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AN EXAMINATION OF SOCIAL SUPPORT AND THE  
ACADEMIC PERFORMANCE OF SAUDI ARABIAN STUDENTS IN THE UNITED  
STATES

A

DISSERTATION

Presented to the Faculty of the Graduate School of  
St. Mary's University in Partial Fulfillment of the Requirements  
for the Degree of

DOCTOR OF PHILOSOPHY

In

Counselor Education and Supervision

by

Yaser Abdulrahman Alghamdi, M.A.

San Antonio, Texas

March 2020

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AN EXAMINATION OF SOCIAL SUPPORT AND THE  
ACADEMIC PERFORMANCE OF SAUDI ARABIAN STUDENTS IN THE UNITED  
STATES

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Throughout this journey, I sometimes felt that things were so hard that I was unsure if I would complete my task. Then, I remembered what God says in his holy book (Quran) in chapter 94, verses 5 and 6: “So, surely with every hardship there is ease: surely, with every hardship there is ease.” I repeated these verses in my mind every time I faced an obstacle for inspiration.

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**Abstract**

AN EXAMINATION OF SOCIAL SUPPORT AND THE  
ACADEMIC PERFORMANCE OF SAUDI ARABIAN STUDENTS IN THE UNITED  
STATES

Yaser Alghamdi

St. Mary's University, 2020

Dissertation Adviser: R. Esteban Montilla, Ph.D.

Saudi Arabia is among the top 10 countries from which students have enrolled in U.S. universities. The scarcity of research about Saudi students in the USA was the inspiration for this study. Previous researchers have examined Saudi students' challenges and adjustment issues in the USA, but the topic of social support and academic performance remained lacking. The purpose of this study was to examine the relationship between perceived social support (PSS) and academic performance among Saudi international students in USA. This study was a cross-sectional quantitative survey design with a sample of 384 Saudi students enrolled in USA universities and colleges. The perceived social support (PSS) was measured by the Interpersonal Support Evaluation List (ISEL) while the academic performance variable was included in the demographic questionnaire and measured by GPA. The findings indicate that Saudi students maintain a high level of perceived social support, and more than half of the participants have a GPA higher than 3.50. The results reveal that gender, age, and having children have a significant relationship with the PSS. In addition, age, marital status, having children and years living in the USA are significantly associated with academic performance. Furthermore, findings indicate a weak relationship between perceived social support and academic performance. Demographic variables including gender, marital status, having children, and years living in the USA show

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statistically significant differences with PSS; in reference to academic performance, the statistically significant differences exist with the demographic variables of marital status, having children, age, and level of education.

## Chapter One: Introduction

Most international students, including Saudi students, have a preference of social support resources and a specific approach to success in studying. Sometimes this preference or approach works for them; sometimes, however, they face difficulties that affect their educational performance. Students may face pressure in trying to solve their difficulties, which may be overcome, allowing them to find their path again. Some students could remain in trouble, resulting in their inability to find success. For international students, especially those from Saudi Arabia, perceived social support from different resources and their academic performance may contribute to the quality of their academic journey in the United States.

The United States of America is considered one of the most fundamental destinations for international students. Based on the Institute of International Education (2018a), the United States is the top country for hosting international students when compared to other developed nations. The number of international students in the U.S. has increased in recent years. According to the open-door report of (2018b), in the academic year 2013-2014, international students enrolled in American universities were 886,052. In 2014-2015, this number had increased to 974,926. International students in the academic year of 2015-2016 reached more than one million students, at 1,043,839. In the following academic year, 2016-2017, the number increased slightly to 1,078,822; according to the report in 2017-2018, international student presence had grown to 1,094,792.

The increase of international students over academic years leads the researcher to consider the countries from which international students have come. As shown in Table 1, the four leading countries sending international students to the United States are China, India, South Korea, and Saudi Arabia. Thus, Saudi Arabia is among the top four countries from which

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students have enrolled in U.S. universities—a total of 44,432 students in 2018 (the institute of international education, 2018b).

Table 1

### *Top Ten Places of Origin of International Students in U.S. 2018*

Place of origin	<i>n</i>	%
China	363,341	33.2
India	196,271	17.9
South Korai	54,555	5.0
Saudi Arabia	44,432	4.1
Canada	25,909	2.4
Vietnam	24,325	2.2
Taiwan	22,454	2.1
Japan	18,753	1.7
Mexico	15,468	1.4
Brazil	14,620	1.3

*Note.* Data is taken from IIE (2018b).

Many researchers reported that the significant contribution international students bring from their countries to United States universities influences classrooms, campuses, and communities. International students, including Saudi students, come from different cultural backgrounds in which they hold various perspectives and ideas that they share with others. Having international students in U.S. universities can have a positive impact on various aspects of each student's life, academically, culturally, and financially. Also, it can enhance the awareness of diversity and appreciation of the different cultures and countries (Bevis, 2002; Harrison, 2002; Wu, Garza, & Guzman, 2015).

Coming to a new country for continued education can be a transitional life event for most international students (Bradley, 2000; Erichsen & Bolliger, 2011; Lee & Rice, 2007; Msengi,



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2007). These students arrive holding different points of view and immediately notice differences between their cultures and the host country's culture. These differences can be a challenge for most international students. Educational goals and overall success may depend on a student's understanding and adoption of U.S. cultural differences. On the other hand, being unable to adjust to the host country's culture and "unwritten" rules can contribute negatively on the well-being of international students, perhaps even preventing them from the overall achievement of their educational goals.

Saudi international students in the United States come from a vastly different culture, tradition, religion, and value set that can conflict with U.S. cultures and customs. These differences may present a real challenge in their journey to academic success. According to Alajlan (2016), the United States and many European countries vary from Saudi Arabia in aspects like social culture and language. In regard to these enormous differences, Saudi students can be expected to experience complications consisting of adjustment difficulties, cultural shock, feelings of loneliness, and even academic challenges regarding the environment and language barriers. In another study by Gielen, Loeb-Adler, and Milgram (1992), due to being far from their home country and their families, Saudi students experience cultural and social trauma plus educational obstacles while in colleges and universities abroad. Saudi students, like other international students, face major difficulties when studying outside their country.

Many challenges can be experienced by international students, including Saudi students, when continuing their education in host countries. Many Researchers identified some of these challenges as being related to learning styles, language proficiency, an unfamiliar environment, financial issues, cultural adjustments, stress, anxiety, and isolation (Erichsen & Bolliger, 2011; Msengi, 2007; Özturgut & Murphy, 2009). In another study, Russell, Rosenthal, and Thomson

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(2010) found that 41% of international students experienced some level of social pressure and cultural shock from being far from home, including perceived discrimination. These issues can influence aspects of the international students' lives, including social experiences and academic life.

It is difficult for international students to escape stress as they adjust to a new culture. Each student needs time and a socially supported environment to reduce their level of stress. Jenny, Lin, and Kishimoto (2003) conducted a study for international students regarding counseling services provided by universities as well as reasons for their seeking out counseling services. Findings from this study suggested that international students rely on social support networks, such as family members and friends, when facing problems. Even though counseling services were offered through universities, these students preferred not to use those services unless their connections with friends or family members had been severed. Many international students looked at counseling services as a surrogate option to families and friends.

The unique environment and the challenges faced by international students can motivate them to search for social networks—social support and social connections in any form. As such, family and friends can play a role in overcoming the obstacles that international students experience. Researchers Dao, Lee, and Chang (2007) and Sümer, Poyrazli, and Grahame (2008) reported that social support was essential in regard to appropriate adjustment to the U.S environment for international students. In addition, a high level of perceived social support was correlated with low levels of academic stress, low symptoms of depression and anxiety, and good sociocultural adjustment. Researchers Bektaş, Demir, and Bowden (2009) identified connection to a home community as important to psychological adjustment when living in a new country. Moreover, social support is expected to be a main aspect influencing the mental health of

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international students; it is a factor that should be investigated when studying international students' challenges.

In addition to the contribution that social support had on psychological adjustment, as well as depression, anxiety, and mental health in international students' life (Dao et al., 2007; Demir, & Bowden, 2009; Sümer et al., 2008), social support was found to be correlated with academic performance. As has been reported by many researchers, being in an academic environment in general can be considered a source of stress that impacts academic performance (Richaud de Minzi, 2006; Shokri, Farahani, Nouri, & Moradi, 2013; Wrzesniewski & Chylinska, 2007). The perceived availability of social support has been identified as a factor that helped in reducing stress in academic environments. Moreover, social support has been found to be a factor when considering preventing low achievements and academic disengagement (Mackinnon, 2012; Perry, Liu, & Pabian, 2010).

Several studies were utilized to investigate the association among social support and academic performance. Concerning elementary and high school students, perceived social support from friends, parents, teachers, and social support in general was positively correlated with a good academic performance (Crean, 2004; Domagała-Zyśk, 2006; Elias & Haynes, 2008; Garcia D' Avila-Bacarji, Marturano, & dos Santos Elias, 2005; Lee & Smith, 1999; Levitt, Guacci-Franco, & Levitt, 1994; Malecki & Demaray, 2003; Murray & Zvoch, 2011; Perry et al., 2010). In regard to college students, perceived social support from parents and teachers was highly correlated with good performance educationally (Bordes-Edgar, Arredondo, Kurpius, & Rund, 2011; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994). The scope of this study will focus specifically on Saudi international residents studying in United States universities, targeting and examining their perceived social support resources and academic performance.

### **Statement of the Problem**

As has been reported by the Institute of International Education (2018a), Saudi Arabian students are among the top four countries whose citizens study in United States' universities. Saudi students are ranked fourth in regard to the number of international students enrolling in U.S universities. What led Saudi Arabian students to reach this rank is the King Abdullah Scholarship Program. This scholarship program is under the supervision of the government of the Kingdom of Saudi Arabian (KSA), Minister of Education and the Saudi Arabian Cultural Mission (SACM), which provides full paid scholarships to qualified students to study outside Saudi Arabia. The administration aspect of the scholarship program is under the supervision of SACM where it works as a connector between Saudi students and American universities (Saudi Academic Cultural Mission, n.d.). Moreover, the economic contribution that Saudi international students bring to the U.S can be beneficial for most universities; in 2016 the economic contribution was \$2.06 billion (Institute of International Education, 2016).

The scarcity of research on Saudi international students in the U.S is what influenced this researcher to conduct this study. Previous researchers have discussed the challenges and adjustment issues facing international students, including Saudi students in the United States (Razek & Coyner, 2013; Sherry, Thomas, & Chui, 2010; Wu et al., 2015). Social inclusion, cultural adjustment, educational styles, financial problems, language barriers, and living independently were some of the challenges international students faced. In that regard, some former researchers analyzed social support resources and found that family members and friends, whether American or not, as well as academic advisors were essential to international students' ability to adjust to a new culture, attain lower levels of acculturative stress, and achieve minimal

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depression and anxiety levels (Mallinckrodt & Leong, 1992; Poyrazli, Kavanaugh, Baker, & Al-Timimi, 2004; Sümer et al., 2008; Zhai, 2002).

The problem this current researcher has discovered is the shortage of research regarding social support and academic performance among Saudi students in the U.S. With Saudi students, Middle Eastern and Arabic students, the current literature showed a scarcity of research among these populations (Heyn, 2013; Melius, 2017; Rundles, 2013; Shaw, 2010). According to Heyn (2013), most studies regarding Saudi students in the U.S. are not in the form of published articles but are usually in the form of published dissertations. Furthermore, 22 research papers have been found on Saudi residents who studied in the U.S., five of which were qualitative and 17 of which were quantitative (Heyn, 2013).

Researchers Yakaboski, Perez-Velez and Almutairi (2018) reported that the research done on the Saudi students' experience in U.S. universities has been concerned mainly with their adjustment and the challenges that these students faced while completing their course work. Some of these challenges and problems included English proficiency, financial issues, understanding the higher educational system, health services, and admissions difficulties (Al-Harthi, 1987; Al-Shehry, 1989; Shabeeb, 1996; Shahmirzadi, 1989; Hofer, 2009; Razek & Coyner, 2013). Based on current literature dealing with this population, it appears that little attention has been paid to actual academic performance (Yakaboski et al., 2018).

According to Rundles (2013) and Renn, Brazelton, and Holmes (2014), although many studies exist on Hispanic, Chinese, and other Asian international students, the Arab student and especially the Saudi student, has not been the focus of research on an international level in the United States. Data on Arab and Saudi students in the U.S. is lacking; it should be explored to reveal these students' academic performances. According to Yakaboski et al. (2018), "the

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international student population from the KSA is largely absent, even though they are the fourth-largest sender to the United States” (p. 221). This population has been ignored and under-researched; more attention should be given to this student group to examine their academic performance in its entirety.

Most researchers have investigated and explored the positive influence that perceived social support has had on academic performance in different populations, both inside and outside the U.S. (Cutrona et al., 1994; DeBerard, Spielmans & Julka, 2004; Guadalupe, Juliana, & Mercedes, 2014; Yasin & Dzulkifli, 2011). Being in an academic position can produce extreme stress and challenges that may have a negative influence on students’ academic performance. (Shokri et al., 2013; Wrzesniewski & Chylinska, 2007). Being in a new country for international students with new academic experiences can be overwhelming and stressful. Students can experience challenges in trying to adjust to a new culture while attempting to succeed in their academic journey (Erichsen & Bolliger, 2011; Msengi, 2007; Özturgut & Murphy, 2009; Wu et al., 2015).

Based on Sarason, Sarason, and Pierce (1990), social support can help university students develop a sense of safety and competence that could influence intellectual difficulties positively, making the student more proficient. Students with strong social support appeared to have a better chance at increasing their academic performance and developing a good social academic environment (Rayle & Chung, 2007). It appeared to the researcher that limited research exists on the relationship between social support and academic performance among international students, especially Saudi students in the U.S. Additionally, it seems to the researcher that no evidence of research on this population, Saudi students in the U.S. in regard to their social support and academic performance, exists. According to Melius (2017), in regard to the difficulties and the

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challenges Saudi students face in the U.S., more investigation and research should be available concerning the support for Saudi students so they can maintain and assure their academic success. This research will attempt to fill this gap in the current literature and explore the topic of social support in regard to Saudi students' academic performance in the U.S.

### **Purpose of the Study**

The purpose of this study is to examine and investigate social support and the academic performance of Saudi students in the United States. To be more specific, the intention of this study is to explore and identify the relationship between the perceived social support of Saudi students and the academic performance; this study will identify the relationship between many demographic variables, to include gender, age, marital status, parental status, level of education, length of residency in the United States, and the state of residency in which academic performance is achieved.

In this study, perceived social support will be measured using the Interpersonal Support Evaluation List (ISEL) (Cohen, Mermelstein, Kamarck, & Hoberman, 1985; Cohen & Hoberman, 1983). The ISEL will assess the availability of perceived social support from four different aspects: tangible support, belonging support, self-esteem support, and appraisal support. Tangible support is intended to measure material aid that students receive from others. Belonging support will measure the availability of people in the student's life to have social activities, such as going to lunch with friends. Thirdly, self-esteem support will evaluate positively when students compare themselves to others. Finally, appraisal support will assess students' ability to talk to others when facing problems. In regard to academic performance, self-reported factor of students' grade point averages (GPAs) will be utilized as the measurement to explore Saudi students' academic achievement.

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To fulfill the goal of this study, a quantitative survey design will be utilized to examine the impact of social support on academic performance and answer the research questions. According to Babbie (2011), survey design can help the researcher explore participants' opinions and perceptions in regard to the research topic. In this study, Qualtrics online survey questionnaire will be used as a tool to collect prospective participants' perceptions about the availability of perceived social support, demographic information, and academic performance. Data will be collected through a convenient sampling for Saudi students (graduate and undergraduate) studying in U.S. universities. When data are received, the researcher will use Statistical Package for Social Sciences (SPSS) to explore and analyze the relationship between variables. This researcher will use descriptive statistics to describe the samples. Mean, median, and mode will be used as central tendency measurements plus variance, standard deviation, and range will be utilized as well as variability measurements.

To examine and investigate the relationship between variables, correlational testing will be applied. The Pearson correlation test and the Pearson chi-square independence test will be used to identify the relationship between variables. Additionally, a one-way ANOVA analysis will be applied to identify the statistically significant differences between the different variables. The study design is appropriate in which the researcher's goal is to understand and investigate more about Saudi students in the U.S., especially the availability of perceived social support and how that relates to academic performance.

### **Research Questions**

RQ1: How do Saudi international students perceive different forms of perceived social support (PSS) while studying in the United States?



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RQ2: How do the demographic variables relate to perceived social support (PSS) and academic performance among Saudi international students in the United States?

RQ3: What is the relationship between perceived social support (PSS) and academic performance among Saudi international students in the United States?

RQ4: Are there statistically significant differences between the varied demographic factors associated with Saudi international students and their perceived social support (PSS) and academic performance?

### **Significance and Justification of the Study**

The United States has become one of the most attractive countries for international students to complete their education with the number of international students from all around the world increasing in recent years (the institute of international education, 2018a). Because Saudi students rank fourth among the number of international students in the U.S., it is significant to examine the availability of different perceived social support recourses in relation to students' academic performance. Many former researchers have studied the adjustment and difficulties international students and Saudi students face in the United States. International students and Saudi students experience challenges, including financial problems, cultural differences, English language proficiency, different educational styles, and understanding the medical health system (Al-Harthi, 1987; El-Banyan, 1974; Hofer, 2009; Razek & Coyner, 2013; Sherry et al., 2010; Wu et al., 2015).

Some former researchers have analyzed social support resources and found that families, friends, and academic advisors were essential to international students for their adjustment to a new culture (Jackson, Ray, & Bybell, 2013; Mallinckrodt & Leong, 1992; Zhai, 2002).

Moreover, social support can play a significant role in influencing the psychological well-being

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of international students (Misra, Crist, & Burant, 2003). While studies have not been identified that address international students' social support associated with academic grade point averages (GPA), Robbins, et al. (2004) conducted a meta-analysis of 109 studies considering psychosocial factors and college success. That review illustrated a positive correlation between grade point average and social support for both adolescent and adult students. Similarly, Cutrona et al. (1994) examined the results of a 418-participant study of parental support associated with college student academic success. Findings advanced the idea that parental social support was significantly correlated with student GPAs; however, support from romantic partners or friends was found not to have the same effect.

Limited research exists regarding the relationship between social support and academic performance among international students, especially Saudi students in the United States. This research will help to identify the relationship between social support and academic performance for Saudi students learning in United States. Specifically, the study may assist universities, mental health providers, and educators in gaining increased perspective on effective social support sources for Saudi students and their relation to academic performance. Consequently, this research will explore the question of Saudi students' social support in comparison to their academic performance in American universities.

### **Limitations of the Study**

Because of the scarcity of research focusing on Saudi students' social support and academic performance in the United States, it is difficult to locate data about this population to cover this research topic in depth. Another limitation may involve the use of self-reported measures. Participants may choose an answer that can place them in a more socially acceptable position, one that does not reflect their true situation. Students may be biased and may not reflect

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their situation accurately when answering the survey questions. Students may choose some answers based on social desirability, which may not represent their actual circumstances. In addition, the researcher will measure academic performance variable using self-reported cumulative grade point average (GPA). Participants may not disclose the GPA that most accurately represents the status of their current academic performance. Another limitation is that this research will use convenience sampling, which may not reflect the findings based on other Saudi students.

