hate Items	-0.136	0.491
ASSIS Fear Items	-0.068	0.730
ASSIS Stress Items	0.058	0.768
ASSIS Guilt Items	0.302	0.118
ASSIS Misc.	-0.068	0.732

Correlation is significant at the 0.05 level (2-tailed).

Table 6 showed the Pearson correlations result between ASSIS scale and Intrinsic Religious Motivation Scale. Based on the data, the significant (2-tailed) scores ranged from 0.118 to 0.963, which indicated no relationship between the two variables.

Table 7

Differences between ASSIS Scale Total Scores and Religious and Spirituality categories

	Frequency (N)	Mean	SD
--	------------------	------	----

Spiritual, but not religious	12	112.3333	27.18400
Both religious and spiritual	11	108.9091	17.49545
Neither religious nor spiritual	8	110.5000	18.71592
Total	31	110.6452	21.37685

Oneway ANOVA was also run to see if there was a difference in ASSIS scale total scores with the four Religious and Spirituality categories. Category one (religious but not spiritual) was removed because only 1 participant chose that category. No significant differences were found. The data indicated that the average mean between groups ranged from 108 to 112.

Differences between ASSIS and Sources of Financial Support and Language

Additional statistical tests were run to determine if there was a difference in ASSIS total scores by source of financial support (families support compared with other sources of support) and languages (English is native language compared with English is second language). T-Test was run to determine the differences. No significant difference was found for both of the possible stress factors for international students in this study.

Table 8

Differences between ASSIS Scale Total Scores and Financial Support and Language

	Frequency (N)	Mean	SD
Financial support from families	19	112.2632	24.45822
Financial support from other sources	14	102.2143	21.31514
English is my native language	10	105.4000	29.73288
I learned English as a second language in my native country	23	109.1304	20.70859

Table 8 showed the results of statistical T-Test. The mean score among the four categories ranged from 102 to 112, with the lowest score from financial support from other sources group.

Summary

This research study did not have significant findings in testing the research question and hypothesis. In general, the participants in this study reported a high level of acculturative stress, with indication of over 45% of students needing counseling or psychological intervention based on the ASSIS scores. No correlations were found between acculturative stress scale scores and Intrinsic Religious Motivation Scale or religious and spirituality categories. No differences were found between acculturative stress scale scores and sources of financial support or language factors. Further interpretation, as well as strengths and limitations of the study, will be discussed in chapter V.

CHAPTER V

Discussion

The purpose of this research study was to explore how acculturative stress among international students is influenced by the students' religion or spirituality. The research findings disconfirmed the research hypothesis, which proposed that the higher the level of Intrinsic Religious Motivation Scale score, the lower the level of Acculturative Scale scores. The findings indicated no relationship between the two variables. This chapter will discuss the key findings of this study, the strengths and limitations, and the recommendations for future research.

Discussion of Research Findings

The demographic background in this study corresponded with the top three places of origin of international students' data provided by the Institute of International Education (IIE). Most students were from China, India, and South Korea. There were no correlations found between the two variables of acculturative stress and religion and spirituality, but the results indicated that the international students in this study experienced high levels of acculturative stress. With possible ASSIS total scores ranging from 36 to 180, the participants in this study scored 57 to 170, with an average score of 108, a standard deviation of 23.377, and over 45% of the participants scoring higher than 109, which indicated a warning sign for counseling and psychological intervention.

In a previous study by Bai (2016), with a sample size of 152 students, participants scored from 40 to 159, with an average score of 91.934 and standard deviation of 24.372, and 22.4% participants scored higher than 109. Although this study had a small sample size, participants in

the current study clearly showed more significant acculturative stress than students in the Bai (2016) study.

Both the current study and Bai's (2016) study found no correlation between language proficiency and acculturative stress. Bai utilized TOEFL scores as a measurement of language proficiency, while this study compared between English as the first language for participants versus English as the second language.

In terms of religion and spirituality, there was no strong indication that the students' affiliation with religion and spirituality helped to decrease their stress level. This is in contrast to the previous study by Sheridan et al. (2014), which found that 95% of the participants in her study turned to religious and spiritual activities for comfort to relieve stress and improve coping with their own health and psychological wellbeing when caring for the elders in their families.

