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SAUDI INTERNATIONAL STUDENTS IN THE U.S. AND THE WISH TO STAY

by

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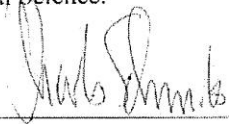
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THE WISH TO STAY

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THESIS APPROVAL PAGE

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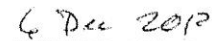
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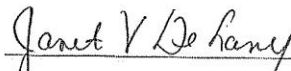
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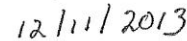
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Abstract

SAUDI INTERNATIONAL STUDENTS IN THE U.S. AND THE WISH TO STAY

By Maha Mansour

Do Saudi students in the U.S. wish to stay in the U.S. after they have completed their studies, and for how long? The purpose of this exploratory study was to answer this question and to investigate the relationships between the U.S. migration wishes of Saudi international students in the U.S. and a number of background social demographic and personality factors. Using a survey and interviews, data were collected from 367 Saudi international students in the U.S. Descriptive data are given with the results of a logistical regression analysis and qualitative analysis of interview data. Statistical findings show that some personality variables, background demographic and family relationship variables, quality of experience in the U.S., and place perception variables are related to the length of time students wish to stay in the U.S. An analysis of interview data suggests that additional family relationship variables might also be important.

Keywords: Saudi international students, U.S., migration, temporary migrant, brain drain.

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SAUDI INTERNATIONAL STUDENTS IN THE U.S.AND THE WISH TO STAY

Chapter I

Introduction

Most people think of international students as visitors rather than migrants. They put international students in the same category as tourists who visit a foreign country for a short period of time and then go back home. Even some government agencies classify international students officially as non-migrants (Hazen and Alberts, 2006). But the length of time international students spend in a host country and the adaptation processes they go through are migration experiences, and international students are actually a kind of temporary migrant. An international student by definition is a person who is a citizen of one country, who goes to another country to study in one of that country's schools. Different from tourists, however, the majority of international students spend at least a year in the host country, not just a few weeks. The usual period for international students who complete a year of studying a foreign language and a BA or an MA degree is three to five years. International students studying for various degrees including PhD degrees sometimes spend up to seven years in their host countries. And while they are living in their host countries, international students go through adaptation and acculturation processes that visitors and tourists do not go through.

Also, unlike visitors or tourists, international students do not always go back home. Some arrive in the host country intending to stay in that country (Card, 1988), but most of those who choose not to go back home decide while they are in the host country that they

want to stay. Something happens to some of them during the process of becoming acculturated to the new place and culture that makes them change their minds about returning home.

Is wanting to stay in the host country one of the possible effects of international study? People often praise study abroad programs because intercultural contact can produce positive changes in individuals' beliefs, attitudes, and behavior. But changes in attitude about wanting to live in the host country rather than the home country are not often considered effects of international study. The international education industry does not advertise this possible effect when administrators promote international education. But it is one possible effect, at least for some international students: As a result of studying in a host country, some international students acquire a desire to migrate to that host country, either for a period of years extending beyond graduation or permanently.

Researchers know that the desire to migrate is sometimes a factor in an international student's choice of a university and a destination country (OECD, 2013). Some international students use international study as a door to migration; they choose a destination country that they think might be easy to migrate to. Canada and Australia, for example, are known for having immigration policies that make it fairly easy for international students to become citizens. But too few researchers have studied international students who change their minds about returning home while they are in their host countries. And because there are too few studies of this kind, too little is known

about international students and the link between their study abroad experiences and migration, too little is known about which students change their minds and why.

At a time when more and more developing countries are encouraging their citizens to study abroad for advanced degrees, more and more developed countries with good schools and a need for revenue are opening their doors to international students, and more international students are deciding to stay in their host countries (Card, 1982; Alberts and Hazen, 2005; Gribble, 2008; Soon, 2012), it is important to identify the internationalization of higher education and issues concerning international students as migration issues. In 2015, almost 5 million college and university students will be enrolled in schools in foreign countries (Gribble, 2008). This represents a large number of mobile people, many of whom will become permanent migrants to their host countries.

