

Bethel University

Spark

---

All Electronic Theses and Dissertations

---

2018

# A Study of Life Satisfaction and Its Relationships With Acculturative Stress, Social Connectedness, and Perceived Social Support in International Students Attending Faith-based K-12 Schools

Todd Allen Russ  
*Bethel University*

Follow this and additional works at: <https://spark.bethel.edu/etd>



Part of the [Educational Leadership Commons](#)

---

## Recommended Citation

Russ, T. A. (2018). *A Study of Life Satisfaction and Its Relationships With Acculturative Stress, Social Connectedness, and Perceived Social Support in International Students Attending Faith-based K-12 Schools* [Doctoral dissertation, Bethel University]. Spark Repository. <https://spark.bethel.edu/etd/551>

This Doctoral dissertation is brought to you for free and open access by Spark. It has been accepted for inclusion in All Electronic Theses and Dissertations by an authorized administrator of Spark.

A Study of Life Satisfaction and its Relationships with Acculturative Stress,  
Social Connectedness, and Perceived Social Support in International Students Attending  
Faith-based K-12 Schools

By:  
Todd Russ

A dissertation submitted to the faculty of Bethel University  
in partial fulfillment of the requirements for the degree of  
Doctor of Education.

Saint Paul, MN  
2018

Approved by:

Advisor: Craig Paulson

Reader: Marta Shaw

Reader: Steve Paulson

## Abstract

Life satisfaction has a profound impact on individuals. Social and emotional well-being are tied to positive life satisfaction. This quantitative study explored the relationship between life satisfaction and the variables of acculturative stress, social connectedness, and perceived social support. International students come from countries around the world to the United States (U.S.) in hopes of a bright future. They come from a variety of cultures many that are different from the traditions and cultures of U.S. Cultural differences and the student's challenge to adapt causes acculturative stress. This stress is as a barrier to life satisfaction. This study identified that adolescent international students are similarly impacted by acculturative stress as undergraduate and graduate college students. The data pointed to strong positive relationships between life satisfaction and social connectedness as well as a strong inverse relationship between life satisfaction and acculturative stress.

## Dedication and Acknowledgements

First and foremost, I want to thank my wife, Sara. She has been my rock of support and encouragement throughout the process. Her confidence and loving prodding was invaluable. I could not have done this without her.

I want to thank the St. Croix Lutheran Academy family for their support. There were days when coursework or writing needed to be a priority and they filled in the gaps. I am grateful for the amazing team.

Tyler Mittelstadt was one of my students 20 years ago. He helped by running much of the data analysis for me. He was patient and kind, even when different analyses needed to be run or re-run because of my changing needs.

Thank you to my dissertation team. Craig, Steve, and Marta, your help and guidance made this possible. I was terrified about writing a dissertation, but you calmed my fears and provided the encouragement I needed.

Finally, I dedicate this to my Savior, Jesus. He is the one who leads, guides and encourages me. His example of love and servant leadership inspires me to serve others for his glory. To him be the glory for all he allows me to do in his name and service.

## Table of Contents

Chapter 1: Introduction.....	10
Introduction to the problem.....	10
Background of the Study .....	11
Statement of the Problem .....	12
Purpose.....	13
Rationale .....	13
Research Questions .....	14
Hypotheses.....	15
Significance of the study.....	16
Definition of Terms.....	17
Chapter 2: Literature Review .....	19
Life Satisfaction.....	20
Life Satisfaction and Mood .....	22
Life Satisfaction and Academics.....	23
Life Satisfaction and Needs .....	24
Acculturation and Acculturative Stress.....	25
Acculturative Stress .....	27
Acculturative Stress and Life Satisfaction.....	30
Collectivistic Cultures.....	31
Acculturative Stress and Cultural Identity .....	33
Social Connectedness.....	34
Host Country Relationships.....	36
Country of Origin (Co-national) Relationships.....	37
Multi-National Friendships.....	38

Teachers and Staff.....	38
Relationships with Family.....	39
Social Connectedness and Life Satisfaction.....	40
Perceived Social Support.....	41
Perceived Social Support and Life Satisfaction.....	43
Other Barriers to Life Satisfaction.....	44
 Chapter 3: Methodology.....	 46
Philosophy and Justification .....	46
Research Design Strategy.....	46
Theoretical Framework.....	47
Research Questions .....	48
Hypotheses.....	49
Variables .....	49
Measures.....	49
Sampling Design.....	52
Data Collection Procedures .....	53
Data Analysis.....	54
Limitations of Methodology.....	55
Ethical Considerations .....	56
 Chapter IV: Results .....	 59
Hypotheses 1.....	61
Hypothesis 2 .....	61
Hypothesis 3 .....	62
Hypotheses 4.....	64

Hypotheses 5.....	65
Other Data Analysis .....	66
Correlations .....	66
Social Connectedness and Acculturative Stress .....	66
Perceived Social Support and Social Connectedness .....	67
Perceived Social Support and Acculturative Stress .....	68
T-Tests .....	70
Comparing Social Connectedness Based on Housing.....	70
Comparing Perceived Social Support Based on Housing.....	70
Comparing Acculturative Stress based on Years in U.S.....	70
Comparing Acculturative Stress based on Years in U.S.....	71
Comparing Acculturative Stress based on Years at Current School.....	71
Comparing Life Satisfaction based on Years at Current School.....	71
Comparing Perceived Social Support based on Years at Current School.....	71
Chapter V: Discussion, Implications, Recommendations .....	73
Discussion and Explanation.....	73
Research Question 1 .....	73
Life Satisfaction Relationships.....	74
Research Question 2 .....	74
Research Question 3 .....	75
Research Question 4 .....	76
Research Question 5 .....	77
Other Data Analysis.....	77
Social Connectedness and Acculturative Stress Correlation.....	77
Perceived Social Support and Social Connectedness Correlation.....	78

Perceived Social Support and Acculturative Stress Correlation.....	78
T-Tests .....	79
Housing Type .....	79
Social Connectedness and Perceived social support by Housing Type .....	79
Acculturative Stress based on years studying in the US .....	80
Life Satisfaction, Acculturative Stress, and Perceived Social Support based on years at a school .....	81
Limitations .....	82
Implications and Recommendations.....	83
Conclusion.....	85
References .....	88
Appendices .....	100



## Table of Tables

1. Demographics .....	59
2. Results Summary .....	60
3. Life Satisfaction and Acculturative Stress Correlation.....	62
4. Life Satisfaction and Social Connectedness Correlation.....	63
5. Life Satisfaction and Perceived Social Support Correlation.....	64
6. Regression - Clean .....	65
7. Social Connectednessand Acculturative Stress Correlation .....	66
8. Percieved Social Support and Social Connectedness Correlation .....	68
9. Percieved Social Support and Acculturative Stress Correlation.....	69

## Table of Figures

1. Theoretical Framework of Relationships.....	20
2. Acculturative stress mean .....	61
3. Life satisfaction and acculturative stress scatterplot.....	62
4. Life satisfaction and social connectedness scatterplot.....	63
5. Life satisfaction and perceived social support scatterplot .....	65
6. Social connectedness and acculturative stress scatterplot .....	67
7. Perceived social support and social connectedness scatterplot.....	68
8. Perceived social support and acculturative stress scatterplot .....	69

## **Chapter 1: Introduction**

### **Introduction to the problem**

Student academic achievement is often impacted by their level of engagement in school and while learning (Lyons & Huebner, 2016). Studies have shown that student engagement is often linked to life satisfaction and social-emotional well-being. Factors in a student's life satisfaction include anxiety, stress, social networks, and overall support. These factors are universal for all students. Students who leave their country of origin to study abroad are impacted uniquely by cultural differences and an uprooting of their social and emotional support structure. All these factors influence their life satisfaction and endanger their academic and social-emotional success.

Since the end of World War II, students from other countries have chosen the United States for education (Zong & Batlova, 2016). The number of international students (IS) in the U.S. increased from 286,000 students in 1979 to over a million students in 2016 (Zong & Batlova, 2016; United States Immigration and Customs Enforcement (ICE), 2016). There are more than 15 million IS throughout the world. Since 2004, the number of high school and middle school students studying in the U.S. has tripled.

Research on IS is not a new topic. For more than 30 years researchers have looked at the unique challenges that these traveling students have had in accomplishing their educational goals. Despite the volumes of research on undergraduate and graduate IS, little has been done on the more recent and ever-growing segment of international enrollment in U.S. middle and high schools. The purpose of this study was to conduct similar research as has been done with undergraduate and graduate IS on middle school

and high school IS in the U.S. The goal was to know how the factors of acculturative stress, social connectedness, and perceived social support influence the life satisfaction of the IS in this growing age group.

### **Background of the Study**

This growing segment of middle school and high school IS enrollment has received little research. Most studies focus on the majority of IS in the U.S. and the world, which are undergraduate and graduate students. One can speculate that the research is generalizable over a broader age group, however, this group requires its own study. Research has indicated that middle school and high school students are continuing to grow and develop their formal thinking, social skills, and self-identity. Conversely, undergraduate and graduate students have cognitive thought fully developed and have a clearer understanding who they are as individuals (Bastable & Dart, 2007; Crocettiti, Moscatelli, Van Derr Graff, Rubini, Meeus, & Branje, 2016). The differences in developmental stages may produce differing results from previously completed research.

As IS attend school in the United States or any other country, one wonders how they are doing socially and emotionally. In addition, how does their social and emotional well-being influence their academic success? Their life satisfaction is often indicative of their emotional success and intertwined with academic success. Research has shown that there is a correlation between a student's academic achievement and life satisfaction (Antaramian, 2017; Crede, Wirthwein, McElvany, & Steinmeyer, 2015). Additional research shows a correlation between positive life satisfaction and a student's grade point average (Lyons & Huebner, 2016). Ruppel, Liersch, and Walter (2015) stated that academic disadvantages impact students well into their adulthood and that school

performance depends on well-being and other factors. IS study abroad primarily for the purpose of academic success and academic positioning for universities. Indications are that IS life satisfaction is negatively affected by acculturative stress, conversely, social connectedness and perceived social support appear to have a positive effect on life satisfaction and well-being (Taormina & Gao, 2013).

Life satisfaction and well-being are often used interchangeably (Ng, 2015; Tiliouine, 2007). Diener, Oishi, and Lucas (2015) stated that positive well-being promotes social activity and production. In addition, those who have high life satisfaction are often healthier. For IS, stress and anxiety negatively affect life satisfaction. Middle school and high school students are potentially more susceptible to the effects of stress due to their cognitive and emotional development. They are typically more affected by embarrassment and peer pressure than those individuals who are college-aged and more developed (Bastable & Dart, 2007; Crocettit, et al., 2016).

### **Statement of the Problem**

An individual's life satisfaction affects many aspects of life including health, social activity, academic engagement, and overall well-being (Diener, et al., 2015). IS are impacted by acculturative stress that causes loneliness, alienation, and homesickness. The effects of acculturative stress impact life satisfaction (Bai, 2016; Li, 2013; Sandhu & Asrabadi, 1998). Social connectedness and perceived social support have been identified as mitigating factors for acculturative stress and positive influences on life satisfaction (Taormina & Gao, 2013). What is not known from previous studies is how the age of the IS affects acculturative stress. Do age and developmental levels change the significance of life satisfaction? Do acculturative stress influence middle school and high school aged

IS similarly as college-age students? Do social connectedness and perceived social support have similar mitigating relationships with acculturative stress and positive relationships with life satisfaction?

### **Purpose**

The purpose of this quantitative research study was to study how IS life satisfaction is influenced by acculturative stress, social connectedness, and perceived social support for those students attending WELS (Wisconsin Evangelical Lutheran Synod) high schools and WELS middle schools.

### **Rationale**

Life satisfaction and emotional well-being are key components of IS succeeding in their journey of studying in a different country. A successful journey takes place when students have high levels of life satisfaction, which allows them to be healthy, and prepared to meet challenges of life. For IS, life satisfaction is an important part of acculturation (Awang, Kutty, & Ahmad, 2014). Little grade-level research has been conducted on IS high school and middle school students (Park & Huebner, 2005). College-level data may or may not be applicable to high school students due to age and developmental differences. Data needs to be collected for IS who are at the high school level in the U.S. Without specific age-appropriate data, educators need to speculate on the applicability of college-level data. The potential impact on these students, international families, and on the schools serving them is too significant to simply speculate.

Lyons and Huebner (2016) state that research consistently indicates that higher levels of life satisfaction are related to higher levels of student engagement and academic performance in adolescents. Although results are mixed on a direct connection between

life satisfaction and academic achievement, researchers have shown an association between life satisfaction, cognitive, behavioral, and social engagement. Schools in the U.S. have a responsibility to educate and care for the IS they enroll. Each school makes a promise to IS parents to care for and support these students while they are learning far from home. Exploring the relationship between life satisfaction and the independent variables of acculturative stress, social connectedness, and perceived social support may provide a foundation for identifying a pattern of information that can be used for creating screening tools, intervention techniques, front-end support programs, and ongoing support by the host school. Expanding educational offerings and programs that target a growth of well-being and life satisfaction appears to be appropriate goals to increase student academic success (Lyons & Huebner, 2016).

The potential relationship between acculturative stress and social connectedness may provide data for developing IS support programs. The potential relationship between perceived social support and social connectedness might provide additional data to develop support plans that include support from students, faculty, and staff in areas of academics and social-emotional needs. With accurate data, host schools will have a clearer understanding of the challenges high school and middle school IS face. This will better equip them schools to positively impact IS life satisfaction and support them for healthy academic success.

### **Research Questions**

Five primary questions frame this study.

Question 1

RQ01: To what extent do middle school and high school international students experience acculturative stress?

Question 2

RQ02: What relationship if any, exists between life satisfaction and acculturative stress?

Question 3

RQ03: What relationship if any, exists between life satisfaction and the social connectedness of middle school and high school international students?

Question 4

RQ04: What relationship if any, exists between life satisfaction and perceived social support?

Question 5

RQ05: What relationship if any, exists among life satisfaction, acculturative stress, perceived social support, and social connectedness?

### **Hypotheses**

H01: International middle school and high school students do not experience acculturative stress.

H02: There is no relationship between social life satisfaction and acculturative stress.

H03: There is no relationship between life satisfaction and social connectedness in international middle school and high school students

H04: There is no relationship between life satisfaction and perceived social support.

H05: There is no significant relationship among life satisfaction, acculturative stress, social connectedness, and perceived social support.



## **Significance of the study**

This study is significant because it looks at a new emerging population in high school and middle school IS enrollment in the U.S. that has not been the subject of sufficient research. Although much has been studied in the area of undergraduate and graduate IS enrollment, this study has an opportunity to identify similar results and relationships with this new age group that is not as developed cognitively, socially, and emotionally as its older counterparts (Bastable & Dart, 2007). Little research has been done to study acculturative stress issues found in middle school and high school IS. Validating that high school and middle school IS experience acculturative stress is an important component of the study. Middle and high school IS comprise 6% of the total IS enrollment in the U.S. This number equates to about 70,000 students (ICE, 2016). Although this number is small in comparison to all U.S. IS enrollment, it is a number that has more than tripled since 2004. The majority (67%) of these students are seeking a diploma (Institute of International Education (IIE), 2017). Diploma-seeking students are in the U.S. for a minimum of two years. This is significant as schools not only provide a cultural experience but also educate IS for future undergraduate enrollment.

Empirical studies demonstrate a relationship between happiness and academic potential (Lakey, 2013). Luhman, Lucas, Eid, and Diener (2012) state that life satisfaction measurement is not only a window into what is happening now but also a predictor of major life outcomes. A study of the relationship between life satisfaction and independent variables such as social connectedness, acculturative stress, and perceived social support has implications for supporting IS in the U.S. socially, emotionally, and academically. Research indicates that cultures and varying cultural norms impact life

satisfaction differently (Diener, Lucas & Oishi, 2002). As educational institutions in the U.S. enroll and care for IS, it is important that greater insight is gained in what variables positively and negatively impact life satisfaction.

Yeh and Inose (2003) conducted a research study with college students that focused on the predictability of acculturative stress based on social connectedness and social support. Their research did not connect those items to life satisfaction and well-being. Research is lacking for the study of adolescent and teen IS regarding a similar focus as Yeh and Inose (2003). There is also little or no research that connects acculturative stress, social connectedness, and perceived social support to life satisfaction and well-being.

Little is known about the impact of life satisfaction and acculturative stress on adolescent and teen IS. If the quantity of IS in this age group continues to increase at a rapid rate, answers are needed to assist schools in supporting student needs and intervening when IS are struggling. It is conceivable that this age group has similar struggles as college-aged IS, but the age and development difference may produce different challenges and require additional support or a different support system. Research is needed to identify the similarities and differences between these age groups. This data may provide a framework to develop a support system that will positively impact IS life satisfaction and academic achievement.

### **Definition of Terms**

Acculturation – Acculturation is the process of change that an individual undergoes as they are presented with or experience a new culture.

Acculturative Stress – Acculturative stress is the personal challenge that is the result of individuals adjusting or reacting to a new culture.

Life Satisfaction – Life satisfaction is how an individual views his or her current status in life. This is a personal evaluation of emotions. The goal is a healthy balance of positive and negative feelings. This term is also used interchangeably with well-being or emotional well-being.

International Student – An international student is an individual who leaves his or her country of origin to receive education in a host country. Typically these students are on F1 or J1 visas.

Social Connectedness – Social connectedness refers to an individual's relationship network. A person who is socially connected will have a variety of individuals who they feel they can share events in their life. This network could include friends, family, teachers, or others.

Perceived Social Support – Perceived social support is the personal belief that if help is needed or desired, there is a network of individuals who are available to assist.

Collectivism – Collectivism is a belief of Confucius that the whole is greater than the individual. This belief is prevalent in Asian cultures.

Host Country – When students leave their home or country of origin and attend school in a different country, the new country is referred to as the host country.

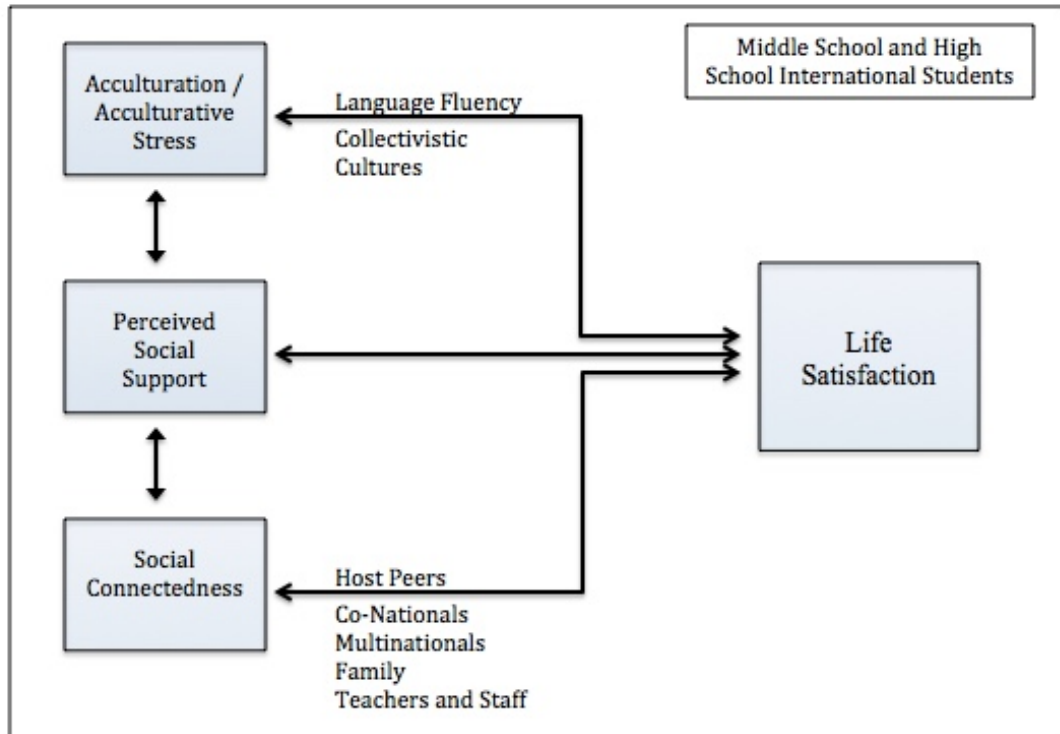
Country of Origin or Co-National – The country of origin is the country that a student identifies as their home. It may not be where the family lives or even where they are attending school. It is the country where the culture and belief systems match that of the student. Co-national is a term that refers to individuals for the country of origin.