### **Definition of Terms**

This section will operationally define the most important terms in this research, where the reader will be familiar and able to understand and follow the information presented in this study.

**Social support.** The availability of perceived social support as measured by the Interpersonal Support Evaluation List-General Population (Cohen & Hoberman, 1983).

**Tangible support.** This term refers to any material aid that a person perceives from others (Cohen & Hoberman, 1983).

**Belonging support.** This term describes a person who is able to find people with whom to spend time and socialize (Cohen & Hoberman, 1983).

**Self-esteem support.** This term is identified as the ability to positively compare one's self to others (Cohen & Hoberman, 1983).

**Appraisal support.** This term refers to the accessibility of a person with whom to discuss one's problems (Cohen & Hoberman, 1983).

**Academic performance.** The cumulative grade point average (GPA), which will be identified and obtained from Saudi undergraduate and graduate international students who study at universities in the United States.

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**Saudi Arabian international students.** This term includes both undergraduate and graduate Saudi international students who attend U.S. universities to complete an academic degree.

**Demographic variables.** This term includes different characteristics of the participants, which will include gender, age, marital status, having children, level of education, length of residency in the United States, and the State of residency in the United States.

## Chapter Two: Review of the Literature

### Challenges Facing International Students

International students face many challenges when they come to the United States to study. Some of these challenges include new educational styles, language, and living independently. Along with those, international students may have cultural conflicts; some new experiences may prevent them from becoming well-adjusted to the new culture. Adapting to a new culture is a transitional period for most international students. This transitional period has an influence on these students, either positive or negative. Living in a new culture is a challenge and can increase the level of anxiety for most international students (Constantine, Kindaichi, Okazaki, Gainor, & Baden, 2005). Russell et al. (2010) conducted a study in Australia of 900 international students that found 41% of them experienced some level of social pressure, including cultural shock and perceived discrimination. It is not easy for international students to escape stress and adjust to a new culture. They need time and a socially supported environment to reduce their level of stress.

A study by Wu et al. (2015) showed that international students experienced challenges regarding academics, social inclusion, and cultural adjustment. Qualitative research was conducted to recognize the adjustment difficulties faced by international students. This study was composed of 10 undergraduate and graduate international students from the southernmost part of the U.S. In order to get an overview of cultural adaptation issues within that population, the students were selected from different backgrounds and countries, such as Saudi Arabia, Japan, China, South Korea, and Mexico. Academic difficulties, including introducing themselves to classmates and communicating with professors, were critical issues for them. Some students expressed not knowing when to raise their hands to ask a question—they were hesitant to

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interrupt their professor. This cultural barrier led many of the students to remain silent with a resulting misunderstanding of the material. Additionally, findings showed that students experienced language barriers even though they had studied English before starting their academic studies. Along with that, cultural adjustment was a challenge for these students. The cultural background of the participants was different from American culture. Due to the differences in beliefs and value systems, participants experienced cultural shock and a lack of social support. Participants came to the new country carrying with them their customs, beliefs, and values. They had a hard time understanding the value system of the new culture, communication patterns, and the symbols and signs of social contact. They needed time and encouragement to explore how to communicate in an appropriate manner within the new culture. Personality played a significant role in enabling some international students to adjust more rapidly than others. Students with an inflexible adjustment style often had a difficult time communicating and building new avenues to adapt to the new culture. Being able to open up to a new culture and perceive that society's viewpoint without constructing obstacles could influence the student's abilities to adapt more effectively to the new environment (Wu et al., 2015).

International students can face many difficulties and barriers when they come to a new country, a foreign culture. Poyrazli and Grahame (2007) have found that international students had suffered barriers and obstacles in trying to adapt to life in America. Some of these barriers that they struggled with were academic life, social interaction, health insurance, transportation, and discrimination. This study was done to discover the needs of international students in order to integrate those individuals into American culture. This study emphasized that these students need more attention and assistance, especially in the first few weeks after their arrival.

International students needed time to interact with their professors and their American friends

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because they wanted to understand the different culture and customs. Additionally, interaction with American students during class was hard due slang, which is the day-to-day language.

Another important issue they had was navigating the health care system, since they were unfamiliar with the policies. They were afraid to go to the hospital because they did not want to receive bills. Clearly, these students were in need of social support to overcome their struggles.

### **Saudi Arabian Culture: Religion and Family**

The culture of the Kingdom of Saudi Arabia cannot be understood clearly without considering the religion of Islam. It is one of the most fundamental aspects to influence Saudi Arabian culture (Long, 2005). Islam originated in the 7th century in the land of what it is now known as the Kingdom Saudi Arabia. Saudi Arabia is recognized as an Islamic country where Islam is the official religion followed by all citizens. The meaning of the word Islam is submission to only one God, Allah. (Alajlan, 2016; Waines, 1995). Islamic belief is that there is only one God, and Prophet Muhammad is the last messenger of God. Prophet Muhammed as a messenger of God was born in the 6th century, and Islam was revealed by God to Prophet Muhammed in the 7th century (Ali, Liu, & Humedian, 2004). Muslim people are known as those who submit themselves to one supreme God. According to Lipka (2017), Islam is considered the second largest religion in the world after Christianity. Approximately 1.8 billion Muslims live around the world, with almost 3.45 million Muslims living in the U.S.

The five pillars are core principles that Muslims believe and practice. The first and fundamental pillar is *Alshahada*, which is a testimony to declare that there is no God but God (Allah), and Prophet Muhammad is the messenger of God. This first pillar is written on the Saudi Arabian flag as a representation of an Islam country (Saudi Arabian Cultural Mission, 1993).

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Those who desire to convert to the Muslim faith must first declare the first pillar with a true heart, coming to this of their own free will.

The second pillar is praying, *Alsalat*, five times daily as a type of connection and link between people and God. The prayers are divided, with the first before sunrise, one at noon, one at the middle of the afternoon, one at the sunset, and finally one at night (Abdalati, 1998; Ali et al., 2004; Armstrong, 2002; Saudi Arabian Cultural Mission, 1993; Wynbrandt, 2004). A specific ritual for the payers: Muslim men must pray at Mosques; however, they can also pray in other place, such as homes, schools, or businesses. Muslim women are allowed to pray at home or other places; it is not mandatory for them to pray at Mosques. Muslims' prayers must be directed to the holy city of Makkah in Saudi Arabia (Yackley-Franken, 2007).

The third pillar in Islam is *Alzakat*, alms. In this pillar, people who are able to give alms will give them to those who are poor and in need. It is a certain percentage of the wealth that people possess. Alzakat is different than normal charity in which Alzakat must follow specific rules, such as the amount of money given and the time of giving alms. However, charity (not alms) can be given at any time with no specific rules (Armstrong, 2002; Blanchard, 2009; Saudi Arabian Cultural Mission, 1993).

The fourth pillar is fasting during the month of Ramadan, the ninth month of the Arabic calendar. In this month, Muslims who are capable physically are to fast before sunrise until sunset (Ali et al., 2004). During fasting, Muslims are not allowed to eat, drink, or have sexual relations. Fasting is considered a spiritual practice to purify people's hearts and souls (Keating, 2004).

The fifth and last pillar is *Alhajj*, pilgrimage, which is in the holy city of Makkah in Saudi Arabia. Pilgrimage is not obligatory if people lack money and are not healthy in body and mind,



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and it is to be done at least once in life. Following these pillars is mandatory for Muslims and is considered holy practice to follow God's commands (Abdalati, 1998; Armstrong, 2002; Wynbrandt, 2004).

The main resource that influences Saudi's behaviors and attitudes is Islam, and the rules and laws in Saudi Arabia are based on the holy Quran and the Prophet Muhammad's guidance (the Sunnah) (Alajlan, 2016). In regard to the spoken language, the official language in the Kingdom of Saudi Arabia is Arabic, which is the Quran's language (Long, 2005; Saudi Arabian Cultural Mission, 1993). Arabic language is very different from the English language in its alphabet, grammar, and how it is read and written. When Saudi students come to the U.S., they need to learn English in order to interact with people and achieve their academic goals (Saudi Arabian Cultural Mission, 1993). When Saudis experience problems or need advice, they do not hesitate to lean on their families for solutions, advice and comfort.

In Saudi Arabia, family is considered a fundamental element in any Saudi home. Extended family and the parents are vital and valued in Saudi culture. Islam influences Saudi Arabian culture, and people attempt to respect the guidance of Islam in their daily life behaviors, especially when dealing with elderly people and parents (Alajlan, 2016; Saudi Arabian Cultural Mission, 1993). In Islam, mothers and fathers must be treated with admiration, respect, and honor. In the holy Quran, God has emphasized the importance of parents and how they must be treated. In chapter 17 verses 23 and 24, God says that, "Your Lord has commanded that you should worship none but Him and show kindness to your parents. If either or both of them attain old age with you, say no word of contempt to them and do not rebuke them, but always speak gently to them and treat them with humility and tenderness and say, Lord, be merciful to them both, as they raised me up when I was little" (Quran 17:23,24).

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Moreover, God mentions in chapter 31 verse 14, “We have enjoined man to show kindness to his parents—for his mother bears him, in hardship upon hardship, and his weaning takes two years. [We said] Give thanks to Me and to your parents; all will return to me” (Quran 31:14). Prophet Muhammad stressed the importance of parents as he said, “who amongst the people is most deserving of my good treatment? He said: Your mother, again your mother, again your mother, then your father, then your nearest relatives” (The Hadith, n.d.).

Saudi Arabia is considered a collectivistic country in which people usually attempt to follow traditions and values as a representation of their identities (Long, 2005). According to Long and Maisel (2010), Saudi citizens have been reared in a collective culture where they value and respect their families’ desires when making decisions and goals. In Saudi culture, it is unusual for Saudi students to be individualistic and ignore their family’s needs and wishes. However, U.S. culture accepts individualism rather than collectivism; people can be more independent and have their own goals without being overly concerned with family goals (Long & Maisel, 2010). Family support is expected to be the main resource upon which Saudis depend when facing challenges and difficulties (Ali et al., 2004).

When Saudis experience problems or need advice, they do not hesitate to return to their families for solutions and comfort (Ali et al., 2004). In Saudi culture, families do not stop supporting their children even after they reach adulthood. Saudi students are supported by their families during their academic journey (Abu-Hilal, 1986; Dwairy, 1997). According to El-Banyan (1974), “The family in Saudi Arabia is the basic social unit. It is the center of all loyalty, obligations and status of its members” (p. 46). Based on Alajlan (2016), family is one of the first priorities for Saudi people where they try to obey and always respect.

### **Challenges of Saudi International Students in the U.S.**

Regarding Saudi international students, Razek and Coyner (2013) identified many challenges that Saudi students faced when they came to America, such as linguistic difficulties, a new educational environment, social and cultural adjustment concerns. The goal of this study was to investigate the social, cultural, and adjustment challenges faced by Saudi students in order to enhance their academic experience. The qualitative research method including interviews, document review, and field observation has been used to collect data. Findings of this study revealed that Saudi students were very concerned about how their professors and friends would perceive them, because they wanted to represent their country and religion in an appropriate manner. They felt that they were ambassadors from their country and feel they must act properly to reflect a good image of their culture and religion. These students came from a collective culture in which they felt responsible for helping and supporting other Saudi students to overcome difficulties and adjust to the new culture.

Another result by Razek and Coyner (2013) showed that Saudi students had a hard time making friendships with American students, and they felt more connected to other Saudis with whom they share a culture and language. Additionally, another finding showed that these students were having a difficult time adjusting to the new educational system. They faced some challenges participating in class and in educational activities. Regarding social life with Americans, findings showed that the participation of Saudi students was limited because of food restrictions, mixing of genders, and alienation. However, this study had some limitations in regard to the method and the sample size. Because of the small number of participants, it could not generalize the findings to other Saudi students. In addition, the collected information from

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the interview could be specific to each participant's case, where it may not apply to other students.

In another study by Young and Snead (2017), Saudi students who attend U.S. universities experienced many challenges with social and cultural differences, for example: English language difficulty, gender differences, religious practices, food choices, and lack of resources for international students. The purpose of this study was to investigate and explore the challenges that Saudi students, male and female, experienced while living and studying in U.S. colleges and universities. This study utilized a qualitative research method; the data was collected using focus groups, written personal reflections, and interviews. The main themes that emerged from the findings were related to three contexts including biological, psychosocial, and academic. Some of the difficulties regarding the biological context were a disorganized sleeping cycle, restricted foods and drinks, and weather-related issues that created dermatologic problems.

Young and Snead (2017) also identified that some of the psychosocial challenges faced by Saudis were the social and emotional disturbance in regard to adjusting to life in the U.S., cultural differences in regard to politics and religion, and social isolation which includes homesickness and being far away from their culture, family, and friends. In the academic context, Saudi students struggled with difficulties, such as language challenges, critical thinking and writing abilities, class interaction between Saudi female students in relation to male professors and male students, and the challenges female students faced with mixed gender classrooms. Another finding of this study showed that Saudi students transitioned poorly when they started the first semester at university. In addition, Saudi students felt disappointed during their first semester and needed more resources from the university; they needed more support and encouragement from the professors. Limitations of this study included the small sample size,

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which led to findings that could not be generalized to other Saudi students. Also, this study was done in one of the U.S. universities in which the participants may not represent most Saudi students (Young & Snead, 2017).

Yakaboski et al. (2018) did a study concerning Saudi students' experiences in U.S. The purpose of this study was to investigate and understand the campus experiences of Saudi graduate students in U.S. universities. This study involved mixed methods using an interpretivist exploratory sequential design. Regarding data collection, the researchers used interviews, subsequently developing a survey to obtain data. Findings revealed that Saudi students had positive interactions when dealing with both professors and staff. Saudi students were almost always satisfied with their academic experiences. They felt respected, comfortable and welcomed while interacting with their faculty. However, male students expressed that they would have appreciated more professor-initiated help, while the female students were satisfied with the amount of help, they received from professors already. Regarding the challenges faced by Saudi students, findings showed that some faculty did not make an effort to work effectively and understand the difficulties these students had. Some female students reported that the faculty they interacted with was not supportive when they expressed a feeling of being misunderstood and unfairly treated. For example, a certain professor refused to give a pregnant female student extra time to submit a final project that was supposed to be submitted two weeks after her delivery date.

With staff interaction among Saudi students, Yakaboski et al. (2018) reported that most participants had a satisfied interaction. Some participants reported; however, that they experienced discriminatory events with some members of the staff. Saudi students wanted more support in understanding the educational system, rules, and policies as some staff members were

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not cooperative and failed to guide them through their experience adequately. Some participants reported a satisfactory amount of interactions with American students in classrooms, while more than half of the participants had limited to no interactions with American students.

Moreover, many participants reported that interaction with American students outside the classroom was mainly negative due to the misunderstanding of the Saudi culture, religion, and the language differences. Many Saudi female students reported that they were very concerned about how people, specifically other American students, would perceive them because of wearing the *abaya*, *hijab*, or *niqab*. Some female students felt discriminated against because they were wearing veils. For example, one female student reported that because of her outfit, some American students seemed hesitant to interact with her (Yakaboski et al., 2018).

### **Social Support for International Students**

Social support plays an essential role in the academic lives of all students, especially international students. Social support can be seen in many ways, such as faculty support, peer support, and family support. Social support can help international students face new challenges that are presented in a new culture. When international students sense that they have social support, they can adjust to cultural differences and succeed in their academic goals. A study done by Mallinckrodt and Leong (1992) found that international graduate students who were supported by their families experienced direct relief of stress symptoms. Along with family support, having support from their academic program advisors had a marked positive impact on them as well. The sample of this study was selected from a large eastern university. The participants of this study were 272 graduate students who lived on campus. This sample included 106 international students: 79 men and 26 women, and one person who did not indicate their sex. The U.S. graduate students were 92 men and 74 women. The main point of this study was to

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determine the most helpful kind of social support for international graduate students. Pearson correlation was conducted to investigate between the social support factors, which were graduate program support and family environment support plus four additional factors as follows: negative life events, depression, anxiety, and physical health symptoms. Results by Mallinckrodt and Leong (1992) showed that having good relations with faculty members was especially beneficial for men. On the other hand, having good relations with other students and tangible support was important for women. Along with that, flexibility of curriculum was beneficial for women. Family support reflected through frequent communication, contributions to financial resources, living conditions and child rearing were also important factors for men. For women, there was a strong negative correlation between child rearing and stressful life events. Additionally, managing both financial resources and living conditions were related to depression in women. Universities and families could create meaningful alliances to reduce the negative symptoms that international students face (Mallinckrodt & Leong, 1992).

The positive impact of families on international students can assist them in adjusting to American universities. Family support can be one of the most important resources, which international students can use to overcome their struggles. International students can get courage and confidence from their families, so they can continue their education process with a minimum of transitional problems. Staying connected with families and contacting them whenever the student does not feel well is beneficial for the well-being of international students. In addition, if international students have good friends, their positive influence on their adjustment and their academic performance is helpful. Friends are essential in international students' lives. They can provide a great social support environment, which will enhance the social adjustment for these students. A finding of a study by Zhai (2002) showed that families and friends were the most

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helpful kinds of social support resources for international students. Along with that, having counseling services, academic orientation, and increasing student language proficiency were essential in helping these students engage and feel welcome in the universities. A sample of 10 international graduate students, five males and five females, from countries such as China, Korea, Indonesia, and Pakistan participated in a qualitative research study at a U.S. university. The main purpose of this study was to look at the issues of adjustment for international students and identify the most helpful social support resources. The most obvious adjustment issues for these students were the new educational system, language barriers, and cultural differences. Education challenges were a struggle for them due to the methods of teaching, interactions with their professors and peers, group activities and the nature of assignments. Individualism and collectivism were the most cultural problematic differences they faced. Most international students were educated in collective environments, in which students were friendly and cooperative with each other. On the other hand, Zhai (2002) results indicated that international students felt isolated and had difficulties making friendships with American students due to cultural differences. These international students felt that their English language limitations could have been one of the obstacles that prevented them from being socially accepted. They preferred to talk about their problems with their fellow international friends because they spoke the same language and faced the same issues. Families were very helpful to them because they could understand their struggles and support them to overcome problem areas (Zhai, 2002). Staying connected to the home culture and, at the same time, discovering and developing optimistic connections to the host culture can help increase cultural adjustments for international students (Sullivan & Kashubeck-West, 2015).



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Another study by Chavajay (2013) found that international students can have positive socioemotional and instrumental support from foreign students studying in America and from family members and friends living back home. This study was conducted at a university located in the Northeastern part of the U.S. A sample of 99 undergraduate and graduate international students who ranged in age from 19 to 53 years from different countries participated in this study. The goal of this study was to find the preferred sources of perceived social support for international students in order to help them adjust to academic life and cultural challenges in the United States. According to Chavajay (2013), many international students sought help from other international students living in America because they could understand and empathize with them. Moreover, international students mentioned that other international students had the same experiences and difficulties as did they, so interactions with them were beneficial. Another finding in this study was that international students had instrumental support from Americans, rather than socioemotional support. These students found that Americans were helpful in guiding them through transportation, housing, and information regarding their courses because Americans were more knowledgeable about these aspects of U.S. life. When international students needed socioemotional support, they did not seek help from Americans because of the cultural differences. Instead, they reached out to their family members and other international students. It was clear that both instrumental support and socioemotional support were fundamental for international students, especially the younger students, because they needed more assistance and support than the older students (Chavajay, 2013).