Those researchers who have focused on the (temporary or permanent) migration of international students across borders often focus on a few sending and receiving countries. The U.S. and the U.K. and a few other English-speaking countries are often studied. A few European and Asian sending countries are also often studied. But very little research has focused on students from the Middle East. And almost no peer-reviewed research on Saudi international students has been done, though Saudi Arabia sends thousands of students to the U.S. each year and Saudi students are the fastest growing group of international students in the U.S. (Institute of International Education, 2012b). Currently there are 100,000 Saudi students sponsored by King Abdullah's scholarship program in undergraduate and graduate programs in U.S. colleges and

universities, and probably a hundred or two hundred more are in U.S. schools paying their own tuition. According to the Student and Exchange Visitor Information System (SEVIS) run by the U.S. Immigration and Customs Enforcement (ICE) agency within Department of Homeland Security (DHS), Saudi Arabia is the “fourth largest sender of international students to the U.S., following China, South Korea, and India” (Kono, 2013). It is therefore as important to study the large numbers of Saudi students in the U.S. as it is to study the large numbers of Chinese or Indian international students in the U.S., but very few studies on Saudi students in the U.S. have been done.

The present study exploring the migration wishes and attitudes of college- and university-level students from Saudi Arabia studying in the U.S. in 2013 was designed to fill this gap. Its limited focus is in some ways its strength. Since almost no other studies of the migration wishes and attitudes of Saudi international students in the U.S. have been done, adding knowledge about Saudi students in the U.S. to the literature on international student migration strengthens the literature as a whole. In addition, other Saudi scholars and other researchers interested in international student migration can use this research as a base for further exploration. U.S. immigration agencies and Saudi ministries interested in Saudi students in the U.S. can also benefit from knowledge about this population. This knowledge can help them design and implement policies based on research.

Most studies of this kind have explored international students’ migration intentions. A small number have explored the relationship between international students’ intentions and behavior. An even smaller number of studies have explored international students’

desires, as this study does. In this study, desire is called “wish.” Most Saudi international students do not see the possibility of migrating to the U.S. as a realistic possibility, so using intention rather than wish as an outcome variable would not have been useful. Most Saudi students would not have intentions to migration, but many of them would have wishes to migrate.

The purpose of this study was to determine whether a number of personal characteristics and social-structural factors, including family relationship variables, predict (or are associated with) Saudi international students’ wish to stay in the U.S. (legally) for at least one year up to permanently after completing their studies. The theory guiding the study’s questions and hypotheses is given below.

Because family relationships are very important, especially to Saudis, if Saudi students (1) have the moral and financial support of their families to stay, (2) have family members who are permanent residents in the U.S., (3) have family members in Saudi Arabia who can afford to and do visit them in the U.S. at least once a year, (4) and have immediate members of their own nuclear family (spouse, children) with them in the U.S., then staying does not involve giving up family love and family relationships, and if other factors are present, they will be likely to wish to stay in the U.S. The family-related variables work together with background demographic variables (prior travel experience to the U.S., and access to financial resources to help them move), personality variables (valuing personal freedom highly, valuing professional development more than geographic closeness to family), place perception variables, and quality of experience in

the U.S. variables to predict the wish to stay at least a year longer or permanently in the U.S. after completing the highest level of studies they intend to complete.

The initial research hypotheses were as follows:

1. Gender is positively correlated with Saudi students' wish to stay in the U.S. longer after completing their studies.
2. Saudi students who see themselves as at least moderately (or very) open-minded are more likely to wish to stay in the U.S. longer after completing studies.
3. Saudi students who value personal freedom highly are more likely to wish to stay in the U.S. longer after completing their studies.
4. Saudi students with family that visits them in the U.S. at least once a year are more likely to wish to stay in the U.S. longer after completing their studies.
5. Saudi students with family members who are permanent residents of the U.S. are more likely to wish to stay in the U.S. longer after completing their studies.
6. Saudi students with nuclear family members with them in the U.S. are more likely to wish to stay in the U.S. longer after completing their studies.
7. Saudi students who value professional development more than geographic closeness to family are more likely to wish to stay in the U.S. longer after completing their studies.
8. Saudi students who have visited the U.S. before studying in the U.S. are more likely to wish to stay in the U.S. longer after completing their studies.