## **Chapter 2: Literature Review**

Globalization has made it easier than ever to study abroad. Every year thousands of IS come to the United States from around the world for middle school, high school, and college education. During the early years, the majority of students were from European countries. In 1979, China's Open Door Policy shifted the geography of countries of origin and significantly increased the number of students studying abroad in the United States (Zhang, 2012). With more than a million IS attending school in study abroad programs, they provide a boost in institutional enrollment (Bai, 2016; Telbis, Helgeson, & Kingsbury, 2014). A significant implication of IS enrollment is the need to provide a support structure for student success. Improving and enhancing the quality of student learning has become a focus for educational institutions around the U.S. positive learning experiences support students' academic, social, and emotional needs while increasing life satisfaction (Awang, Kutty, & Ahmad, 2014).

International education programs are only successful when students are successful. Success can be measured in a number of ways, however, positive life satisfaction of the IS is a key goal. In the process of achieving academic success, IS likely have experienced acculturation and successfully navigated some of the challenges of studying in a host country. Acculturative stress, social connectedness, and perceived social support are some of the key issues IS need to navigate in order to achieve academic success and positive life satisfaction (Crede, Wirthwein, McElvany, & Steinmayr, 2015; Hu & Hagedorn, 2014; Telbis et al., 2014). Educational leaders who work with IS and international programs would benefit from better understanding the potential interconnection of these success factors so that they can successfully support IS in their

schools. The theoretical framework of this study focuses on the interconnected relationships of these variables.



*Figure 1.* Theoretical framework of relationships demonstrates how the researcher believes the variables of this study are interrelated.

## Life Satisfaction

Ng (2015) and Tiliouine (2007) state that life satisfaction is often used interchangeably with well-being. Life satisfaction is an emotional evaluation of one's personal life status and an evaluation of personal goals and achievement of those goals. Life satisfaction evaluations are internal and personal in nature and often based on individual perceptions of what should be normal expectations of life (Diener, Emmons, Larsen, & Griffin, 1985). Research has identified a connection between positive relationships and life satisfaction. Relationships with friends, parents, peers, teachers,

school, home, and church play a role in impacting perceptions. Research indicates that adults with higher life satisfaction have higher paying jobs, better job performance evaluations, and are more likely to marry and live longer (Antaramian, 2017; Lyons & Heubner, 2016). A school that supports its students in maintaining positive life satisfaction and well-being prepares them for success in adulthood. This preparation and lifelong success is a true measure of an institution's impact and success (Kern, Waters, Adler, & White, 2015).

Researchers have indicated that life satisfaction is a short-term status that can fluctuate based on an emotional event or life change. Research participants seem to use the current important information to determine their current life satisfaction (Diener, Lucas, & Oishi, 2002). The downside is the potential for fluctuations if measured over time or longitudinally. The benefit is the potential predictability of underlying issues or concerns at the given moment of measure (Diener, Inglehart, & Tay, 2013).

Antaramian (2017) states that although very high life satisfaction is beneficial for academic achievement, it may be more important for social connections and relationships. Diener et al. (2002) indicated that there appeared to be a difference in the way individuals from Western cultures and collectivistic cultures base positive life satisfaction. Western cultures tend to be more individualistic and place a higher value on self-esteem. Research has shown that individualism and self-esteem are strong predictors of life satisfaction (Yetim, 2002).

Individuals from collectivistic cultures focus more on an alignment with the wishes of family members and specifically parents and grandparents. The research also noted that despite momentary fluctuations in an individual's life satisfaction, there was a

consistent relationship between groupings of individuals who had similar life experiences. This correlation may be recognized as IS are surveyed regarding life satisfaction (Diener et al., 2013). Life satisfaction was measured using a scale that asks participants to share their level of satisfaction dissatisfaction with areas of their life.

Park and Huebner (2005) conducted research that focused on life satisfaction differences between adolescents in Korea and the U.S. The students in Korea represented a collectivistic culture, whereas the U.S. students represented an individualistic culture. Although there are universally consistent findings such as one's view of self, the study did identify two key differences. Park and Huebner (2005) identified differences in overall life satisfaction and general satisfaction with self and school. Overall, the student life satisfaction was lower for collectivistic students and higher for individualistic students. The collectivistic student's life satisfaction correlated with their view of school whereas the individualistic student's life satisfaction correlated with a view of self (Meyer, 2014). This further supports the belief that life satisfaction of individuals is impacted by different cultures. This may also impact the intervention and support plans for schools looking to positively impact student life satisfaction.

### **Life Satisfaction and Mood**

One of the factors influencing life satisfaction is an individual's mood. Moods are not as long lasting as depression or other forms of mental illness, nor are they as intense (Brand, Reimer, & Opwis, 2007; Scrimin, Mason, & Moscardino, 2014). Mood level has been shown in research to influence school performance (Ruppel et al., 2015). Various studies have shown conflicting information on the impact of moods regarding academic growth and achievement. One of the stressors that affect IS is academic anxiety. Often IS

struggle to understand what the academic expectations and routines are in a host country. This stress-induced anxiety produces negative moods and an academic threat (Scrimin et al., 2014). Febrilia and Warokka (2014) studied the effects of mood on academic performance and achievement. They state that positive moods facilitate learning whereas negative moods depress it. The foundation of their study looked at how moods affected learning because regardless of the type of mood, learning was impacted by emotions and emotional well-being. The results of the study did not indicate a correlational effect of positive mood on learning. Research results showed that negative moods hinder the processing of information and a reduction in the transferal of information (Brand et al., 2007; Scrimin et al., 2014). Some empirical research indicates that negative moods can actually increase an individual's ability to remain focused whereas positive moods can create a distraction (Brand et al., 2007).

### **Life Satisfaction and Academics**

Lyons and Huebner (2015) identified statistical linear relationships between life satisfaction, GPA, and academic engagement in early adolescents. Research was inconclusive in regards to what is the optimal level of life satisfaction (Anataramian, 2017). Febrillia and Warooka's (2014) study indicated a correlational effect of negative mood on learning and a correlational effect between learning and academic success. Other studies identified that students with very high life satisfaction had a significant advantage academically. The advantage was so significant that the researcher believes colleges would be wise to assess student life satisfaction to identify those at risk in hopes to intervene and support (Anataramian, 2016).



Many researchers found that positive feelings and emotions about school and learning generally increase achievement and negative emotions such as frustration and hopelessness decrease academic performance and achievement (Brand et al., 2007; Febrilia & Warokka, 2014). Lyons and Huebner (2016) found that poor mental health in college students was a predictor of a lower or declining grade point average (GPA). Additional studies showed college depression as a predictor for lower GPA and an increased rate of dropout (Lyons & Huebner, 2016; Ruppel et al., 2015). Research identified the importance of life satisfaction as it relates to academic engagement and academic motivation (Karaman, 2016; Lyons & Huebner, 2016). These connections promote lifelong learning and ongoing academic success. Researchers have found relationships between social connectedness, stress, and life satisfaction (Anataramian, 2016). These connections could provide important insight for schools that are looking to serve their students and prepare them for academic and life-long success.

### **Life Satisfaction and Needs**

The emotional well-being and life satisfaction of IS needs to be the focus of any school because emotional well-being and life satisfaction affect student learning (Diener, Oishi, & Lucas, 2015). This research fits with *Maslow's Hierarchy of Needs* that identified basic needs individuals needed to meet in order to function at their highest potential (Maslow, 1948). Satisfaction of a basic level of need is necessary for success in achieving higher levels of success. As a result, life satisfaction comes from successful personal and academic growth that is possible through the satisfaction of basic needs (Taormina & Gao, 2013). Educationally, this has implications as school look to address student needs so academic performance can be maximized (Hurst, Wallace, & Nixon,

2013). IS who battle the effects of acculturative stress, a lack of social connectedness, and perceived social support struggle with the first three levels of *Maslow's Hierarchy of Needs* placing their academic performance at risk (Taormina & Gao, 2013).

### **Acculturation and Acculturative Stress**

Berry (2005) defines acculturation as the process of cultural and psychological change that an individual experiences when being involved in two different cultures at the same time. The new interactions involve the people, institutions, and cultural practices. The process of acculturation includes personal changes in social structures, daily cultural practices, and behavioral changes as an individual adapts. There are some significant challenges that an IS experiences while going through the process of acculturation. There are pressures for the IS to maintain a strong connection to the culture of his or her country of origin. There are pressures for IS to change or accept the culture of the host country they now are receiving their education. Balancing two cultures can be challenging as the external pressures and internal struggles take place. Sandhu and Asarabadi (1991) stated that IS are caught between two cultures. The old values of their home country are the foundation for who they are and the ones they know and often cherish. The values and traditions of the host country are often seen as something that should be adapted to or adopted for their survival as an IS. How much the IS keeps of one or adopts of another can significantly impact their life satisfaction. Research indicates that there is a benefit for an IS to maintain his or her cultural identity. Relationships with fellow IS from the same country can assist in not only maintaining their identity, but also provide social and emotional support (Hendrickson, Rosen, & Aune, 2011). Middle school and high school IS appear especially susceptible to cultural identity issues.

Developmentally, students of this age range are still developing their sense of self (Bastable & Dart, 2007; Crocetti, et al., 2016).

Berry (2005) discussed the challenges individuals face when experiencing acculturation depending upon the desired relationships and desired level of maintenance of culture and identity. He identified four possible outcomes for an individual: integration, assimilation, isolation, and marginalization. IS generally do not experience marginalization. Marginalization takes place primarily with immigrants who desire to flee their culture of origin, and yet are not interested in building relationships with individuals from a host country (Sullivan & Kashubeck-West, 2015). IS who are looking to maintain their home culture and identity while limiting their social relationships will experience separation. This may result in isolation and a lack of social connectedness. IS looking to acquire the culture and social norms of their host country through significant relationships, may intentionally or unintentionally lose their cultural identity. This change is called assimilation. IS who successfully balance their cultural identity with the culture of the host country experience integration. Integration allows an IS to value both cultures and to grow and maintain relationships in the country of origin and host country.

Sullivan and Kashubeck-West (2015) studied Berry's Modes of Acculturation Model (Berry, 2005) and the relationship between the modes and acculturative stress. A number of studies have focused on Berry's model and its relationship with immigrants. The data was used to explore if the findings were similar for IS attending U.S. universities. Their findings showed that relationships with host country peers had higher statistically higher social support and lower acculturative stress than those IS who were in the integration and assimilation modes. They also found that IS in the assimilation and

integration mode had higher levels of social support from host country peers, while those in separation and marginalization had higher levels of social support from other international students. Acculturative stress is associated with the acculturation mode and an IS level of support (Sullivan, Kashubeck-West, 2015).

### **Acculturative Stress**

Life satisfaction can be impacted by the stress of the acculturation process. Acculturative stress is the result of individuals leaving their home country or culture and immersing themselves in an entirely new environment (Li, 2013). Research has shown that the greater the difference between the two cultures, the greater the level of acculturative stress. Students from Asian countries who attend school in a western society experience significant acculturative stress (Bai, 2014; Bertram et al., 2014; Li, 2013). Students from Europe who attend school in the United States, Australia, or another European country experience lower levels of stress (Patron, 2014). Culture shock is another name for acculturative stress. The culture shock that IS experience can be temporary or long-lasting. Research indicates that culture shock and the impact of culture shock remained after three semesters for more than 20% of IS (Li et al., 2017).

Acculturative stressors may include language barriers, ethnic identity, and homesickness (Bai, 2016; Bertram et al., 2014; Li, 2013). Sandhu and Asrabadi (1991) indicated their belief that the communication issues and challenges of IS were a major underlying root cause of their acculturative stress. They stated it transcended all areas of the IS' lives including academics and social-emotional needs. The need for language fluency is a foundational transition need for all IS. Language fluency does not have a consistent definition. It is generally considered as the ability for an individual to verbally

converse and communicate with individuals in a given country. For IS attending school in the U.S. the focus is on English fluency. This is not the same as proficiency. Proficiency includes the ability to write effectively. Researchers found that the level of self-reported English fluency was a predictor of acculturative distress (Sullivan & Kashubeck-West, 2015; Yeh & Inose, 2003). IS are immersed in a new culture with new routines and expectations. Academic success is essential, yet navigating a new academic setting can be challenging. Yeh and Inose (2003) speculated that the ability of an IS to ask basic questions and get directions as needed lowered anxiety and acculturative stress. They noted that language fluency may allow IS to interact easier with the individuals from the host country. This helps IS build social connections and relationships. They even speculated that increased language fluency may minimize an IS self-consciousness feelings of being different and boost their overall confidence.

Perceived discrimination and rejection were also cited as sources of acculturative stress (Akhtar & Kroner-Herwig, 2015; Bai, 2016; Li et al., 2017). These stressors often create feelings of anxiety, loneliness, and isolation (Patron, 2014). Each of these emotional feelings has potentially significant side effects that can lead to depression, mental illness, and even suicide (Patron, 2014; Smith & Khwaja, 2014). Although acculturative stressors cannot be eliminated, research has identified that social, and academic support along with coping skills can minimize or lower the negative effects. IS with homesickness can display poor study skills, poor decision-making, and anxiety. All of these characteristics can negatively affect academic success (Hendrickson, et al., 2011).

Acculturative stress can lead to depression and other emotional challenges. These challenges can be treated with the assistance of mental health. Many universities offer mental health assistance, however, these services are underutilized (Bai, 2016; Patron, 2014). Bertram et al. (2014) explained that due to cultural embarrassment, IS will rarely seek the help they need. This can result in increased feelings of isolation and loneliness. Bai (2016) noted in his research that more than 20% of IS suffer from extensive acculturative stress. This designation indicates a potential need for mental health intervention. This data indicates that there are likely thousands of IS students in the U.S. struggling with the effects of acculturative stress.

Acculturative stress often is interwoven with emotional pain and suffering resulting from loneliness, feelings of discrimination, alienation, and inferiority (Sandhu & Asrabadi, 1998). These feelings of stress often stay with IS for a significant amount of time impacting their emotional health, life satisfaction, and academic success. Assessing the acculturative stress of IS is important for schools because it may identify the psychological needs of the student. Once the needs are assessed, interventions may be possible to assist the IS.

Middle and high school students need more support and guidance in handling the many changes happening in their lives socially, emotionally, and physically. They are in the cognitive developmental period of formal operations (Bastable & Dart, 2007; Crocetti, et al., 2016). It appears IS in this age group may be more susceptible to the effects of acculturative stress impacting their life satisfaction and health. Acculturative stress will be measured by asking participants to identify experiences that they have had during their acculturation process.

## **Acculturative Stress and Life Satisfaction**

Acculturation is the process of cultural modification of an individual, group, or people by adapting to or borrowing traits from another culture or a merging of cultures as a result of prolonged contact. Regardless of the country of origin, when students study in other countries, they experience an initial period of culture shock as they begin the acculturation process (Berry, 2010). Culture shock or acculturative stress, identifies or measures the conflict that exists as a result of two cultures interacting (Berry, 2005). Factors that impact acculturative stress can include social connectedness, self-efficacy, perceived social and academic support, language barriers, and perceived discrimination (Akhtar & Kröner-Herwig, 2015; Telbis, Helgeson, & Kingsbury, 2014). These stressors inhibit acculturation and life satisfaction.

Significant research has been conducted on IS at the undergraduate and graduate levels looking at the relationships between acculturative stress and life satisfaction. Much of their stress is due to cultural differences (Bai, 2016; Telbis, Helgeson, & Kingsbury, 2014). Much of what an IS knows about a country is what is depicted in movies or seen on the television. They quickly understand that the reality is different from what they perceived it to be. The new reality can be disheartening for some IS as many IS have high cultural expectations of the United States. This difference increases the level of culture shock experienced (Bai, 2016). English proficiency impacts many aspects of an IS adjustment to a new culture (Telbis, Helgeson, & Kingsbury, 2014). Low English proficiency has the ability to isolate an IS in their new environment. It can limit a student's ability to seek help from teachers or support individuals. A lack of English proficiency can make academics challenging and frustrating as students struggle with

understanding language and concepts. This can have a negative effect on their emotions and confidence as some students have never struggled academically before and now are experiencing lower than desired results (Yeh & Inose, 2003). Due to cultural differences and language barriers, social networks are often limited. As a result, IS feel unsupported despite structures that may be in place to help them succeed.

### **Collectivistic Cultures**

The majority of high school and middle school IS in the U.S. come from Asian countries with a collectivistic foundation. The collectivistic culture of Asian countries or collectivism creates additional social-emotional challenges for IS students (Kim, Sherman, & Taylor, 2008). Collectivism is rooted in the teachings of Confucius. It is a family-centered value system that has its roots in subsistence farming. In places like Korea, it grew from a time when educational opportunities were limited and multi-generational farming was the way of life. As a result, the collective good is valued more than the individual needs or desires of any one individual. For that reason, individuals are not viewed as independent but rather part of an interconnected social web (Kim et al., 2008; Park, Joo, Quiroz, & Greenfield, 2015).

Understanding the culture of IS is invaluable in helping with acculturation (Hofstede, Hofstede, & Minkov, 2010; Lanier, 2000; Meyer, 2014). If the barriers to assistance are understood, misconceptions and misunderstandings can be minimized. Collective or group cultures of Asia and the individualistic cultures of the U.S. and Europe are fundamentally at odds with one another. As a result, there are greater challenges for IS from Asia to adjust to the relationship and social structure in the U.S. (Hendrickson et al., 2011; Kim, et al, 2008).



The interdependence of relationships in collectivistic cultures can be filled with pressure, as family decisions may place a child or IS in a position they may not want to be. Family expectations for success are often extremely high and potentially unrealistic. A career or school choice can be forced upon an IS without their input, yet in many cases, an IS from a collectivistic culture willingly follows the direction given without issue or concern (Park et al., 2015).

Many institutions provide support systems for IS to address academic and social challenges. These same institutions are often frustrated by the lack of use by IS. One important challenge for IS to maximize the use of these resources is the concept of saving face. Saving face is a powerful component of collectivistic societies and an important concept that U.S. schools need to understand when working with IS from Asian countries (Patron, 2014). Li (2013) described saving face as the ability to maintain social respectability despite challenging times. The loss of face means the individual could face humiliation and embarrassment when his or her action is viewed as culturally inappropriate (Wei et al., 2012). The collectivistic culture of many IS is so interdependent and intimately close that needs are not to be expressed individually. Friends and members of an IS support network are expected to identify the needs for them (Kim et al., 2008; Wei et al., 2012). If an individual has to ask for help, they are either too weak to handle the issue or lacking a social network, all of which can be viewed negatively. In many collectivistic cultures, the concept of questioning someone in authority, like a teacher, is culturally inappropriate (Hofstede, et al., 2010; Lanier, 2000; Meyer, 2014). This has significant implications for U.S. academic institutions.

Socially, IS are removed from their interdependent social network. The depth of that social support is much greater than that of typical western relationships. They are encouraged to build relationships with host country peers who have different cultures and beliefs. In the U.S., IS are expected to ask if they need help or are hurting. In an individualistic culture the responsibility shifts from the group to the individual (Kim et al., 2008; Wei et al., 2012). In the U.S. classroom, teachers encourage and expect students to ask questions and make the instructor aware of their needs. Individuals from collectivistic cultures often will not seek help in fear of co-national ridicule and embarrassment (Kim et al., 2008). Asking for help is viewed as undesirable and a barrier to getting the help needed (Akhtar & Kroner-Herwig, 2015; Bertram et al, 2014; Kim et al., 2008; Li, 2013). Undesirable assistance can range from minor issues such as directions on homework to significant challenges such as bullying and depression. As an educational institution, it is important to provide the systems and structure IS need for support while allowing them to save face. The timing and form of teacher feedback can be devastating for IS from collectivistic cultures (Hofstede, et al., 2010; Lanier, 2000; Meyer, 2014).