Social relationships are crucial to international students in helping them adjust to a new culture and university. Without social relationships, these students may be unable to perceive and understand their new challenges; they may get lost, feeling incapable of achieving their goals.

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Moreover, social support may have an impact on predicting psychological adjustment. Yusoff and Othman (2011) found that social support, especially from friends, and availability of a special person in the host culture can have a positive influence on the psychological adjustment of international students. This study was conducted to look at the relationship between social support and psychological adjustment. A sample of 185 international students, 85 males and 100 females from public universities in Malaysia, participated in this research. International students were from different countries, such as China, Thailand, Saudi Arabia, France, Iran, Sudan, and the United States. Results by Yusoff, and Othman (2011) suggested, having friendships can increase the level of student adjustment during academic transitions. Along with friendships, having a special person like a boyfriend, girlfriend or a mentor can assist these students in feeling more comfortable, able to perform in the new culture. In this study, Malaysian friends were found to be beneficial for international students because they helped international students understand the different customs and traditions in the host country. Additionally, Malaysian friends helped these students adapt to the new language. As Yusoff and Othman (2011) emphasized the importance of international students seeking relationships with other students, they clarified that these connections would reduce their stress and increase their abilities to face the new environment.

Researchers Poyrazli et al. (2004) were interested in studying acculturative stress among international students, and they found that students with higher levels of social support and English proficiency had lower levels of acculturative stress. Participants in this study consisted of 141 international students from different countries and from four American universities. Additional findings showed that students who socialized with Americans had lower acculturative stress compared to students who socialized only with non-Americans. Other findings indicated

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that Asian students had more acculturative stress than European students. European and American societies share some similar values, such as independence and individualism, but Asian cultures value collectivism over individual freedom of expression. Asian students found it difficult to be independent; they struggled in expressing their needs from their universities and professors (Poyrazli et al., 2004).

Depression and anxiety may be present for international students if they lack sources of social support. Social support can play a big role in influencing the mental health status of these students and either positively or negatively affect their adjustment. A study conducted by Sümer et al. (2008) found that social support had a fundamentally positive, constructive contribution to minimizing depression and anxiety among these students. Students who were surrounded by higher levels of social support had lower levels of depression. Along with these findings, students who reported higher levels of anxiety had lower levels of social support. American friends and international peers were found to be good resources of social support.

### **Social Support for Saudi Students**

When it comes to social support studies for Saudi students in America, a scarcity of research exists covering this topic. More investigation to explore this topic and fill the gap of knowledge is needed (Asfahani, 2018). Regarding the role of social support for Saudi students in the United States, Asfahani (2018) has investigated this topic. The aim of the study was to explore the relationship among social support and intrapersonal identity conflict for Saudi students in the U.S. The study was a mixed method, both quantitative and qualitative. In the quantitative design, the researcher used two instruments, which were the Index of Sojourner Social Support scale to measure social support and the Ethno-Cultural Identity Conflict Scale to measure identity conflict. The qualitative method using interviews to collect data was utilized to

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get in-depth information regarding the social support system. The findings of this study indicated that the levels of identity conflict for Saudi students were low to moderate. Moreover, the results revealed that these students were moderately competent in adjusting to their lives in the United States. In the relationship between social support and identity conflict, the correlation was negative  $r_s(125) = -0.200, p < .05$ ; when social support increased, the identity conflict decreased (Asfahani, 2018).

Additionally, Asfahani (2018) reported that limited people were available to support Saudi students during their stay in the U.S. The qualitative data indicated that the help and support that Saudi students have received from their families, professors and their faith adequately protected them from having any intense emotional well-being issues identified with the conceivably uncomfortable experience of being a stranger in another country. Even though Saudi students had few people to depend on as social support sources, those people were fundamental to support and guide them in feeling more comfortable and having a successful academic journey. In regard to counseling services, during the interview one participant refused to seek professional counseling to help in overcoming social and academic challenges. According to Asfahani (2018), counseling services were not the first choice for Middle Eastern students, who preferred to pursue support and assistance from their families, religious resources and friends. The different social norms, values, and cultures of Middle Eastern students were evident in their declining to seek professional help, finding it unacceptable in their culture. In some Middle Eastern families, looking for assistance outside the circle of family and friends could be a stigma causing embarrassment. More findings indicated that having friends and peers from the host country helped Saudi students overcome the cultural shock; it assisted with effective communication between them and their professors and peers as well.

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Likewise, Heyn (2013) conducted a study aimed at understanding and depicting Saudi male students' life experiences in the United States. This study was a qualitative method using phenomenology approach with a sample of nine Saudi male students. Furthermore, the researcher used face-to-face interviews and phone interviews to collect data. In regard to understanding the experiences of Saudi students with social support systems, findings showed that support from professors, other Saudi students, families, and their faith were helpful to overcome challenges. All participants reported that perceived support from professors was fundamental to aid their understanding of the academic system and ease their process of adjusting to the new academic environment. In regard to religious support, participants emphasized the importance of practicing their faith through prayer as a coping strategy to overcome daily difficulties.

Furthermore, Heyn (2013) reported that support from other Saudi students was reported as being essential in helping Saudi students adapt to life in America. Saudi students helped each other whenever they faced any problems, such as housing issues, health problems, academic challenges, and understanding the American culture. In addition, family support was identified as one of the main recourses that encouraged Saudi students to come to America and continue their education. Both married and single participants reported that their families back home maintained a connection with them and motivating them to work hard on their studies to achieve their goals. Saudi students who were married reported support from their wives whenever experiencing stressful events, which assisted them in alleviating stress.

### **Social Support and Academic performance**

Social support has been shown to impact positively the security and competence of college students where it assisted students in facing intellectual challenges in an appropriate

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manner (Sarason et al., 1990). Many previous researchers have emphasized the importance of social support on academic success, where it could significantly influence students' overall success. Based on Li, Han, Wang, Sun, and Cheng (2018), the relationship between perceived social support and academic achievement was positive, which indicates that having more sources of social support enhances students' academic achievement. The goal of this study was to examine the relationship among many variables, including social support, academic achievement, self-esteem, and emotional exhaustion. Social support was defined as the availability of perceived support (Helgeson, 1993). The study was a survey designed; the sample was convenience, including 262 Chinese students and was collected at one of China's universities. According to Li et al. (2018), the finding revealed that there was a positive correlation between social support and academic achievement ( $r = .13, p < .05$ ), and social support and self-esteem ( $r = .47, p < .01$ ). Additionally, social support and emotional exhaustion were negatively correlated ( $r = -.22, p < .01$ ), and there was a positive relationship among academic achievement and self-esteem ( $r = .17, p < .01$ ). More findings showed that self-esteem was negatively correlated to emotional exhaustion ( $r = -.34, p < .01$ ), and there was a negative correlation between emotional exhaustion and academic achievement. The findings conclude that social support had an important influence on the mental and physical aspects of the life quality of the university students. Social support should be emphasized in university students' lives to better enhance their quality of life and reflect positively on their academic accomplishments and self-esteem. However, the study of Li et al. (2018) had some limitations. First, all the measurements were self-reported where people may be biased when reporting some information. Second, the sample was convenient with small number of participants, and the data was collected from one university in China where in this case, it was hard to generalize the findings.

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Along with the study of Li et al. (2018), De la Iglesia, Stover, and Liporace (2014) have done a study aiming to investigate the relationship between perceived social support and academic achievement. This quantitative survey design included 760 college students in Argentinean universities. Social support was measured using Student Social Support Scale, which measures social support from four different aspects: teachers, classmates, parents, and a best friend or girlfriend/boyfriend. The measurement of academic achievement was obtained based on the rate of passed, failed, and dropped classes. Findings of this study revealed that women had greater significantly perceived social support from classmates, parents, and best friend or girlfriend/boyfriend when compared to men.

Moreover, researchers De la Iglesia et al. (2014) found that social support from a best friend or girlfriend/boyfriend was the most recognized by both males and females, while support from teachers was the less recognized. Regarding the relationship between social support and academic achievement, results showed a positive relationship among perceived social support and academic achievement only for female students; the more social support female students perceived, the better academic achievement they had. No significant relationship existed, however, between social support and academic achievement in male students.

Another study by DeBerard et al. (2004) aimed to investigate some predictor risk variables in relation to academic achievements and attrition in a sample of 204 freshmen undergraduate students, both male and female. One of the predictor risk factors that researchers targeted was social support as measured by the Multidimensional Perceived Social Support Scale (MPSSS) and included support from three different resources: family, friends, and significant others. In this study, academic achievement was measured using the students' SAT scores, cumulative high school GPAs, and students' cumulative college GPAs. The results of the

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DeBerard et al. (2004) study indicated that social support had a positive influence on academic achievement. Thus, social support from family, friends, and significant others could predict academic achievement.

Bordes-Edgar et al. (2011) have done a study regarding academic and nonacademic factors that influence academic persistence among a sample of 76 Latino students in a U.S. university. This study was a longitudinal study where the researchers did a follow-up study for these Latino students after four and a half years. Social support was one of the factors that related to academic persistence and was measured by the Perceived Social Support Inventory–Friend (PSS-Fr) and Family (PSS-Fa) Scales, while academic persistence was assessed using the Persistence/Voluntary Dropout Decision Scale. The findings of Bordes-Edgar et al. (2011) revealed that perceived social support from friends had a significant prediction of academic persistence, as it gave these students the determination that they needed to accomplish their academic goals and make better academic decisions.

Although the positive relationship between perceived social support and academic performance has existed in the literature, previous researchers Line (2008) and Mackinnon (2012) found that no relationship existed between perceived social support and academic performance. Line (2008) conducted a study, aiming to examine the relationships between different variables including: social support, academic performance, family functioning, and self-esteem. A survey design was utilized to collect data, and the sample of this study included 378 students, both male and female, aged between 18 and 26 years. In this study, perceived social support was measured by the Multidimensional Scale of Perceived Social Support (MSPSS), which evaluates social support from three resources: family, friends, and significant others. Academic performance was assessed using students' cumulative grade point average (CGPA).



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Additionally, family functioning and self-esteem variables were measured by Family Functioning Scale and Self-Esteem Rating Scale.

According to Line (2008), findings revealed that social support and family functioning were not significantly correlated with academic performance, indicating that students' achievement had not been influenced by social support or family functioning. Additionally, results showed that both family functioning and social support had a positive relationship with self-esteem; gender differences were statistically significant with academic performance, implying that females had a higher academic performance (CGPA) when compared with males.

Along with Lian (2008), Mackinnon (2012) investigated how social support and academic performance could change over time. The collection of data was done through a three-wave longitudinal design using perceived social support and academic achievement questionnaires. The sample was 10,445 students, male and female, attending schools in Canada, aged between 15 and 19 years, who were in the process of transitioning from high school to university or college level. Findings by Mackinnon (2012) revealed that the relationship between perceived social support and academic achievement was not evident regardless of the common expectation of their association. The improvements in academic performance over time were not predicted by students who had perceived higher levels of social support at age 15; therefore, receiving higher levels of social support did not shield the students from decreased student academic performance.

### **Tangible Support**

In accordance to Cohen et al. (1985), tangible support was defined as any material and palpable assistance that a person perceived by others. Some previous researchers, Caplan (1979) and Cobb (1976), have differentiated between psychological and non-psychological aspects of

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social support. Psychological support is described as the ability to provide information to others who are in need, while non-psychological support has been described as the capability of offering and providing material assistance. Tangible support was considered under non-psychological support whereas some social scientists were less interested in it as a buffer for stress. Cobb (1976) and Swank (1949) have emphasized the fundamental role of tangible support in natural disasters, battle, sick and elderly people. It is important to be cautious when providing tangible support, which should be appropriately suitable in the eye of the recipient; at the same time, material aid would be more effective when the recipient is in need of this help. Providing tangible support to people who are not in need may not moderate their stress impact and provide no benefits (Gross, Wallston, & Piliavin, 1979). The perception of people who receive aid is considered an essential part of tangible support, whether people would benefit from it or not (Cohen & McKay, 1984).

### **Belonging Support**

Researchers Cohen et al. (1985) have described belonging support as that of a person who can find people with whom to spend time and do things. A study by O'Keeffe (2013) has explored the topic of a sense of belonging and how it could influence student retention. Students who were in their first year of college were at high risk of attrition and not completing their studies. Developing a sense of belonging for university students was one of the fundamental aspects in predicting their retention. Findings by O'Keeffe (2013) revealed that the ability to create an inviting and supportive atmosphere inside the college was essential in developing a feeling of belonging. In addition, the improvement of positive relationships between students and faculty members, the availability of good counseling resources, and prompting diversity variations within the university were important factors in creating a sense of belonging.

### **Self-esteem Support**

As has been defined by researchers Cohen et al. (1985), self-esteem support is the ability to positively compare one's self to others. Additionally, Rosenberg (1965) described self-esteem as that of a person who can have an opposing demeanor toward one's self. Researchers Friedlander, Reid, Shupak, and Cribbie (2007) have conducted a study to examine the impact of social support, self-esteem, and stress on first-year university student adjustments. Findings of this study showed a positive correlation between self-esteem and adjustments for university students in which better levels of self-esteem indicated better adjustments to the overall university experience. Moreover, social support was positively correlated with adjustments. It was indicated that students who had better social support resources were able to transition to university life and increase their adjustments. Findings also revealed that stress levels were negatively correlated with adjustments. The less stress those students experienced, the better adjustments they experienced (Friedlander et al., 2007).

### **Appraisal Support**

Appraisal support can be defined as the capability of finding someone with whom to discuss one's problems. It can be identified as a resource where a person can depend on someone with whom to express concerns and turn to for advice and suggestions (Cohen et al., 1985). Researchers Hurd, Albright, Wittrup, Negrete, and Billingsley (2018) conducted a study to explore the impact of appraisal support from mentors on the mental health of underrepresented college students who attend a predominantly white university. In this study, mentors were from the students' social networks, not including their parents. The study aimed to investigate how appraisal support could contribute to reducing the symptoms of depression, anxiety, and psychological distress in general by increasing the sense of self-worth for those students.

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Findings of this study revealed that appraisal support was correlated negatively with psychological distress; better appraisal support from mentors could decrease the mental health challenges faced by underrepresented students. Additionally, mentors were strongly beneficial to the increased self-worth, guiding and encouraging those students to enjoy better mental health and a successful journey throughout their academic careers (Hurd et al., 2018).

### **Summary**

The intention of this chapter was to examine and review the literature to provide information about the culture of the Kingdom of Saudi Arabia in regard to family and religion. Additionally, this chapter discussed former research concerning the challenges facing international and Saudi students in the USA, social support for international and Saudi students, social support in relation to academic performance, and different resources for social support.

### **Chapter Three: Methodology**

#### **Introduction**

In this chapter, the researcher described in detail the methodology utilized to conduct this research. The researcher discussed the following methodology: purpose of the study, research questions, theoretical framework, research design, participants, measurements, data collection procedure, data analysis, along with legal and ethical considerations.

#### **Purpose of the Study**

The purpose of this research was to examine and explore social support and academic performance for Saudi residents studying in the United States. This research explored the question of Saudi students' social support in relation to their academic performance in the United States. In addition, this study identified the relationship among different demographic variables in regard to the perceived social support and academic performance for Saudi Students in the United States.

#### **Research Questions**

RQ1: How do Saudi international students perceive different forms of perceived social support (PSS) while studying in the United States?

RQ2: How do the demographic variables relate to perceived social support (PSS) and academic performance among Saudi international students in the United States?

RQ3: What is the relationship between perceived social support (PSS) and academic performance among Saudi international students in the United States?

RQ4: Are there statistically significant differences between the varied demographic factors associated with Saudi international students and their perceived social support (PSS) and academic performance?

### **Theoretical Framework**

In this study, the researcher was interested in examining, understanding, and obtaining participants' perspective regarding different social support resources in relation to academic performance. To achieve this, constructivism epistemology informed the conduction of this study. According to Daly (2007), epistemology is identified as a theory of knowledge in which reality can be known and approached. Objectivism and constructivism are two perspectives of epistemology that researchers in social science use to understand reality.

In objectivist perspective, reality exists outside the researcher's thoughts and knowledge whereby reality can be seen as external and independent. In addition, the researcher has to follow a specific scientific procedure to assure the objective reality in which experimentation and measurement can be used to achieve the objective reality (Daly, 2007; Marshall & Rossman, 2014). Guba and Lincoln (1994) believed that values, thoughts, biases, and opinions must not impact and/or influence outcomes where the researcher receives results objectively. Objectivism is not the focus of this research because the researcher is interested in going beyond the objective reality to examine the participants' opinions and perspectives.

On the other hand, the researcher in this study came from a constructive standpoint in which reality exists, but understanding of the interpretation regarding the observer must be taken into consideration. The work of constructivism can be tracked in the work of Kant's (1781/1966) *Critique of Pure Reason*. The point of view that Kant held regarding constructivism was that "human perception derives not only from evidence of the senses but also from the mental apparatus that serves to organize the incoming sense impressions" and that "human claims about nature cannot be independent of inside-the-head processes of the knowing subject" (Hamilton, 1994, p. 63).

According to Piaget (1970), constructivism holds that the connection among the population's ideas and experiences creates meaning and knowledge. According to Daly (2007), "reality is that which is created in the liminal zone between a perceived external reality and a subjective meaning-making process" (p. 31, 32). Daly (2007) and Piaget (1970) described that constructivism can be seen in the middle between the subjectivist and objectivist epistemology. Constructivism can accept the existence of external reality, but it is comprehended and influenced according to the observer's perspective.

In regard to constructivism perspective and this research, quantitative survey research design was utilized in order to examine participants' opinions toward social support and academic performance. Participants shared their perceptions and points of view, allowing the researcher to examine and understand. According to Fowler (2009), survey design can provide participants' opinions, attitudes, or perspectives regarding the variables of this study, which will served the goals of the study. Survey design can use questionnaires or structured interviews to collect data. In this research, questionnaires were appropriate and were utilized as tools for data collection.

### **Research Design**

The research design for this study was a cross-sectional survey design, which is a quantitative research method. In this research, the data collection was obtained by quantitative self-administrated questionnaires with a convenience sample of Saudi students in the United States. According to Creswell (2014), quantitative research can be defined as "an approach of testing objective theory by examining the relationship among variables" (p. 4). In addition, quantitative analysis can be defined as "the numerical representation and manipulation of

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observations for the purpose of describing and explaining the phenomena that those observations reflect” (Babbie, 2011, p. 447).

In this research, a variety of techniques support and justify the use of the quantitative research method. First, researchers can save time and reduce effort by using statistical data, such as numbers and figures to describe the results. Second, having the ability to generalize the results to a population gives strength to this method. Third, objectivity can be achieved using this method. Fourth, the ability to reach many participants from different resources adds value to the results (Bryman, 2001; Cohen, Manion & Morrison, 2011; Trochim, Donnelly & Arora, 2015).