9. Saudi students who like the U.S. city or town where they live are more likely to wish to stay in the U.S. longer after completing their studies.
10. Saudi students who are highly or very satisfied with the relationships they have established with other people living permanently in the U.S. are more likely to wish to stay in the U.S. longer after completing their studies.
11. Saudi students with enough money to move to the U.S. are more likely to wish to stay in the U.S. longer after completing their studies.
12. Saudi students with perceptions of place favorable to the U.S. or who judge the U.S. and KSA equal in these respects are more likely to wish to stay in the U.S. longer after completing their studies.
13. Saudi students with parents who would be happy for them if they got a job in the U.S. and stayed longer in the U.S. are more likely to wish to stay in the U.S. longer after completing their studies.

Chapter II

Assessment of the Literature

Literature reviewed for this study can be divided into three types: (1) research on international students and international education, (2) research on migration in general and on international students and migration in particular, and (3) research on Saudi international students. Although research on international students and international education is a fairly narrow field focused on a few main issues, research on migration is a large and varied field and research on international students and migration is a specialty type within this field. Research on Saudi international students is an underdeveloped field.

1. Research on International Students and International Education

Research on international students has always been important to people in educational institutions and to economists. Teachers in educational institutions are interested in the characteristics and abilities of international students who come to study in various disciplines, and educational administrators, in addition to being interested in the revenue international students generate, want to understand why and how students' adaptation to the host institution and the host country's culture succeeds or fails. They use research on international students' adaptation processes to help them decide what kinds of on-campus services and orientation programs to offer international students (Gans, 1999). If the host country institutions can offer programs and services to help international students adapt, the institutions have a better chance of attracting other international students. Economists

who look at financial figures know that the host country benefits financially as well, and they often keep track of financial data concerning the international education business worldwide and in various countries.

In addition, promotional literature and the media often focus on the cultural and political aspects of international education. Promotional literature about the benefits of the study abroad experience says that students who travel abroad to study in foreign universities have a special learning experience. In addition to subject matter learning, international students improve their foreign language skills, acquire a greater knowledge of the world through cross-cultural experience, and possibly become more open to understanding and appreciating other cultures: they are educated as global citizens. In addition, promotional literature often says that the study abroad experience improves relations between the sending and receiving countries. The presence of international students is supposed to provide host country citizens with the opportunity to better understand the people of another culture, and international students are supposed to gain a better understanding of the people of the host culture. Through better understanding between these people, relations between the countries are supposed to improve. This is what was said in 2005 when U.S. President George Bush agreed to open U.S. borders after 9/11 to Saudi students enrolled in King Abdullah's scholarship program. The two leaders said that the program would reduce negative Saudi perceptions of the U.S. and thus improve U.S.-Saudi relations.

Recently, however, as the numbers of international students worldwide has grown and as more and more international students stay in their host countries after graduation (Gribble, 2008; Hazen and Alberts, 2006; Alberts and Hazen, 2005; Findlay, 2010) research on international students has become important for other reasons. Researchers in fields like geography and migration and population studies within sociology, and researchers who are interested in transnationalism, mobility, and globalization, have focused on the relationship between international students and migration, a relationship they say has not been studied enough (Findlay, 2010; Lu, Zong, and Schissel, 2009; Hazen and Alberts, 2005; Szeleny, 2006).

To draw attention to the relationship between international students, globalization, and mobility, some of these researchers define international students as a group of mobile people (Findlay, 2010; Project Atlas, 2013). They also make “academic mobility in higher education” a defining characteristic of the global knowledge economy (Kemal as cited in Fletcher, 2008). Some researchers study why students choose to study abroad and where they go, and how government policies influence that mobility (Gans, 1999; Findlay, 2010). Some researchers study the changing patterns of international student mobility (Findlay, 2010; Sharma, 2011).

To draw attention to the relationship between international students and migration, some researchers label international students’ status “initial temporary migration” (Lu, Zong, and Schissel, 2009), or call international students “temporary migrants.” Some researchers categorize international students as kinds of “professional migrants” because

job or professional factors in both pre-move and future planning processes are important (Hazen and Alberts, 2005). Researchers like these are interested in the possibility that large numbers of international students will never return to their home countries. Instead many become immigrants by adjusting their student status while they are in their host countries.