The current study results found that a high percentage of students practice some type of religion. The results showed that over 55% of students had some type of religious affiliation, and over 63% indicated that they either attended churches or practiced meditation and prayers. This result somewhat confirmed with the previous survey conducted by Pew Research Center, which suggests that 80% of American practice some type of religion. Another survey conducted by Angus Reid Strategies (as cited in Koenig et al., 2012), which interviewed 5800 adults in 21 countries during the year of 2006, asked the participants about the importance of religion in their daily lives; 48% of respondents indicated that religion was very important.

Strengths and Limitations

The strengths of this study can be summarized as follows. This study utilized three wellvalidated measurement tools, and the research study was novel. Previous research studies examined acculturative stress among international students, but no study has examined the influences of religion and spirituality among this population. This study was able to receive

support from both of the international students' offices at Mount Holyoke College and Smith College.

As for limitations, although the recruitment was emailed to 711 international students at Mount Holyoke College and posted on Smith College's International Students and Scholars webpage, the response rate was much lower than expected. The low response and high drop off rate were the major limitations for this study. This researcher questions if the language barrier could be a possible factor influencing the drop off rate, because several of the participants signed the consent form but did not complete the survey. Therefore, with this small sample size, it is impossible to make generalizations when comparing the study to existing research.

Other limitations included constraints of time to reach out to other colleges in the Western Massachusetts area and limited resources of this individual independent study in recruiting students, thus limiting the validity of this research study. If the study could be broader to recruit students from schools other than these two colleges, this study conceivably may have found different results and, thus, validation for the research hypothesis.

Implications for Social Work Practice

The data from this study indicated that the international students consisted of a very diverse background, with 16 different countries among the 38 participants. This implied that the host college should be prepared to accept and provide culturally sensitive resources to these diverse student bodies to be attuned to their needs. Furthermore, due to the fact that high acculturative stress levels were found on both this study and previous studies, mental health counseling services and extra academic supports should be made available to the international students by the student affairs offices. In terms of college counseling, it might be helpful to suggest a mandatory individual session to introduce the counseling service to each incoming international student. In addition to individual psychotherapy, workshop or support groups

attuned to the needs of international students should also be considered and offer proactive outreach to international students to participate in these groups.

Recommendations for Future Research

For future research in working with international students, providing research credit as an incentive might recruit more students and increase the participation rate. This was a suggestion made by Mount Holyoke College. Future studies should also consider a mixed method of a quantitative survey and qualitative in-person interviews. In this case, more personal experiences could be captured, and the interviewer could provide assistance and clarify questions when the participants have difficulty completing the questionnaire. More individualized involvement with the participants might avoid the drop off rate.

As suggested by Koenig et al. (2012), longitudinal research and clinical trials are needed to predict the outcome for religious intervention or the role of spirituality. Therefore, I would suggest that future studies recruit students to participate in such a study over their four years of their college lives. This would be a more effective way of comparing acculturative stress and mental health among those who practice religion verses those who do not have any religious or spirituality practices.

Conclusion

Although this study did not validate the research hypothesis and the previous body of literature regarding the relationship between religion, spirituality, and mental health, it did address the issue of high acculturative stress encountered by these international students. The study suggests it is important for providers and educators to pay attention to the mental health needs of international students. Further, universities need to allocate resources for international students from around the world with diverse cultural and religious backgrounds.

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Appendix A: Human Subjects Letter of Approval



School for Social Work
Smith College
Northampton, Massachusetts 01063

January 20, 2017

Mun Ying Kennis Cheng

Dear Mun Ying Kennis,

You did a very nice job on your revisions. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Congratulations and our best wishes on your interesting study.

Sincerely,



Elaine Kersten, Ed.D.
Co-Chair, Human Subjects Review Committee

CC: Susanne Bennett, Research Advisor

Appendix B: Smith College IRB Approval Letter



**NOTICE OF SMITH IRB APPROVAL FOR RESEARCH THAT HAS BEEN APPROVED
AT ANOTHER INSTITUTION**

SMITH COLLEGE APPROVAL DATE: 14-FEB-2017

SMITH COLLEGE REVIEW STATUS: EXPEDITED

The Institutional Review Board at Smith College has reviewed and approved the research protocol referenced above. Please note the following requirements:

TO: MUN YING KENNIS CHENG

FROM: NNAMDI POLE, CHAIR, INSTITUTIONAL REVIEW BOARD, SMITH COLLEGE

SUBJECT: HUMAN SUBJECTS PROPOSAL

DATE: FEBRUARY 15, 2017

PROPOSAL TITLE: THE RELATIONSHIP BETWEEN RELIGION AND SPIRITUALITY AND ACCULTURATIVE STRESS AMONG INTERNATIONAL STUDENTS IN THE US

PRIMARY IRB/INSTITUTION: SMITH COLLEGE SCHOOL FOR SOCIAL WORK

PRIMARY IRB/INSTITUTION PROTOCOL NUMBER: NOT APPLICABLE

SMITH COLLEGE PROTOCOL NUMBER: 1617-039

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), you must submit these changes to the IRB by filling out and submitting a Change of Protocol form.