Survey design was used in this study because it can quantitatively examine and discover people’s opinions or perceptions by using different measurements—this researcher utilized questionnaires (Babbie, 2011). According to Babbie (2011) and Creswell (2014), survey research design studies a sample of a population; this helps the researcher to understand the opinions or attitudes within this population. The survey design is appropriate in this study; the researcher collected data from Saudi international students to discover their opinions and beliefs, then examined relationship between social support and academic performance. According to Babbie (2011) and Sheperis, Yong, and Daniels, (2010), in social science, survey design is considered one of the fundamental designs because of the nature of collecting data where the researcher can distribute questionnaires directly to participants, then receive the results in the same manner.

Regarding survey research, Babbie (2011) and Sheperis, Young, and Daniels (2016) identified that longitudinal and cross-sectional designs are the foundational types of survey research. The cross-sectional design is most commonly used in survey design. Babbie (2011) defines the cross-sectional survey design as observing and collecting a type of data of a population from a sample at one point in time.



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Regarding this study, the researcher used cross-sectional design to collect data from a large population at one point in time. The cross-sectional survey design was suitable in this study; the researcher obtained data in a short period of time and had research results within an appropriate time with no intention to manipulate the environment of the study. In addition, this design was appropriate because of the accessibility of locating participants using reasonably reduced financial costs (Sheperis et al., 2016).

This study had many variables, including social support, academic performance, and demographic variables. Social support, as measured by Interpersonal Support Evaluation List (ISEL), consists of four subscales: tangible support, belonging support, self-esteem support, and appraisal support. The academic performance variable was measured using self-reported cumulative grade point average (CGPA) to identify and predict the relationship between social support and academic performance.

### **Participants**

The population the researcher targeted, accessed, and drew a sample from was Saudi students in the United States. According to Gall, Gall, and Borg (2007), an accessible population can be identified as participants whom researchers can reach and from whom to draw a sample of respondents who meet the criteria of the study. To accomplish the goals of this research, the sample was convenience sampling. Gall et al. (2007) stated that convenience sampling is a type of sampling that researchers can access easily to achieve the goals of the study. For this study, the researcher reached out to Saudi students in the United States who were willing to give their input. These students were asked to participate in this research. The age of participants was 18 years and above. This research included both male and female undergraduates plus those

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graduate Saudi international students who had completed at least their first semesters in U.S. universities or colleges.

### Measures

In this study, the researcher used two questionnaires concerning demographic characteristics and perceived social support. The researcher included in the demographic characteristics the cumulative grade point average (GPA) to measure academic performance.

**Demographic Questionnaire.** This questionnaire was created by the researcher to measure different demographic characteristics of the participants, including the following information: gender, age, marital status, having children, level of education, cumulative GPA, length of residency in the United States, and State of residency in U.S (see Appendix A). This demographic questionnaire was self-administered via Qualtrics, an online internet service available via link

**Interpersonal Support Evaluation List (ISEL).** In this study, the Interpersonal Support Evaluation List (ISEL) was used to measure the availability of perceived social support (Cohen et al., 1985; Cohen & Hoberman,1983). The goal of ISEL was to measure the perceptions of social support among people. Moreover, the ISEL was created to look at the four functions of perceived availability of social support and provide an overall assessment of support. The ISEL consists of four subscales, which include tangible support, belonging support, self-esteem support, and appraisal support. The tangible support subscale was designed to assess material aid perceived by others. The belonging support subscale was intended to measure people's availability with whom a person can socialize. The self-esteem support subscale was designed to assess the positive comparison that people perceive when comparing oneself to others. The appraisal support subscale was intended to measure the accessibility of a person in which to

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confide when one perceives problems. Each factor of the ISEL included 10 items with a total of 40 items to measure the availability of social support resources as needed by someone (see Appendix B). The statements of the ISEL were designed based on theoretical grounds to cover the factors of social support resources that could ease the process of dealing with stressful incidents. In regard to the ISEL, half of the 40 items represent positive social relationship statements. An example of a positive statement is, “If I needed help fixing an appliance or repairing my car, there is someone who would help me.” The other half of the ISEL represents negative statements, such as “There really is no one I can trust to give me good financial advice.” In regard to the ISEL statements, prospective participants were asked to choose whether each statement is definitely true, probably true, probably false, or definitely false. The scores of the 4-point rating scale included: 3 = definitely true, 2 = probably true, 1 = probably false, and 0 = definitely false. The potential scores of total ISEL ranged from 0 to 120. A high total score indicated a high level of perceived social support; whereas, a low score indicated a low level of perceived social support.

Regarding the internal reliability (alpha coefficient) of the ISEL, Cohen et al. (1985) indicated that the ISEL is considered a reliable instrument to measure perceived social support. The overall scale internal reliability (alpha coefficient) of the ISEL has been reported from several studies, student samples, and nonstudent (community) samples to range from 0.88 to 0.90. In addition to the overall scale internal reliability (alpha coefficient), the ISEL subscales internal reliability ranges are as follow: tangible support 0.71-0.74, appraisal support 0.70-0.82, self-esteem support 0.62-0.73, and belonging support 0.73-0.78. The ISEL correlation of 6 months' test-retest were 0.74 for the overall scale, 0.68 for belonging subscale, 0.60 for appraisal subscale, 0.54 for self-esteem subscale, and 0.49 for tangible subscale.

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Regarding the validity of the ISEL compared to other social support measurements, Cohen et al. (1985) reported that “the ISEL was designed to provide a measure that was somewhat different from any of the existing social support scales. Even so, we assume that the ISEL would moderately correlate with the existing structural, past support, and perceived availability measure” (p. 77). Cohen et al. (1985) stated that based on a sample of 154 males and 62 females at Carnegie-Mellon University, the correlation between the ISEL total score and the Moos Family Environment Scale (FES) total score was 0.30 (Moos & Moos, 1981). In addition, the correlation of the ISEL with the FES’s subscales were as follows: 0.20 with expressiveness, 0.19 with conflict, 0.46 with cohesiveness. In another sample, the Oregon Smoking Cessation program, the correlation among the ISEL and the Partner Adjustment Scale was 0.31 (Mermelstein, Cohen, & Lichtenstein, 1983). Cohen et al. (1985) reported that the self-esteem subscale of the ISEL suggested a good correlation of 0.74 with the Rosenberg Self-esteem Scale. When investigating the discriminate validity between the ISEL and social desirability, the Crowne-Marlowe Social Desirability Scale did not correlate with the ISEL and its subscale (Cohen et al., 1985).

**Cumulative Grade Point Average (CGPA).** The academic performance in this study was measured using self-reported GPA. In accordance with York, Gibson, and Rankin (2015) the finding of analytic literature review investigating academic success measurements resulted in the grade point average (GPA) being the most frequently used measure of academic performance. In this study, participants were asked to report their current cumulative GPA at their university or college. Gray and Watson (2002) have found that the correlation between the university official GPA records and the high school GPA records in regard to students’ self-reported GPAs was high (.84) and (.92). Based on previous research, this can suggest a high confidence in student

self-reported GPAs, reducing the chance for reflecting inaccurate GPAs. In this study, a higher GPA indicated academic success, whereas lower GPA scores indicated some lack of success.

### **Data Collection Procedure**

The sample used in this research was convenience sampling. According to Etikan, Musa, and Alkassim (2016), convenience sampling is defined as “a type of nonprobability or nonrandom sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study” (p. 2). In behavioral science research, convenience sampling is the method of sampling used most often; it helps the researcher easily obtain data by asking participants to voluntarily join the research group (Gravettters & Forzano, 2015).

The researcher used Raosoft, a software program to calculate the sample size in order to answer the questions in this research. In order to estimate the sample size from Raosoft, the researcher had a confidence level  $(1 - \beta)$  at 0.95,  $\alpha = 0.05$ , margin of error 5%, and a normal distribution 50%. According to the entered information, the researcher estimated a minimum sample of 377 Saudi international students in the United States.

In this study, the researcher incorporated the use of Qualtrics. Qualtrics is an online internet survey questionnaire that aids in collecting data. The online survey questionnaire link was created using Qualtrics in order to minimize the difficulty often involved in the process of collecting data. After getting approval from the St. Mary's University Institutional Review Board (IRB), the researcher collected data through an online internet link from Qualtrics survey website while following the legal and ethical guidelines regarding data collection. The researcher distributed the online Qualtrics survey link via the technology of social media network utilizing

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electronic communication. In this research, the researcher targeted Saudi international students throughout the United States. The researcher attempted to reach out to a wide range of Saudi students. Permission from the Saudi Arabian Cultural Mission (SACM) was obtained through e-mail collaboration and documented research approval. SACM helped the researcher announce the study and reach Saudi students in the United States through its official Facebook page or Twitter account.

In addition, the researcher accessed participants from different Saudi Arabian organizations in the United States, including Saudi student clubs and social organizations that support Saudi Arabian students, such as Saudis in USA. These organizations were contacted through Facebook, Twitter, or e-mail where they assisted the researcher in announcing the study and inviting Saudi students to participate through their official Facebook and Twitter accounts for data collection (see Appendix C).

Participants were given informed consent and a description of the study before starting the survey (see Appendix D). If participants agreed to take part in this research and provide informed consent, they were directed to complete the survey. The researcher used social network technology, including Facebook and Twitter plus e-mail, to invite research participants. Participants received the survey questions by either e-mail or a social network technology online link through Facebook or Twitter. The link immediately directed participants to the Qualtrics survey, from which participants responded anonymously. Every participant was a volunteer; no compensation was offered for participating in this study.

### **Data Analysis**

After receiving surveys from all participants, the researcher transferred the data received from Qualtrics to IBM Statistical Package for the Social Sciences (SPSS), version 24.0, in order

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to analyze it and obtain results. The researcher used descriptive statistics to describe the sample. Frequency distributions were used in addition to central tendency measurements and variability measurements. Furthermore, the ISEL total score and the total score of the four dimensions of the ISEL (appraisal, tangible, self-esteem and belonging) in addition to the overall GPA were recognized as quantitative variables. Each of these variables were identified by conducting descriptive statistics including central tendency and variability. Regarding the qualitative variables, the researcher reported data utilizing frequency distribution tables after analyzing the variables.

Correlational analysis was used to investigate the relationship between variables. According to Pagano (2012) and Sheperis et al. (2016), correlation is a statistical approach that assists the researcher in identifying the degree and the direction of the relationship between variables. The direction of the relationship can be described as having a positive or negative association. Positive correlation refers to the situation where two variables move in the same direction. On the other hand, negative correlation indicates that both variables are moving in the opposite direction. Regarding the degree of the relationship, this will aid the researcher in exploring the strength of the relationship between variables. It can fluctuate from a perfect relationship to a nonexistent relationship, or anything in between. This will aid the researcher in exploring the strength of the association between variables. The pearson correlation analysis was applied to examine the existing association between the total scores of the ISEL (PSS) and overall GPA.

Based on the definition given by Pagano (2012), “A correlation coefficient expresses quantitatively the magnitude and direction of the relationship” (p.130). The correlation

coefficient can range from  $-1$  to  $+1$ . In addition, the value of  $0.00$  implies that the relationship is nonexistent between variables.

In addition to using the pearson correlation analysis, the pearson chi-square independence test was performed. This test was helpful in verifying the probability association among various qualitative variables including demographic variables, the level of the PSS, and the level of GPA.

The analysis of variance, one-way ANOVA was applied to assess the existence of statistically significant differences between variables. The total scores of the ISEL (PSS) and overall GPA were considered as independent variables while the demographics variables including gender, age, marital status, having children, years living in USA and level of education were considered as factors representing qualitative variables.

### **Axiology**

Regarding this research, all legal and ethical standards and guidelines were taken into consideration and followed. The researcher submitted a proposal to St. Mary's University's Institutional Review Board (IRB) in order to obtain approval to collect data. The researcher followed all ethical regulations of IRB to secure participants' rights. Some ethical implications considered, which were autonomy, beneficence, maleficence, justice, fidelity, and veracity (ACA, 2014). Researcher respected participants' dignity and ensured their welfare.

Participation in this research was voluntary, and participants had the right to withdraw from the research study if and when they wanted. The researcher was honest and responsible with participants, keeping promises, and ensuring that participation in this study caused no harm to participants. In order to guarantee participants' confidentiality, data collection was



anonymous. An approval and permission form was obtained from the dissertation chair and committee members to conduct this study.

### **Summary**

This chapter demonstrated the research methodology, describing in detail the process and steps involved in conducting this study. This chapter discussed the following themes: purpose of the study, research questions, theoretical framework, research design, participants, measuring tools, data collection procedures, data analysis, and axiology.

## Chapter Four: Results

### Introduction

The main purpose of this research study was to examine and investigate the relationship between perceived social support, academic performance and some demographic variables which include gender, age, marital status, having children, level of education, length of residency in the United States. This study used a cross-sectional survey design and collected data from Saudi students in USA universities and colleges using an online survey. A representative sample of 384 Saudi students, male and female, participated in this research. The main goal of this chapter was to answer the research questions and describe the results. The data of this study were analyzed using the IBM Statistical Package for the Social Sciences (SPSS) version 24. The descriptive analysis of that data and the inferential statistical analysis follows in this chapter.

### Demographic Characteristics of the Sample

The study analyzed a representative sample of Saudi students in the United States, the majority of which were males (64.6%) with approximately 35% corresponding to female gender. The average age was 29.16 years, the maximum age was 52 years and the minimum 18 years. The standard deviation was 5.68 years. The participants were mostly young, about 83.8% being between 18 and 34 years old, with only 2% older than 45 years. The sample included mostly young students (25 and 34 years old); this group represented approximately 61%, 40% of whom were male and 21% female, as itemized in Table 2 and was the largest group surveyed.

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Table 2

*Sample Distribution by Age and Gender*

		What is your gender?					
		Male		Female		Total	
		f	%	f	%	f	%
Age	18 to 24	61	15.9	27	7.0	88	22.9
	25 to 34	152	39.6	82	21.4	234	60.9
	35 to 44	34	8.9	24	6.3	58	15.1
	45 and more	1	0.3	3	0.8	4	1.0
	Total	248	64.6	136	35.4	384	100.0

Regarding familiar profiles as shown in Table 3, some 53.1% of the participants were married; 44% were single, and 44.3% of the total participants had children. About 36.7% of the sample were males who were childless. On the other hand, 36.5% were in bachelor programs and more than 60% were enrolled in a master's or PhD program.

Table 3

*Sample Distribution Gender, Having Children, Marital Status, Level of Education*

		What is your gender?					
		Male		Female		Total	
		f	%	f	%	f	%
What is your marital status?	Single	108	28.1	61	15.9	169	44.0
	Married	138	35.9	66	17.2	204	53.1
	Widow	1	0.3	1	0.3	2	0.5
	Divorced	1	0.3	7	1.8	8	2.1
	Other	0	0.0	1	0.3	1	0.3
Total		248	64.6	136	35.4	384	100.0

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Do you have children?	Yes	107	27.9	63	16.4	170	44.3
	No	141	36.7	73	19.0	214	55.7
Total		248	64.6	136	35.4	384	100.0
In which level of education are you studying now?	Associate degree	1	0.3	3	0.8	4	1.0
	Undergraduate (Bachelor's degree)	104	27.1	36	9.4	140	36.5
	Master's degree	69	18.0	46	12.0	115	29.9
	Doctorate degree	74	19.3	51	13.3	125	32.6
Total		248	64.6	136	35.4	384	100.0

In the sample of Saudi students analyzed, it was observed in Table 4 that they lived mainly in Texas (21.6%) with 7.60% living in Pennsylvania and Illinois, 5.70% in Virginia and New York and 12.80% in other states. Only 1.60% of respondents did not reside in the USA.

Table 4

### *Gender and States in USA*

	What is your gender?					
	Male		Female		Total	
	f	%	f	%	f	%
Texas	65	16.90	18	4.70	83	21.60
Pennsylvania	24	6.30	5	1.30	29	7.60
Illinois	25	6.50	4	1.00	29	7.60
Virginia	19	4.90	3	0.80	22	5.70
New York	8	2.10	14	3.60	22	5.70
Florida	11	2.90	8	2.10	19	4.90
Missouri	8	2.10	8	2.10	16	4.20
Arizona	12	3.10	3	0.80	15	3.90
Ohio	3	0.80	10	2.60	13	3.40
Tennessee	8	2.10	4	1.00	12	3.10
Massachusetts	6	1.60	5	1.30	11	2.90

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Colorado	7	1.80	4	1.00	11	2.90
Michigan	7	1.80	2	0.50	9	2.30
Indiana	5	1.30	4	1.00	9	2.30
Maryland	5	1.30	3	0.80	8	2.10
Washington	2	0.50	5	1.30	7	1.80
New Jersey	5	1.30	2	0.50	7	1.80
California	4	1.00	3	0.80	7	1.80
I do not reside in USA	2	0.50	4	1.00	6	1.60
Other States	22	6.00	27	7.20	49	12.80
<b>Total</b>	<b>248</b>	<b>64.60</b>	<b>136</b>	<b>35.40</b>	<b>384</b>	<b>100.00</b>

As shown in Table 5, most of the sample (44.5%) have lived between 5 and 10 years in the USA with the other 37.5% having lived 2 to 4 years in the USA. Just 3.1% of the sample have lived more than 10 years in the United States. The group with major representation (30%) was male with a resident time of between 5 and 10 years.

Table 5

### *Gender and Time Living in USA*

			What is your gender?		
			Male	Female	Total
How many years have you resided in the United States?	Less than 1 year	f	7.0	1.0	8.0
		%	1.8	0.3	2.1
	From 1 - 2 years	f	32.0	18.0	50.0
		%	8.3	4.7	13.0
	From 2 - 4 years	f	86.0	57.0	143.0
		%	22.4	14.8	37.2
	From 5 - 10 years	f	115.0	56.0	171.0
		%	29.9	14.6	44.5
	More than 10	f	8.0	4.0	12.0
		%	2.1	1.0	3.1
<b>Total</b>		f	248.0	136.0	384.0
		%	64.6	35.4	100.0

### **Results Regarding the Perceived Social Support (PSS) of Saudi International Students**

In order to measure the Perceived Social Support (PSS), the Interpersonal Support Evaluation List-General Population were employed (Cohen & Hoberman, 1983). The ISEL was created to look at the four functions of perceived availability of social support and provide an overall assessment of support. In the questionnaire, the ISEL consisted of four subscales, which included tangible support, belonging support, self-esteem support and appraisal support. Each factor of the ISEL included 10 items with a total of 40 items to measure the availability of social support resources needed by someone. The results were illustrated by dimensions.

Cohen and Hoberman (1983) defined the appraisal support as the accessibility of a person to talk with others when one perceives problems. Regarding this factor, Table 6 shows that approximately 75% of respondents definitely believed several people that they trusted were available to help solve their problems; similarly, about 83% believed that at least one person gave advice they really trusted. On the other hand, about 71% definitely believed they had someone to whom they could turn for advice about career plans or changing jobs, while 48% did not agree; that is, they felt there was no one with whom they could share their most private worries and fears.