A very popular approach connected to viewing students as “professional migrants” is the approach that identifies international student migration as a problem of “brain drain” and “brain gain” caused by increased opportunities for global mobility and by knowledge-based economies competing globally for skilled labor (Lu, Zong, and Schissel, 2009; Soon, 2010a, 2010b; Gribble, 2008; Szelenyi, 2006). According to Szelenyi (2006), the brain drain/gain/circulation question (the migration of professionals or highly skilled workers) is the context in which international student mobility has been studied most. This is because international student migration has important effects on both host countries and sending countries, effects that almost all researchers in this field take into account.

But even when the temporary or permanent migration of international students is not identified as a problem of brain drain, the numbers of international students involved and the evidence of recent trends make international student mobility and migration an important area of study. As early as 1985, some researchers noticed that international student enrollments were increasing, and that the method of using international study as a path to immigration (an indirect immigration) was increasing “more rapidly than either

total immigration or direct immigration of professionals” (Agarwal and Winkler, 1985, p. 514). Some international students were choosing to study abroad because it was the easiest way to migrate. Others changed their minds about returning home and adjusted their visa status to that of immigrant while they were in their host countries: for these students, migration decisions were effects of the study abroad experience (Szelenyi, 2006).

Over the last decade, the number of international students worldwide has increased over 95%. And in recent years, according to Findlay (2010), countries expect that high numbers of students will remain after completing their studies. Currently there are approximately 4.1 million international students worldwide (Project Atlas). In the 2011-2012 school year there were a record 764,495 international students in the U.S. (McGill, 2013). In 2015, almost 5 million college and university students will be enrolled in schools in foreign countries (Institute of International Education, 2013), and a significant number of these students will become permanent migrants (Gribble, 2008; Hazen and Alberts, 2006; Findlay, 2010; Baruch, Budhwar, and Khatri, 2007).

Research concerning the U.S. as a destination country has found that most international students do not arrive in the U.S. intending to migrate permanently; the majority of international students who decide to migrate to the U.S. make that decision or change their plans while they are in the U.S. (Agarwal and Winkler, 1985; Hazen and Alberts, 2006; Baruch, Budwar, and Khatri, 2007). However, even those students who change their minds about returning home do not always want to stay permanently in the

U.S. Studies often show that only a minority of international students plan a permanent stay (e.g., Lu, Zong, and Schissel, 2009; Hazen and Alberts, 2005; Baruch, Budhwar, and Khatri, 2007). The majority of those students who do want to stay in the U.S. after completing their studies want to stay only for several years more in order to gain work experience and earn money (Hazen and Alberts, 2005). Very little follow-up research, however, has focused attention on whether students' intention to stay for several years more eventually turns into a more permanent migration. According to Lu, Zong, and Schissel (2009), there is little research in the temporary to permanent migration transition process or the link between temporary and permanent migration in migration theory and in studies of population mobility.

2. Migration Research

Migration research is characterized by variety. Some research focuses on macro- or micro-level data or both. Some research uses very general kinds of explanations and some uses very specific kinds of explanations. One general explanation or model used in many studies is the push-pull model associated with economic explanations of migration. However, a recent trend in migration research is to use psychological theories of behavior in studying migration decision-making at the individual level. Psychological approaches usually focus on decision-making processes, motivation, and personality factors.

Types of Migration Research

Migration research can be divided into types based on kinds of migration and kinds of migrants studied as well as by different approaches taken. Different kinds of migration

include internal or international, temporary or permanent, voluntary and involuntary, migration caused by crisis and “social-mobility migration” (De Jong, 2000). Different kinds of migrants include transnational migrants, temporary migrants, economic migrants, political refugees, voluntary and involuntary migrants, and first generation and second generation migrants (Gans, 1999). When international students are considered types of migrants, they are usually called temporary migrants, circular migrants, “migrants in a knowledge economy” (Findlay, 2010), “professional migrants” (Alberts and Hazen, 2005), or “pseudo-migrants” (Szelenyi, 2006). They are often associated with a type of migration called “brain drain” (Card, 1982; Baruch, Budhwar, and Khatri, 2006; Szelenyi, 2006; Gribble, 2008; Soon, 2010a, Soon, 2010b, Soon, 2012).

Different approaches to different types of migration and different types of migrant also involve different theories, models, classification schemes, research designs, methodologies, and statistical procedures (Simmons, 1986). Some migration researchers focus on macro factors, some focus on micro factors, and some focus on both (Gans, 1999). Some researchers look at global patterns (for example, the geographic mobility of international students worldwide) and others limit themselves to studying two countries and a specific migration path between the two countries (Chinese international students migrating to Canada, for example).