### **Acculturative Stress and Cultural Identity**

Wei, Liao, Heppner, Chao, and Ku (2012) studied the relationship between forbearance, cultural identity, and acculturative distress. Research showed that students from strong collectivistic cultures used forbearance as a coping mechanism. Forbearance is the concealing of issues or problems so that social status and harmony can be maintained. In more individualistic cultures such as the U.S. and European, individuals tell each other what their problems are and communicate their needs. In collectivistic

cultures, the intimate relationships of friends and family are to identify the needs of others before the needs have to be communicated (Kim, Sherman, & Taylor, 2008; Noh & Kaspar, 2003; Wei et al., 2012). When those relationships are in place, the cultural norm of forbearance is effective in lowering acculturative stress. When those co-national relationships are not in place, IS from collectivistic cultures and with strong cultural identity, may be at an increased risk of high acculturative stress. This increased risk is the result of IS from collectivistic cultures keeping things to themselves in order to save face. IS with a co-national social network tend to have lower amounts of acculturative stress (Noh & Kaspar, 20; Wei et al., 2012).

### **Social Connectedness**

Social connectedness is a component of Kohut's self-psychology theory (Kohut & Elson, 1987). This theory focuses on the importance of individuals feeling connected with others such as their family and friends (Lee & Robbins, 1994; Lee, Draper, & Lee, 2001). In his theory, Kohut focused on the importance of relationships between the individual and the actions of others toward the individual. Connectedness is part of the broader framework of belongingness, which is important in avoiding loneliness and alienation (Lee & Robbins, 1994).

Social connections can take place between IS and host country students, co-nationals, other IS students, with faculty and school support personnel (Glass et al., 2015). The feeling of belonging or socially connected is identified as a significant factor in IS successful acculturation (Glass et al., 2015; Hwang, 2014). A student's ability to succeed as an IS is impacted by his or her ability to get assistance. Individuals who struggle to feel connected socially and emotionally begin to withdraw as they fantasize

about places that they sense they belong. This only heightens their criticism of others and frustration with their situation. This often leads to psychological challenges (Lee & Robbins, 1994; Lee, Draper, & Lee, 2001). This frustration can impact an IS life satisfaction as they struggle with the ability to get the help he or she needs academically, socially, and emotionally (Akhtar & Kroner-Herwig, 2015).

Social connectedness and interaction is an important part of learning. Much of what students learn is through verbal interactions. Good teachers will encourage social interaction between students (Hurst, Wallace, & Nixon, 2013). Teachers who can connect with their students and navigate the social challenges of IS in a classroom setting will positively impact their cultural adjustment and learning. Social interactions with faculty bring students out of isolation and assist with academic, and cultural stress. These social interactions provide an opportunity for students to ask cultural and adjustment questions without social anxiety (Glass et al., 2015).

The research of Yeh and Inose (2003) indicated that social connectedness was a significant predictor of acculturative stress. They speculated that this was a result of much of their sampling coming from countries from Asia, Africa, and South/Central America with interdependent cultures. For IS from collectivistic cultures, Yeh and Inose (2003) found that social connectedness was so important that it even influenced their view of self. A struggle with a sense of self can lead to significant distress negatively influencing life satisfaction. IS who struggle to develop social connections deal with their pain by starting to dream about different places where they would fit in (Hendrickson et al., 2011). A lack of social connectedness can lead to perceived social alienation which can be interpreted by IS as discrimination (Hendrickson et al., 2011; Sandhu, 1994).

Social connectedness was measured by asking participants questions about how they feel about themselves.

### **Host Country Relationships**

Social connections with individuals from a host country are an important component in mitigating stress and improving life satisfaction. Relationships with peers from a host country are difficult for IS to develop due to cultural differences and language deficiencies. If friendships are developed, IS often find them disappointing and lacking the depth desired (Hendrickson et al., 2011). Researchers have explored the relationships and social connections of IS with host country peers. The data points to the benefits of these relationships as it indicates an increase in social support and lowering of acculturative stress (Hendrickson et al., 2011; Sullivan & Kashubeck-West, 2015). Studies have found a positive connection between host country relationships and positive life satisfaction and social connectedness (Hendrickson et al., 2011; Sullivan & Kashubeck-West, 2015). These relationships aid IS in language acquisition and the creation of a social support system. Intimate relationships with host country peers have been identified as assisting and accelerating the adaptation process. These relationships provide needed social support and the capacity to provide critical information for IS to navigate their new academic environment (Hendrickson et al., 2011).

Schools can help IS adjust and thrive academically, socially, and emotionally while studying in the U.S. by encouraging and fostering host country relationships. This can minimize acculturative stress and improve life satisfaction (Hendrickson et al., 2011; Sullivan & Kashubeck-West, 2015). Hendrickson et al. (2011) found that international students with a higher ratio of friendships and strong relationships with host country

peers reported a significantly higher level of life satisfaction and lower reported homesickness. Du and Wei (2015) speculated that co-national relationships may be helpful in regulating or managing mental health problems, but host country relationships promote positive relationships and life satisfaction.

### **Country of Origin (Co-national) Relationships**

Social connectedness with co-national peers can positively impact IS life satisfaction (Hendrickson et al., 2011). There are conflicting studies regarding the positive influence of relationships between IS and peers from their own country. Some studies identify a relational benefit with the country of origin students for IS who are experiencing loneliness (Hendrickson et al., 2011; Li, Heath, Jackson, Allen, Fischer, & Chan, 2017). Research indicates that IS with strong co-national relationships have a more positive life satisfaction than those without (Hendrickson, et al., 2011). These relationships and friendships provide opportunities to discuss the new culture from the frame of reference of a co-national (Woolf, 2007). These friendships help rebuild the social network that IS leave behind and often struggle to re-establish in their host country (Hendrickson et al., 2011). IS, especially from China, base their self-image on social and interdependent relationships. As a result, peer relationships between fellow Chinese students can fill that needed void (Du & Wei, 2015; Sullivan & Kashubeck-West, 2015; Wei et al., 2012). Initially, these relationships can help lower the effects of culture shock. Longer term, these relationships can provide support for those who have a stronger cultural identity and need the support of other co-nationals with similar cultural beliefs and practices (Wei et al., 2012). Some studies see minimal or no long-term significant benefit for peer relationships with IS from countries of origin. In fact, some studies have

indicated that these social relationships may be a hindrance to acculturation and increase acculturative stress (Hendrickson et al., 2011; Sullivan & Kashubeck-West, 2015).

### **Multi-National Friendships**

Social connectedness with multinational peers can positively impact life satisfaction as IS build relationships with those of common experiences and challenges (Hendrickson et al., 2011). In schools where there is a diverse enrollment of IS from many different countries, multi-national friendships can have many benefits. These relationships can benefit both individuals in language acquisition. Since IS and their multi-national friends are not native English speakers, there is less fear an intimidation of trying and learning a new language (Hendrickson et al., 2011; Yeh & Inose, 2003). There is also a sense of commonality as both are experiencing similar struggles and frustrations. This common bond can lead to global friendships that can impact their entire lives (Hendrickson et al., 2011).

### **Teachers and Staff**

Social connectedness with teachers and staff can positively influence IS. Li et al. (2017) noted that the cultural barriers and western style of education was challenging to many IS. Communicating with teachers and building relationships with them allows IS the opportunity to get clarification and share individual needs. Research identifies the importance of teachers as part of an IS social network as those relationships were identified as helpful in reducing academic stress (Sandhu, 1994). Kim and Kim (2013) extended the benefits of IS-teacher relationships beyond assistance with academic needs but also to include emotional needs. Teachers are often the bond needed for IS to attach to a school. The relationship builds trust and provides perceived support. Glass et al.

(2015) shared that IS-teacher relationships increased the IS feeling of belonging.

Teachers have the opportunity to affect the feeling of inclusion in the classroom through personal interaction and seating assignments. Teachers provide an example of how to learn and understand the content.

IS will often need extended time with assignments and often are unsure of what to study for a test. They spend more time than host country peers in academic preparation. The amount of time dedicated by many IS to academics, minimizes their available time for activities, social interactions, and even sleep. The combination of these deficiencies heightens their risk for isolation, anxiety, and loneliness (Li et al., 2017). The lack of involvement in activities can influence the IS socially and emotionally as these activities are known to positively impact school attachment and life satisfaction (Kim & Kim, 2013).

### **Relationships with Family**

Social connectedness with parents and family is important for IS. Over the past decade, the ability of IS to communicate with family and friends back home has changed dramatically. The increase of cell phone use and face-to-face electronic communication has made frequent communication practical. No longer are expensive long distance phone calls and handwritten letters the only form of communication. Research has shown that overall life satisfaction and relationship satisfaction is positively connected with familial face to face-to-face communication, phone calls, and video calls (Goodman-Deane, Mieczakowski, Johnson, Goldhaber, & Clarkson, 2016). Cemalcilar, Falbo, and Stapleton (2005) found that maintaining home relationships via technology lowers the feelings of loneliness and social isolation. As a result, the acculturation process is



positively impacted by maintained country of origin relationships as they positively support mental health and academic adaptation. Although parents cannot assist with the actual coursework or provide tutoring and academic clarification, they can play an important role for an IS by being encouraging and supportive (Awang, Kutty, & Ahmad, 2014).

### **Social Connectedness and Life Satisfaction**

IS often view their life holistically. Social connections are an important component in fulfilling their social needs. Many IS struggle to become socially connected with host country students. There are a variety of factors involved, however, cultural differences and language barriers are the two most significant (Yeh & Inose, 2003). When individuals have social and relationship needs met, there is a sense of belonging. Belongingness is a key identifier of social connectedness. Belongingness is the desire or need to feel like you are part of a group. This is established through interpersonal relationships that satisfy unique individual needs. The needs are different for each individual and the number of friends or size of your social network is not indicative of social connectedness or a sense of belonging (Mellor et al., 2008). Individuals who lack belongingness often battle loneliness and feelings of isolation and alienation (Mellor et al., 2008).

Loneliness takes place when the desired relationship levels are not met. Loneliness has been linked to poor mental health and negative life satisfaction (He, Shi, Yi, 2014; Mellor et al., 2008;). Individuals with a higher needs for social connectedness, are more susceptible to feelings of loneliness and lower life satisfaction. He et al. (2104) also saw a relationship between core self-evaluation, loneliness, and life satisfaction. In

their research, it appeared that adolescents with lower core self-evaluation also had increased loneliness, and lower life satisfaction.

### **Perceived Social Support**

Perceived social support is the judgment or belief that social support is in place as needed to address an individual's needs. Although the support may not be desired or drawn upon, there is a belief that it can be accessed at the individual's choosing (Awang et al., 2014; Roohafza, Afshar, Keshteli, Mohammadi, Feizi, Taslimi, & Adibi, 2014). IS are deeply affected by the loss of social support when they arrive in the U.S. This loss of social support negatively impacts their mental well-being and life satisfaction (Yeh & Inose, 2003). College students were found to feel a sense of loss as they left their country of origin (Sandhu, 1994). A relationship between parents, peers, and often a deep relationship with one or two people has now been uprooted. The depth of relationships experienced at home, especially in Asia, are difficult to replace and essential for providing the social and emotional support IS need (Kim et al., 2008). Distressing to many IS is the difficulty of building relationships that exist in the U.S. Even after relationships are established in some form, the IS are disappointed. Many of the social relationships are more individualistic and shallow in comparison to those in their culture and lack the necessary or desired social support (Hendrickson et al., 2011; Yeh & Inose, 2003).

Some researchers indicated that perceived social support is similar to implicit social support. Implicit social support is the emotional comfort an IS has in a social network without the need to share personal issues or stress (Kim et al., 2008). The difference between the two is that perceived social support is the belief that they could

get help from a specific group when needed, whereas implicit social support is a social network at work (Kim et al., 2008). Both are necessary, as students need to know that social support is available and that there are those who accept, love, and care (Song, Kong, & Jin, 2013). Perceived social support provides opportunities for IS to engage in a new setting while disengaging from a previous setting. IS who transition into a new school often feel alone and isolated. Individuals who are isolated or alone often feel a sense of anxiety. Due to culture shock, language barriers, and loss of social connections IS are at risk of feeling alone. Social support, perceived or actual, minimizes isolation.

Research has shown that increased social support and perceived social support improves the social and emotional adjustment in college students first year (Awang et al., 2014). Research also shows a correlation between life satisfaction and perceived or actual social support (Song et al., 2013; Tamannaefar, & Behzadmoghaddam, 2016). Perceived social support, especially from families, is an important coping mechanism to fight depression (Roohafza et al., 2014) and stress (Cohen & Willis, 1985). For IS, perceived social support appears to be a factor in lowering the effects of acculturative stress, such as anxiety and depression while increasing life satisfaction. Cohen and Willis (1985) stated that people with high levels of perceived social support experienced greater emotional well-being than those with low levels of perceived support regardless of the stress level of the individual. Researchers found that poor perceived social support was significantly connected to anxiety and depression (Zhou, Zhu, Zhang, & Cai, 2013). There is a need to provide social support through conversations, shared activities, and the building of relationships around ordinary day-to-day activities to help individuals process positive and negative events (Shorey & Lakey, 2011).

Diener, et al (2013) stated that students from collectivistic cultures use social relationships or support as a way to measure and evaluate their life satisfaction. This increases the importance for IS to feel social support and believe it is accessible as needed. Awang et al. (2014) noted the importance of social support groups comprised of co-nationals. The benefit of similar cultures and experiences were important in building a friendship network. The use of senior members of co-nationals to mentor new students can also be an impactful support system. Perceived social support will be measured by participants agreeing or disagreeing with statements about their social support system.

### **Perceived Social Support and Life Satisfaction**

Lakey (2013) and Awang et al. (2014) suggested a strong association between perceived social support and an individual's happiness, life satisfaction, and well-being. Lakey (2013) noted that this connection has been seen in individuals who are in varying situations and come from a wide range of age brackets and backgrounds. He shared that research indicates a lowering of stress and better life satisfaction in those who perceive social support. Song, Kong, and Jin (2012) identified a correlation between life satisfaction and social support in their study of Chinese adults. In this study, the researchers indicated that individuals with higher perceived social support were likely to have higher core self-evaluations and positive life satisfaction.

Kim et al. (2013) studied the effect of explicit support given to Asian Americans and European Americans. Explicit support is the traditional Western model of talking about one's problems and getting advice and emotional support. They identified that the same explicit social support that helps and calms an individual who is of European American decent actually increases the stress levels for individuals of Asian descent.

Social support in action or perceived is beneficial only in the cultural context of the recipient. This is known as the matching hypothesis (Cohen & Willis, 1985; Kim et al., 2013). The negative impact of a mismatched support plan is something that schools and caregivers would be wise to consider. The result could negatively impact the IS and his or her life and school satisfaction (Kim et al., 2013).

### **Other Barriers to Life Satisfaction**

Students travel to other countries for education for various reasons. Some attend for cultural enrichment and others for rigorous study. IS from Asian countries carry with them significant academic expectations. Parents and relatives expect high achievement despite the cultural and language barriers (Hu & Hagedorn, 2014).

Improving social connectedness of an IS is a complex challenge. It is an important coping skill in dealing with acculturative stress (Akhtar & Kroner-Herwig, 2015; Telbis et al., 2014). Cultural and language barriers make coping skill acquisition difficult. Many IS will not self-identify their need for assistance, therefore, organized intervention is necessary (Li, 2013; Smith & Khawaja, 2014).

Language proficiency is at the root of many acculturative stressors. Institutions assist students by connecting them to available academic support as needed. IS are some of the most academically gifted individuals in their country. Verbal language proficiency may be lacking and as a result, students may struggle academically. This struggle can be embarrassing, yet minimized with increased self-efficacy. Self-efficacy can be increased through social networks and a feeling of belonging. IS need assistance with social networking (Patron, 2014). Institutional academic support can improve a student's perceived and actual social support network. In turn, this will aid a student's self-efficacy

and minimize stress (Bai, 2016; Smith & Kawaja, 2014). Providing structured interactions between IS and host country students, assists in acculturation by increasing social support and connectedness (Akhtar & Kroner-Herwig, 2015).

## **Chapter 3: Methodology**

### **Philosophy and Justification**

The researcher believes that truth is not merely objective but also contextual. This belief supported a postpositivist worldview used in conducting this study (Ryan, 2006).

The goal was to better understand how life satisfaction of IS is influenced by acculturative stress, social connectedness and perceived social support. This study employed a quantitative cross-sectional survey design to gather and analyze data surrounding the life satisfaction of IS who attend Wisconsin Evangelical Lutheran Synod (WELS) high schools and middle schools. These schools were selected because each had a small cluster of IS as part of their school's enrollment and had interest in serving the needs of those students more effectively. Each of these schools had a relationship with the researcher which aided in gaining needed parental permissions.

Empirical research shows a correlation between life satisfaction and student social and emotional health (Diener, Oishi, & Lucas, 2015). The study investigated the relationships between life satisfaction and acculturative stress, social connectedness, and perceived social support. An important aspect of this study was to explore the extent that IS in these grade levels experienced acculturative stress. The review of literature for this project did not identify research that had been done to connect acculturative stress to life satisfaction. No literature was found that assessed the level of acculturative stress in IS in the U.S. for this age level.

### **Research Design Strategy**

The participant population for this study included middle school and high school IS. A survey was used to collect data on life satisfaction, acculturative stress, social

connectedness, and perceived social support. In addition, a few demographic variables were documented by the survey (gender, number of years at the school, number of years studying in the U.S., and housing situation - dormitory or homestay with host national family). The survey took about 20 minutes to complete. It included words of encouragement between each section, and a status bar to communicate to the participant where they were in the process.

### **Theoretical Framework**

The theoretical framework of this study focused on life satisfaction. It was suspected that acculturative stress, social connectedness, and perceived social support have a relationship with life satisfaction (See Figure 1). It was speculated that some of these variables had relationships with each other. One could sense the relationship between and among these variables when conducting the literature review.

Life satisfaction is grounded in goal theories (Diener, Lucas, & Oishi, 2002). The more goals or levels of Maslow's (1948) hierarchy of needs accomplished by a person, the greater his or her satisfaction of life (Taorima & Gao, 2013). Acculturative stress is grounded in Berry's acculturation theory that explains the inner challenges of IS based on their desired social interactions and cultural identity (Berry, 2005; Sullivan & Kashubeck-West, 2015). Social connectedness is grounded in Kohut's (1987) self-psychology theory that focuses on connections needed by individuals, in this case IS, to feel comfortable in an environment (Lee & Robbins, 1994; Lee, Draper, & Lee, 2001). Perceived social support is grounded in the relational regulation theory. This theory focuses on the need to provide social support through conversations, shared activities, and the building of relationships around ordinary day-to-day activities that help



individuals process positive and negative events (Shorey & Lakey, 2011). Each of these theories have a unique focus, yet there are areas of similarities where the present research was expected to provide a clearer picture of the relationships that may or may not exist for middle school and high school IS.

### **Research Questions**

The following research questions were addressed in this study:

#### **Question 1**

RQ01: To what extent do middle school and high school international students experience acculturative stress?

#### **Question 2**

RQ02: What relationship if any, exists between life satisfaction and acculturative stress of middle school and high school international students?

#### **Question 3**

RQ03: What relationship if any, exists between life satisfaction and the social connectedness of middle school and high school international students?

#### **Question 4**

RQ04: What relationship if any, exists between life satisfaction and perceived social support of middle school and high school international students?

#### **Question 5**

RQ05: What relationship if any, exists among life satisfaction, acculturative stress, perceived social support, and social connectedness of middle school and high school international students?