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Table 6

*Frequencies Distribution for Appraisal Dimension*

		definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
1. There are several people that I trust to help solve my problems.	f	36.0	57.0	165.0	126.0
	%	9.4	14.8	43.0	32.8
6. There is no one that I feel comfortable to talking about intimate personal problems.	f	69.0	95.0	111.0	109.0
	%	18.0	24.7	28.9	28.4
11. There really is no one who can give me an objective view of how I'm handling my problems.	f	31.0	114.0	167.0	72.0
	%	8.1	29.7	43.5	18.8
17. I feel that there is no one I can share my most private worries and fears with.	f	71.0	113.0	110.0	90.0
	%	18.5	29.4	28.6	23.4
19. There is someone I can turn to for advice about handling problems with my family.	f	69.0	94.0	137.0	84.0
	%	18.0	24.5	35.7	21.9
22. When I need suggestions on how to deal with a personal problem, I know someone I can turn to.	f	41.0	82.0	158.0	103.0
	%	10.7	21.4	41.1	26.8
26. There is someone I could turn to for advice about making career plans or changing my job.	f	37.0	73.0	170.0	104.0
	%	9.6	19.0	44.3	27.1
30. There really is no one I can trust to give me good financial advice.	f	34.0	96.0	160.0	94.0
	%	8.9	25.0	41.7	24.5
36. If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it.	f	40.0	123.0	132.0	89.0
	%	10.4	32.0	34.4	23.2
38. There is at least one person I know whose advice I really trust.	f	15.0	51.0	157.0	161.0
	%	3.9	13.3	40.9	41.9

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In reference to the dimension of tangible support, this subscale is designed to assess the material aid perceived by others (Cohen & Hoberman, 1983). As seen in Table 7, some 83% definitely believed that If they needed an emergency loan of \$100, someone (friend, relative, or acquaintance) would provide the loan. Similarly, 75% think that if they needed help fixing an appliance or repairing their car, someone would help them. On the other hand, 44% consider that if they had to go out of town for few weeks, they could easily find someone to look after their house or apartment.

Table 7

### *Frequencies Distribution for Tangible Support Dimension*

		definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
2. If I needed help fixing an appliance or repairing my car, there is someone who would help me.	f	40.0	54.0	175.0	115.0
	%	10.4	14.1	45.6	29.9
9. If I needed a ride to the airport very early in the morning, I would have a hard time finding someone to take me.	f	63.0	85.0	120.0	116.0
	%	16.4	22.1	31.3	30.2
14. If I were sick and needed someone (friend, family member, or acquaintance) to take me to the doctor, I would have trouble finding someone.	f	43.0	60.0	101.0	180.0
	%	11.2	15.6	26.3	46.9
16. If I needed a place to stay for a week because of an emergency (for example, water or electricity out in my apartment or house), I could easily find someone who would put me up.	f	63.0	83.0	121.0	117.0
	%	16.4	21.6	31.5	30.5
18. If I were sick, I could easily find someone to help me with my daily chores.	f	43.0	84.0	148.0	109.0
	%	11.2	21.9	38.5	28.4
	f	23.0	43.0	112.0	206.0



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23. If I needed an emergency loan of \$100, there is someone (friend, relative, or acquaintance) I could get it from.	%	6.0	11.2	29.2	53.6
29. If I had to go out of town for a few weeks, it would be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.).	f %	65.0 16.9	103.0 26.8	120.0 31.3	96.0 25.0
33. If I was stranded 10 miles from home, there is someone I could call who would come and get me.	f %	34.0 8.9	61.0 15.9	143.0 37.2	146.0 38.0
35. It would be difficult to find someone who would lend me their car for a few hours.	f %	56.0 14.6	93.0 24.2	119.0 31.0	116.0 30.2
39. If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me.	f %	53.0 13.8	99.0 25.8	117.0 30.5	115.0 29.9

The self-esteem support subscale is designed to assess the positive comparison that students perceive when comparing themselves to others (Cohen & Hoberman, 1983). The results as shown in Table 8, approximately 87% of respondents considered it true that they were as good at doing things as most other people were; similarly, about 80% believed that generally people did not have much confidence in them. On the other hand, 78% of them were more satisfied with their life than most other people. About 40% thought that they were not closer with their friends than most other people were to theirs.

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Table 8

*Frequency of Distribution for Self-Esteem Support Dimension*

		definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
3. Most of my friends are more interesting than I am.	f	36.0	123.0	156.0	69.0
	%	9.4	32.0	40.6	18.0
4. There is someone who takes pride in my accomplishments.	f	37.0	69.0	123.0	155.0
	%	9.6	18.0	32.0	40.4
8. Most people I know think highly of me.	f	35.0	67.0	185.0	97.0
	%	9.1	17.4	48.2	25.3
13. I think that my friends feel that I'm not very good at helping them solve their problems.	f	17.0	64.0	139.0	164.0
	%	4.4	16.7	36.2	42.7
20. I am as good at doing things as most other people are.	f	10.0	40.0	185.0	149.0
	%	2.6	10.4	48.2	38.8
24. In general, people do not have much confidence in me.	f	16.0	59.0	118.0	191.0
	%	4.2	15.4	30.7	49.7
28. Most of my friends are more successful at making changes in their lives than I am.	f	32.0	93.0	175.0	84.0
	%	8.3	24.2	45.6	21.9
32. I am more satisfied with my life than most people are with theirs.	f	18.0	65.0	200.0	101.0
	%	4.7	16.9	52.1	26.3
37. I am closer to my friends than most other people are to theirs.	f	52.0	103.0	159.0	70.0
	%	13.5	26.8	41.4	18.2
40. I have a hard time keeping pace with my friends.	f	24.0	86.0	139.0	135.0
	%	6.3	22.4	36.2	35.2

Finally, the results concerning belonging-support dimension are shown in Table 9. The belonging support subscale is intended to measure friends', family's or peoples' availability with which a person can socialize (Cohen & Hoberman, 1983). Approximately 83% considered that

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

they often would meet or talk with family or friends. This same proportion, 81%, expressed that there were several different people with whom they enjoy spending time. On the other hand, 48% considered it probably false that no one they know would throw a birthday party for them.

Table 9

### *Frequency of Distribution for Belonging-Support Dimension*

		definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
5. When I feel lonely, there are several people I can talk to.	f	44.0	63.0	133.0	144.0
	%	11.5	16.4	34.6	37.5
7. I often meet or talk with family or friends.	f	25.0	41.0	120.0	198.0
	%	6.5	10.7	31.3	51.6
10. I feel like I'm not always included by my circle of friends.	f	49.0	97.0	122.0	116.0
	%	12.8	25.3	31.8	30.2
12. There are several different people I enjoy spending time with.	f	19.0	51.0	141.0	173.0
	%	4.9	13.3	36.7	45.1
15. If I wanted to go on a trip for a day, I would have a hard time finding someone to go with me.	f	59.0	93.0	120.0	112.0
	%	15.4	24.2	31.3	29.2
21. If I decide one afternoon that I would like to go to a movie that evening, I could easily find someone to go with me.	f	56.0	101.0	154.0	73.0
	%	14.6	26.3	40.1	19.0
25. Most people I know do not enjoy the same things that I do.	f	47.0	136.0	145.0	56.0
	%	12.2	35.4	37.8	14.6
27. I don't often get invited to do things with others.	f	35.0	95.0	148.0	106.0
	%	9.1	24.7	38.5	27.6
31. If I wanted to have lunch with someone, I could easily find someone to join me.	f	38.0	76.0	152.0	118.0
	%	9.9	19.8	39.6	30.7
	f	76.0	111.0	104.0	93.0

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34. No one I know would throw a birthday party for me.	%	19.8	28.9	27.1	24.2
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Table 10 summarizes the descriptive statistics for each of the dimensions of social support analyzed. In general, respondents maintained a high level of PSS, mainly in self-esteem (1.97) and tangible support (1.89). The lowest average values were found in appraisal support (1.80).

Table 10

### *Descriptive Statistics Dimensions of Interpersonal Support Evaluation List (ISEL)*

Item	Appraisal	Tangible	Self-esteem	Belonging
IT1	1.99	1.95	1.67	1.98
IT2	1.68	1.75	2.03	2.28
IT3	1.73	2.09	1.90	1.79
IT4	1.57	1.76	2.17	2.22
IT5	1.61	1.84	2.23	1.74
IT6	1.84	2.30	2.26	1.64
IT7	1.89	1.64	1.81	1.55
IT8	1.82	2.04	2.00	1.85
IT9	1.70	1.77	1.64	1.91
IT10	2.21	1.77	2.00	1.56
Mean	1.80	1.89	1.97	1.85

On the other hand, 50% of the respondents maintained average values in support appraisal scale between 14 and 26 points (raw scores) and self-esteem between 17 and 23 points (raw scores). Figure 1 highlights how the dimension self-esteem has higher scores in relation to the other dimensions of Interpersonal Support Evaluation List (ISEL).

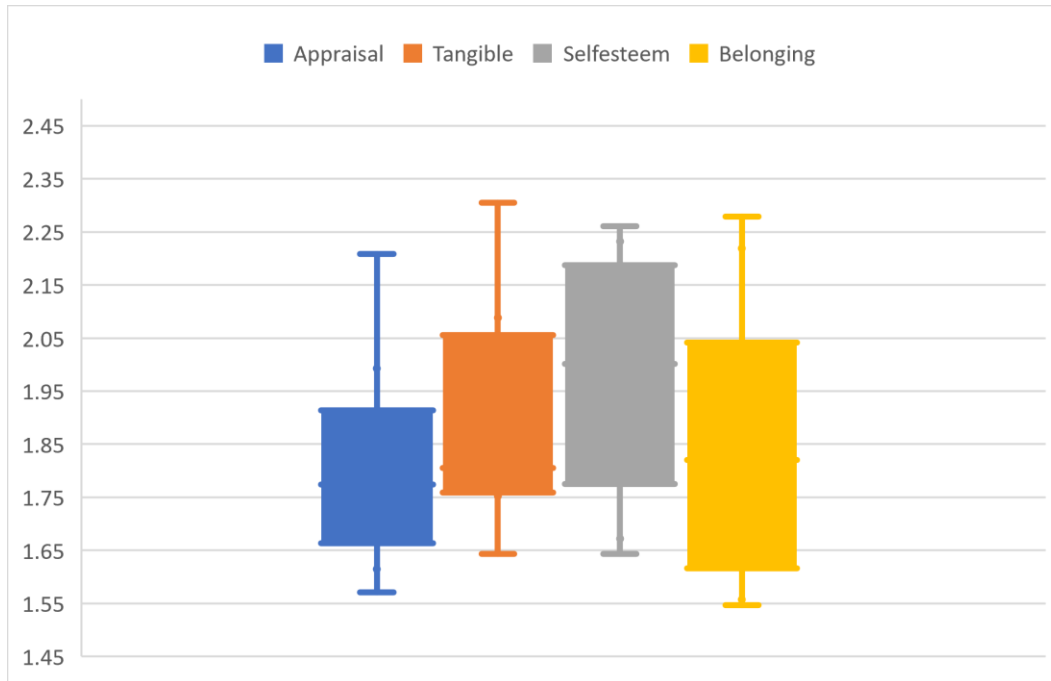


Figure 1. Box and Whisker Chart for Dimensions of Interpersonal Support Evaluation List (ISEL)

### Results Regarding Demographic Variables in Relation to PSS and Academic Performance Among Saudi International Students in the USA

The descriptive statistics for the total PSS of ISEL and GPA are shown in Table 11. For PSS the mean was 75 points with a confident level between 73.19 and 77.20 points. About 50% of scores were higher than 77 points with 50% central between 61 and 90 points. The data set exhibited high variability ( $SD = 20$  points) and marked differences in the extremes. In reference to GPA, the mean was 3.53 points with a confidence level of between 3.48 and 3.57 points. Fifty percent of the students had a GPA above 3.67 points, and the variability was low. The central 50% of the GPA values ranged between 3.30 and 3.90 points. Figure 2 shows a histogram of frequencies for both variables. It is obvious that the sample moves away from normality in both cases.

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Table 11

*Statistics Descriptive of Total PSS and GPA*

	What is your overall GPA? Total PSS	
Mean	3.53	75
Median	3.67	77
Standard Deviation	.47	20
Minimum	1.00	16
Maximum	4.00	119
Percentile 25	3.30	61
Percentile 75	3.90	90

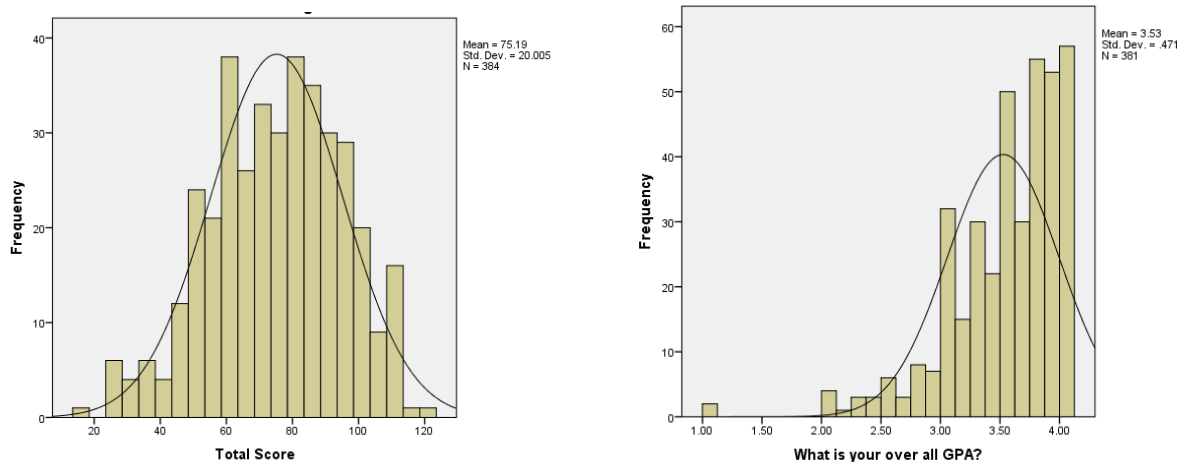


Figure 2. Histogram frequencies of Total PSS and GPA

The categories of total PSS based on the calculation of quartiles are shown in Table 12. Four levels of social support are seen with approximately 50% of respondents perceiving moderate social support and 25% perceiving a low level of social support. Just a quarter of the participants showed social support at a high level (above 91 points). Among students aged 25 to 34, perceived social support fluctuated between low and high levels.

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Approximately 52% of the respondents were reported to have from low to medium levels of social support. On the other hand, only 25% claimed to have a high degree of perceived social support. Considering gender, the figures were proportionally equal (around 25%). Regarding marital status, single students proportionally weighed 14.4% with a low perception of social support, but 15% of the respondents who had children reported a medium level of social support. The Saudi students with more time living in the USA expressed a high level of PSS (15%). About 12% of the undergraduate respondents perceived low social support while 10% of those with a doctorate expressed a high level of social support.

Table 12

*Crosstabs Levels Social Support by Gender, Age, Marital Status, Having Children, Years Living in USA, and Level of Education*

		Total Score (Binned)							
		Low Level (61 or less)		Low Medium (62 - 77)		Medium High (78 -90)		High (91 and more)	
		f	%	f	%	f	%	f	%
What is your gender?	Male	51	13.3	65	16.9	65	16.9	67	17.4
	Female	45	11.7	38	9.9	25	6.5	28	7.3
	Total	96	25.0	103	26.8	90	23.4	95	24.7
Age	18 to 24	30	7.8	19	4.9	18	4.7	21	5.5
	25 to 34	57	14.8	62	16.1	59	15.4	56	14.6
	35 to 44	6	1.6	22	5.7	13	3.4	17	4.4
	45 and more	3	0.8	0	0.0	0	0.0	1	0.3
	Total	96	25.0	103	26.8	90	23.4	95	24.7
What is your marital status?	Single	55	14.3	35	9.1	38	9.9	41	10.7
	Married	36	9.4	65	16.9	50	13.0	53	13.8
	Widow	1	0.3	0	0.0	1	0.3	0	0.0
	Divorced	4	1.0	2	0.5	1	0.3	1	0.3
	Other	0	0.0	1	0.3	0	0.0	0	0.0

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	Total	96	25.0	103	26.8	90	23.4	95	24.7
Do you have children?	Yes	29	7.6	58	15.1	41	10.7	42	10.9
	No	67	17.4	45	11.7	49	12.8	53	13.8
	Total	96	25.0	103	26.8	90	23.4	95	24.7
How many years have you resided in the United States?	Less than 1 year	3	0.8	1	0.3	1	0.3	3	0.8
	From 1 - 2 years	18	4.7	12	3.1	15	3.9	5	1.3
	From 2 - 4 years	35	9.1	33	8.6	39	10.2	36	9.4
	From 5 - 10 years	40	10.4	54	14.1	30	7.8	47	12.2
	More than 10	0	0.0	3	0.8	5	1.3	4	1.0
	Total	96	25.0	103	26.8	90	23.4	95	24.7
In which level of education are you studying now?	Associate degree	2	0.5	2	0.5	0	0.0	0	0.0
	Undergraduate (Bachelor's degree)	46	12.0	30	7.8	32	8.3	32	8.3
	Master's degree	25	6.5	30	7.8	34	8.9	26	6.8
	Doctorate degree	23	6.0	41	10.7	24	6.3	37	9.6
	Total	96	25.0	103	26.8	90	23.4	95	24.7

In reference to academic performance (GPA) as shown in Table 13, it was observed that most of the group had a high GPA (higher than 3.50). Only 14.8% have a GPA of 3 or less. Regarding the demographic variables, it stood out that 35.7% of men had a GPA greater than 3.50. Similarly, 30% of them with a GPA over 3.50 had children; 26.3% with the highest GPA had lived in the USA between 5 and 10 years. Approximately 47% of Saudi students whose courses of study were master's or doctoral programs had a GPA greater than 3.50.