Different approaches and focuses mean that migration studies have different degrees of generalizability. Some researchers find patterns that are only country or region

specific. Sometimes explanations apply only to migrants leaving countries or regions of economic stagnation, decline, or political unrest (Boneva et al, 1998).

However, despite the variety and different theories and approaches, most researchers agree that migration is a complex phenomenon: there are a lot of factors involved in why people migrate. The problem for most researchers is to build models that include all the factors, and different researchers seem to solve this problem in different ways. Some researchers advise taking a multifaceted approach (Winchie and Carment, 1988). Some take a multifaceted approach but focus on only a few factors in their studies.

General Explanations of Migration

Very general explanations use models that explain the relationships between a few general categories of factors. One of these general explanations in migration research is the push-pull model of migration, a simple explanation that almost everyone can understand. It is associated with a socio-economic orientation (Chirkov, Vanstteenkiste, Tao, and Lynch, 2007) and with Kurt Lewin's (1951) field theory (Baruch, Budhwar, and Katri, 2007). That theory states that people experience "contradictory forces in making a decision regarding whether or not to move to a different country" (Baruch, Budhwar, and Katri, 2007, p. 101). The push-pull model of international migration predicts that personal and structural factors will push and pull an individual to migrate and/or to stay.

Many researchers who use the push-pull model assign the push factors to one country, place, or environment and the pull factors to another country, place, or environment. The individual person seems to be a receiver of these opposite forces: he or she is pushed out

of someplace and pulled in by another. However, some researchers give push and pull tendencies to both the origin and destination countries, places, or environments. In the country of origin, the push force pushes people to leave and the pull force pulls them back. In the destination country, the pull force pulls people to it and the push force pushes them away (for example, by having strict immigration policies).

To illustrate, several push factors relating to students' choice to study abroad have been identified: (1) students do not find the quality program at home (Macready and Tucker as cited in Bista, 2011; Agarwal and Winkler, 1986); (2) students wish to experience other cultures and improve job prospects; (3) students try to position themselves for the next stage of their education or work (Macready and Tucker as cited in Bista, 2011); and (4) development programs and government financial aid in nations like Saudi Arabia makes study abroad possible for many students (Agarwal and Winkler, 1986). What Bista (2011), citing Macready and Tucker, called anti-push (pull back) factors are financial (higher tuition, no possibility of a job, higher living expenses, travel expenses) or visa problems.

Pull factors (coming from the destination country) affecting international students have been identified as quality of study and work opportunities, affordability, helpful visa arrangements, and the positive effects of internationally recognized degrees (Agarwal and Winkler, 1986). In many countries, like Saudi Arabia, there are big benefits to attending U.S. colleges. Saudis with degrees from U.S. institutions can expect to earn more and have greater social prestige. A network of friends and family in the destination or host

country has also been identified as a pull factor (Chirkov, Vansteeenkiste, Tao, and Lynch, 2007). This factor competes with the push-back-to-the-home-country factor of the presence of family in the home country (Hazen and Alberts, 2006). In addition, the student is often pulled to the host country by economic and professional factors (Hazen and Alberts, 2006; Boven and Frieze, 2001; Frieze et al., 2004).

The Classic Economic Approach

The classic economic approach also uses relationships between categories of factors to explain migration, but it takes a step toward becoming more specific. Push and pull become opposite *economic* or labor market forces, especially opposite supply/ demand and cost/benefit forces. As in other models of economic behavior, information or knowledge about the new place plays an important role. Classic economic explanations of migration also consider the presence of family and friend migration networks in the destination country important factors (Frieze et al., 2004).

However, as noted by many researchers (e.g., Wolpert, 1965; Winch and Carment, 1988; Frieze et al., 2004; Frieze, Hansen, and Boneva, 2006; Gibson and McKenzie, 2009), the problem with the classic economic approach is that it ignores factors at the individual level. It cannot by itself explain why only some people from an economically underdeveloped area migrate but others from the same area do not. Migration researchers who see this problem with the economic approach therefore include individual factors, or psychological variables and behavioral factors, in their explanatory models. For example, in a longitudinal survey study of Filipino graduate students, Card (1982) used a

combination of psychological and structural variables to study return intentions. De Jong et al. (1986) developed models to analyze both personal and structural background factors that determine migration intentions and behavior. Hazen and Alberts (2006) divided migration decision determinants into two categories: structural factors and individual factors. They stated that the relative importance of these in individual decision-making changes over time and is different depending on the person. McGill (2013) included personal motivation variables with economic, geopolitical, and cultural variables.