## **Hypotheses**

The following hypotheses were tested in this study:

H01: International middle school and high school students do not experience acculturative stress.

H02: There is no relationship between life satisfaction and acculturative stress in international middle school and high school students.

H03: There is no relationship between life satisfaction and social connectedness in international middle school and high school students

H04: There is no relationship between life satisfaction and perceived social support in international middle school and high school students.

H05: There is no significant relationship among life satisfaction, acculturative stress, social connectedness, and perceived social support in international middle school and high school students.

## **Variables**

There were four key variables in this study. Life satisfaction was the dependent variable. The goal of this study was to measure life satisfaction and then look for relationships with the independent variables. The independent variables were acculturative stress, social connectedness, and perceived social support. Additional analysis was done to determine the relationships between the independent variables for possible future research not as part of the formal hypothesis testing phase of the project.

## **Measures**

An electronic survey was created using Qualtrics, an online survey and document tool. Qualtrics allowed the researcher to gather permission documents and create a Likert

scale survey. The tool collected and compiled survey data automatically. The survey used was a compilation of four different questionnaires that have been previously used in other research studies and all had been psychometrically reviewed and determined to be reliable. The questionnaires that were used are as follows: The Life Satisfaction Questionnaire (Lyons & Huebner, 2016), Acculturative Stress Questionnaire (Sandhu, 1994), Social Connectedness Questionnaire-Revised (Lee & Robbins, 1995), and the Multidimensional Scale of Perceived Social Support (Zimet, 1988). Permission to use the surveys was requested and received from publishers and authors as required though some surveys did not require permission to be gained. Appendices A, B, C, and D provide the individual surveys along with usage permissions received.

**Brief Multidimensional Students' Life Satisfaction Scale – BMSLSS.** Life satisfaction was measured using the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS) (Huebner, 1991) (see Appendix A). It is a seven-item self-report scale designed to measure youth life satisfaction. Participants responded to statements about their perceived quality of life using a six-point Likert-type scale (1 = strongly disagree, 6 = strongly agree). The seven items on the BMSLSS do not address specific areas of satisfaction. The BMSLSS was designed to measure a student's global or overall life satisfaction. Student responses were summed and averaged. Higher average scores correspond to higher levels of life satisfaction. Studies conducted using participants from a variety of cultures, both individualistic and collectivistic, have shown the BMSLSS to have adequate reliability and validity for elementary, middle, and high school students, correlating significantly with parent reports, teacher reports, and other subjective well-being measures (Bender, 1997; Proctor, Linley, & Maltby, 2009). The mean of the data

from the BMSLSS can be interpreted as < 3.0 low LS, 3.0-4.2 medium LS, and >4.2 high LS (Bickman, Riemer, Lambert, Kelley, Breda, Dew, Brannan, and Vides de Andrade, 2007). The BMSLSS coefficient alpha in the Bender (1997) study was  $\alpha=0.83$ . The coefficient alpha for this study was  $\alpha=0.85$ .

**Acculturative Stress Scale for International Students - ASSIS.** Sandhu and Asrabadi (1994) developed the Acculturative Stress Scale for International Students (ASSIS) (see Appendix B). The ASSIS consists of 36 items, which were rated on a five-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). It was designed to assess culture adjustment problems. It is comprised of seven subscales, which includes perceived discrimination (8 items), homesickness (4 items), perceived hate or rejection (5 items), fear (4 items), stress due to change or culture shock (3 items), guilt (2 items), and nonspecific concerns (10 items). The scale provides a sum score for total acculturative stress as well as scores for the seven subscales of acculturative stress, with higher numerical values indicating greater acculturative stress. Rajab, Rahman, Panatik, and Mansor (2014) provided ranges for levels of acculturative stress: low (1.0-2.33), moderate (2.33-3.64), high (3.64-5.0). The ASSIS total score has high reliability coefficients, the Cronbach's coefficient is  $\alpha=0.94$  for all 36 items of the scale (Sandhu & Asrabadi 1998). ASSIS has been used in other studies and internal consistency scores ranged from  $\alpha=0.87$  to  $\alpha=0.95$  (Yeh & Inose 2003). For this study the internal consistency score was  $\alpha=0.93$ .

**Social Connectedness Scale – SCS.** The original Social Connectedness Scale (SCS) included eight items to measure the level of participant's social connectedness. The Revised Social Connectedness Scale included 20 items (see Appendix C). Each item

used a six-point Likert-type scale (1 = strongly disagree, 6 = strongly agree). The results produce a sum score with a range from 20 to 120. The higher numerical value, the higher the general social connectedness level. Mean scores under 3.5 were considered as low social connectedness (Lee et al., 2001). Internal consistency coefficient in the original study was found as  $\alpha = 0.91$  and the revised 20 item scale had was  $\alpha = 0.94$ . For this study the coefficient alpha was found as  $\alpha = 0.83$ .

**Multidimensional Survey of Perceived Social Support – MPSSS.** The MPSSS scale was developed by Zimet, Dahlem, Zimet, and Farley (1988) to measure the perceived social support from families, friends, and significant others (see Appendix D). It includes 12 questions with four questions designed to assess each of the three perceived support sources. Each item used a seven-point Likert-type scale (1 = very strongly disagree, 7 = very strongly agree). The total score for MPSSS ranges from 12 to 84; (12–48; 1-4 average) low acuity, (49–68; 4.1-5.74 average) moderate acuity, (69–84; 5.75-7 average) high acuity of perceived social support. The MPSSS was reviewed by Eker, Arker, and Yaldiz (2001). The reliability study showed that the scale had high internal consistency value of  $\alpha = 0.89$ . This study also had an internal consistency value of  $\alpha = 0.89$ .

### **Sampling Design**

The sampling was a census sampling. The sampling frame contained all IS that attended faith-based high schools and middle schools connected with the Wisconsin Evangelical Lutheran Synod (WELS). The surveys were administered to international high school and middle school students enrolled at WELS high schools and middle schools in the U.S. during the 2017-18 school year.

The overall population of IS in the WELS totaled about 408 students. Students completed 160 surveys with viable data from a total of 128 surveys. These students came from 21 schools located in the United States, primarily in the Midwest. Due to the distance between the participants and the researcher, an online survey approach was used. The complexities of parental permission for minors from international parents made obtaining a parent permission challenging as discussed in the next section.

### **Data Collection Procedures**

This study required a number of steps to complete the collection of data. Institutional review board (IRB) approval was essential before any data collection took place. The IRB approved the proposal along with permission documents and survey tools on April 6, 2018. Parent permission forms as well as the introduction to the student survey were translated into multiple languages to better communicate with the IS and parents. All survey tools were formatted so they could be used in an electronic Qualtrics form.

Parental permission was required for all IS who were minors. Permission verification was received electronically via Qualtrics or email. Students who were 18 and older did not need parent permission. Each student was required to provide personal consent prior to answering survey questions. Participating schools were offered a personal visit from the researcher to help facilitate the process. All schools chose to work through a school representative via email. Each school was sent eligible names once they indicated that all of their families had been contacted to seek permission. Some schools had the eligible students take the survey at one set time, while others simply shared the survey link. All data was collected between May 2 and May 28, 2018.

## **Data Analysis**

The data analysis for this research consisted of computing simple means, multivariate regressions, and Pearson Product Moment Correlation Coefficients. H01 was tested using a simple means analysis to determine if IS suffered from acculturative stress. For the hypotheses and research questions between different variables, it was appropriate to use simple Pearson Product Moment Correlations. That approach was used to for H02, H03, and H04.

The multivariate regression focused on how the variables of acculturative stress, social connectedness, and perceived social support are related to the life satisfaction of IS. A multivariate regression was carried out for H05. The following is the process that was used. Possible variables to predict life satisfaction: social connectedness, perceived social support, acculturative stress, gender, living situation, years of study in the United States were tested. Combinations of variables in various linear regression equations were analyzed and the R-squared and adjusted R-squared values were used for hypothesis H05 testing. Although multiple iterations of the model included some demographic data, they did not add significance.

In the process of testing H05, certain model assumptions regarding social connectedness, perceived social support, and acculturative stress were examined. After reviewing LS correlation charts, no data points needed to be removed because of incomplete surveys. Variable relationships were linear with no visible unique pattern or trend. None of the observations had a time function so there was no need to examine autocorrections. There was no multicollinearity because SC, SS, and AS have different relationships with LS. AS is an inverse score so SC and AS counteract each other when

predicting LS. No significant outliers were included in data after incomplete data sets were removed. Residual distributions were not problems. A random forest model approach was tried but there was no significant improvement.

### **Field Test**

The individual surveys that were compiled to create the combined survey had all been used in previous research studies. A pilot-test was not necessary, but the length of the survey was a concern. A field test was given to three students who were not part of the study so that a timeframe for completion could be identified. Their average time of completion was 18 minutes and they felt the directions were clear. This information aided in communicating expectations and directions to the participant pool.

### **Limitations of Methodology**

A limitation of the survey model is the lack of follow-up questions that could be asked in a qualitative or mixed method approach. It is possible that the time of the school year during that the data were collected could impact the data received. Students at the beginning of the school year may have a different view of each component than students at the end of the year. Life satisfaction may be impacted positively at the end of the year as a number of students may be nearing graduation and have a college or university decision completed. Conversely, some may be nervous about what the future may bring as they prepare to graduate. The areas of data collection are subjective; so many events in each participant's life may impact the data. A longitudinal study would provide better data that might show the change in a student's life satisfaction as different variables increase or decrease over time.

The sampling is a limitation. The decision to use a small segment of IS from



WELS schools limited the pool significantly. That decision was made because these schools are similar and access provided the opportunity for a census. Using schools of similar size and a faith-based education provided commonality. These schools had a working relationship with the researcher, which will provided easier access to the students.

Obtaining parent permissions was a limitation. Without direct access to the parents or the students, the researcher needed to rely on individuals in other schools. There was no way to verify if the permission request documents were sent to parents. This may have impacted the number of eligible participants. Similarly, the researcher needed to rely on others to share the survey with eligible students. There is no way to verify if that was done in every school.

### **Ethical Considerations**

Explaining the purpose and potential benefit of the study to be conducted, is an important ethical requirement for good research. Creswell (2014) stated that it is important to disclose the purpose of the study to the participants. He further explained that being transparent about the data collection process and data usage is important to the participants. That same transparency is required when data are analyzed. It is ethical that data be shared with the participants if they desire.

It was anticipated that more than 50% of the participants would be under the age of 18. Parental consent prior to data collection was needed for all students who were minors (Creswell, 2014). An IRB approved online consent document was provided to the participant's parents. Some parents were not English language proficient. Participants and representatives of the students (such as agents or family liaisons) were informed of the

process so they could assist in explaining the consent request document. The documents were translated into 10 languages to aid parents in understanding the consent request. Once the consent forms were collected, students still had the opportunity for personal consent as part of the electronic survey. This allowed them to volunteer their participation. As recommended by Creswell (2014), participants had the ability to opt into the survey as well as to opt out at any time. Data indicated that more than 30 students chose to opt out during the data collection process.

Guaranteeing confidentiality and anonymity is important for each of the participants (Creswell, 2014; Roberts, 2010). The parental consent documents were collected and held by the researcher only. The names were referenced only to identify the students who had permission to take the assessment. Once the survey was administered via an online link, there was no personal traceable information that linked a participant to any given survey. It was not known who voluntarily dropped out or completed the assessment. Protection of identity was uniquely important for the students at the school connected to the researcher. The researcher is the president of one of the schools. His role is primarily outside of the building and has no direct supervision of the students. The two principals of the researcher's school carried out direct supervision. Although there is no direct supervision, it was something that needed to be disclosed and remain a consideration. To further address the ethical concerns, the researcher utilized other school personnel to administer the data collection process. In other schools that ethical concern did not exist.

There were no significant risks to any of the participants in the population pool. There was the possibility of minimal emotional risks as students recalled information to

complete the survey. Each school identified an individual who would be available to assist if a student was negatively impacted emotionally. The researcher was not informed of any issues that resulted from participation. All members of the population had the opportunity to participate and request a final data report if desired. No student was excluded from any benefits that may or may not result from this research.

## Chapter IV: Results

The overall population was believed to be 408 students if all schools participated in the study. Informally, the researcher was notified that at least one school did not participate that had initially indicated it would. This eliminated eight students from the potential pool. The specific potential population was not known with 100% accuracy. The surveys fully or partially completed numbered 160 with 79% (N=128) of the surveys were fully completed and used for data analysis.

Table 1

### *Demographics*

Characteristic	N	%
Total Population	400	100
Surveys	163	40.8
Completed Surveys	128	32
Gender		
Male	69	53.1
Female	59	46.9
Housing		
Dormitory	82	64.1
Homestay	43	33.6
Relatives	3	2.3
Years of English Study		
First Year	11	8.6
Two or more	117	91.4
Continent of Origin		
Asia	113	88.2
Africa	3	2.3
Europe	6	4.7
South America	5	3.9
Other	1	0.8
Years Studying in the United States		
First Year	35	27.3
Second Year	43	33.6

Third or More	50	39.1
Time at Current School		
First Year	42	32.8
Second Year	44	34.4
Three or More	42	32.8

The participants (N=128) were comprised of 54% (N=69) males and 46% (N=59) females. 64% (N=82) of the participants lived in dormitories, 34% (N=43) lived in homestays, and 2% (N=3) lived with relatives. 91% (N=117) of the participants studied English for two years or more. 9% (N=11) of the participants had only one year of English experience. 88% (N=113) of the participants were from Asia. There was a relatively even dispersion of students who were in their current school for a given amount of time. 33% (N=42) of the participants were in their school for one year, 34% (N=44) for two years, and 33% (N=42) for three or more years.

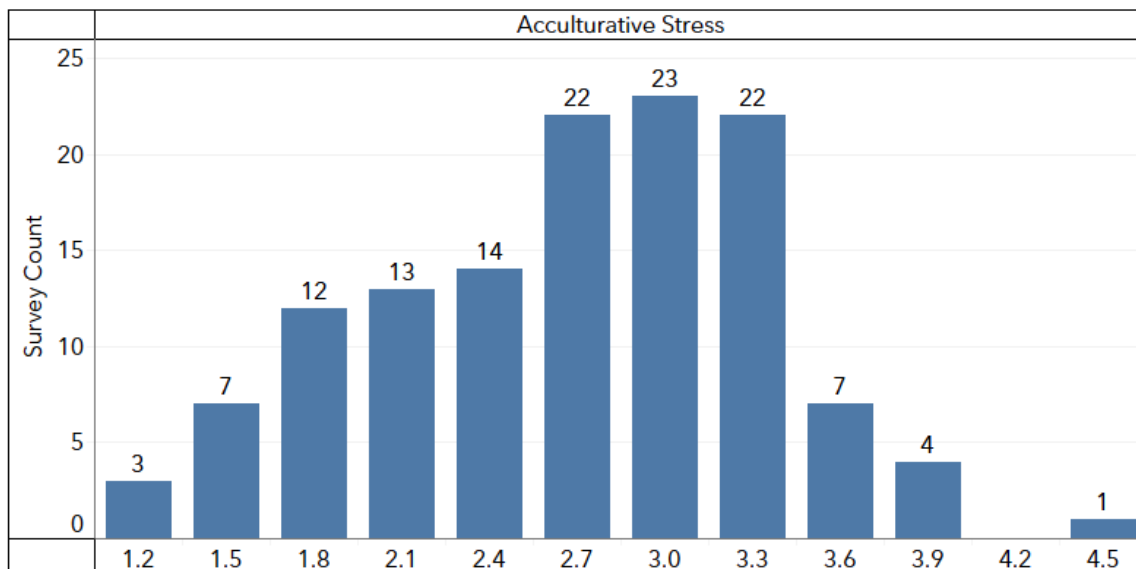
Table 2

*Results Summary*

Hypothesis	Reject the Null	Fail to Reject
H01: International middle school and high school students do not experience acculturative stress	X	
H02: There is no relationship between life satisfaction and acculturative stress.	X	
H03: There is no relationship between life satisfaction and social connectedness in international middle school and high school students.	X	
H04: There is no relationship between life satisfaction and perceived social support.	X	
H05: There is no significant relationship among life satisfaction, acculturative stress, social connectedness, and perceived social support.		X

## Hypotheses 1

H01: International middle school and high school students do not experience acculturative stress. To test this hypothesis a simple mean test was used to determine if IS middle and high school students (adolescents) experience acculturative stress. Rajab et al. (2014) provided ranges for levels of acculturative stress: low (1.0-2.33), moderate (2.33-3.64), high (3.64-5.0). Figure 4.1 shows that >70% (n=95 of N=128) of the IS experienced moderate to high acculturative stress. Based on data, the null is rejected.



*Figure 1.* Acculturative stress mean. This figure shows the mean score of acculturative stress and the number of participants who had the same mean.

## Hypothesis 2

H02: There is no relationship between social life satisfaction and acculturative stress.

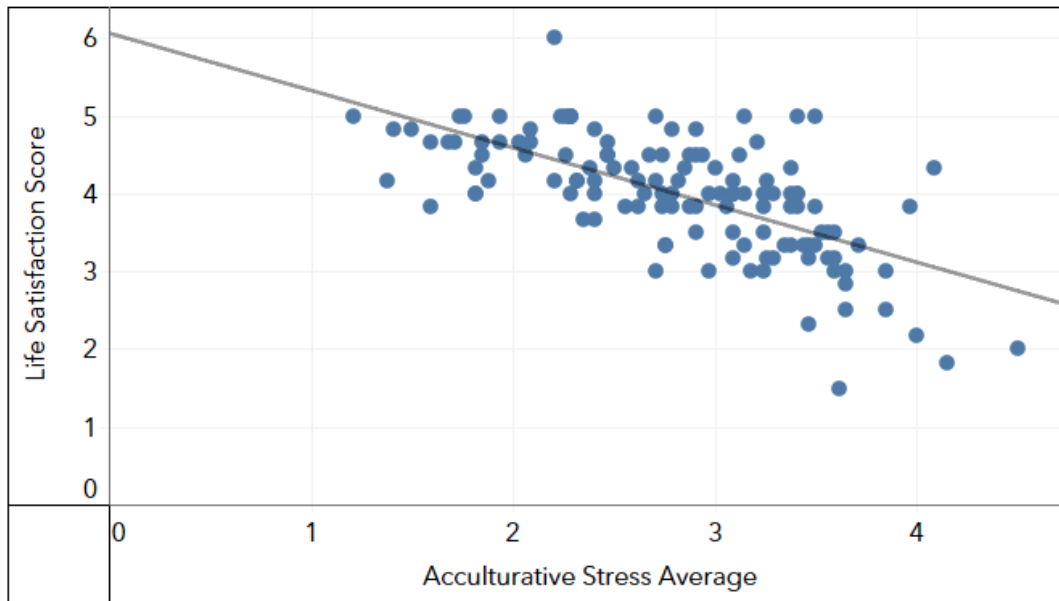
A Pearson correlation coefficient was computed to assess the relationship between IS life satisfaction and acculturative stress. There was a significant correlation between the two variables ( $r = -.65$ ,  $n = 128$ ,  $p < .01$ , Table 3). The null hypothesis is rejected. A

scatterplot summarizes the results (Figure 4.3). Overall, there was a strong, negative correlation between life satisfaction and acculturative stress.

Table 3

*Life Satisfaction and Acculturative Stress Correlation*

		Life Satisfaction (LS)	Acculturative Stress (AS)
LS	Pearson Correlation	1.00	-.65
	Sig.	-	<.00001
	N	128	128
AS	Pearson Correlation	-.65	1.00
	Sig.	<.00001	-
	N	128	128



*Figure 2.* Life satisfaction and acculturative stress scatterplot visually demonstrates the relationship between life satisfaction and acculturative stress.