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Table 13

*Crosstabs GPA by Gender, Age, Marital Status, Having Children, Years Living in USA, and Level of Education*

		Levels GPA					
		Level 1		Level 2		Level 3	
		f	%	f	%	f	%
What is your gender?	Male	38	9.9	73	19.0	137	35.7
	Female	19	4.9	34	8.9	83	21.6
	Total	57	14.8	107	27.9	220	57.3
Age	18 to 24	26	6.8	26	6.8	36	9.4
	25 to 34	29	7.6	70	18.2	135	35.2
	35 to 44	1	0.3	10	2.6	47	12.2
	45 and more	1	0.3	1	0.3	2	0.5
	Total	57	14.8	107	27.9	220	57.3
What is your marital status?	Single	35	9.1	56	14.6	78	20.3
	Married	20	5.2	48	12.5	136	35.4
	Widow	1	0.3	1	0.3	0	0.0
	Divorced	0	0.0	2	0.5	6	1.6
	Other	1	0.3	0	0.0	0	0.0
	Total	57	14.8	107	27.9	220	57.3
Do you have children?	Yes	16	4.2	40	10.4	114	29.7
	No	41	10.7	67	17.4	106	27.6
	Total	57	14.8	107	27.9	220	57.3
How many years have you resided in the United States?	Less than 1 year	1	0.3	2	0.5	5	1.3
	From 1 - 2 years	10	2.6	17	4.4	23	6.0
	From 2 - 4 years	19	4.9	41	10.7	83	21.6
	From 5 - 10 years	27	7.0	43	11.2	101	26.3
	More than 10	0	0.0	4	1.0	8	2.1

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	Total	57	14.8	107	27.9	220	57.3
In which level of education are you studying now?	Associate degree	1	0.3	1	0.3	2	0.5
	Undergraduate (Bachelor's degree)	51	13.3	54	14.1	35	9.1
	Master's degree	3	0.8	35	9.1	77	20.1
	Doctorate degree	2	0.5	17	4.4	106	27.6
	Total	57	14.8	107	27.9	220	57.3

When assessing a possible dependency relationship between total PSS and GPA in regard to gender, age, marital status, having children, years lived in USA and level of education, the following significant relationships were found as shown in Table 14: Gender and PSS ( $p = 0.025 < 0.05$ ); Age and PSS ( $p = 0.027 < 0.05$ ), Age and GPA ( $p = 0.00 < 0.05$ ); Marital Status and GPA ( $p = 0.00 < 0.05$ ); Having Children with PSS and GPA ( $p = 0.00 < 0.05$ ;  $p = 0.00 < 0.05$ ); Years living in USA and PSS ( $p = 0.046 < 0.05$ ); levels of education with PSS and GPA ( $p = 0.042 < 0.05$ ;  $p = 0.00 < 0.05$ ). These values allowed acceptance of the hypothesis of independence with the conclusion that clear association exists between the variables mentioned.

On the other hand, the  $p$ -values  $> 0.05$  indicated the absence of a clear relationship between these demographic variables: PSS and GPA (Chi = 13,117; df = 4;  $p = 0.01 < 0.05$  and Chi = 12,987; df = 4;  $p = 0.01 < 0.05$ ).

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Table 14

*Pearson Chi-Square Tests Total PSS Score and GPA by Gender, Age, Marital Status, Having Children, Years Living in USA, and Level of Education*

		Total PSS	Levels GPA
What is your gender?	Chi-square	9.372	1.242
	df	3	2
	Sig.	0.250*	.537
Age	Chi-square	18.770	33.440
	df	9	6
	Sig.	.027*	.000*
What is your marital status?	Chi-square	20.618	27.808
	df	12	8
	Sig.	.056	.001*
Do you have children?	Chi-square	13.807	13.201
	df	3	2
	Sig.	.003*	.001*
How many years have you resided in the United States?	Chi-square	21.346	5.800
	df	12	8
	Sig.	.046*	.670
In which level of education are you studying now?	Chi-square	17.485	129.663
	df	9	6
	Sig.	.042*	.000*

### **Results Regarding the Relationship Between PSS and Academic Performance Among Saudi International Students in the USA**

In order to determine whether a relationship exists between PSS and GPA, analysis will consider the quantitative and qualitative variables. First, assess the relation-applying correlation

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bivariate and obtain the coefficient of correlation  $r$  by pearson. This coefficient will allow the evaluation of grade of association between both variables. The results are shown in Table 15.

According to the results, a value  $r = 0.11$  indicated a low or poor relation between PSS and GPA.

Table 15

### *Pearson Correlation*

		Total PSS Score	What is your overall GPA?
Total PSS Score	Pearson Correlation	1	.115*
	Sig. (2-tailed)		.025
	N	384	381
What is your overall GPA?	Pearson Correlation	.115*	1
	Sig. (2-tailed)	.025	
	N	381	381

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

Second, from a qualitative perspective, this study will evaluate the relationship between PSS and GPA considering the qualitative transformations as described above, which is 4 levels for the PSS (1. Low; 2. Low Medium 3. Medium high; and 4. High) plus 3 levels for the GPA.

The pearson chi-square independence test was used. The results are shown in Table 16.

Table 16

### *Levels of Perceived Social Support and GPA*

			Level of GPA			
			3 or Less	3.01 to 3.50	3.51 to 4.00	Total
Total PSS (Binned)	Low Level (61 or less)	f	21.0	28.0	47.0	96.0
		%	5.5	7.3	12.2	25.0
	Low Medium (62 - 77)	f	11.0	35.0	57.0	103.0
		%	2.9	9.1	14.8	26.8
	Medium High (78 - 90)	f	12.0	24.0	54.0	90.0
		%	3.1	6.3	14.1	23.4
	High (91 and more)	f	13.0	20.0	62.0	95.0
		%	3.4	5.2	16.1	24.7
	Total	f	57.0	107.0	220.0	384.0
		%	14.8	27.9	57.3	100.0

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According to the results in Table 17, a chi-square value of 10.095 with 6 df and p-value associated  $p = 0.12 > 0.05$  lead to rejection of the dependency hypothesis and concluded that the PSS and GPA variables were not associated as such, as determined by evaluating these variables through pearson's r coefficient.

Table 17

### *Chi Square Test Between PSS and GPA*

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.095 <sup>a</sup>	6	.121
Likelihood Ratio	9.893	6	.129
Linear-by-Linear Association	4.970	1	.026
N of Valid Cases	384		

### **Results Regarding Statistically Significant Differences Between Demographic Factors Associated with the PSS and Academic Performance Among Saudi International Students in the USA**

With the purpose of determining whether statistically significant differences exist between PSS and GPA with each demographic variable considered, one-way ANOVA was applied. In this case, each demographic variable was considered as a factor with the scores of the total PSS and overall GPA as independent variables. The results are shown in the Table 18.

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Table 18

*One-way ANOVA for PSS, GPA and Gender, Age, Marital Status, Having Children, Years living in USA, and Level of Education*

Gender		Sum of Squares	df	Mean Square	F	Sig.
What is your overall GPA?	Between Groups	0.509	1	0.509	2.303	0.130
	Within Groups	83.734	379	0.221		
	Total	84.243	380			
Total PSS	Between Groups	2735.911	1	2735.911	6.942	0.009
	Within Groups	150541.828	382	394.089		
	Total	153277.740	383			
Age		Sum of Squares	df	Mean Square	F	Sig.
What is your overall GPA?	Between Groups	5.786	3	1.929	9.268	.000
	Within Groups	78.457	377	.208		
	Total	84.243	380			
Total PSS	Between Groups	1962.286	3	654.095	1.643	.179
	Within Groups	151315.453	380	398.199		
	Total	153277.740	383			
Having Children		Sum of Squares	df	Mean Square	F	Sig.
What is your overall GPA?	Between Groups	1.851	1	1.851	8.513	.004
	Within Groups	82.392	379	.217		
	Total	84.243	380			
Total PSS	Between Groups	1733.374	1	1733.374	4.369	.037
	Within Groups	151544.366	382	396.713		
	Total	153277.740	383			

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Marital Status		Sum of Squares	df	Mean Square	F	Sig.
What is your overall GPA?	Between Groups	4.102	3	1.367	6.500	.000
	Within Groups	79.085	376	.210		
	Total	83.186	379			
Total PSS	Between Groups	4744.578	3	1581.526	4.035	.008
	Within Groups	148531.735	379	391.904		
	Total	153276.313	382			

Years in USA		Sum of Squares	df	Mean Square	F	Sig.
What is your overall GPA?	Between Groups	0.916	4	0.229	1.034	0.390
	Within Groups	83.327	376	0.222		
	Total	84.243	380			
Total PSS	Between Groups	4152.224	4	1038.056	2.638	0.034
	Within Groups	149125.516	379	393.471		
	Total	153277.740	383			

Level of Education		Sum of Squares	df	Mean Square	F	Sig.
What is your overall GPA?	Between Groups	24.983	3	8.328	52.980	0.000
	Within Groups	59.260	377	0.157		
	Total	84.243	380			
Total PSS	Between Groups	2942.384	3	980.795	2.479	0.061
	Within Groups	150335.355	380	395.619		
	Total	153277.740	383			

In reference to the overall GPA, Table 18 shows that the differences did not become significant ( $F_{1,379} = 2.303$ ;  $p = .13 > 0.05$ ) when considered as a factor in the category of gender (male/female). However, this factor result was significant for the PSS ( $F_{1,382} = 6,942$ ;  $p = .009$

<0.05).

Regarding the demographic variables having children (yes/no) and marital status (single/married/widowed/divorced), both independent variables (GPA and PSS) showed significant differences ( $F_{1,379} = 8.513$ ;  $p = .004 < 0.05$ ), ( $F_{1,382} = 4.369$ ;  $p = .037 < 0.05$ ) for having children and ( $F_{3,376} = 6.500$ ;  $p = .000 < 0.05$ ), ( $F_{3,379} = 4.035$ ;  $p = .008 < 0.05$ ) for marital status. In reference to age, the GPA overall results were significant ( $F_{3,377} = 9.268$ ;  $p = .000 < 0.05$ ) while regarding PSS, the differences did not become significant ( $F_{3,380} = 1,643$ ;  $p = .18 > 0.05$ ).

Considering the variable years living in the USA as a factor for the PSS, significant differences were shown in the mean values of the categories of this variable ( $F_{4,379} = 2.638$ ;  $p = .034 < 0.05$ ). In reference to GPA, the differences did not become significant ( $F_{4,376} = 1.034$ ;  $p = .39 > 0.05$ ).

Finally, when evaluating levels of education as a factor, as for GPA, significant differences were found; regarding PSS, the differences were not significant. ( $F_{3,377} = 52.98$ ;  $p = .000 < 0.05$ ), ( $F_{3,380} = 2.479$ ;  $p = .061 > 0.05$ ).

Moreover, post hoc testing allowed the researcher to provide, once the significant differences have been determined using F test with three or more means, specific information on which means were significantly different from each other. A Duncan post hoc analysis showed significant differences in the mean values of total score when evaluating PSS and GPA with each variable of the sociodemographic profile of Saudi students. Results showed significant differences in the mean values of the following variables, as shown in Table 19:

A Duncan post hoc analysis showed significant differences in the mean values of the following variables:



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- Higher PSS in men than in women
- Higher GPA among older students
- Higher PSS and GPA between married and widowed students than between single and divorced students
- Higher PSS and GPA among students who have children compared to those without offspring
- Higher PSS for Saudi students who have lived in the USA five years or more
- Higher GPA in students who have studied for master's or doctoral degrees compared to those who have studied for associate's or bachelor's degrees

Table 19

### *Duncan Post Hoc Analysis*

Age	N	Subset for alpha = 0.05	
		1	2
18 to 24	87	3.3393	
25 to 34	233	3.5432	3.5432
45 and more	4	3.5525	3.5525
35 to 44	57		3.7430
Sig.		0.2450	0.2760
What is your marital status?	N	Subset for alpha = 0.05	
		1	2
Widow	2	2.7500	
Single	168		3.4382
Married	202		3.6045
Divorced	8		3.7388
Sig.		1	0.2770
How many years have you resided in the Unites States?	N	Subset for alpha = 0.05	
		1	2
From 1 - 2 years	50	69.3200	

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Less than 1 year	8	70.5000	
From 2 - 4 years	143	75.3800	
From 5 - 10 years	171	76.0400	
More than 10	12		88.5000
Sig.		0.3280	1
In which level of education are you studying now?	N	Subset for alpha = 0.05	
		1	2
Associate degree	4	61	
Undergraduate (Bachelor's degree)	140	72.3100	72.3100
Master's degree	115		76.4900
Doctorate degree	125		77.6900
Sig.		0.1250	0.4950

### Discussion

The goal of this section is to examine and summarize the key results in this research and discuss research questions with the interpretation of the findings in relation to previous research. The purpose of this research was to examine the relationship between perceived social support and academic performance among Saudi international students in the USA and how these variables are related to several demographic variables including gender, marital status, having children, level of education, length of residency in the United States, and State of residency in the U.S.

This study was intended to answer the following research questions:

RQ1: How do Saudi international students perceive different forms of perceived social support (PSS) while studying in the United States?

RQ2: How do the demographic variables relate to perceived social support (PSS) and academic performance among Saudi international students in the United States?

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RQ3: What is the relationship between perceived social support (PSS) and academic performance among Saudi international students in the United States?

RQ4: Are there statistically significant differences between the varied demographic factors associated with Saudi international students and their perceived social support (PSS) and academic performance?

**Research Question One.** When international students decide to go to college in the USA, they face profound changes of great diversity that challenge their lifestyle. The challenges that they may experience are related to their emotions, culture, religion, social circles and psychological situations that can lead to stress.

The relationships between social support and other variables have been discussed in different studies (Dupont et al., 2015; Hurd et al., 2018; Li et al., 2018; Mackinnon, 2012). These have even been addressed with some higher educational institutions promoting a high social support policy for students as an international student recruitment strategy (Martirosyan, Bustamantea, & Saxon, 2019).

Researchers have proven that in the U.S., the Perceived Social Support (PSS) in international students seems to be strengthened over time when they overcome the obstacles caused by intra-personal conflicts (Asfahani, 2018). This reinforces the hypothesis that international students who live longer in the USA have a greater PSS.

When evaluating PSS using the Interpersonal Support Evaluation List (ISEL) (Cohen, et al., 1985; Cohen & Hoberman, 1983), the findings indicated that in general the PSS was high for all Saudi students in the United States, placing the four dimensions evaluated above the theoretical average ( $M = 1.5$ ).

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The dimension with the highest weighting was self-esteem ( $M = 1.97$ ;  $SD = 0.068$ ), while the least weighted was appraisal with ( $M = 1.80$ ;  $SD = 0.061$ ), referring to how students find specific support to communicate their problems to others. In relation to appraisal support, the results are consistent with other studies that have found moderate association relationships when evaluating mentoring relationships (Hurd et al., 2018).

Belonging support is considered a critical dimension in the matter of PSS because finding people in institutions willing to help makes a difference directly related to academic success, consequently affecting the PSS (O'Keeffe, 2013). In this sense, the results showed a high sense of belonging reflected among other factors including academic performance, time living in the USA, as well as with the level of education.

Self-esteem was the dimension with the highest results when evaluating the PSS among Saudi students in the U.S. Li et al. (2018) have found that this variable was fundamental in both the assessment of the PSS and academic performance. Specifically, Li et al. (2018) suggested that self-esteem fully mediated the relationship between social support and academic achievement and the relationship between social support and emotional exhaustion. Although it is generally expected to have higher levels of social support, a better self-esteem corresponds; however, other factors may affect this condition (Friedlander et al., 2007).

The PSS profile of Saudi students in the USA was not far from that evidenced by the aforementioned authors. Saudi students believed that they could find people to support them in solving their problems, people they could trust and from whom they could obtain career advice. Similarly, they felt a high response in material support, as in cash or financial instruments in emergent situations.

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On a personal level, Saudi students reflected a high level of self-confidence without disadvantaged as compared to others; they even report accessibility to a network of family and friends. So, the findings indicated that throughout their stay Saudi students consolidated themselves as a community organized in the USA.

**Research Question Two.** The intention of this research question was to examine the relationship of students' sociodemographic profile in relation to PSS and academic performance among Saudi students in the USA. The results reported significant differences in the pairs of relationships between the variables of interest and the characteristics of the students. Thus, for example, Tayfur and Ulupinar (2016) reported differences in social support according to gender as well as other variables, such as socio-economic advantages and academic success.

On the other hand, academic variables become a preponderant factor in the greater or lesser perception of the PSS, mainly if students relate well-being to academic success. Although Bordes et al. (2011) related academic success directly to the quality of mentoring and the qualifications obtained, other authors such as Dupont et al. (2015) highlighted the importance of supervision and institutional support in promoting student success. In relation to the level of education, results highlighted that this was also a variable directly associated with the PSS that students who attended undergraduate programs expressed less support overall than students of master's or doctoral programs.

In the case of Saudi students in the USA, the selected variables reflected significant differences at the sociodemographic level (gender and age) but also in the family context (marital status and having children) and remarkably academic aspects (level of education). The results found were consistent with what the theorists found; however, it is important to highlight the

need to expand bivariate relationships and consider more complex relationships that allow to understand the effects of other variables on PSS in addition to the academic performance.

**Research Question Three.** The relation between PSS and GPA has not always been clear. Although a close relationship is commonly assumed between these variables, especially when it comes to young students; age has been considered a factor that can affect this relationship and a slight difference in ages would mean a change in the PSS (Mackinnon, 2012). In this study, considering a relatively homogeneous young adult sample of Saudi students, age was not a significant factor in relation to PSS. Despite this finding, some researchers revealed the classic positive relationship between PSS and academic achievement (Yasin & Dzulkipli, 2011). Even researchers outside the USA suggested this strong relationship between PSS and GPA (Ugwu, 2017). Others perceived this relationship with small variations in perception in typical variables such as gender, as expressed by De la Iglesia et al. (2014) in which women reflected greater social support than men.

The results of the study suggest that evaluating a relationship between social support and GPA should go beyond simple bidirectionality. Other variables that explain the multidimensionality and complexity of these constructs should be included. It follows that a mere evaluation of the relationship between PSS and GPA is diffuse; therefore, it is necessary to analyze in greater depth relations with other underlying variables. Researchers, such as Lian (2008), have used mathematical and statistical models for instance correlation, finding only partial effects of certain variables and their interactions in which the relationships were significant for PSS or GPA with other variables—but not when analyzed together.

Supporting this thesis, Cutrona et al. (1994) stressed that the relationship between PSS and GPA was not so direct; therefore, they showed that it was significant when it was in

conjunction with other factors, and that this significance was commonly attributed to a third variable: “The relation between parental social support and GPA also retained significance when statistically controlling for level of family conflict” (p. 377).

The findings were consistent with those performed in higher education with international students in the USA and reported that the relationship between PSS and GPA was not necessarily significant. As explained above, a set of factors associated with each of these variables needed to be analyzed for a understanding of each, including variables associated with the personality, family aspects and other concepts of interest in positive psychology such as having gratitude and resilience. The academic literature suggested that PSS is more associated with personality variables than with a purely academic relationship. In this regard, Mokhtari and Mehdinezhad (2016) found a strong PSS and GPA relationship with those students with gratitude; higher academic performance and perceived social support indicated higher student gratitude.

**Research Question Four.** The results of this study have found important differences between the relationships of PSS and GPA variables when considering the different factors associated with them. The main motivations related to the values reported in student sociodemographic profiles indicated that the presence or absence of certain categories of these make this relationship stronger or weaker. Thus, the results showed differences in the relationships of these variables in terms of gender similar to those presented by De la Iglesia et al. (2014) that revealed higher PSS in women than in men and higher GPA among the older students.

Dupont et al. (2015) suggested various sources of social support that could vary from familiar, educational or motivational aspects (Furrer & Skinner, 2003; Wentzel, 1998). However, the need to address the complexity of each of these variables is highlighted when considering a

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greater number of relationships. These allow multidimensional optics to assess how the PSS and GPA relationship is affected by other variables and determine how this effect can expand or improve the understanding of this relationship.

In relation to family aspects, the results highlighted a higher PSS and GPA among married and widowed than single and divorced. Similarly, there were higher PSS and GPA among students who have children compared to those without offspring. In terms of the time of permanence or coexistence, or when students begin their stay in the USA to study, the fact that higher PSS for Saudi students who have been living five years or more in the USA was demonstrated. On the other hand, higher GPA was illustrated in students who were obtaining a master's or doctoral degree compared to those who were obtaining an associate or bachelor's degree.