Adverse Event Reporting/Deviations from Approved Procedures: Should any adverse events occur during the conduct of your research, you should report them immediately to the chair of the IRB. Additionally, any procedural deviations from your approved proposal must be reported. Explanations of these events and related forms can be found on the IRB website.

Completion: When you have completed your study (i.e. data collection is finished), you are required inform the IRB by submitting a signed Research Project Continuation Form with appropriate box checked.

Additional Requirements: None.

Be sure to use the project number provided above in all subsequent correspondence to the Institutional Review Board at Smith College. Please contact the IRB office at 413-585-3562 or irb@smith.edu if you have any questions.

For Committee Use Only:

Any and all requirements completed, final approval given:

A handwritten signature in black ink, appearing to read "Nnamdi Pole", written over a horizontal line.

Nnamdi Pole, Ph.D.

Chair, Institutional Review Board

Appendix C: Mount Holyoke College IRB Approval Email

Expedited Review Approved by Chair - IRB ID: 351

Feb 9

Mount Holyoke IRB Approval Notification

To: Mun Ying Cheng

From: Katherine Binder, IRB Chair

Subject: Protocol #351

Date: 02/09/2017

The proposal "The relationship between religion and spirituality and acculturative stress among international students in the US" has been approved by the IRB Chair under the rules for expedited review on 02/09/2017.

The approval of your study is valid through 02/08/2018, by which time you must submit an annual report either closing the proposal or requesting permission to continue the proposal for another year. Please submit your report by 01/25/2018 so that the IRB has time to review and approve your report if you wish to continue it for another year.

Before you begin work, you must reply to this email and affirm that you have read and understood the terms of this approval and that you agree to abide by those terms. Please reply with the words "I agree" to serve as your electronic signature to be kept on file with this proposal.

If you have any questions, feel free to contact me.

Katherine Binder,

IRB Chair

kbinder@mtholyoke.edu



SMITH COLLEGE

**Consent to Participate in a Research Study
Smith College • Northampton, MA**

Title of Study: Is there a relationship between acculturative stress and religion and spirituality among international students studying in Western Massachusetts?

Investigator:

Mun Ying Kennis Cheng, 2nd Year MSW Student, xxx-xxx-xxxx

Introduction

- You are being asked to be in a research study of the relationship between acculturative stress and religion and spirituality among international students studying in Western Massachusetts. International students are at high risk of acculturative stress due to different challenges in adjusting to living and learning in a new environment. For the purpose of this study, acculturative stress is defined as the stress derived from this transition and cultural-shock experience.
- You were selected as a possible participant because you are an undergraduate/graduate International Student with either F1 or J1 visa and you are currently enrolled in university/college in Western Massachusetts.
- I ask that you read this form and ask any questions that you may have before agreeing to be in the study.

Purpose of Study

- The purpose of the study is to examine if religiosity and spirituality can lessen the acculturative stress of international students, while they are obtaining their higher education in the US. For the purpose of this study, religiosity is defined as religious practice such as public, communal, organized activities (for examples church attendance) reflecting particular beliefs and practices. Spiritual refers to private, personal activities (for examples prayer, meditation and journaling) that may or may not be expressed through religious forms or institutions.
- This study is being conducted as a research requirement for the master's in social work degree at Smith College.
- Ultimately, this research may be published or presented at professional conferences.

Description of the Study Procedures

- If you agree to be in this study, you will be asked to do the following things: In this survey, you will be asked to complete (1) demographic information, (2) Acculturative Stress Scale for International Students, (3) Religion and Spirituality scale.
- Affiliation with any church or religious organization is not required to participate in this study.

Risks/Discomforts of Being in this Study

- There are potential minimal risks for your participation in this study. Due to the nature of the survey questions, it is possible that you may experience mild discomfort in thinking about your experiences of acculturative stress as an international student. You may choose to skip any question that you do not feel comfortable and you can choose to withdraw from the study at any time. If you are interested to seek consultation/service from Counseling Center or Office of Religious and Spiritual Life at your institutions, a list of resources will be given to you at the end of this consent form.