### Hypothesis 3

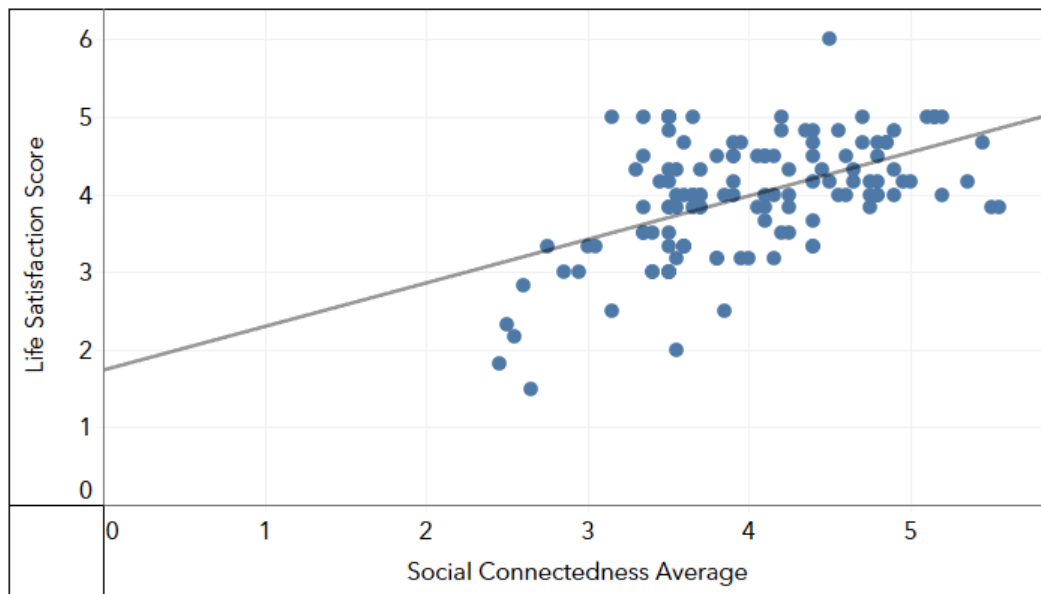
H03: There is no relationship between life satisfaction and social connectedness in international middle school and high school students.

A Pearson correlation coefficient was computed to assess the relationship between IS life satisfaction and social connectedness. There was a significant correlation between the two variables [ $r = .51$ ,  $n = 128$ ,  $p = < .01$ ]. The null hypothesis is rejected. A scatterplot summarizes the results (Figure 4.2) Overall; there was a strong, positive correlation between life satisfaction and social connectedness.

Table 4

*Life Satisfaction and Social Connectedness Correlation*

		Life Satisfaction (LS)	Social Connectedness (SC)
LS	Pearson Correlation	1.00	.51
	Sig.	-	<.00001
	N	128	128
SC	Pearson Correlation	.51	1.00
	Sig.	<.00001	-
	N	128	128



*Figure 4.* Life satisfaction and social connectedness scatterplot visually represents the relationship between life satisfaction and social connectedness.



## Hypotheses 4

H04: There is no relationship between life satisfaction and perceived social support.

A Pearson correlation coefficient was computed to assess the relationship between IS life satisfaction and perceived social support. There was a significant correlation between the two variables [ $r = .23$ ,  $n = 128$ ,  $p = <.01$ ]. The null hypothesis is rejected. A scatterplot summarizes the results (Figure 4.4) Overall, there was a weak positive correlation between life satisfaction and perceived social support.

Table 5

*Life Satisfaction and Perceived Social Support Correlation*

		Life Satisfaction (LS)	Perceived Social Support (SS)
LS	Pearson Correlation	1.00	.23
	Sig.	-	.009008
	N	128	128
SS	Pearson Correlation	.23	1.00
	Sig.	.009008	-
	N	128	128

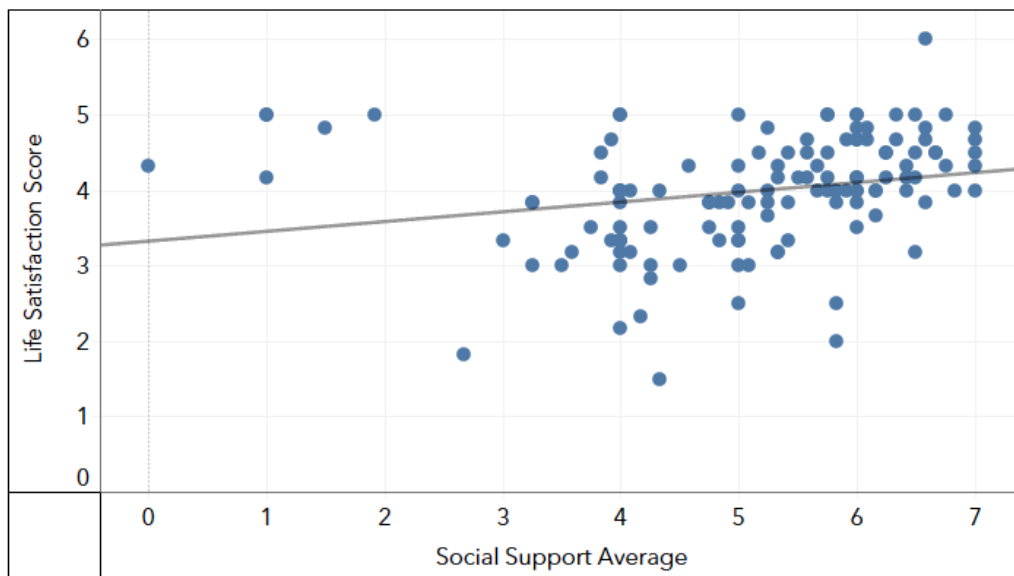


Figure 3. Life satisfaction and perceived social support scatterplot visually represents the relationship between life satisfaction and perceived social support.

## Hypotheses 5

H05: There is no significant relationship among life satisfaction, acculturative stress, social connectedness, and perceived social support.

Life satisfaction scores were regressed on variables of gender, school, years in the U.S., social connectedness, perceived social support, and acculturative stress. Only social connectedness and acculturative stress were statistically significant at the 95% threshold.

A clean regression was done so that life satisfaction scores were regressed on social connectedness and acculturative stress. These two predictors accounted for just under half of the variance in test scores ( $R^2=0.46$ ), which is highly significant,  $F(2,125)=53.32$ ,  $p<.01$ . Both the social connectedness ( $\beta=0.24$ ,  $p<.01$ ) and acculturative stress ( $\beta=-0.6$ ,  $p<.01$ ) demonstrated significant effects on life satisfaction.

Table 6

### *Regression – Clean*

Variable	Coefficient	Std. Error	T-Value	Probability
Constants	4.73110	0.52643	8.987	3.32e-15 ***
Social Con.	0.23934	0.08646	2.768	0.00649 **
ASSIS	-0.60389	0.08800	-6.862	2.80e-10 ***
Signif. Codes	0 ***		.001 **	.01*
R-squared	0.4604			
Adj. R-Squared	0.4517			
S.E. of Regression	0.5624			
F-Statistics	53.32 on 2 and 125 DF			

## Other Data Analysis

### Correlations

In addition to the statistical tests of hypotheses presented above and in the methodology section, correlational and t-test analyses were conducted to uncover possible discoveries or focuses for future research. The additional analyses that were scientifically significant are reported in the remainder of this chapter.

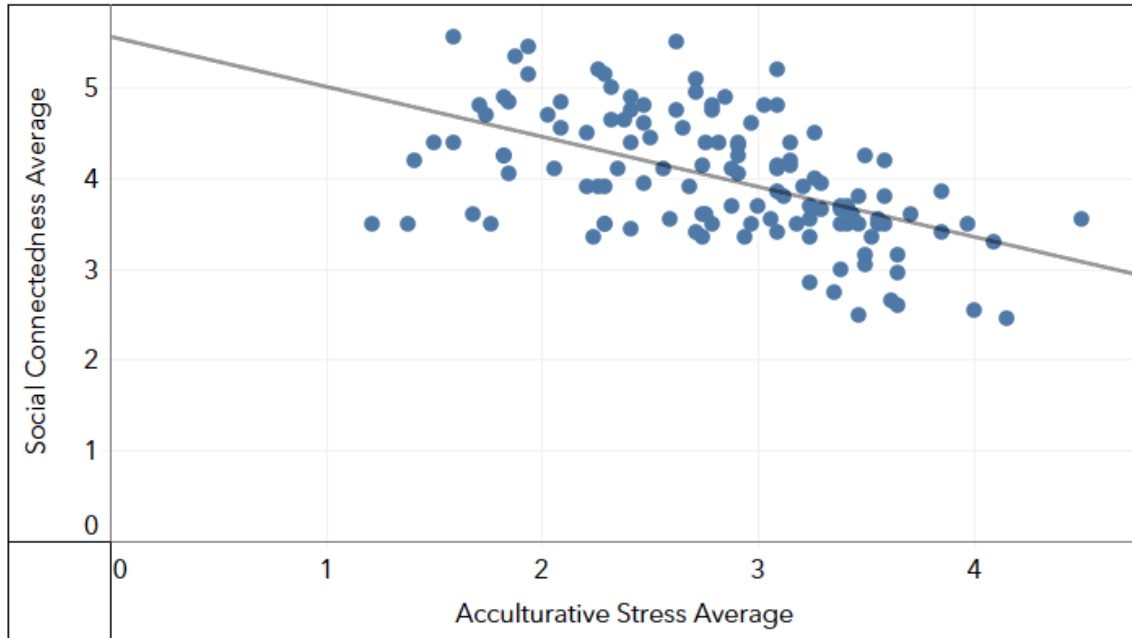
### Social Connectedness and Acculturative Stress

A Pearson correlation coefficient was computed to assess the relationship between IS social connectedness and acculturative stress. There was a significant correlation between the two variables ( $r = -.54$ ,  $n = 128$ ,  $p = <.01$ , Table 6). A scatterplot summarizes the results (Figure 4). Overall, there was a strong, negative correlation between acculturative stress and social connectedness.

Table 7

#### *Social Connectedness and Acculturative Stress Correlation*

		Acculturative Stress (AS)	Social Connectedness (SC)
LS	Pearson Correlation	1.00	-.54
	Sig.	-	<.00001
	N	128	128
SC	Pearson Correlation	-.54	1.00
	Sig.	<.00001	-
	N	128	128



*Figure 4.* Social connectedness and acculturative stress scatterplot visually represents the relationship between social connectedness and acculturative stress.

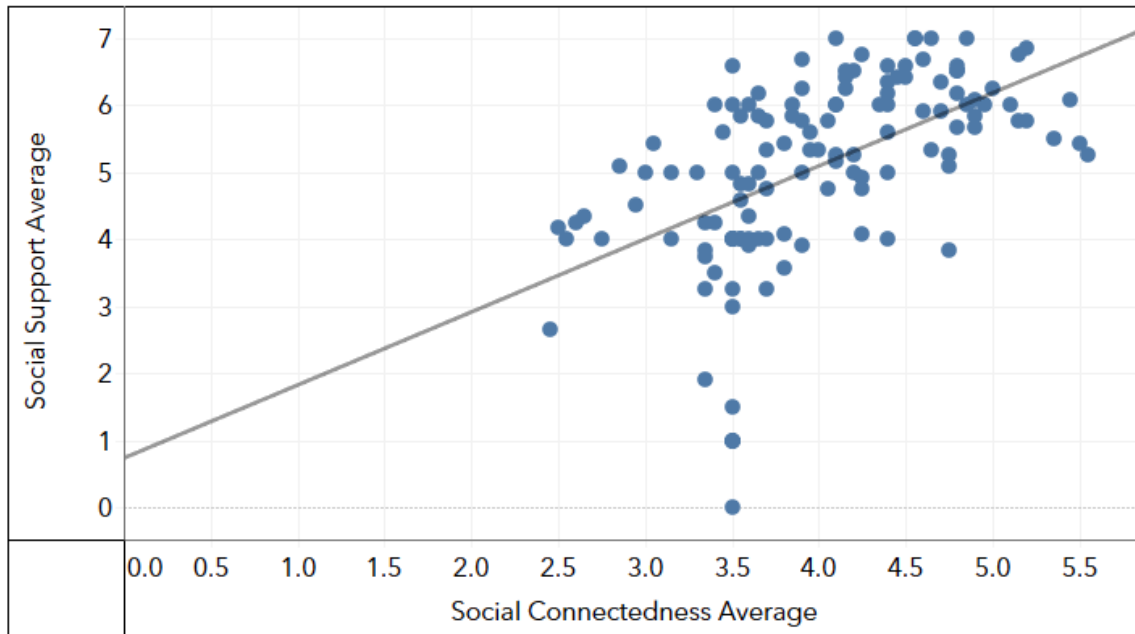
### **Perceived Social Support and Social Connectedness**

A Pearson correlation coefficient was computed to assess the relationship between IS social connectedness and perceived social support. There was a significant correlation between the two variables ( $r = 0.54$ ,  $n = 128$ ,  $p = <.01$ , Table 7). A scatterplot summarizes the results (Figure 5). Overall, there was a strong, positive correlation between perceived social support and social connectedness.

Table 8

*Perceived Social Support and Social Connectedness Correlation*

		Perceived Social Support (SS)	Social Connectedness (SC)
LS	Pearson Correlation	1.00	.54
	Sig.	-	<.00001
	N	128	128
SC	Pearson Correlation	.54	1.00
	Sig.	<.00001	-
	N	128	128



*Figure 5.* Perceived social support and social connectedness scatterplot visually represents the relationship between Perceived social support and social connectedness.

**Perceived Social Support and Acculturative Stress**

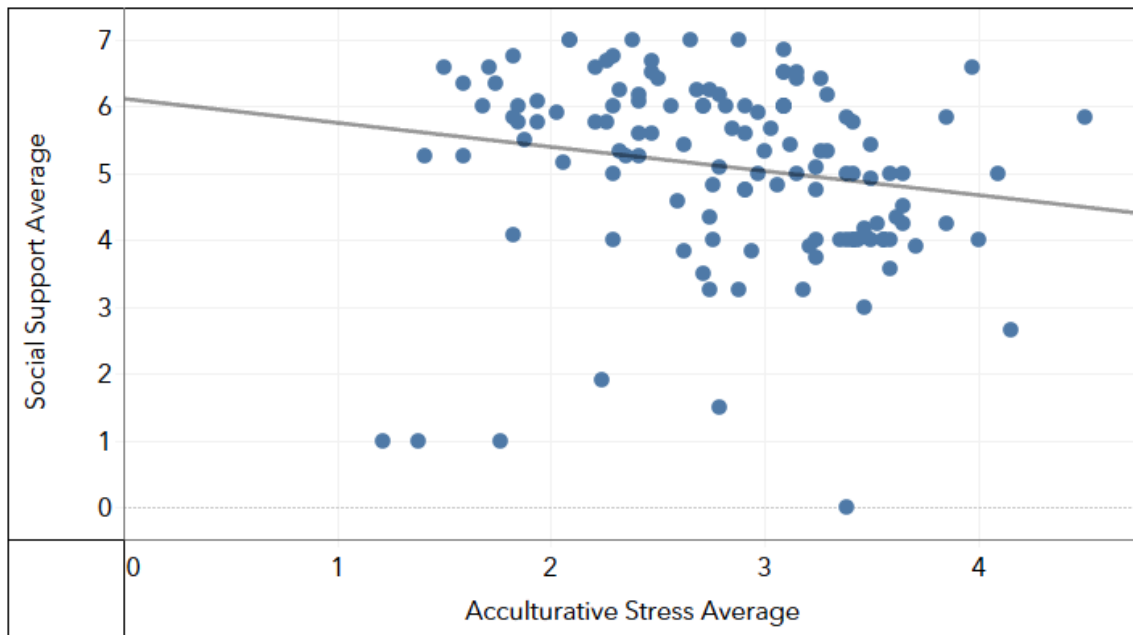
A Pearson correlation coefficient was computed to assess the relationship between IS perceived social support and acculturative stress. There was a significant correlation between the two variables ( $r = -.18$ ,  $n = 128$ ,  $p = .04$ , Table 8). A scatterplot summarizes

the results (Figure 6). Overall, there was a weak, negative correlation between acculturative stress and perceived social support.

Table 9

*Perceived Social Support and Acculturative Stress Correlation*

		Perceived Social Support (SS)	Acculturative Stress (AS)
LS	Pearson Correlation	1.00	-.18
	Sig.	-	.04
	N	128	128
SC	Pearson Correlation	-.18	1.00
	Sig.	.04	-
	N	128	128



*Figure 6.* Perceived social support and acculturative stress scatterplot visually demonstrates the relationship between perceived social support and acculturative stress.

## **T-Tests**

There were a series of unpaired t-tests run on demographics. Although many were not statistically significant, the following were found to have statistical significance. Two tests were statistically significant based on housing, two were statistically significant based on years in the U.S., and three were significant based on years at their current school.

### **Comparing Social Connectedness Based on Housing**

For this t-test the demographic compared was based on housing type. Dorm housed IS (N=82) were compared to IS housed in homestays (N=43). This t-test looked at social connectedness based on housing differences. There was a statistically significant difference in the scores for IS in dorms (M=3.92, SD=0.71) and IS in a homestay (M=4.26, SD=0.61) conditions;  $t(123)=-2.71$ ,  $p=>0.01$ .

### **Comparing Perceived Social Support Based on Housing**

For this t-test the demographic compared was based on housing type. Dorm housed IS (N=82) were compared to IS housed in homestays (N=43). This t-test looked at perceived social support based on housing. There was a statistically significant difference in the scores for IS in dorms (M=4.97, SD=1.44) and IS in a homestay (M= 5.47, SD=0.94) conditions;  $t(123)=-2.08$ ,  $p=0.04$ .

### **Comparing Acculturative Stress based on Years in U.S.**

For this t-test the demographic compared was based on years in the U.S. IS in year one (N=34) were compared to IS in year two (N=42). This t-test looked at acculturative stress based on time in the U.S. There was a statistically significant

difference in the scores for IS in their first year in the U.S. ( $M=2.56$ ,  $SD=0.64$ ) and IS in their second year ( $M= 2.92$ ,  $SD=0.69$ ) conditions;  $t(74)=-2.28$ ,  $p=0.03$ .

### **Comparing Acculturative Stress based on Years in U.S.**

For this t-test the demographic compared was based on years in the U.S. IS in year one ( $N=34$ ) were compared to IS in year three ( $N=52$ ). This t-test looked at acculturative stress based on time in the U.S. There was a statistically significant difference in the scores for IS in their first year in the U.S. ( $M=2.56$ ,  $SD=0.64$ ) and IS in their third year ( $M= 2.88$ ,  $SD=0.68$ ) conditions;  $t(84)=-2.1962$ ,  $p=0.03$ .

### **Comparing Acculturative Stress based on Years at Current School**

For this t-test the demographic compared was based on years at current school. IS in year one ( $N=41$ ) were compared to IS in year two ( $N=45$ ). This t-test looked at acculturative stress based on time at their current school. There was a statistically significant difference in the scores for IS in their first year at their school ( $M=2.60$ ,  $SD=0.68$ ) and IS in their second year ( $M= 2.95$ ,  $SD=0.70$ ) conditions;  $t(84)=-2.38$ ,  $p=0.02$ .

### **Comparing Life Satisfaction based on Years at Current School**

For this t-test the demographic compared was based on years at current school. IS in year one ( $N=41$ ) were compared to IS in year two ( $N=45$ ). This t-test looked at life satisfaction based on time at current school. There was a statistically significant difference in the scores for IS in their first year in their school ( $M=4.18$ ,  $SD=0.59$ ) and IS in their second year ( $M= 3.84$ ,  $SD=0.84$ ) conditions;  $t(84)=2.15$ ,  $p=0.03$ .

### **Comparing Perceived Social Support based on Years at Current School**



For this t-test the demographic compared was based on years at current school. IS in year two (N=45) were compared to IS in year three (N=42). This t-test looked at perceived social support based on time at current school. There was a statistically significant difference in the scores for IS in their second year in their school (M=4.96, SD=1.33) and IS in their third year (M= 5.51, SD=0.92) conditions;  $t(85)=-2.24$ ,  $p=0.03$ .