Psychological Orientations to Migration Research

Some researchers add on personal psychological variables to models containing demographic variables and macro-level structural variables but shift their attention almost completely to a few psychological variables (e.g., Frieze et al., 2004; Frieze, Hansen, and Boneva, 2006; Boneva et al., 1998; Wiinchie and Carment, 1988). These researchers do not deny that macrolevel factors are important, but they sometimes theorize that these macrolevel factors are conditions that interact with individual psychological variables. Some argue that environmental factors “create the *conditions* for wanting to leave, but desires to do so are based in the personality of those who make the choice” (Boneva and Frieze, 2001, p. 478).

Adding psychological variables in any way, however, complicates theories and makes model building much more difficult for several reasons. One reason is that psychological phenomena consist of both thinking and feeling phenomena (Brown and Perkins, 1992).

Another reason is that there are many different terms used to label the same, similar, or overlapping factors or categories of psychological factors. Expectations, motives, goals, beliefs, feelings, attitudes, values, wishes, desires, needs, drives, perceptions, personal factors, personality factors, and dispositions are often overlapping subjective phenomena. In addition, because researchers do not always use the same terms in similar studies, it is hard to categorize psychological phenomena in a systematic way and hard to conceptualize psychological factors clearly or compare the results of different psychologically-oriented studies. Generally, however, the most objective individual data are put in the demographic factor category and subjective phenomena like desires, values, attitudes, motives and expectations are put in the personality factor category.

Categorizing methods, however, can sometimes be mistaken for explanations. For example, Boneva and Frieze (2001), Frieze, Hansen, and Boneva (2006) and Frieze et al.'s (2004) migrant personality theory says that a certain combination of personality factors determines migration intentions or behavior (along with a variety of non-personality factors). They define the migrant personality as a personality that has a willingness or desire to geographically relocate whenever it appears that opportunities “might be better in another region” (Frieze et al., 2006, p.170). According to Boneva and Frieze (2001), Frieze, Hansen, and Boneva (2006), and Frieze et al. (2004), the total combination of personality factors that predicts migration desires or intentions includes being high in openness, being work oriented, having a high power motivation, a high achievement motivation and a lower affiliation motivation. They suggest that restlessness

or the tendency to be willing to move is part of the personality that tends to look for new conditions that will allow the person to achieve goals. However, the term “migrant personality” is just a category-level label, not an explanation. The explanation concerns how these personality factors work to produce the effect.

Characteristics of Psychologically-Oriented Migration Studies

Migration studies that have a psychological orientation usually center on theories of motivation, perception, and personality, and often draw upon behavioral theory, focusing on decision-making behavior at the individual level (Alberts and Hazen, 2005; Brown and Perkins, 1992; Baruch, Budhwar, and Khatri, 2006; Boneva et al., 1998; Frieze et al., 2001; De Jong et al., 1986). However, according to Chirkov, Vansteenkiste, Tao, and Lynch (2007), although psychological research on motivation is well-developed, research on migration motivation is not a well-developed research area conceptually or methodologically.

When considering migration motivation, distinctions must be made between voluntary and involuntary migration, different degrees of self-determination in an individual migrant (Chirkov, Vansteenkiste, Tao and Lynch, 2007; Deci and Ryan, 2002), and decisions about migrating temporarily or permanently, since whether to migrate temporarily or permanently are often competing decision-making options (De Jong, 2000). International students, for example, do not always make decisions to study abroad on a voluntary basis if their parents or others have pressured them into it. This lack of self-determination might affect both their study abroad experience and their return

intentions. Similarly, they do not return voluntarily if they are bound by contract to return home at the end of their studies or have no other choice because of visa and host country migration restrictions (Brown and Perkins, 1992). The temporary/permanent distinction is important in research on international students also because many of those students who desire to stay in a host country might only desire to stay for a longer temporary period after graduation, rather than permanently. But a temporary stay after graduation might turn into a permanent stay.