Benefits of Being in the Study

- The benefits of participation are: You will be given an opportunity to better understand the concern of acculturative stress among International students.
- The benefit of this research study for social work is that it examines the importance of religion and spirituality as a means helping people cope, and it has implications in work with international students in particular.

Confidentiality

- This study is anonymous. We will not be collecting or retaining any information about your identity.
- The records of this study will be kept strictly confidential. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password-protected file. We will not include any information in any report we may publish that would make it possible to identify you. The data will be destroyed if not needed after 3 years.

Payments

- You will not receive any financial payment for your participation.

Right to Refuse or Withdraw

- The decision to participate in this study is entirely up to you. You may refuse to take part in the study *at any time* without affecting your relationship with the investigators of this study or Smith College. Your decision will not result in any loss or benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the interview at any point during the process by clicking on the 'Esc' button at the top of the keyboard.

Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Mun Ying Kennis Cheng at *kcheng@smith.edu* or by telephone at xxx-xxx-xxx. If you like, a summary of the results of the study will be sent to you. If you have any other concerns about your rights as a research participant, or if you have any problems as a result of your participation, you may contact the Chair of the Smith College School for Social Work Human Subjects Committee at (413) 585-7974.

Consent

I encourage you to save a screen shot of this screen or print a copy of this informed consent for your records.

I have shared information on Counseling Services and Office of Religious and Spiritual Life for the following universities for your reference.

Hampshire College: <https://www.hampshire.edu/health-services/counseling-services>
<https://www.hampshire.edu/spiritual-life/spiritual-life>

Mont Holyoke College: <https://www.mtholyoke.edu/counseling>
<https://www.mtholyoke.edu/religiouslife>

Smith College: <https://www.smith.edu/counseling/index.php>
<https://www.smith.edu/religiouslife/>

UMASS Amherst: <https://www.umass.edu/counseling/>
<http://www.umass.edu/orsl/>

BY CHECKING "I AGREE" AND CLICKING "NEXT" YOU ARE INDICATING THAT YOU HAVE READ AND UNDERSTOOD ABOVE INFORMATION, THAT YOU HAVE HAD THE OPPORTUNITY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS, AND THAT YOU AGREE TO PARTICIPATE

IN THE STUDY

- I AGREE (To begin the study)
- I DO NOT AGREE (To exit the study)

Next

Appendix E: Recruitment Email

Recruitment Email

My name is Mun Ying Kennis Cheng and I am currently a second year social work student at Smith College School for Social Work. I am writing to request your participation in my study on the level of relationship between religion and spirituality and acculturative stress among International students in the United States. International students are at high risk of acculturative stress due to different challenges in adjusting to living and learning in a new environment. For the purpose of this study, acculturative stress is defined as the stress derived from this transition and cultural-shock experience.

The following points will describe the study and provide instructions to participate in this study. Thank you in advance for your time and participation.

I am recruiting International students with either FI or J1 visas, who are 18 years or older, who are either undergraduate or graduate students and are currently enrolled in a four-year college or university at Western Massachusetts

Participation in this study includes completing an online survey. The online survey is administered by a confidential research site and will be entirely anonymous. The survey is a total of 47 items and will take approximately 15-20 minutes to complete. If you are interested in participating, please go to the online link below.

The link to the survey is: https://smithcollege.qualtrics.com/SE/?SID=SV_8CSTL1h8RQYRPg1

After opening the link, you will be directed to the inclusion criteria page, and then asked to review the informed consent. The survey will not start until you offer the informed consent.

Please also forward this email to anyone that you may know who may be eligible and willing to participate in this study. I will send a reminder email in two weeks to follow-up. Please feel free to contact me with any questions or concerns.

If you are interested in knowing the result of the study, feel free to contact me and I will send you the study result once it is ready.

This study protocol has been reviewed and approved by the Smith College School for Social Work Human Subjects Review Committee (HSRC).

Thank you in advance for your time and participation.

Sincerely,

Mun Ying Kennis Cheng kcheng@smith.edu

Phone: xxxxxxxxxxx

Appendix F: Online Survey

Online Survey

Welcome Screen

Welcome to the survey on understanding the relationship between religion and spirituality and acculturative stress among international students in the US. Thank you in advance for agreeing to participate in this study. This survey should take about 15 minutes to complete and your answers will be kept anonymous and confidential. The next screen will ask you three questions to determine if you are eligible to participate in this study. If you are eligible, you will be guided to the informed consent and then the survey.