## **Chapter V: Discussion, Implications, Recommendations**

The purpose of this study was to study how international student (IS) life satisfaction is influenced by acculturative stress, social connectedness, and perceived social support for those adolescent students attending Wisconsin Evangelical Lutheran Synod (WELS) high schools and middle schools. This chapter provides an overview of the study and discusses each research question in greater detail. Other findings are discussed and implications for future research and school leaders are shared. It concludes with a summary of the study.

### **Discussion and Explanation**

The data analysis provided a better picture of the relationships between various components and factors in an IS life as they attend school in the U.S. Much of the analysis mirrored components of previous research studies. There were a few items that were different than anticipated.

#### **Research Question 1**

The purpose of this hypothesis was to identify that acculturative stress (AS) affected middle school and high school IS. Although it was believed that this would be the case, the researcher wanted to make sure that this participant group was not unique. The data from this study indicated that the participants suffer acculturative stress. More than 70% (N=95) of the participants indicated moderate to significant acculturative stress based on the chart provided by Rajab et al. Rajab, Rahman, Panatik, and Mansor (2014) provided ranges for levels of acculturative stress: low (1.0-2.33), moderate (2.33-3.64), high (3.64-5.0). (2014). As a result of this data, the null hypothesis was rejected.

The results of this analysis indicated that the majority of the participants are dealing with some form of challenge, obstacle, or level of discomfort by studying in the U.S. Previous research indicated that more than 20% of IS suffer from extensive effects of acculturative stress (Bai, 2016). Additional research indicated that 20% of IS suffer the effects of acculturative stress for longer than three semesters (Li et al., 2017). The connection of long-term acculturative stress to feelings of isolation, loneliness, and anxiety is significant. The potential impact on emotional health and life satisfaction makes this a significant concern (Sandhu & Asarabadi, 1998). This concern is even greater for schools working with middle school and high school age students who are still adolescents developing and changing rapidly (Crocetti, et al., 2016).

### **Life Satisfaction Relationships**

Life satisfaction (LS) affects IS in multiple ways ranging from emotional and mental well-being to academic learning (Diener, et al., 2015; Lyons & Huebner, 2016). Hypotheses two through four used Pearson Correlations to analyze the relationship between LS and the factors of AS, social connectedness (SC), and perceived social support (SS).

### **Research Question 2**

What is the relationship between life satisfaction and acculturative stress (AS)? In the first data analysis, acculturative stress was clearly identified in the participants. That result provided significance for the potential relationship between these two variables. The data showed a strong inverse relationship between the two ( $r=-0.65$ ). As AS decreased, LS increased. Conversely, the higher the AS, the lower the LS. This

relationship is clearly shown in Figure 4.3. This correlation was statistically significant and provided support to reject the null hypothesis.

This relationship is also significant because it demonstrates the importance of assisting IS in their transition to a U.S. school. Hendrickson et al. (2011) focused on the importance of supporting IS with coping skills. These skills are needed to deal with the AS IS experience because of its potential impact on student life and various components of LS. Due to cultural differences, few IS will seek help (Bertram et al., 2014). This places a large group of students at risk of emotional distress.

### **Research Question 3**

What is the relationship between life satisfaction and social connectedness? The data identified a strong positive relationship between LS and SC ( $r=0.51$ ). That means higher social connectedness likely leads to greater life satisfaction. It also means that those students who have high life satisfaction likely are socially connected. Conversely, those IS who are not socially connected, likely have lower life satisfaction. This relationship is shown in Figure 4.2. This correlation was scientifically significant and provided support to reject the null hypothesis.

Social connectedness can come in many forms. Social connections and relationships can take place between IS and host country students, co-nationals, other IS students, with faculty and school support personnel (Glass et al., 2015). A sense of belonging or feeling socially connected has been identified in research as a significant factor in IS successful acculturation and transition (Glass et al., 2015; Hwang, 2014). Social connectedness creates a sense of belonging and helps mitigate the effects of loneliness and alienation often attributed to AS, poor mental health and negative life

satisfaction (Mellor et al., 2008; He, Shi, & Yi, 2014). In the previous research question, it was noted that few students seek the assistance they need to cope with acculturative stress. Providing processes and programs for IS to become socially engaged may be a way to increase social connectedness and life satisfaction while mitigating the effect of AS (Anataramian, 2016).

#### **Research Question 4**

What is the relationship between life satisfaction and perceived social support? The data identified a weak positive relationship between LS and SS ( $r=0.23$ ). The relationship was statistically significant and provided support to reject the null hypothesis. Although there was a statistically significant relationship, the strength of this relationship was noticeably less than the relationships that LS had with AS or SC.

Despite the statistically significant positive relationship, the data for this correlation was a bit surprising to the researcher. It was anticipated that there would be a strong relationship based on literature. Lakey (2013) and Awang et al. (2014) suggested a strong association between perceived social support and an individual's happiness, life satisfaction, and well-being. Research also shows a correlation between life satisfaction and perceived or active social support (Tamannaifar & Behzadmoghaddam, 2016; Song et al., 2013).

The reason for a lower than expected relationships is speculative. The researcher noticed that the data was negatively skewed with an overall SS average quite high (5.15 using a 7 point Likert scale). The negative skew and the relatively small number of participants ( $N=128$ ) may have been factors. Even the location of the survey questions in the overall questionnaire could have been a factor.

### **Research Question 5**

What relationship, if any, exists among life satisfaction, acculturative stress, perceived social support, and social connectedness? The data analysis for this question included these variables as well as a few demographic variables to test their relationships as well. After running the regression, it was noted that none of the demographic variables were statistically significant. It was also identified that perceived social support was not statistically significant in the regression at the 95% confidence level. Since SS was not statistically significant as a predictor in this regression, the researcher failed to reject the null hypothesis.

A follow-up regression was set up that removed the variables that were not scientifically significant. A clean regression was run using life satisfaction, acculturative stress, and social connectedness (Table 5). Acculturative stress and social connectedness showed strong predictability of life satisfaction. This analysis supports the findings in research questions two and three. Although the hypothesis was rejected, the alternate regression provides a better understanding of the significance of social connectedness in predicting life satisfaction and lower acculturative stress levels. Potential reasons for perceived social support not being scientifically significant will be discussed later.

### **Other Data Analysis**

#### **Social Connectedness and Acculturative Stress Correlation**

The relationship between SC and AS was a strong inverse relationship ( $r=-0.54$ ). As SC increased AS decreased. Similarly the higher the AS the lower the SC. This relationship was supported in literature that indicated social connectedness is a significant factor in successful acculturation (Glass et al., 2015; Hwang, 2014). Yeh and Inose

(2003) also indicated that social connectedness was a significant predictor of acculturative stress.

### **Perceived Social Support and Social Connectedness Correlation**

The relationship between SS and SC was a strong positive relationship ( $r=0.54$ ). As SS increased so did SC. Similarly the higher the SC the greater the SS. The literature review pointed to a strong correlation between these two variables. So much so that the researcher considered dropping one due to concerns of data collinearity and general overlap.

Although there are similarities, there are distinct differences. Literature by Kim et al. (2008) discussed the distinction between the two by identifying social connectedness as explicit social support and perceived social support as implicit. Explicit is an active give and take relationship whereas implicit is a feeling or understanding of support that exists if needed. Both are important especially for IS from Asia who have concerns about saving face (Kim et al., 2008). Additional research supported the need for both as increased social support (explicit) and perceived social support (implicit) improved the social and emotional transition of first-year college students (Awang et al., 2014).

### **Perceived Social Support and Acculturative Stress Correlation**

The relationship between SS and AS was a weak inverse relationship ( $r=-0.18$ ). As perceived social support increased, acculturative stress slightly decreased. Conversely, as acculturative stress was measured higher perceived social support was measured lower.

Although the relationship was statistically significant, literature pointed to a stronger relationship. Roohafza et al. (2014) shared that perceived social support,

especially from families, is an important coping mechanism to fight depression. Cohen and Willis (1985) connected higher perceived social support and lower stress and anxiety levels. Zhou et al. (2013) found that poor perceived social support was significantly connected to anxiety and depression.

### **T-Tests**

T-tests were conducted based on demographics. The t-tests were grouped into three comparisons groupings based on a type of housing, years in the U.S., and years at their current school. Although statistically significant differences exist, the size of the sample makes the data volatile. In most situations, the removal of one or two participants would significantly change the results and in many cases render them no longer statistically significant at the 95% confidence level.

### **Housing Type**

There are three types of housing represented in this census study: dormitory (N=82), homestay (N=43), and home of a relative (N=3). A dormitory is defined as living in a multi-person dwelling without a parent structure in place. This can be on a school's campus or off campus. Homestay is defined as a home with an American host family. A home of a relative is defined as living with an immediate or extended family member of the same cultural background. The number of participants in the home of a relative was too small to use in a t-test.

### **Social Connectedness and Perceived social support by Housing Type**

Two t-tests were statistically significant when comparing housing types. Social connectedness and perceived social support t-tests indicated a statistically significant difference for dormitory and homestay situations. In both instances, IS in homestays had



higher levels. In the case of social connectedness, dorm IS had a mean score of 3.92 with a standard deviation (SD) of .71. Homestay IS had a mean score of 4.26 with a SD of .61. Looking at the variable perceived social support, dorm IS had a mean of 4.97 with a SD of 1.44. Homestay IS had a mean of 5.47 with a SD of .94.

With nearly a 2:1 ratio of dorm IS to homestay IS an evaluation beyond stating the data would be difficult. Although these two tests showed homestay IS to have higher scores than dorm IS, it would be difficult to say that homestay living situations are superior to dormitory living situations when considering these two variables. In conducting the analysis, the researcher wondered what would happen if the same t-test was run while removing one or two of the scores from the dormitory or homestay data set. When manipulating the data set by removing one or two scores, the result became statistically insignificant. This demonstrated the volatility of small sample sizes.

### **Acculturative Stress based on years studying in the US**

There were two t-tests conducted that compared acculturative stress between the number of years studying in the US. The first t-test compares acculturative stress levels for IS who were in their first year studying in the U.S. (N=34) and those in their second year of study in the U.S. (N=42). The results were a bit surprising as first-year IS had a mean of 2.56 with a SD of 0.64 and second-year students had a mean of 2.92 with a SD of 0.69. In comparing first-year IS (N=34) and third-year IS (N=52) the results were similar with first-year IS had a mean of 2.56 with a SD of 0.64 and third-year students having a mean of 2.88 with a SD of 0.68.

The researcher anticipated that the first year IS would have higher acculturative stress than second and third-year students. All of the mean scores indicate a low

acculturative stress score. This may indicate that the majority of first-year IS had transitioned to life in the U.S. by the time that the data was collected. Most had been in the U.S. for more than nine months with a few in the U.S. for approximately four months. Once again, small sample sizes make significant evaluations speculative.

### **Life Satisfaction, Acculturative Stress, and Perceived Social Support based on years at a school**

Three t-tests were run comparing the number of years an IS spent at their current school. This differs from years in the U.S. because some IS transfer to different schools once in the U.S. The first comparison was done looking at life satisfaction for first-year IS (N=41) and second-year IS (N=45) at their current school. First-year IS had a mean of 4.18 with a SD of 0.59 and second-year IS had a mean of 3.84 with a SD of 0.84. The researcher is unable to determine why life satisfaction is lower for second-year students. One can speculate that some second-year students may be predominately seniors, and the timing of data collection may coincide with university acceptance or denial.

The second comparison used the variable of acculturative stress in comparing IS in year one (N=41) and year two (N=45) at their given school. This comparison had similar results as the t-test with life satisfaction. Year one students had an acculturative mean score of 2.60 with a SD of 0.68 and year two IS had a mean score of 2.95 with a SD of 0.70. The researcher anticipated a lower score for year two students, but due to the size of the sample and overall low scores between both groups, it is difficult to make further determinations.

The final t-test was done to compare perceived social support between year one IS (N=45) and year three IS (N=42). In this t-test, first-year students had a SS mean of 4.96

with a SD of 1.33. Second-year IS had a SS mean of 5.51 with a SD of 0.92. This data indicates that the IS who attended a school for three or more years felt a greater level of perceived social support. This result matched what the researcher anticipated. Due to relatively high values by both groups and small sample sizes further application is difficult.

### **Limitations**

In conducting the research there were limiting factors that took place. Many were found in the methodology section. Some additional limitations involved the timing of the data collection, the type of data collection, the length of the questionnaire and dependency on others.

The data were collected at the end of the school year. One can speculate if the data would have been significantly different for first-year students had the questionnaire been delivered within the first few weeks of the school year. The literature states that acculturative stress is greatest in the first few months of an IS transition and then lessons over time (Li et al., 2017). This researcher would recommend a longitudinal study with assessments given quarterly to collect data over different time frames to better assess changes.

The data collection was a Likert scale survey. It was a practical way to gather data from 20+ schools around the U.S. The researcher wonders if a mixed method approach might have provided deeper insight into the root causes rather than quantitative data alone. A follow-up qualitative or mixed method research project would be a possible follow-up to this study.

The length of the questionnaire was potentially too long for adolescents. Although this was not a concern after the field test, the data collected included 32 partially completed surveys. The researcher speculates that the length of the survey may have contributed to the number of surveys that were not completed. 16 of the 32 surveys that were not completed were drops after the first section was completed. The survey may have been overwhelming to some despite average completion times of 20 minutes or less.

The dependency on others was challenging. In an attempt to be respectful of the end of school year craziness of all schools, the researcher pushed to have as many schools as possible share the questionnaire before May 15, 2018. It became clear from the lack of communication with some school representatives that this study was not a priority for them. While understandable due to the timing, it was a factor in the process. Due to the anonymity of the data collection design, there is no way to determine if all schools shared the survey to the participants. Based on parental permissions and the estimated number of 18 years old IS and older, it appears there were some distribution errors. It is important to note that the data collection could not have been conducted without the assistance of these school and their representatives.

### **Implications and Recommendations**

This study has implications for future research and school leaders. This study was focused on the life satisfaction of middle school and high school students attending WELS schools. The study focused on a gap in research that has a limited amount of data on adolescent IS attending school in the U.S. The data mirrored much of what was found in previous studies on undergraduate and graduate students. Although it did not indicate

generalizability of previous and new studies down through that developmental level, it does indicate a possibility of similar results.

Future research could focus on the influence of perceived social support on social connectedness. This researcher wonders about the strong relationship between the perceived social support and social connectedness and weaker relationships with other variables. Is it possible that perceived social support promotes or enhances social connectedness rather than influence other variables? Is it possible that the questions were too challenging for adolescents and another scale or survey tool should be used? It is possible that perceived social support can have a greater influence on life satisfaction, but in this isolated study, the influence was not as significant.

Future research on adolescent IS could focus on a longitudinal study of acculturative stress and social connectedness monthly or quarterly throughout the first year of an IS in the U.S. No longitudinal studies were found in the literature review for any developmental level. The study could be further refined to focus on adolescents in middle school and compare the data with high school IS. The census population for this study did not have enough middle school aged IS to conduct such a study.

The predictability of life satisfaction based on acculturative stress and social connectedness provides direction for school leaders. An assessment of IS in the areas of AS and SC can help identify students who need intervention. It also provides statistical support for increasing opportunities for connecting students socially with various groups of people.

In WELS schools or faith-based schools with adolescent IS this study provides statistical support and tools to assess IS life satisfaction and the two primary predictors of

life satisfaction; acculturative stress, and social connectedness. Mean data from the tools in the appendices could help identify IS who are struggling and in need of monitoring or intervention. The strong influence of social connectedness was observed as a key variable in mitigating acculturative stress.

It is recommended that schools with IS create programs and policies that support IS transitions. A key component to program development is a school-wide understanding of the differences and challenges IS face day to day. A study of the books by Lanier (2000), Meyer (2014), and Hofsteadt (2004) provides valuable resources to frame supportive programming. Supportive programming for IS should promote social connectedness with various members of the school family (Glass et al., 2015). Equally important are policies that allow for continued social connections from the IS home country (Hendrickson et al., 2011; Sullivan & Kashubeck-West, 2015). Both types of social connectedness promote life satisfaction as well as social and emotional well-being. This structure could support a positive lasting impact on the IS academics and overall health.

## **Conclusion**

The purpose of this quantitative study was to better understand the life satisfaction of international students enrolled at WELS schools and the influence of acculturative stress, social connectedness, and perceived social support. The study sought to add to the current research by focusing on adolescent international students. This represents a small but growing group of students across the United States (United States Immigration and Customs Enforcement (ICE), 2016; Zong & Batlova, 2016).

The research focused on the relationships between life satisfaction and the independent variables. Life satisfaction has a profound impact on individuals. IS come from countries and cultures around the world to the U.S. in hopes of a bright future. Schools have the privilege of working with these students and their families. They too share in that dream of a bright future for these students. IS have a barrier or struggle to maximize their opportunity and a barrier to a positive life satisfaction as acculturative stress, or culture shock, impacts every IS. Mitigating this barrier and providing processes for IS to acculturate quickly often depends on their ability to remain connected to home and to build social connections in their new environment. This study identified the strong relationships between life satisfaction, acculturative stress, and social connectedness.

The researcher used three different types of data analysis to answer the studies five research questions. First, a simple mean analysis was done to identify that adolescent international students do suffer from acculturative stress. Next, a series of Pearson correlations were performed to test the relationships between life satisfaction and each of the independent variables. There were strong relationships with acculturative stress and social connectedness, and a weak relationship with perceived social support. The relationship with acculturative stress was an inverse relationship, while the relationships with social connectedness and perceived social support were positive. The third analysis was a multivariate linear regression that showed strong predictability of life satisfaction by acculturative stress and social connectedness. Perceived social support was not statistically significant at the 95% confidence level. Although perceived social support has a statistically significant relationship with life satisfaction, this researcher believes

acculturative stress and social connectedness are more significant in predicting and influencing life satisfaction in adolescent international students.