Motivation in Psychologically-Oriented Migration Studies

Types of migration motivation research can often be distinguished on the basis of the outcome variable of the study. Outcome variables are usually wishes or desires, intentions, behavior, or the link between intentions and behavior.

Some researchers study only wishes or desires (e.g., Frieze, Hansen, and Boneva, 2006; Frieze et al., 2004). According to Boneva and Frieze (2001), the advantage to studying wishes or desires, rather than intentions or actual behavior, is that the researcher can separate out the effects of migration opportunities, or the effects of various constraints and facilitators, on both intentions and behavior. However, a problem with studying wishes, or desires, is that wishes are even more changeable than intentions. In addition, they are often suppressed in situations where individuals perceive certain wishes as threatening to others, unpopular, or unlikely to be satisfied. Wolpert (1965) notes that individuals adjust their wishes to what they think is possible or attainable. A study

subject's answers concerning wishes could hide the fact that a wish to do something exists but is suppressed and no longer fully recognized, especially in public.

Most researchers study intentions (e.g., Albert and Hazen (2005; Baruch, Budhwar, and Khatri, 2006; Lu, Zong, and Schissel, 2009; Soon, 2010a; Soon, 2010b; Soon, 2012; Szelenyi, 2006). They generally do limited- time-period survey studies, not longitudinal survey studies, and as a result, they only theorize about whether there is a direct link between intentions and actual migration behavior. In general, many migration motivation researchers theorize that there is a direct link between intentions and behavior, but some, like De Jong (1986), after testing found that various constraints and facilitators intervene to modify the relationship between intentions and behavior.

Researchers who study actual behavior (e.g., McGill, 2013; Whisler, Waldorf, Mulligan, and Plane, 2008) often do comparative studies, comparing data from different countries. Researchers who study the link between intentions and behavior (Card, 1982; De Jong, 1986; De Jong, 2000) usually do longitudinal studies involving surveys, data collected by previous surveys, or both.

When international students are the subject of migration studies, researchers study their motivation before their move to a host country, or after, when they return home or make the decision not to return home. Though it may be important to compare study abroad motivations with return and nonreturn motivations (Hazen and Alberts, 2005), many researchers who study international students' intentions sometimes ignore the reasons why students chose to study abroad. Changed intentions about whether to return

are usually called non-return wishes or intentions. If international students return home, their migration is sometimes called a circular migration (Szelenyi, 2006).

Researchers studying international student motivation before the move to a host country are usually interested in demand-side explanations, as Findlay (2010) argues. Demand-side explanations include the social and economic factors that motivate students to go abroad to study (Project Atlas, 2013). Few researchers have been interested in supply-side factors (Findlay, 2010). Findlay (2010), however, examined the financial interests of those who supply elite higher education to a world market.

Although there has been more research in recent years on the migration intentions and decisions of international students, especially using the U.S. as a destination country (Soon, 2010b), no systematic body of knowledge about the migration intentions and decisions of international students exists (Hazen and Alberts, 2006). Because finding data on actual return rates is difficult, most studies report return intentions (Hazen and Alberts, 2006).

Important Factors in Psychologically-Oriented Migration Studies

The following section of the literature review gives an overview of factors identified as important in migration motivation psychology. Subsections include the following: the family/work opposition and the role of values and expectations; adjustment or adaptation outcomes; prior mobility and migration experience; perceptions of place utility and the concept of place attachment; and other important factors

Family/work opposition and the role of values and expectations

Many migration motivation researchers often theorize that an opposition between work centrality and family centrality is important to understanding migration motivation (e.g., Frieze et. al, 2004, 2006; Boneva and Frieze, 2001; Chirkov, Vanstteenkiste, Tao, and Lynch, 2007; Szelenyi, 2006). Their hypotheses sometime center on this opposition, and their studies include measures of family centrality and work centrality. Even researchers with less focused study designs include the work/family opposition in some way. Szelenyi (2006), for example, included social ties and the role of personal and professional interests and aspirations as two of her four categories of determinants of migration (the other two were the international context and the influence of the state and state institutions).