The next screen will take you to the questions that determine your eligibility. Please click “Next” to begin.

Please contact me if you have any questions about the study or survey.

Thank you for taking time to participate.

Mun Ying Kennis Cheng kcheng@smith.edu

Phone: xxxxxxxxxxx

Screening Criteria

I am an International student with J1 or F1 visa.

I am currently enrolled in a four-year college or university at Western Massachusetts.

I am at least 18 years old.

- I agree that I meet ALL of these criteria I meet some or none of these criteria

If a participant clicks the first button indicating that they meet all of these criteria, they will be taken to the informed consent page. If a participant clicks the second button and indicate that they meet some or none of these criteria, they will be exited from the survey and directed to a thank you screen.

Screen if the Participants do not Meet the Criteria

Dear Participants, Thank you for your interest in this study. Unfortunately, one of your answers to the screening questions does not match the recruitment criteria for this study and you are not

eligible to participate. Thank you so much for your time! Please contact me if you have any questions.

Section I: Demographics Information

Age: _____ (Fill in the blank) Gender:

- Male
- Female
- Prefer not to answer University:

- University of Massachusetts Amherst
- Smith College
- Hampshire College
- Mount Holyoke College
- Other _____ (Fill in the blank)

- Graduate Student
- Undergraduate Student

Native Country: _____ (Fill in the blank)

Please check below your major area of study in the United States:

- Business and management
- Computer and information services
- Education
- Engineering
- Health Professions
- Physical Sciences
- Psychology
- Social sciences
- Liberal Arts
- Others _____ (fill in the blank)

Please check the source/s of your financial support while studying in the United States.

- Families
- Friends
- Native government
- College/University
- U.S. Government
- other Language/s:

- English is my native language

I learned English as a second language in my native country

Section II: Acculturative Stress Scale for International Students ((Sandhu & Asrabadi, 1994)

Directions:

As foreign students have to make a number of personal, social, and environmental changes upon arrival in a strange land, this *cultural-shock* experience might cause them acculturative stress. This scale is designed to assess such acculturative stress you personally might have experienced. There are no right or wrong answers. However, for the data to be meaningful, you must answer each statement given below as honestly as possible.

For each of the following statements, please circle the number that BEST describes your response.

1= Strongly disagree, 2= disagree, 3= not sure, 4 = agree, 5 = strongly agree

Because of my different cultural background as a *foreign* student, I feel that:

- | | | |
|--|-----------|-----------|
| 1. Homesickness for my country bothers me. | 1 2 3 4 5 | |
| 2. I feel uncomfortable to adjust to new foods
new eating habits | 1 2 3 4 5 | and/or to |
| 3. I am treated differently in social situations. | 1 2 3 4 5 | |
| 4. I feel rejected when people are sarcastic toward my
values. | 1 2 3 4 5 | cultural |
| 5. I feel nervous to communicate in English. | 1 2 3 4 5 | |
| 6. I feel sad living in unfamiliar surroundings here. | 1 2 3 4 5 | |
| 7. I fear for my personal safety because of my different
cultural background. | 1 2 3 4 5 | |
| 8. I feel intimidated to participate in social activities. | 1 2 3 4 5 | |
| 9. Others are biased toward me. | 1 2 3 4 5 | |
| 10. I feel guilty to leave my family and friends behind. | 1 2 3 4 5 | |
| 11. Many opportunities are denied to me. | 1 2 3 4 5 | |