## References

- Akhtar, M. & Kröner-Herwig, B. (2015). Acculturative stress among international students in context of socio-demographic variables and coping styles. *Current Psychology*, 34(4). doi:10.1007/s12144-015-9303-4.
- Alorani, O., & Alradaydeh, M. (2017). Spiritual well-being, perceived social support, and life satisfaction among university students. *International Journal of Adolescence and Youth*, 1-8. Retrieved from <https://doi.org/10.1080/02673843.2017.1352522>
- Antaramian, S., & Lee, J. (2017). The importance of very high life satisfaction for students' academic success. *Cogent Education*, 4(1). Retrieved from <http://www-tandfonline.com.ezproxy.bethel.edu/doi/pdf/10.1080/2331186X.2017.1307622?needAccess=true>
- Awang, M., Kutty, F. ,& Ahmad, A. (2014). Perceived social support and well-being: First-year student experience in university. *International Education Studies*, 7(13), 261-270. doi:10.5539/ies.v7n13p261.
- Bai, J. (2014). Development and validation of the acculturative stress scale for Chinese college students in the united states (ASSCS). *Sociological Abstracts*. Retrieved from <https://search-proquest-com.ezproxy.bethel.edu/docview/1622293099?accountid=8593>
- Bai, J. (2016). Perceived support as a predictor of acculturative stress among international students in the united states. *Journal of International Students*, 6(1). Retrieved from <http://files.eric.ed.gov/fulltext/EJ1083271.pdf>
- Bastable, S. B. (2008). Developmental stages of the learner. In *Nurse as educator: Principles of teaching and learning for nursing practice* (3rd ed.). Sudbury, MA:

- Jones and Bartlett. Retrieved  
from [http://www.jblearning.com/samples/0763751375/46436\\_CH05\\_000\\_000.pdf](http://www.jblearning.com/samples/0763751375/46436_CH05_000_000.pdf)
- Bender, T. A. (1997). Assessment of subjective well-being during childhood and adolescence. In G. D. Phye (Ed.), *Handbook of classroom assessment: Learning, achievement, and adjustment* (pp. 199–225). San Diego, CA: Academic.
- Berry, J. W. (2010). Intercultural relations and acculturation in the Pacific region. *Journal of Pacific Rim Psychology*. Retrieved  
from <https://pdfs.semanticscholar.org/3ee1/3b0154f20011c5d225b8039c8ca4bc7aefea.pdf>
- Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, 29(6), 697-712. <http://dx.doi.org/10.1016/j.ijintrel.2005.07.013>
- Bertram, D. M., Poulakis, M., Elsasser, B. S., & Kumar, E. (2014). Social support and acculturation in Chinese international students. *Journal of Multicultural Counseling and Development*, 42. doi:10.1002/j.2161-1912.2014.00048.x
- Bickman, L., Riemer, M., Lambert E. W., Kelley, S. D., Breda, C., Dew, S. E., Brannan, A. M., & Vides de Andrade, A. R. (2007). *Manual of the Peabody Treatment Progress Battery [Electronic version]*. Nashville, TN: Vanderbilt University. <http://peabody.vanderbilt.edu/ptpb/>
- Brand, S., Reimer, T., & Opwis, K. (2007). How do we learn in a negative mood? Effects of a negative mood on transfer and learning. *Learning and Instruction*, 17(1), 1–16

- Cemalcilar, Z., Falbo, T., & Stapleton, L.M. (2005). Cyber communication: A new opportunity for international students' adaptation? *International Journal of Intercultural Relations*, 29(1), 91-110. doi:10.1016/j.ijintrel.2005.04.002
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310. Retrieved from <http://www.psy.cmu.edu/~scohen/Cohen%20&%20Wills%201985%20Psy%20Bull.pdf>
- Cohen, S., Underwood, L. G., & Gottlieb, B. H. (Eds.). (2000). *Social support measurement and intervention: a guide for health and social scientists*. Retrieved from <https://ebookcentral.proquest.com>.
- Crede, J., Wirthwein, L., McElvany, N., & Steinmayr, R. (2015). Adolescents' academic achievement and life satisfaction: the role of parents' education. *Frontiers in Psychology*, 6, 52. <http://doi.org/10.3389/fpsyg.2015.00052>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed-methods approaches* (4<sup>th</sup> ed.). Los Angeles, CA: Sage.
- Crocetti, E., Moscatelli, S., Van der Graaff, J., Rubini, M., Meeus, W., & Branje, S. (2016). The interplay of self-certainty and prosocial development in the transition from late adolescence to emerging adulthood. *European Journal of Personality*, 30(6), 594-607. doi: 10.1002/per.2084
- Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. In C.R. Snyder & S.J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 63-73). New York, NY: Oxford University Press. <http://doi.org/10.1093/oxfordhb/9780195187243.013.0017>

- Diener, E., Oishi, S., & Lucas, R. E. (2015). National accounts of subjective well-being. *American Psychologist*, 70(3), 234-242. <http://dx.doi.org/10.1037/a0038899>
- Draper, M., Lee, R.M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology*, 48(3). doi: 10.1037//0022-0167.48.3.310
- Du, Y., & Wei, M. (2015). Acculturation, enculturation, social connectedness, and subjective well-being among Chinese international students, *The Counseling Psychologist*, 43(2), 299-325. doi: 10.1177/001100001456571
- Eker, D., Arker, H., & Yaldiz, H. (2001). Factor structure, validity, and confidence of revised form of multidimensional scale of perceived social support. *Turkish Psychiatry Journal*, 12, 17–25.
- Glass, C. R., Kociolek, E., Wongtrirat, R., Lynch, R. J., & Cong, S. (2015). Uneven experiences: The impact of student-faculty interactions on international students' sense of belonging. *Journal of International Students*, 5(4), 353-367. Retrieved from <https://search-proquest-com.ezproxy.bethel.edu/docview/1695740381?accountid=8593>
- Goodman-Deane, J., Mieczkowski, A., Johnson, D., Goldhaber, T., Clarkson, P. J. (2016). The impact of communication technologies on life and relationship satisfaction. *Computer in Human Behavior*, 57, 219–229. <https://doi.org/10.1016/j.chb.2015.11.053>
- He, D., Shi, M., & Yi, F. (2014). The mediating effects of affect and loneliness on the relationship between core self-evaluation and life satisfaction among two groups

- of Chinese adolescents. *Social Indicators Research*. 119: 747. <https://doi-org.ezproxy.bethel.edu/10.1007/s11205-013-0508-3>
- Hendrickson, B., Rosen, D., & Aune, R.K. (2011). An analysis of friendship networks, social connectedness, homesickness, and satisfaction levels of international students. *International Journal of Intercultural Relations*, 35(3), 281-295. <https://doi.org/10.1016/j.ijintrel.2010.08.001>
- Hofstede, G. H., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. Maidenhead, UK: McGraw-Hill.
- Hu, J., & Hagedorn L. S. (2014). Chinese parents' hopes for their only children: A transition program case study. *Journal of College Admission*. 2014 spring, 35-42. Retrieved from file:///Users/toddruss/Dropbox/01%20Bethel%20845%20Research%202/Chinese%20Hopes%20for%20their%20only%20children%20-%20Case%20Study.pdf
- Hurst, B., Wallace, R., & Nixon, S. (2013). The impact of social interaction on student learning. *Reading Horizons (Online)*, 52(4), 375. Retrieved from [http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=3105&context=reading\\_horizons](http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=3105&context=reading_horizons)
- Hwang, T. (2014). *An exploratory study into the correlations between the cultural composition of social support network and acculturative stress for international students* (Doctoral dissertation). Retrieved from <http://search.proquest.com.ezproxy.bethel.edu/docview/1555597843/fulltextPDF/2B0EBFFD6CD64A05PQ/1?accountid=8593>

- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *The Journal of Positive Psychology, 10*(3), 262-271. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4337659/pdf/rpos-10-262.pdf>
- Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist, 63*(6), 518-526. <http://dx.doi.org/10.1037/0003-066X>
- Kim, D. H., & Kim, J. H. (2013). Social relations and school life satisfaction in South Korea. *Social Indicators Research, 112*(1), 105–127. <https://doi-org.ezproxy.bethel.edu/10.1007/s11205-012-0042-8>
- Kohut, H., & Elson, M. E. (1987). *The Kohut seminars on self psychology and psychotherapy with adolescents and young adults*. WW Norton & Co.
- Lakey, B. (2013). Perceived social support and happiness: The role of personality and relational processes. In S. A. David, I. Boniwell, & A. C. Ayers (Eds.), *The Oxford handbook of happiness* (pp. 847–859). New York: Oxford University Press. Retrieved from <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199557257.001.0001/oxfordhb-9780199557257-e-062>.
- Lanier, S. A. (2000). *Foreign to familiar: A guide to understanding hot- and cold-climate cultures*. Hagerstown, MD : McDougal Pub.
- Lee, R., & Robbins, S. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology, 42*(2), 232-241. doi: 10.1037/0022-0167.42.2.232

- Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology, 48*(3), 310-318. doi: 10.1037/0022-0167.48.3.310
- Li, J. (2013). Examining the relationship between Chinese international students' acculturation, ethnic identity, language proficiency, and their attitudes toward seeking professional counseling services (Doctoral dissertation). Retrieved from <https://ttu-ir.tdl.org/ttu-ir/bitstream/handle/2346/58428/LI-DISSERTATION-2013.pdf?sequence=1&isAllowed=y>
- Li, Z., Heath, M., Jackson, A., Allen, G., Fischer, L., Chan, P. (2017). Acculturation experiences of Chinese international students who attend American universities. *Professional Psychology: Research and Practice, 48*(1), 11-21. <http://dx.doi.org.ezproxy.bethel.edu/10.1037/pro0000117>
- Lyons, M., & Huebner, D. (2016). Academic characteristics of early adolescents with higher levels of life satisfaction. *Applied Research in Quality of Life, 11*(3), 757-771.
- Meyer, E. (2014). *The Culture map: Breaking through the invisible boundaries of global business*. First edition. New York, NY: PublicAffairs.
- Muijs, D. (2011). *Doing quantitative research in education with SPSS*. (2<sup>nd</sup> ed.). Los Angeles, CA: Sage.
- Ng, Y. K. (2015). *Happiness, Life Satisfaction, or Subjective Well-being? A Measurement and Moral Philosophical Perspective*. Retrieved from <http://www.ntu.edu.sg/home/ykng/Happiness,LS,%20SWB-2015.pdf>

- Noh, S., & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. (Abstract). *The American Journal of Public Health*, 93(2), 232-238.
- Patron, M. (2014). Loss and loneliness among international students. *Psychology Journal*, 11(1). Retrieved from <http://ezproxy.bethel.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=keh&AN=96640273&site=ehost-live&scope=site>
- Park, H., Joo, J., Quiroz, B., & Greenfield, P. M. (2015). Sociodemographic factors influence cultural values: Comparing European American with Korean mothers and children in three settings—rural Korea, Urban Korea, and Los Angeles. *Journal of Cross-Cultural Psychology*, 46(9), 1131-1149. <http://dx.doi.org/10.1177/0022022115600258>
- Park, N., & Huebner, E. (2005). A Cross-Cultural Study of the Levels and Correlates of Life Satisfaction among Adolescents. *Journal of Cross-Cultural Psychology*, 36(4), 444-456. doi: 10.1177/0022022105275961
- Proctor, C., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction measures: a review. *The Journal of Positive Psychology*, 4, 128–144. doi: 10.1080/17439760802650816
- Rajab, A., Rahman, H. A., Panatik, S. A., and Mansor, N .S. (2014). Acculturative stress among international students. *Journal of Economics, Business and Management*, 2(4), 262-265. doi: 10.7763/JOEBM.2014.V2.136
- Roohafza, H. R., Afshar, H., Keshteli, A. H., Mohammadi, N., Feizi, A., Taslimi, M., & Adibi, P. (2014). What's the role of perceived social support and coping styles in



- depression and anxiety? *Journal of Research in Medical Sciences : The Official Journal of Isfahan University of Medical Sciences*, 19(10), 944–949. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4274570/>
- Rüppel, F., Liersch, S., & Walter, U. (2015). The influence of psychological well-being on academic success. *Journal of Public Health*, 23(15). Retrieved from <https://doi-org.ezproxy.bethel.edu/10.1007/s10389-015-0654-y>
- Ryan, A. B. (2006). Post-Positivist Approaches to Research. In M. Anotonesa, *Researching and writing your thesis: A guide for postgraduate students* (pp. 12-26). Maynooth, Ireland: NUI Maynooth. Retrieved from: [http://eprints.maynoothuniversity.ie/874/1/post-positivist\\_approaches\\_to\\_research.pdf](http://eprints.maynoothuniversity.ie/874/1/post-positivist_approaches_to_research.pdf)
- Sandhu, D. S. (1994). An examination of the psychological needs of the international students: Implications for counseling and psychotherapy. *International Journal for the Advancement of Counselling*, 17, 229-239. doi:10.1007/BF01407739
- Sandhu, D. S., & Asrabadi, B. R. (1994). Development of an acculturative stress scale for international students: Preliminary findings. *Psychological Reports*, 75, 435-448. doi:10.2466/pr0.1994.75.1.435
- Sandhu, D. S., & Asrabadi, B. R. (1998). An acculturative stress scale for international students: A practical approach to stress management. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources*, V. 2 (pp. 1-33). Lanham, MD: Scarecrow Press.

- Scrimin, S., Mason, L., & Moscardino, U. (2014). School-related stress and cognitive performance: A mood-induction study. *Contemporary Educational Psychology*, 39(4), 359-368. <https://doi.org/10.1016/j.cedpsych.2014.09.002>
- Shorey, R., & Lakey, B. (2011). Perceived and capitalization support are substantially similar: Implications for social support theory. *Personality & Social Psychology Bulletin*, 37(8), 1068-79. doi: 10.1177/0146167211406507
- Song, G., Kong, F., & Jin, W. (2013) Mediating effects of core self-evaluations on the relationship between social support and life satisfaction. *Soc Indic Res* 114: 1161. <https://doi-org.ezproxy.bethel.edu/10.1007/s11205-012-0195-5>
- Sullivan, Christopher, & Kashubeck-West, Susan. (2015). The interplay of international students' acculturative stress, social support, and acculturation modes. *Journal of International Students*, 5(1), 1-11. Retrieved from: [https://clicsearch.bethel.edu/primo-explore/fulldisplay?docid=TN\\_ericEJ1052843&context=PC&vid=BETHEL&search\\_scope=bethel&tab=default\\_tab&lang=en\\_US](https://clicsearch.bethel.edu/primo-explore/fulldisplay?docid=TN_ericEJ1052843&context=PC&vid=BETHEL&search_scope=bethel&tab=default_tab&lang=en_US)
- Smith, R. A., & Khawaja, N. G. (2014). A group psychological intervention to enhance the coping and acculturation of international students. *Advances in Mental Health*, 12(2), 110-124. Retrieved from <https://search-proquest-com.ezproxy.bethel.edu/docview/1617316232?accountid=8593>
- Tamannaefar, M. R., & Behzadmoghaddam, R. (2016). Examination of the relationship between life satisfaction and perceived social support. *Human Resource Management*, 3(3), 8-15. Retrieved from <http://iaiest.com/dl/journals/6->

- %20IAJ%20of%20Organizational%20Behavior%20and%20Human%20Resource  
%20Management/v3-i3-mar2016/paper2.pdf
- Taormina, R., & Gao, J. (2013). Maslow and the motivation hierarchy: Measuring satisfaction of the needs. *The American Journal of Psychology*, 126(2), 155-177. doi:10.5406/amerjpsyc.126.2.0155
- Telbis, N. M., Helgeson, L., & Kingsbury, C. (2014). International students' confidence and academic success. *Journal of International Students*, 4(4). Retrieved from <http://files.eric.ed.gov/fulltext/EJ1054787.pdf>
- Tiliouine, H. (2007). *Health and Subjective Wellbeing in Developing Countries: The Case of Algeria*. WeD Working Paper 39, ESRC Research Group on Wellbeing in Developing Countries. UK: University of Bath. Retrieved from <http://www.welldev.org.uk/research/workingpaperpdf/wed39.pdf>
- Wei, M., Liao, K., Heppner, P., Chao, R., & Ku, T. (2012). Forbearance coping, identification with heritage culture, acculturative stress, and psychological distress among Chinese international students. *Journal of Counseling Psychology*, 59(1), 97-106. <http://dx.doi.org/10.1037/a0025473>
- Woolf, M. (2007). Impossible things before breakfast: Myths in education abroad. *Journal of Studies in International Education*, 11, 496-509.
- Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly*, 16(1), 15-28. <http://dx.doi.org/10.1080/0951507031000114058>

- Zhou, X., Zhu, H., Zhang, B., & Cai, T. (2013). Perceived social support as moderator of perfectionism, depression, and anxiety in college students. *Social Behavior and Personality, 41*(7), 1141-1152. Retrieved from <https://search-proquest-com.ezproxy.bethel.edu/docview/1504420650?accountid=8593>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 52*, 30–41. doi:10.1207/s15327752jpa5201\_2

## Appendices

### Appendix A

Permission to use BMLSS from Dr. Scott Huebner

Faculty Treatment Progress Survey 2019

BMSLSS-PTPB: Youth

#### Your Satisfaction with Life

**Please place an 'X' in the one box that best indicates how satisfied or dissatisfied you CURRENTLY are with each item below. There is no right or wrong answer.**

	HOW SATISFIED OR DISSATISFIED ARE YOU WITH...	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied Nor Dissatisfied	Somewhat Satisfied	Very Satisfied
1.	Your family life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Your friendships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Your school experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Where you live	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Your life overall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Permission to Use BMSLSS Survey

Inbox x

Todd Russ <tor27437@bethel.edu>

Feb 17 (6 days ago)

to huebner

Dr. Huebner,

I am an Ed.D. student at Bethel University in Arden Hills, Minnesota. I am in my dissertation phase and would like to use your survey - Brief Multidimensional Students' Life Satisfaction Scale - as part of my research. Could I receive written permission from you to use this tool? My research will be working with international students in the USA who are high school and middle school age attending a small set of schools. Thank you for considering my request.

Blessings!

---



HUEBNER, SCOTT

Feb 17 (6  
days ago)

to me

You have my permission to use the BMSLSS in your research. Good luck! Scott Huebner

## Appendix B

Permission to use the ASSIS from Dr. Sandhu

### **An Acculturative Stress Scale for International Students \***

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<br>and/or to new eating habits    | 1 2 3 4 5 |
| 3. I am treated differently in social situations.                                | 1 2 3 4 5 |
| 4. I feel rejected when people are sarcastic toward my<br>cultural values.       | 1 2 3 4 5 |
| 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<br>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
13. I feel overwhelmed that multiple pressures are placed upon me after my migration to this society.	1 2 3 4 5
14. I feel that I receive unequal treatment.	1 2 3 4 5
15. People from some ethnic groups show hatred toward me nonverbally.	1 2 3 4 5
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 values.	1 2 3 4 5
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 toward me through their actions.	1 2 3 4 5
25. I feel that my status in this society is low due to my cultural background.	1 2 3 4 5
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 ethnic groups.	1 2 3 4 5
32. I feel some people don't associate with me because of my ethnicity.	1 2 3 4 5
33. People from some other ethnic groups show hatred toward me verbally.	1 2 3 4 5
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 whether to stay here or to go back.	1 2 3 4 5

---

\* Copyrights, 1994 by Dr. Daya Singh Sandhu & Dr. Badiolah R. Asrabadi. All Rights

Reserved. Please don't copy or adapt these statements without the written permission

of the authors. For the necessary permission, please write to,

Dr. Daya Singh Sandhu Ed.D., NCC, NCCC, NCSC, LPCC  
Distinguished Professor of Research and Chairman (1996-2004)  
316 Education Building  
Department of Educational and Counseling Psychology  
College of Education and Human Development  
University of Louisville  
Louisville, KY 40292

### Scoring

The total scores range from 36 to 180 on this scale. Higher scores indicative of greater acculturative stress perceived by the subjects. The scores on six subscales can be computed by adding the individual scores on the relative items. These items can be identified as follows:

1. Perceived Discrimination Items: 3, 9, 11, 14, 17, 23, 26, 29

2. Homesickness Items: 1, 6, 21, 35

3. Perceived Hate Items: 4, 15, 20, 24, 33

4. Fear Items: 7, 18, 27, 31

5. Stress Due to Change/

Culture Shock Items 2, 13, 22

6. Guilt 10, 34

7. Miscellaneous 5, 8, 12, 16, 19, 25, 28, 30, 32, 36\*

\* These items are important because they address the special concerns of international students; however, they do not fall under one particular factor.

Please free to contact me if I could be any help.

With all the best!

Permission Request to uses Acculturative Stress Scale

Inbox x

Todd Russ <tor27437@bethel.edu>

Feb 17 (6  
days ago)

to sandhud

Dr. Sandhu,

I am an Ed.D. student at Bethel University in Arden Hills, Minnesota. I am requesting written permission to use your Acculturative Stress Scale for International Students. For my dissertation research, I will be surveying international students who attend high schools and middle school in the USA looking at a small subset of schools. Your survey would be a portion of the research. Thank you for your consideration.

Blessings!



Daya Sandhu

Feb 17 (6  
days ago)

to me

Dear Todd Russ,

Thank you for your interest in my research and publications. As requested, you have my permission to use my scale, "Acculturative Stress Scale for International Students," to complete your dissertation research. To facilitate the process, I am attaching a copy of the original scale for your review and use. Should you have any questions, please feel free to contact me at [Sandhud@lindsey.edu](mailto:Sandhud@lindsey.edu). Presently I am at the Punjabi University Patiala in Punjab, India as a Senior Fulbright Research Scholar. If needed, I can reached at [011-91-9855444560](tel:011-91-9855444560).

With my best wishes.