Finally, PSS is a highly sensitive variable of a multidimensional nature that must be addressed considering its complex structure. When studying PSS in relation to academic performance, the simple expectations of a strong relationship exceed and deepens its analysis by understanding other contexts beyond the academic, such as cultural, family and especially personality aspects.



## Chapter Five: Summary, Implications, and Recommendations

### Summary

The United States of America is recognized as one of the main countries international students seek to continue their education (the Institute of International Education, 2018a). In the recent years, the number of international students has increased; according to the open-door report of 2018b, the number of international students in the United States had reached 1,094,792. Saudi students were among the top four countries from which students have enrolled in U.S. universities and colleges with a total number of 44,432 students in 2018 (the Institute of International Education, 2018b). For international students, studying in a new country is a transitional event; international students can face challenges and obstacles that may prevent them from being successful in their academic journey (Bradley, 2000; Erichsen & Bolliger, 2011; Lee & Rice, 2007; Msengi, 2007). Saudi students come to the USA with different cultures, values and traditions, often incompatible with USA culture. These different cultures, values, and traditions are considered a challenge for Saudi students, which can impact the success of their academic journey in the USA (Alajlan, 2016; Gielen et al., 1992).

The idea of conducting this research came from the scarcity of studies involving Saudi students in the USA (Melius, 2017; Rundles, 2013). Former researchers have focused primarily on difficulties and adjustment problems facing Saudi students in the USA regarding English language proficiency, different educational systems, making friends with American students, food choices, and gender differences (Razek & Coyner, 2013; Yakaboski et al., 2018; Young & Snead, 2017). It appeared to the researcher that most previous researchers have been concerned about the experiences and adjustment issues Saudi students faced with little attention being paid to social support and academic performance (Yakaboski et al., 2018). The scarcity of research

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examining perceived social support and academic performance among Saudi students in the USA is what led the researcher to conduct this study.

Perceived social support has been shown to have a positive correlation with good educational performance among college students (Bordes-Edgar et al., 2011; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994; Li et al., 2018; De la Iglesia et al., 2014). Regarding the social support studies for Saudi students in the USA, a scarcity of research has been conducted relating to this topic; more investigation should be done to understand this topic and fill in gaps of knowledge (Asfahani, 2018). The main purpose of this study is to fill those gaps of knowledge, examining the relationship between perceived social support, academic performance, and demographic variables

The researcher in this study employed a quantitative cross-sectional survey design to explore the topic under research. An online survey regarding perceived social support and demographic variables, including GPA, was distributed via different social media platforms to collect data from Saudi students in United States universities and colleges. A total of 384 Saudi Arabian students, both male and female who were at least 18 years old or older, have participated in this study.

The research findings showed Saudi students in general maintained a high level of perceived social support. In regard to the descriptive statistics of the four dimensions of ISEL, Saudi students maintained a high level of perceived self-esteem support (1.97) followed by perceived tangible support (1.89), perceived belonging support (1.85), with the lowest dimension being perceived appraisal support (1.80). Regarding the total PSS of the ISEL, the findings showed that the mean score is 75 points with a confidence level between 73.19 and 77.20 points. Based on the four levels of social support, varying from low levels, low medium, medium high,

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and high levels, 50% of the Saudi students perceived moderate social support, and 25% demonstrated a high level of social support. The results showed 25% of the participants had a low level of social support. The researcher also found that 14% of single students perceived low levels of social support, and 15% of the respondents who have children perceived medium levels of social support. Moreover, respondents who have been in the USA longer than others reported a high level of social support (15%), while 10% of the participants whose level of education is doctoral perceived high levels of social support.

Regarding the academic performance measured by the GPA, the mean score of the total GPA was 3.53 points with a confidence level between 3.48 and 3.57 points. The findings revealed that most of the respondents had a high GPA—higher than 3.50—while only 14.8% had a GPA of 3 or lower. In addition, the finding indicated that 35.7% of men had a GPA of greater than 3.50, and 30% of men whose GPA was over 3.50 had children. Also, nearly 47% of participants who studied at a master's or doctoral level had a GPA of greater than 3.50.

In reference to the relationship between total PSS and GPA concerning the demographic variables, several significant relationships have been found between gender and PSS, age and PSS, age and GPA, marital status and GPA, having children with PSS and GPA, and years living in the USA and GPA. In regard to assessing the relationship between total PSS and GPA, pearson correlation was applied with findings showing a weak relation— $r = 0.11$  between PSS and GPA.

The researcher was also interested in identifying any significant statistical differences between PSS and GPA with each demographic variable applying one-way ANOVA analysis, as follows: statistically significant differences between gender and PSS, having children with PSS and GPA, marital status with PSS and GPA, age and GPA, years living in the USA and PSS, and

level of education and GPA were identified. However, the statistical differences were insignificant between gender and GPA, age and PSS, years living in the USA and GPA, and level of education and PSS.

### **Limitations**

The main purpose of the study was to examine the relationship between social support, academic performance, and different demographic variables. The main limitation the researcher faced was scarcity of research examining Saudi students in the USA, especially the topics of social support and academic performance. The literature concerning Saudi students in the USA was mostly focused on the challenges and problems of adjustment confronting this population. However, the crux of the issue, which motivated the researcher to conduct this study, was the paucity of literature review covering the topic of social support in relation to academic performance.

The researcher in this study utilized self-reported measures to collect data from Saudi students. Self-reported measures may have some disadvantages and biases that can influence the findings. In this study, the self-reported measures were posted on social media platforms and sent via online link for participants' answers. Indeed, controlling the environment regarding self-reported measures can be challenging as many other extraordinary factors can influence participants' answers. Some participants may choose answers that are socially acceptable and ignore answers that represent their true condition. Social desirability can play a role in preferring some answers over others, which is another limitation in this study. In this study, the academic performance variable was measured by self-reported cumulative GPA. This could be an additional limitation as participants may not reveal the accurate GPA score, reflecting their actual academic performance.

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This study utilized a quantitative self-reported survey design to assist the researcher analyze data through numeric values. This design was useful in examining the association between different variables and to identify statistically significant differences among variables. One of the limitations of this design was the lack of deep understanding of the under researched phenomena; thus, mixed methods research design can be recommended in future research to gain a better understanding of the phenomena.

The cross-sectional design was used in this study where the researcher collected data one point at a time. Limitations of this design include extraordinary factors that might influence participants' responses, resulting in the findings being affected—positively or negatively. Also, the researcher utilized convenience sampling; therefore, the findings may be difficult to generalize among other Saudi students in the USA.

### **Implications and Recommendations**

Regardless of the limitations in this study, the researcher followed and applied scientific methods in analyzing the data statistically and acquiring the results. The purpose of this study was to examine the relationship between social support and academic performance with consideration of several other demographic variables. This study was beneficial in filling the gaps in literature regarding scarcity of research concerning Saudi students in the USA, particularly their social support and academic performance (Melius, 2017; Rundles, 2013; Yakaboski et al., 2018). Most of the previous researchers concentrated on the challenges and adjustment issues Saudi students faced in the USA (Razek & Coyner, 2013; Yakaboski et al., 2018; Young & Snead, 2017). This research can be acknowledged as the first study to examine social support and academic performance for Saudi students in USA universities and colleges.

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Despite the results that indicated weak associations between perceived social support and academic performance, this study revealed valuable findings about the overall perceived social support and the overall academic performance of Saudi students in the USA. Most Saudi students had a moderate to high level of perceived social support. In addition, more than half of the respondents had a high GPA, over 3.50, indicating that Saudi students maintained a good academic performance. The findings also showed significant relationships and statistically significant differences between the demographic variables in relation to the total PSS and GPA.

This research presents findings to assist mental health providers, such as counselors and psychologists, to understand and gain knowledge of Saudi international students in the USA regarding several aspects of social support and academic performance relating to demographic variables. The researcher in this study found that women had less of a level of perceived social support compared to men. Mental health providers should consider how social support can vary between Saudi men and women, making plans to examine this topic and develop suitable interventions to enhance the quality of life of Saudi students enrolling in USA universities and colleges, focusing on Saudi women.

Moreover, Saudi students who have been in the USA less than 5 years indicated lower levels of perceived social support, suggesting that mental health clinicians should aid Saudi students in identifying appropriate social support resources, encouraging Saudi students to engage with these resources. The results indicated a higher GPA among older students; therefore, mental health practitioners might consider their use as mentors with the younger students, assisting them in identifying resources to obtain and maintain their academic success, which is closely related to GPA levels.

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The research's findings can be helpful to Saudi's government, the Saudi Ministry of Education, especially the scholarship program; the results can provide an overview about Saudi students in USA universities and colleges, providing specific information about Saudi students' social support, academic performance, and several demographic variables. Government officials who are responsible for the Saudi scholarship program can use these findings to develop plans to enhance their students in USA universities and colleges while supporting the Saudi vision 2030.

Furthermore, those responsible for the international office in each university and college in the USA can benefit from these findings, increasing their knowledge of different demographic variables in relation to social support and academic performance for Saudi students. This information can prepare the people in charge in the U.S. universities and colleges in developing programs and interventions to support Saudi students in their successful academic journeys in the USA.

Researchers in the future can benefit from the findings of this research and continue to investigate this topic. Several valuable findings in this study should be taken into consideration. The present study found that men had a higher perceived social support (PSS) than women, and a higher GPA has been found in the older students. Married and widowed students had a higher PSS and GPA than single and divorced participants; students who have children identify a higher PSS and GPA than those without offspring. More results showed that students who have been in the USA for 5 years or more had a high PSS, and students who studied for master's and doctoral degrees had a higher GPA than those who studied for associate's or bachelor's degrees.

Future researchers should expand on the findings, conducting future studies that deeply examine the topic. Some areas researchers may examine include why Saudi men had higher PSS scores than Saudi women and why the older students had higher GPAs than the younger

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students. Additional research questions may include why singles and divorced students had lower PSS and GPA scores than married and widowed students. This study was a quantitative survey design that helped the researcher to statistically analyze the data and show numerical values. Future researchers should consider a mixed method design to gain an insightful understanding of the topic understudied.

In this study, the researcher measured social support by the Interpersonal Support Evaluation List (ISEL); the ISEL consists of four different dimensions, which include belonging support, self-esteem support, tangible support, and appraisal support. Saudi students in general had a high level of perceived social support. In regard to the dimensions, the self-esteem support was the highest in comparison to the other factors, and the lowest dimension was the appraisal support. Future researchers should seek to examine the perceived social support of Saudi students in USA from different resources and dimensions. Family support, American friends' support, Saudi community support in the USA, financial support, religious support, and professors' support should be taken into consideration for future studies, exploring how they relate to academic performance.

This study measured academic performance using Saudi students' cumulative GPAs in their current semesters. The GPA was only one factor that indicated the academic performance for Saudi students. Future researchers should consider examining different factors to measure academic performance in relation to unique resources from which social support can be received.

Lastly, researchers in the future might take into consideration the complexity and sensitivity of the PSS variable. As the findings showed in this study, which indicated a weak relationship between PSS and academic performance (GPA), the researcher recommends in the



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future to consider investigating PSS and academic performance as individual variables in relation to other factors, such as personality characteristics and cultural aspects.

### References

- Abdalati, H. (1998). *Islam in focus*. Beltsville, MD: Amana Publications.
- Abu-Hilal, M. M. (1986). *Foreign students' interaction, satisfaction, and attitudes toward certain aspects of the American culture: A case of Arab students in Southern California* (Unpublished doctoral dissertation). University of California, Riverside
- Alajlan, R. (2016) *Psychological attitudes of Saudi Arabian international students toward mental health counseling* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10106095)
- Al-Harhi, F. (1987). *Saudi undergraduate students in U.S. universities: An exploratory study of their performance* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. Retrieved from [http://search.proquest.com/docview/303613351?accountid\\_15099](http://search.proquest.com/docview/303613351?accountid_15099)
- Ali, S. R., Liu, W. M., & Humedian, M. (2004). Islam 101: Understanding the religion and therapy implications. *Professional Psychology: Research and Practice*, 35, 635-642.
- Al-Shehry, A. M. (1989). *An investigation of the financial and academic problems perceived by Saudi graduate students while they are studying in the United States* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9023701)
- American Counseling Association. (2014). *ACA code of ethics*. Alexandria, VA: Author.
- Armstrong, K. (2002). *Islam: A short history*. New York, NY: Random House, Inc.
- Asfahani, A. (2018). The Role of Social Support Systems for Saudi Arabian Students in the United States. *College Student Journal*, 52(2), 187-198.
- Babbie, E. (2011). *The basic of social research*. Boston, MA: Cengage Learning.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Bektaş, Y., Demir, A., & Bowden, R. (2009). Psychological adaptation of Turkish students at U.S. campuses. *International Journal for the Advancement of Counseling, 31*(2), 130-143.
- Bevis, T. B. (2002). 'At a glance: International students in the United States', *International Educator, 11*(3), 12-17.
- Blanchard, C. M. (2009). Saudi Arabia: Background and U.S. relations. In D. R. Nagunian (Ed.), *Saudi Arabia: A hotbed of unrest?* New York, NY: Nova Science.
- Bordes-Edgar, V., Arredondo, P., Kurpius, S. R., & Rund, J. (2011). A longitudinal analysis of Latina/o students' academic persistence. *Journal of Hispanic Higher Education, 10*(4), 358-368.
- Bradley, G. (2000). Responding effectively to the mental health needs of international students. *Higher Education, 39*(4), 417-433.
- Bryman, A. (2001). *Social Research Methods*. New York: Oxford University Press.
- Caplan, R. D. (1979). Social support, person-environment fit, and coping. *Mental health and the economy, 89-137*.
- Chavajay, P. (2013). Perceived social support among international students at a U.S. university. *Psychological Reports, (2)*, 667. doi: 10.2466/17.21.PR0.112.2.667-677
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*(5), 300-314.
- Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress<sup>1</sup>. *Journal of applied social psychology, 13*(2), 99-125.
- Cohen, L., Manion, L. & Morrison, K. (2011). *Research Methods in Education*. (7th ed). London: Routledge.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Cohen, S., & McKay, G. (1984). Social support, stress and the buffering hypothesis: A theoretical analysis. *Handbook of psychology and health*, 4, 253-267.
- Cohen S., Mermelstein R., Kamarck T., & Hoberman, H.M. (1985). Measuring the functional components of social support. In Sarason, I.G. & Sarason, B.R. (Eds), *Social support: theory, research, and applications*. The Hague, Netherlands: Martinus Nijhoff.
- Constantine, M. G., Kindaichi, M., Okazaki, S., Gainor, K. A., & Baden, A. L. (2005). A Qualitative Investigation of the Cultural Adjustment Experiences of Asian International College Women. *Cultural Diversity and Ethnic Minority Psychology*, 11(2), 162-175. doi:10.1037/1099-9809.11.2.162Students-In-US#.WAXO3-ArJaV
- Crean, H. F. (2004). Social support, conflict, major life stressors, and adaptive coping strategies in Latino middle school students: An integrative model. *Journal of Adolescent Research*, 19(6), 657-676. doi:10.1177/0743558403260018
- Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. 4th ed. Thousand Oaks, California: SAGE Publications.
- Cutrona, C. E., Cole, V., Colangelo, N., Assouline, S. G., & Russell, D. W. (1994). Perceived parental support and academic achievement: An attachment theory perspective. *Journal of Personality and Social Psychology*, 66(2), 369-378. doi:10.1037/0022-3514.66.2.369
- Daly, K. J. (2007). *Qualitative methods for family studies and human development*. Sage.
- Dao, T., Lee, D., & Chang, H. (2007). Acculturation level, perceived English fluency, perceived social support level, and depression among Taiwanese international students. *College Student Journal*, 41(2), 287-295.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- DeBerard, M., Spielmans, G., & Julka, D. (2004). Predictors of academic achievement and retention among college freshmen: A longitudinal study. *College Student Journal*, 38, 66–80.
- De la Iglesia, G., Stover, J. B., & Liporace, M. F. (2014). Perceived social support and academic achievement in Argentinean college students. *Europe's journal of psychology*, 10(4), 637-649.
- Domagała-Zyśk, E. (2006). The significance of adolescents' relationships with significant others and school failure. *School Psychology International*, 27(2), 232-247.  
doi:10.1177/0143034306064550
- Dupont, S., Galand, B., & Nils, F. (2015). The impact of different sources of social support on academic performance: Intervening factors and mediated pathways in the case of master's thesis. *European Review of Applied Psychology*, 65(5), 227-237.
- Dwairy, M. (1997). Addressing the repressed needs of the Arabic client. *Cultural Diversity and Mental Health*, 3(1), 1-12. doi:10.1037/1099-9809.3.1.1
- El-Banyan, A. (1974). *Cross-cultural education and attitude change: A study of the Saudi Arabian students in the United States* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. Retrieved from <http://search.proquest.com/docview/302699486/>
- Elias, M. J., & Haynes, N. M. (2008). Social competence, social support, and academic achievement in minority, low-income, urban elementary school children. *School Psychology Quarterly*, 23(4), 474-495. doi:10.1037/1045-3830.23.4.474

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Erichsen, E. A., & Bolliger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research and Development, 59*(3), 309-326.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics, 5*(1), 1-4.
- Fowler, F. J. (2009). *Survey research methods*. (4th ed) Thousand Oaks, CA: Sage.
- Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of college student development, 48*(3), 259-274.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of educational psychology, 95*(1), 148.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). Boston, MA: Pearson Education.
- Garcia D'Avila-Bacarji, K. M., Marturano, E. M., & dos Santos Elias, L. C. (2005). Suporte parental: Um estudo sobre crianças com queixas escolares [Parents' support: A study of children with school trouble]. *Psicologia em Estudo, 10*(1), 107-115. doi:10.1590/S141373722005000100013
- Gielen, U. P., Loeb-Adler, L., & Milgram, N. A. (1992). *Psychology in international perspective: 50 years of the International Council of Psychologists*. Amsterdam, the Netherlands: Swets & Zeitlinger.
- Gravetter, F., & Forzanol, L. (2015). *Research methods for the behavioral sciences* (5th ed.). Stamford, CT: Cengage Learning.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

Gray, E. K., & Watson, D. (2002). General and specific traits of personality and their relation to sleep and academic performance. *Journal of Personality, 70*(2), 177-206.

Gross, A. E., Wallston, B. S., & Piliavin, I. M. (1979). Reactance, Attribution, Equity, and the Help Recipient 1. *Journal of Applied Social Psychology, 9*(4), 297-313.

Guba, E., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage.

Harrison, P. (2002). 'Educational exchange for international understanding', *International Educator 11*(4), 2–4.

Helgeson, V. S. (1993). Two important distinctions in social support: Kind of support and perceived versus received. *Journal of Applied Social Psychology, 23*(10), 825-845.