12. I feel angry that my people are considered inferior here. 1 2 3 4 5
 overwhelmed that multiple pressures are placed 1 2 3 4 5
 migration to this society. upon me after my
14. I feel that I receive unequal treatment. 1 2 3 4 5
 People from some ethnic groups show hatred toward 1 2 3 4 5
 me nonverbally.
16. It hurts when people don't understand my cultural values. 1 2 3 4 5
17. I am denied what I deserve. 1 2 3 4 5
18. I have to frequently relocate for fear of others. 1 2 3 4 5
19. I feel low because of my cultural background. 1 2 3 4 5
20. I feel rejected when others don't appreciate my cultural 1 2 3 4 5 values.
 21. I miss the country and people of my national origin. 1 2 3 4 5
22. I feel uncomfortable to adjust to new cultural values. 1 2 3 4 5
23. I feel that my people are discriminated against. 1 2 3 4 5
24. People from some other ethnic groups show hatred 1 2 3 4 5
 toward me through their actions.
25. I feel that my status in this society is low due to my 1 2 3 4 5
 cultural background.
26. I am treated differently because of my race. 1 2 3 4 5
27. I feel insecure here. 1 2 3 4 5
28. I don't feel a sense of belonging (community) here. 1 2 3 4 5
29. I am treated differently because of my color. 1 2 3 4 5
30. I feel sad to consider my people's problems. 1 2 3 4 5
31. I generally keep a low profile due to fear from other 1 2 3 4 5
 ethnic groups.
32. I feel some people don't associate with me because of 1 2 3 4 5
 my ethnicity.
33. People from some other ethnic groups show hatred 1 2 3 4 5 toward
 me verbally.

34. I feel guilty that I am living a different lifestyle here. 1 2 3 4 5
35. I feel sad leaving my relatives behind. 1 2 3 4 5 36. I
worry about my future for not being able to decide 1 2 3 4 5
whether to stay here or to go back.

Section III: Religion and Spirituality scale (Sheridan, Burley, Hendricks, & Rose, 2014; Hoge, 1972)

1) At the present time, what is your religious affiliation?

- Christian
- Muslim
- Jewish
- None
- Other - please specify: _____

2) If Christian, which specific denomination? _____ 3) In general, how often do you attend religious services?

- Never
- Less than once a year
- About once or twice a year
- Several times a year
- About once a month
- 2-3 times a month
- Nearly every week
- Every week
- Several times a week
- Daily

4) Besides religious services, how often do you take part in other activities at a place of worship? (e.g., Bible group, adult Sunday school, spiritual development group, choir rehearsal, special events, etc.)

- Never
- Less than once a year
- About once or twice a year
- Several times a year
- About once a month

- 2-3 times a month
- Nearly every week
- Every week
- Several times a week
- Daily

**5) How often do you pray privately in places other than a church, synagogue or mosque?
("Never," "Less than once a month," etc.)**

- Never
- Less than once a month
- Once a month
- A few times a month
- Once a week
- A few times a week
- Once a day
- Several times a day

6) How often do you watch or listen to religious or spiritual programs on TV, radio or internet?

- Never
- Less than once a month
- Once a month
- A few times a month
- Once a week
- A few times a week
- Once a day
- Several times a day

7) How often do you read religious scripture (Bible, Torah, Qu'ran, etc.) or other religious literature?

- Never
- Less than once a month
- Once a month
- A few times a month
- Once a week
- A few times a week
- Once a day

- Several times a day

8) How often are prayers or grace said before or after meals in your home?

- Never
- Less than once a month
- Once a month
- A few times a month
- Once a week
- A few times a week
- Once a day
- Several times a day

9) How would you describe your involvement/participation in organized religion?

- Active participation/high level of involvement in religion
- Regular participation/some involvement with religion
- Identification with religion, but very limited or no involvement
- No identification, participation, or involvement with religion **10)**

Which of these descriptions best fits how you see yourself?

"Religious" refers to public, communal, organized activities (e.g., church attendance) reflecting particular beliefs and practices.

"Spiritual" refers to private, personal activities (e.g., prayer/meditation, journaling) that may or may not be expressed through religious forms or institutions.

- Religious, but not spiritual
- Spiritual, but not religious
- Both religious and spiritual
- Neither religious nor spiritual

11) With 1 being "strongly disagree," 2 "moderately disagree," 3

"moderately agree," and 4 "strongly agree," indicate your response

to each of the following statements:

_____ My faith or spirituality involves all of my life.

_____ One should seek God's (the Divine's) guidance when making every important decision.

_____ In my life I experience the presence of God (the Divine).

_____ My faith or spirituality sometimes restricts my actions.

_____ Nothing is as important to me as serving God (the Divine) as best I know how.

_____ I try hard to carry my religion or spirituality over into all my other dealings in life.

_____ My religious or spiritual beliefs are what really lie behind my whole approach to life.

_____ It doesn't matter so much what I believe as long as I lead a moral life.

_____ Although I am a religious or spiritual person, I refuse to let religious or spiritual considerations influence my everyday affairs.

_____ Although I believe in my religion or spiritual perspective, I feel there are many more important things in life.