Sincerely,

Daya Singh Sandhu

Dr. Daya Singh Sandhu, Ed.D., NCC, NCCC, NCSC, LPCC  
Director of Research and Professor  
Doctoral Program in Counselor Education and Supervision  
Chairperson: Institutional Review Board (IRB)  
Office: Goodin Building 233  
210 Lindsey Wilson Street  
Lindsey Wilson College  
Columbia, KY 42728  
(270) 384-8583 or (502) 931-2158 (cell)  
[Sandhud@lindsey.edu](mailto:Sandhud@lindsey.edu) or [Dayasandhu13@hotmail.com](mailto:Dayasandhu13@hotmail.com)  
Fulbright Senior Research Scholar (2002 & 2010)  
Fellow: American Counseling Association  
Diplomate: American Mental Health Counselors Association  
President: Association of Multicultural Counseling and Development  
Hind Rattan: NRI Society and Govt. of India (2014)

## Appendix C

Permission to use the Social Connectedness Scale from Dr. Lee

### Social Connectedness Scale – Revised

**Directions:** Following are a number of statements that reflect various ways in which we view ourselves. Rate the degree to which you agree or disagree with each statement using the following scale (1 = Strongly Disagree and 6 = Strongly Agree). There is no right or wrong answer. Do not spend too much time with any one statement and do not leave any unanswered.

	Strongly Disagree 1	Disagree 2	Mildly Disagree 3	Mildly Agree 4	Agree 5	Strongly Agree 6
	Strongly Disagree			Strongly Agree		
1. I feel comfortable in the presence of strangers.....	1	2	3	4	5	6
2. I am in tune with the world.....	1	2	3	4	5	6
3. * Even among my friends, there is no sense of brother/sisterhood.....	1	2	3	4	5	6
4. I fit in well in new situations.....	1	2	3	4	5	6
5. I feel close to people.....	1	2	3	4	5	6
6. I feel disconnected from the world around me.....	1	2	3	4	5	6
7. Even around people I know, I don't feel that I really belong. ....	1	2	3	4	5	6
8. I see people as friendly and approachable.....	1	2	3	4	5	6
9. I feel like an outsider.....	1	2	3	4	5	6
10. I feel understood by the people I know.....	1	2	3	4	5	6
11. I feel distant from people.....	1	2	3	4	5	6
12. I am able to relate to my peers.....	1	2	3	4	5	6
13. I have little sense of togetherness with my peers.....	1	2	3	4	5	6
14. I find myself actively involved in people's lives.....	1	2	3	4	5	6
15. I catch myself losing a sense of connectedness with society.....	1	2	3	4	5	6
16. I am able to connect with other people.....	1	2	3	4	5	6
17. I see myself as a loner.....	1	2	3	4	5	6
18. I don't feel related to most people.....	1	2	3	4	5	6
19. My friends feel like family.....	1	2	3	4	5	6
20. I don't feel I participate with anyone or any group...	1	2	3	4	5	6

Permission to Use Social Connectedness Scale

Inbox x

Todd Russ <tor27437@bethel.edu>

Feb 17 (6  
days ago)

to richlee

Dr. Lee,

I am an Ed.D. Student at Bethel University and writing my dissertation. I would like to use the social connectedness scale that is attached for measuring the social connectedness of international high school and middle school students. Could I have your written permission to use your scale for my research? I would be willing to contact Dr. Robbins as well, but I cannot find contact information for him. Thank you for considering my request.

Blessings!

Attachments area



Richard Lee

Feb 17 (6  
days ago)

to me

Thank you for the interest in my measure. I have attached a copy of the scale, including different versions, scoring procedures, select references, and terms for usage. I recommend using the SCS with both positive and negative items, rather than the original 8-item version with all negative items. In addition to the 20-item revised version, I included a 2008 paper in which we dropped five items from the 20-item revised scale due to overlap with extraversion. If you need to translate one of the scales, please use a translation-backtranslation method with independent translators. I also would appreciate a copy of any translation and the English back-translation. You may use any version. Please read the terms for usage and let me know if they are acceptable prior to use of the scales. There is no copyright form beyond responding to this email. Best, Rich

----

Richard M Lee, PhD, LP

Editor, [Cultural Diversity and Ethnic Minority Psychology](#)

Professor of Psychology | University of Minnesota

[612-625-6357](tel:612-625-6357) | [richlee@umn.edu](mailto:richlee@umn.edu) | [Dept](#) and [Lab](#)

## Appendix D

Permission to use the Multidimensional Scale of Perceived Social Support from Dr.

Zimet

### Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**  
 Circle the "2" if you **Strongly Disagree**  
 Circle the "3" if you **Mildly Disagree**  
 Circle the "4" if you are **Neutral**  
 Circle the "5" if you **Mildly Agree**  
 Circle the "6" if you **Strongly Agree**  
 Circle the "7" if you **Very Strongly Agree**

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Strongly Agree
1. There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2. There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3. My family really tries to help me.	1	2	3	4	5	6	7
4. I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5. I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6. My friends really try to help me.	1	2	3	4	5	6	7
7. I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8. I can talk about my problems with my family.	1	2	3	4	5	6	7
9. I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10. There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11. My family is willing to help me make decisions.	1	2	3	4	5	6	7
12. I can talk about my problems with my friends.	1	2	3	4	5	6	7

The MSPSS is free to use. Please simply credit the following paper (and any others that are relevant), if you use the scale:

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment 1988;52:30-41.

Todd Russ <tor27437@bethel.edu>

8:28 PM (56 minutes ago)

to gzimet

Dr. Zimet,

I am an Ed.D. student at Bethel University in Arden Hill, Minnesota (USA). I am writing to request permission to use the attached survey -

### **Multidimensional Survey of Perceived Social Support**

I am preparing to conduct my research surveying the perceived social support of a subset of international students attending high schools and middle schools in the USA. I would like to use this survey in my research. Could I please receive written permission to use this survey tool? Thank you for considering my request.

Blessings!

Todd Russ [Preview attachment Zimet Perceived Social Support Psychnet.pdf](#)



[Zimet Perceived Social Support Psychnet.pdf](#)  
80 KB



Zimet, Gregory D

8:40 PM (44 minutes ago)

to me

Dear Todd,

You have my permission to use the Multidimensional Scale of Perceived Social Support (MSPSS) in your research. I see you have a copy of the scale, but I've attached one

anyway - it has scoring information on the 2nd page. Also attached is a document listing several of the studies that have reported on the psychometric properties of the MSPSS.

I hope your research goes well.

Best regards,  
Greg Zimet

---

**Gregory D. Zimet, PhD, FSAHM** | Professor of Pediatrics & Clinical Psychology  
Co-Director, IUPUI Center for HPV Research  
Immediate Past-President, Society for Adolescent Health & Medicine  
Division of Adolescent Medicine, Department of Pediatrics  
**Indiana University School of Medicine**  
410 W. 10<sup>th</sup> Street, HS 1001, Indianapolis, IN 46202, USA  
T [+1 317-274-8812](tel:+13172748812) | Fax [+1 317-274-0133](tel:+13172740133)  
Email [gzimet@iu.edu](mailto:gzimet@iu.edu)

<http://pediatrics.iu.edu/center-hpv-research/about-us/>

<http://pediatrics.iu.edu/sections-and-faculty/adolescent-medicine/our-team/faculty/bio-zimet/>



## Appendix E

### Dissertation Questionnaire

# Dissertation Questionnaire

---

Start of Block: Social Connectedness

Q22

**Welcome to the International Student Life Satisfaction Questionnaire!**  
**Thank you, for taking the time to share your feedback.**

By clicking "YES - I want to take the survey", you are agreeing to be a participant in this online questionnaire concerning International Student Life Satisfaction. After clicking "Yes - I want to take the survey" please click the red arrow at the bottom. Please click the red arrow at the bottom of each page to submit your answers.

If you have received this survey, we have a consent from your parent or guardian or you are 18 years of age or older. We would like all eligible international students to participate in this 15-20 minute survey. Participants will be eligible for a random drawing of Amazon gift cards. However, your participation is voluntary.

At any time during this survey, you may change your mind and exit out of the process. If during the survey you do not understand a question. You are encouraged to use a translator or ask a teacher for clarification. If the question is confusing, answer it the best you can. If you become upset by anything asking about your experiences, please talk with the designated school representative.

\*\*\*Remember to click the red arrow at the bottom of each page after submitting your answers.

*Thank you for your time. This information will help your school better serve future international students. You are making a difference!*

- ☐ Yes - I want to take this survey (1)
- ☐ No - I do not want to take the survey (2)

---

Page Break

Q0

**Let's get started!**

This section asks six (6) questions about how satisfied you are with your life. Satisfied = Happy; Unsatisfied = Unhappy

Please click on the open circle that matches your answer. There are no right or wrong answers.

---

Q68 Click to write the question text

	Very Satisfied (1)	Somewhat Satisfied (2)	Neither Satisfied nor dissatisfied (3)	Somewhat dissatisfied (4)	Very Dissatisfied (5)
1. How satisfied or dissatisfied are you with your family life? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How satisfied or dissatisfied are you with your friendships? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. How satisfied or dissatisfied are you with your school experience? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. How satisfied or dissatisfied are you with yourself? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. How satisfied or dissatisfied are you with where you live? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. How satisfied or dissatisfied are you with your life overall? (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

---

End of Block: Social Connectedness

---

Start of Block: Acculturative Stress

Q8

**One Section down...just a few to go!**

In this section, you will be asked about your adjustment to the United States and American culture. This section is the longest. So it has been broken into smaller groupings.

Please Click on the circle that matches your answer. There are no right or wrong answers.

*Thank you to help make a difference!*

---

Q71

Each question is a continuation of the following statement.

Because of my different cultural background as an international student, I feel that:

	Strongly Disagree (1)	Disagree (2)	Not Sure (3)	Agree (4)	Strongly Agree (5)
1. Homesickness for my country bothers me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I feel uncomfortable to adjust to new foods and/or to new eating habits. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I am treated differently in social situations. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I feel rejected when people are sarcastic toward my cultural values. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel nervous to communicate in English. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I feel sad living in unfamiliar surroundings here. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I fear for my personal safety because of my different cultural background. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. I feel  
intimidated to  
participate in  
social  
activities. (8)

☐☐☐☐☐

9. Others are  
biased toward  
me. (9)

☐☐☐☐☐

10. I feel  
guilty to leave  
my family and  
friends behind.  
(10)

☐☐☐☐☐

Q72 Because of my different cultural background as an international student, I feel that:

	Strongly Disagree (1)	Disagree (2)	Not Sure (3)	Agree (4)	Strongly Agree (5)
11. Many opportunities are denied to me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I feel angry that my people are considered inferior here. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I feel overwhelmed that multiple pressures are upon me after my migration to this society. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I feel that I receive unequal treatment. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. People from some ethnic groups show hatred toward me nonverbally. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. It hurts when people don't understand my cultural values. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17 I am denied what I deserve. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I have to frequently relocate for fear of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



(8)

19. I feel low  
because of my  
cultural  
background.

☐☐☐☐☐

(9)

20. I feel  
rejected when  
others don't  
appreciate my  
cultural  
values. (10)

☐☐☐☐☐

Q73 Because of my different cultural background as an international student, I feel that:

	Strongly Disagree (1)	Disagree (2)	Not Sure (3)	Agree (4)	Strongly Agree (5)
21. I miss the country and people of my national origin. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I feel uncomfortable to adjust to new cultural values. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I feel that my people are discriminated against. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. People from some other ethnic groups show hatred toward me through their actions. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I feel that my status in this society is low due to my cultural background. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I am treated differently because of my race. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I feel insecure here. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I don't feel a sense of belonging (community) here. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. I am  
treated  
differently  
because of my  
color. (9)

☐☐☐☐☐

30. I feel sad  
to consider my  
people's  
problems. (10)

☐☐☐☐☐

Q74

You are almost done with this section!

Because of my different cultural background as an international student, I feel that:

	Strongly Disagree (1)	Disagree (2)	Not Sure (3)	Agree (4)	Strongly Agree (5)
31. I generally keep a low profile due to fear from other ethnic groups. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I feel some people don't associate with me because of my ethnicity. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. People from some other ethnic groups show hatred toward me verbally. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. I feel guilty that I am living a different lifestyle here. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel sad leaving my relatives behind. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry about my future for not being able to decide whether to stay or go back. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----  
Page Break

---

End of Block: Acculturative Stress

---

Start of Block: Social Connectedness

Q45

**You are nearing the end! Thank you for your help so far!**

This section is a bit shorter and focuses on how connected you feel to others.

Please Click on the circle that matches your answer. There are no right or wrong answers.

---

Q75 Click to write the question text

	Strongly Disagree (1)	Disagree (2)	Mildly Disagree (3)	Mildly Agree (4)	Agree (5)	Strongly Agree (6)
1. I feel comfortable in the presence of strangers. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am in tune with the world. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Even among my friends, there is no sense of brother/sisterhood. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I fit in well in new situations. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel close to people (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I feel disconnected from the world around me. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Even around people I know, I don't feel I really belong. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I see people as friendly and approachable. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I feel like an outsider. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I feel understood by the people I know. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I feel distant from my people (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I am able to relate to my peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(12)						
13. I have little sense of togetherness with my peers. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I find myself actively involved in people's lives (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I catch myself losing a sense of connectedness with society. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I am able to connect with other people. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I see myself as a loner. (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I don't feel related to most people. (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. My friends feel like family. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I don't feel I participate with anyone or any group. (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break



End of Block: Social Connectedness

---

Start of Block: Perceived Social Support

Q54

You are nearly done, Great job!

You are nearing the end. This short section asks questions about how you feel about the support you have in the United States and your school.

Please Click on the circle that matches your answer. There are no right or wrong answers.

---

Q76 Click to write the question text

	Very Strongly Disagree (1)	Strongly Disagree (2)	Mildly Disagree (3)	Neutral (4)	Mildly Agree (5)	Strongly Agree (6)	Very Strongly Agree (7)
1. There is a special person who is around when I am in need. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. There is a special person with whom I can share joys and sorrows. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My family really tries to help me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I get the emotional help & support I need from my family. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I have a special person who is a real source of comfort to me. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. My friends really try to help me. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I can count on my friends when things go wrong. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I can talk about my problems with my family. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I have friends with whom I can share my joys and sorrows. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. There is a special person in my life who cares about my feelings. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. My family is willing to help me make decisions. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I can talk about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

my  
problems  
with my  
friends.  
(12)

---

Page Break

---

## End of Block: Perceived Social Support

---

### Start of Block: Block 4

Q13

You have finished the questions...but one small part remains.  
It is very quick!

The final piece of the Survey contains a few questions that describe you.

Please click on the best answer.

---

Q14 What is your Gender

- ☐ Male (1)
  - ☐ Female (2)
- 

Q15 Where do you live while at school in the United States?

- ☐ Dorm (1)
  - ☐ Homestay (2)
  - ☐ Other (3)
- 

Q17 How long have you studied in the United States?

- ☐ First Year (1)
  - ☐ 2 years (2)
  - ☐ More than two years (3)
-

Q16 How long have you been in your current U.S. School?

- ☐ First Year (1)
  - ☐ 2 years (2)
  - ☐ More than two years (3)
- 

Q18 In what continent is your home country located?

- ☐ Asia (1)
  - ☐ Africa (2)
  - ☐ Europe (3)
  - ☐ South America (4)
  - ☐ Other (5)
- 

Q19 How many years have you studied English?

- ☐ two or less (1)
  - ☐ three or more (2)
- 

Page Break

---

Q21

**You are done! Thank you!**

Your answers will help your school serve international students better for years to come.

**You have made a difference!**

End of Block: Block 4

---

Appendix G  
Schools who Volunteered to Participate in the Study

**Consenting Schools**

Michigan Lutheran Seminary	Joel V. Petermann
St. Croix Lutheran Academy	Richard Gibson
Great Plains Lutheran High School	Eric Brown
Arizona Lutheran Academy	Kurt Rosenbaum
Nebraska Evangelical Lutheran High School	Mark Otte
West Lutheran High School	Adam Wiechmann
Northland Lutheran	Ryan Wiechmann
Michigan Lutheran High School	Matthew Herbst
Divine Savior Academy	Ben Troge
Shoreland Lutheran High School	Mike Koestler
Evergreen Lutheran High School	Theodore Klug
Fox Valley Lutheran	Laura Gucinski, IS Program Director
Wisconsin Lutheran High School	Phil Leyrer
Kettle Moraine Lutheran High School	Principal Jamie Luehring
Apostles Lutheran High School	Pastor Bork
Huron Valley Lutheran High School	Dan Schultz
Manitowoc Lutheran High School	Norv L. Kock
Luther High Onalaska	Paul Wichmann
California Lutheran High School	Steven Rosenbaum
Luther Preparatory School	Matthew Crass
Winnebago Lutheran Academy	David Schroeder



## Appendix H

### Parental Consent Document

# Parental Active Consent Life Satisfaction

Dear Parent or Guardian,

Our school is participating in a research study. The researcher is Todd Russ an administrator at a sister school. He is a doctoral student at Bethel University in Minnesota. He is studying the life satisfaction of international students. The research survey will ask students to evaluate their current satisfaction with life, their social network, and support, as well as the cultural challenges they faced coming to the United States.

Students will be asked to fill out an online survey that will take about 20 minutes to complete.

This survey will cause little or no risk to your child. One potential risk is that some students might find certain questions to be sensitive. There will be individuals available at school to talk with any student who may be emotional.

The survey has been designed to protect your child's privacy. There will be no way to track their responses because no names will be requested. No school or student will ever be mentioned by name in any report of the results. All communication will be private between the school and the researcher and the school and the students. The researcher will not communicate directly with the students at any point of the study.

Although your child will get no benefit right away from taking part in the survey, the results of this survey will help international students in the future. Students who participate **may** receive a gift card from a random drawing.

We would like all students to take part in the survey, **but the survey is voluntary**. No action will be taken against the school, you, or your child, if your child does not take part.

Once the students receive the survey, he or she will be asked to participate. If they select yes, they will take the survey. If they say no, they will be done with the process. Students can skip any question that they do not wish to answer. In addition, students may stop participating in the survey at any point without penalty.

If you want your child to take the survey, click the grey box with the words "I want my student to take the survey" and fill in the blanks below. When you are done, please click on the red box with arrows at the end to submit your document. **All students** who were born after May 15, 2000, must have a parental consent document. This should be completed by May 1, 2018. If you do nothing, your student will **Not** be given the opportunity to participate.

This research project has been reviewed and approved in accordance with Bethel University Levels of Review for Research with Humans. If you have any questions about the research and/or research participants' rights or wish to report a research-related injury, please email or call researcher Todd Russ (tor27437@bethel.edu, 651-455-1521) or faculty sponsor Dr. Craig Paulsen (craig-paulson@bethel.edu, 651.638.6400).

Thank you!

(The questions below must be completed online with the link provided by the school – Click the red arrows to submit your consent)

☐ I want my student to take the survey.

Q3 Student Name

---

Q4 Name of Student's School

---

Q5 Parent or Guardian Name (A Typed name will be considered a signature)

---

Q6 Thank you for helping our school and the research project that will help future international students!

## Appendix I

### Message to Student Participants

Students,

Our School is participating in a research study with 21 other schools.

The study focuses on your Life Satisfaction. Life satisfaction is a measure of how satisfied you are with your life currently. The study will also explore different areas of possible stress in your life and how well you feel supported socially and academically. There will also be a general demographic section at the end.

There are no right or wrong answers. No one will know who you are, so your answers are completely confidential.

This study has the potential to provide important information for our school that will help us better support and help future international students during their study abroad experience. You can make a difference!

Your participation in this study is encouraged, but it is voluntary. It will take 15-20 minutes for you to complete. Participants will be eligible for a random drawing of Amazon Gift cards.

If you would like to get a copy of the completed research, please ask me for the researchers email address. He will provide you a copy when it is completed in late 2018.

Open your email and you will find a link to the survey. You must consent or agree to take the survey before you begin. You can quit at any time. However, we encourage you to complete it.