Heyn, M. (2013) *Experiences of male Saudi Arabian international students in the United States* (Doctoral dissertation). Retrieved from <https://scholarworks.wmich.edu>

Hofer, J. V. (2009). *The identification of issues serving as barriers to positive educational experiences for Saudi Arabian students studying in the state of Missouri* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (Order No. 3392682)

Hurd, N. M., Albright, J., Wittrup, A., Negrete, A., & Billingsley, J. (2018). Appraisal support from natural mentors, self-worth, and psychological distress: Examining the experiences of underrepresented students transitioning through college. *Journal of Youth and Adolescence, 47*(5), 1100-1112.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

Institute of International Education. (2018a). Number of international students in the United States. Retrieved from <https://www.iie.org/Why-IIE/Announcements/2018/11/2018-11-13-Number-of-International-Students-Reaches-New-High>

Institute of International Education. (2016). Open Doors Fact Sheet: Saudi Arabia. *Educational Exchange Data from Open Doors 2016*. Retrieved from File:///Users/carriemeliuss/Downloads/Saudi-Arabia-Open-Doors-2016.pdf

Institute of International Education. (2018b). Places of origin. Retrieved from <https://www.iie.org/research-and-insights/open-doors/data/international-students/places-of-origin>

Jackson, M., Ray, S., & Bybell, D. (2013). International students in the U. S.: Social and psychological adjustment. *Journal of International Students*, 3(1), 17–28.

Keating, S. (2004). *Saudi Arabia: Modern Middle East nations and their strategic place in the world*. Broomall, PA: Mason Crest.

Lee, J. J., & Rice, C. (2007). Welcome to America? International student perceptions of discrimination. *Higher education*, 53(3), 381-409.

Lee, V. E., & Smith, J. B. (1999). Social support and achievement for young adolescents in Chicago: The role of school academic press. *American Educational Research Journal*, 36(4), 907-945. doi:10.3102/00028312036004907

Levitt, M. J., Guacci-Franco, N., & Levitt, J. L. (1994). Social support achievement in childhood and early adolescence: A multicultural study. *Journal of Applied Developmental Psychology*, 15(2), 207-222. doi:10.1016/0193-3973(94)90013-2



## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Li, J., Han, X., Wang, W., Sun, G., & Cheng, Z. (2018). How social support influences university students' academic achievement and emotional exhaustion: The mediating role of self-esteem. *Learning and Individual Differences, 61*, 120-126.
- Lian, C. T. (2008). Family functioning, perceived social support, academic performance and self-esteem. *Pertanika Journal Social, Science & Humaniora, 16*(2), 285-299
- Lipka, M. (2017, August 9). *Muslims and Islam: Key findings in the U.S. and around the world*. Retrieved from <https://www.pewresearch.org/fact-tank/2017/08/09/muslims-and-islam-key-findings-in-the-u-s-and-around-the-world/>
- Long, D. E. (2005). *Culture and customs of Saudi Arabia: Culture and customs of the Middle East*. Westport, CT: Greenwood Press.
- Mackinnon, S. P. (2012). Perceived social support and academic achievement: Cross-lagged panel and bivariate growth curve analyses. *Journal of Youth and Adolescence, 41*(4), 474-485. doi:10.1007/s10964-011-9691-1
- Malecki, C. K., & Demaray, M. K. (2003). What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly, 18*(3), 231-252. doi:10.1521/scpq.18.3.231.22576
- Mallinckrodt, B., & Leong, F. T. (1992). International graduate students, stress, and social support. *Journal of College Student Development, 33*(1), 71-78.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research* (6th ed.). Thousand Oaks, CA: SAGE.
- Martirosyan, N. M., Bustamantea, R. M., & Saxon, D. P. (2019). Academic and social support services for international students: Current practices. *Journal of International Students, 9*(1), 172-191.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Melius, C. (2017) *Saudi Student Integration in Southeastern U.S. Higher Education Institutions: A Study on the Impact of Academic, Social, and Cultural Adjustments Related to Academic Success* (Doctoral dissertation). Retrieved from <https://etd.auburn.edu>
- Mermelstein, R., Cohen, S., & Lichtenstein, E. (1983). Perceived and objective stress, social support and smoking cessation. *Unpublished manuscript, Department of Psychology, University of Oregon.*
- Misra, R., Crist, M., & Burant, C. J. (2003). Relationships among life stress, social support, academic stressors, and reactions to stressors of international students in the United States. *International Journal of Stress Management, 10*, 137–157.
- Mokhtari, T. & Mehdinezhad, Vali. (2016). Gratitude, social support and academic performance: Exploring the relationships between indicators' high school students. *The Social Sciences, 11*, 5657-5662. Retrieved from <http://medwelljournals.com/abstract/?doi=sscience.2016.5657.5662>
- Moos, R. H., & Moos, B. S. (1981). *Family environment scale manual*. Palo Alto: Consulting Psychologists Press.
- Msengi, I. G. (2007). Sources of stress and its impact on health behaviors and academic performance of international students at a comprehensive Midwestern University. *International Journal of Global Health and Health Disparities, 5*(1), 55-69.
- Murray, C., & Zvoch, K. (2011). The inventory of teacher-student relationships: Factor structure, reliability, and validity among African American youth in low-income urban schools. *The Journal of Early Adolescence, 31*(4), 493-525. doi:10.1177/0272431610366250
- O'Keeffe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal, 47*(4), 605-613.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Özturgut, O., & Murphy, C. (2009). Literature vs. practice: challenges for international students in the US. *International Journal of Teaching and Learning in Higher Education*, 22(3), 374-385.
- Pagano, R. R. (2012). *Understanding statistics in the behavioral sciences* (Vol. 1). Cengage Learning.
- Perry, J. C., Liu, X., & Pabian, Y. (2010). School engagement as a mediator of academic performance among urban youth: The role of career preparation, parental career support, and teacher support. *The Counseling Psychologist*, 38(2), 269-295.  
doi:10.1177/0011000009349272
- Piaget, J. (1970). *Genetic epistemology*. New York, NY: Columbia University Press.
- Poyrazli, S., & Grahame, K. M. (2007). Barriers to adjustment: Needs of international students within a semi-urban campus community. *Journal of Instructional Psychology*, 34(1), 28-46.
- Poyrazli, S., Kavanaugh, P. R., Baker, A., & Al-Timimi, N. (2004). Social support and demographic correlates of acculturative stress in international students. *Journal of College Counseling*, 7(1), 73-83.
- Rayle, A. D., & Chung, K. Y. (2007). Revisiting first-year college students' mattering: Social support, academic stress, and the mattering experience. *Journal of College Student Retention: Research, Theory & Practice*, 9(1), 21-37.
- Razek, N. A., & Coyner, S. C. (2013). Cultural impacts on Saudi students at a mid-western American university. *Academy of Educational Leadership Journal*, 17(1), 103-117.
- Renn, K. A., Brazelton, G. B., & Holmes, J. M. (2014). At the margins of internationalization: An analysis of journal articles on college student development, learning, and experiences,

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

1998– 2011. *Journal of College Student Development*, 55, 278–294.

<http://dx.doi.org/10.1353/csd .2014.0029>

Richaud de Minzi, M. C. (2006). Stress and coping in adolescence. In A. M. Columbus (Ed.), *Advances in psychology research* (Vol. 45, pp. 67-84). New York, NY: Nova Science.

Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological bulletin*, 130(2), 261.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rundles, K. (2013). *Factors impacting the psychological adjustment of Saudi Arabian international students in the United States: Self-esteem, social support, and discrimination* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. ED552483)

Russell, J., Rosenthal, D., & Thomson, G. (2010). The international student experience: three styles of adaptation. *Higher education*, 60(2), 235-249.

Sarason, B. R., Sarason I. G., & Pierce, G. R. (1990). Social support: The sense of acceptance and the role of relationships, In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 97-128). New York, NY: Willey & Sons

Saudi Arabian Cultural Mission in the United States (1993). *Education in Saudi Arabia*.

Washington, DC: Royal Embassy of Saudi Arabia.

Saudi Academic Cultural Mission. (n.d.). *King Abdullah Scholarship Program*. Retrieved March

8, 2017, from [http://www.sacm.org/ArabicSACM/pdf/ Posters\\_Sacm\\_scholorship.pdf](http://www.sacm.org/ArabicSACM/pdf/ Posters_Sacm_scholorship.pdf)

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Shabeeb, S. S. (1996). *Saudi and Arabian Gulf students' adjustment problems in eastern Washington* (Doctoral dissertation). *Dissertation Abstracts International: A. The Humanities and Social Sciences*, 57, 00162.
- Shahmirzadi, A. (1989). *The self-perceived problems of Middle Eastern students attending the George Washington University*. Unpublished doctoral dissertation, George Washington University, Washington, DC.
- Shaw, D. L. (2010). Bridging differences: Saudi Arabian students reflect on their educational experiences and share success strategies. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3401195)
- Sheperis, C., Young, J., & Daniels, M. (2010). *Counseling research*. Boston, MA: Pearson.
- Sheperis, C., Young, J., & Daniels, M. (2016). *Counseling Research: Quantitative, Qualitative, and Mixed Methods* (2<sup>nd</sup> ed.). Pearson Education, Inc.
- Sherry, M., Thomas, P., & Chui, W. H. (2010). International students: A vulnerable student population. *Higher education*, 60(1), 33-46.
- Shokri, O., Farahani, M. N., Nouri, R. K., & Moradi, A. R. (2013). Perceived social support and academic stress: The roles of gender and cultural differences. *Journal of Iranian Psychologists*, 9(34), 143-156.
- Sullivan, C., & Kashubeck-West, S. (2015). The Interplay of International Students' Acculturative Stress, Social Support, and Acculturation Modes. *Journal of International Students*, 5(1), 1-11.
- Sümer, S., Poyrazli, S., & Grahame, K. (2008). Predictors of depression and anxiety among international students. *Journal of Counseling and Development: JCD*, 86(4), 429-437.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Swank, R. L. (1949). Combat exhaustion; a descriptive and statistical analysis of causes, symptoms and signs. *Journal of Nervous and Mental Disease*, 109, 475-508.
- Tayfur, C., & Ulupinar, S. (2016). The Effect of Perceived Social Support on the Academic Achievement of Health College Students. *Journal of Psychiatric Nursing/Psikiyatri Hemsireleri Dernegi*, 7(1).
- Trochim, W. M., Donnelly, J. P., & Arora, K. (2015). *Research methods: The essential knowledge base* (2<sup>nd</sup> ed.). Wadsworth Publishing.
- Ugwu, C. C. (2017). Relationship between social support and academic performance among undergraduate students of Madonna University, Nigeria. *Global Journal of Applied, Management and Social Sciences*, 13.
- Waines, D. (1995). *An Introduction to Islam*. Cambridge, England: Cambridge University Press.
- Wentzel, K. R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of educational psychology*, 90(2), 202.
- Wrzesniewski, K., & Chylinska, J. (2007). Assessment of coping styles and strategies with school-related stress. *School Psychology International*, 28(2), 179  
194.doi:10.1177/0143034307078096
- Wu, H. P., Garza, E., & Guzman, N. (2015). International student's challenge and adjustment to college. *Education Research International*, doi:10.1155/2015/202753
- Wynbrandt, J. (2004). A brief history of Saudi Arabia. New York, NY: Facts on File, Inc.
- Yackley-Franken, N. (2007). *Teens in Saudi Arabia*. Minneapolis, MN: Compass Point Books.
- Yasin, A. S. M., & Dzulkipli, M. A. (2011). The relationship between social support and academic achievement. *International Journal of Humanities and Social Science*, 1(5), 277-281.

## SOCIAL SUPPORT OF SAUDI ARABIAN STUDENTS IN U.S.

- Yakaboski, T., Perez-Velez, K., & Almutairi, Y. (2018). Breaking the Silence: Saudi Graduate Student Experiences on a U.S. Campus. *Journal of Diversity in Higher Education*, 11(2), 221–238.
- York, T. T., Gibson, C., & Rankin, S. (2015). Defining and Measuring Academic Success. *Practical Assessment, Research & Evaluation*, 20.
- Young, B. N., & Snead, D. (2017). Saudi Arabian International Graduate Students' Lived Experiences at a US University. *Journal of Learning in Higher Education*, 13(2), 39-44.
- Yusoff, Y. M., & Othman, A. K. (2011). An early study on perceived social support and psychological adjustment among international students: The case of a higher learning institution in Malaysia. *International Journal of Business and Society*, 12(2), 1-15.
- Zhai, L. (2002). Studying International Students: Adjustment Issues and Social Support, Full Text from ERIC Available online: <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED474481>

## Appendices

### Appendix A: Demographic Questionnaire

- 1- In which level of education are you studying now?
  - a) English language program entry requirements for university
  - b) Associate degree
  - c) Undergraduate (Bachelor's degree)
  - d) Master's degree
  - e) Doctorate degree
  
- 2- What is your gender?
  - a) Male
  - b) Female
  - c) Other
  
- 3- What is your age (Type a number)? For example, 18, 25, 30, 33
  
- 4- What is your marital status?
  - a) Single
  - b) Married
  - c) Widow
  - d) Divorced
  - e) Other
  
- 5- Do you have children?
  - a) Yes
  - b) No
  
- 6- What is your overall GPA (Cumulative GPA) at your university now (Type a number, For example, 2.5, 3, 3.3, 4)?
  
- 7- How many years have you resided in the Unites States?
  - a) Less than 1 year
  - b) From 1- 2 years
  - c) From 2-4 years
  - d) From 5 - 10 years
  - e) More than 10
  
- 8- Where do you currently reside?



**Appendix B: Interpersonal Support Evaluation List (ISEL)**

INSTRUCTIONS: This scale is made up of a list of statements each of which may or may not be true about you. For each statement check “definitely true” if you are sure it is true about you and “probably true” if you think it is true but are not absolutely certain. Similarly, you should check “definitely false” if you are sure the statement is false and “probably false” if you think it is false but are not absolutely certain.

	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
1. There are several people that I trust to help solve my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. If I needed help fixing an appliance or repairing my car, there is someone who would help me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Most of my friends are more interesting than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. There is someone who takes pride in my accomplishments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. When I feel lonely, there are several people I can talk to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. There is no one that I feel comfortable to talking about intimate personal problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I often meet or talk with family or friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Most people I know think highly of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
9. If I needed a ride to the airport very early in the morning, I would have a hard time finding someone to take me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I feel like I'm not always included by my circle of friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. There really is no one who can give me an objective view of how I'm handling my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. There are several different people I enjoy spending time with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I think that my friends feel that I'm not very good at helping them solve their problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. If I were sick and needed someone (friend, family member, or acquaintance) to take me to the doctor, I would have trouble finding someone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. If I wanted to go on a trip for a day (e.g., to the mountains, beach, or country), I would have a hard time finding someone to go with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
16. If I needed a place to stay for a week because of an emergency (for example, water or electricity out in my apartment or house), I could easily find someone who would put me up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I feel that there is no one I can share my most private worries and fears with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. If I were sick, I could easily find someone to help me with my daily chores.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. There is someone I can turn to for advice about handling problems with my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I am as good at doing things as most other people are.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. If I decide one afternoon that I would like to go to a movie that evening, I could easily find someone to go with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. When I need suggestions on how to deal with a personal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
problem, I know someone I can turn to.				
23. If I needed an emergency loan of \$100, there is someone (friend, relative, or acquaintance) I could get it from.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. In general, people do not have much confidence in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
25. Most people I know do not enjoy the same things that I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. There is someone I could turn to for advice about making career plans or changing my job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I don't often get invited to do things with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Most of my friends are more successful at making changes in their lives than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. If I had to go out of town for a few weeks, it would be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
30. There really is no one I can trust to give me good financial advice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. If I wanted to have lunch with someone, I could easily find someone to join me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I am more satisfied with my life than most people are with theirs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
33. If I was stranded 10 miles from home, there is someone I could call who would come and get me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. No one I know would throw a birthday party for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. It would be difficult to find someone who would lend me their car for a few hours.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I am closer to my friends than most other people are to theirs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)
38. There is at least one person I know whose advice I really trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. I have a hard time keeping pace with my friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	definitely false (0)	probably false (1)	probably true (2)	definitely true (3)

**Appendix C: Invitation Letter for Participation: Dissertation Project**

Title: An Examination of Social Support and the Academic Performance of Saudi Arabian Students in the United States

Student Researcher: Yaser Alghamdi, M.A.

Faculty Adviser: Esteban Montilla, Ph.D., Department of Counseling and Human Services

Dear potential participant,

I invite you to participate in my dissertation study entitled an examination of social support and academic performance of Saudi students in the United States. The purpose of this research is to investigate the relationship between social support and academic performance among Saudi students in U.S. universities.

Although you will not directly benefit from participating in this study, you will help me complete my doctoral degree in Counselor Education and Supervision at St. Mary's University. The information you provide also may help universities in U.S. better support Saudi students in the future. There are no known risks with your participation in this project. Your participation in this study is totally voluntary, and you may refuse to participate or withdraw at any time with no consequences.

You will be asked to complete an online survey, and the estimated time to finish the survey is approximately 10 to 15 minutes.

Before and after your participation, I am willing to answer any questions about the study. You may contact me, the principal investigator, at [yalghamdi@mail.stmarytx.edu](mailto:yalghamdi@mail.stmarytx.edu). You may also contact my faculty adviser at [rmontilla@stmarytx.edu](mailto:rmontilla@stmarytx.edu) if you have questions about this study.

Respectfully  
Yaser Alghamdi, MA  
Principal Investigator

**Appendix D: Informed Consent Form**

Title: An Examination of Social Support and the Academic Performance of Saudi Arabian Students in the United States

Student Researcher: Yaser Alghamdi, M.A.

Faculty Adviser: R. Esteban Montilla, Ph.D., Department of Counseling and Human Services

I am voluntarily participating in the above-mentioned research study. I realize that I may continue as a participant or withdraw from participating at any time. In either case, my responses will be kept confidential. I will not be asked for my identity, so the researcher will not be able to connect my responses with who I am.

The purpose of this study is to examine the relationship between social support and academic performance among Saudi Arabian students studying in the United States.

I realize that there will be no financial compensation for my participation in this study. My participation will be solely to help the investigator(s) better understand the social support and academic performance among Saudi Arabian students studying in the United States. The data collected from the study will be used strictly for educational purposes.

Although participating in this study will take approximately 10 to 15 minutes of my time, participation should not impact me in any other way.

If I have any questions about the study, I understand the investigator(s) will answer these questions. I may contact the Principal Investigator (Yaser Alghamdi M.A.), at St. Mary's University Counselor Education and Supervision program, [yalghamdi@mail.stmarytx.edu](mailto:yalghamdi@mail.stmarytx.edu). I may also contact the faculty adviser for this research, R. Esteban Montilla, Ph.D., at [rmontilla@stmarytx.edu](mailto:rmontilla@stmarytx.edu).

If you have any questions about your rights as a research subject or concerns about this research study please contact the Chair, Institutional Review Board, St. Mary's University at 210-436-3736 or email at [IRBCommitteeChair@stmarytx.edu](mailto:IRBCommitteeChair@stmarytx.edu). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT ST. MARY'S UNIVERSITY ARE GOVERNED BY THE REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

To participate in this study, I must meet ALL the following requirements:

- Be a Saudi student studying in the United States
- Be 18 years old or older
- Have finished any English language prerequisites to beginning my degree program
- Be enrolled in an undergraduate (Bachelor's degree) or graduate degree program
- Have finished at least my first semester in my program of study