Study results often feature the work/family opposition (e.g., Alberts and Hazen, 2005; Hazen and Alberts, 2006; Soon, 2012; Baruch, Budhwar, and Khatri, 2007). Hazen and Alberts (2006), for example, found in a study of international students in the U.S. that economic and professional factors act as strong pull factors to stay in the US, and personal and societal factors (including family relationships) in conflict with those pull factors act as push factors to send students back to their home countries. However, in an earlier comparative study, Alberts and Hazen (2005) found wide variations in work and family values at both the individual level and the national level: different national groups valued personal, professional, and societal (familial) factors differently.

The hypothesis that emigrants of various nationalities often value work more than family is connected to the idea that values, not just demographic characteristics, are important in determining migration wishes, intentions, and behavior. Frieze et al. (2004) argued that people who do not find home country conditions to be compatible with their motives and values are those who want to migrate. In a study of international students from five European countries, they tested the interaction of the family centrality variable with motivation variables and found that being high in family centrality (valuing family more highly than work) was the most important predictor of the desire not to migrate (Frieze et al., 2004). People higher in work centrality were more likely to want to migrate (Frieze et al., 2004).

However, quite a few studies demonstrate that aspects of work other than income are the important issue in the work/family value dynamic. Gibson and McKenzie (2011), in a study of the migration of the highly skilled (college-educated) in three Pacific countries, found that within the highly skilled group, the emigration decision was most strongly associated with preference variables like risk aversion, patience, and choice of subjects in secondary school and not strongly linked to lack of money or to the gain in income students might have as a result of migrating. The decision to return was strongly linked to family and lifestyle reasons, rather than to the income opportunities in different countries (Gibson and McKenzie, 2011). Gibson and McKenzie (2011) suggest that making more money plays a limited role in migration tendencies among the highly skilled, educated student group.

Research on how people in different life stages value things like income in relation to other aspects of life indicates that the young adult student group may in fact value income maximization less than other factors (Whisler, Waldorf, Mulligan, and Plane, 2008). However, lifestyle issues are important to people at other stages in the life cycle. In a study of general migration using a sample of East Indians of various ages, Winchie and Carment (1988) found that occupational satisfaction was the most important variable, and they suggested that the lack of opportunity for advancement was the most important part of the occupational satisfaction variable. Soon (2010a) found that perception of skill-use opportunity in work, not income, was a significant determinant of migration for the non-doctoral group of international students he studied. Other studies similarly identify job satisfaction (an element of lifestyle satisfaction), not income, as the important variable (Frieze, Hnsen, and Boneva, 2006; Soon, 2012; Finn, 2003; Alberts and Hazen, 2005).

If findings like these are valid, the problem for sending countries is that those who migrate for job-related reasons are often more committed to their work or to skill-use opportunity and more ambitious and energetic (Boneva and Frieze, 200?; Frieze et al., 2004; Gans, 1999). The label “brain drain” describes the effect on the sending countries. However, many students who wish or intend to stay longer after graduation report wanting to stay in the U.S. only for several years more in order to gain work experience and earn money in the U.S (Hazen and Alberts, 2006; Szelenyi, 2006). Because they do not wish to stay permanently, the countries of origin in the end might be better off with

experienced professionals who return, rather than new graduates seeking work experience in their home countries.

Szelenyi (2006) found that although feelings of social responsibility toward the country of origin could not be directly linked to return migration intentions, some international students who intended to stay in the U.S. planned to do future transnational work that would benefit their countries. Szelenyi (2006) perceived that students' ideas of national boundaries and their positions in relation to those boundaries change; they come to think of national boundaries as fluid, so they plan to live in one place but focus their professional work on another. Szelenyi (2006) concluded that students make migration decisions thinking internationally, and that losing them does not always mean losing their brains also.

In relation to work or professional goals and perceptions of skill use opportunity, Alberts and Hazen (2005) found regional differences. Students from Asia and Africa were least likely to say that professional conditions would keep them in the U.S. Alberts and Hazen (2005) suggested that these students might have been discouraged by prejudice or that they might have been members of elites who had better career options at home.

Adjustment or adaptation outcomes

According to Gans (1999), the favorite topic of sociological immigration research is the adaptation of immigrants. This seems to be true of research on international students also, including the research done by international students for their doctoral degrees.

Even studies focused on international student migration must consider international students' host country adjustment outcomes. The reason for this is that adjustment outcomes have been found to have an effect upon migration wishes, intentions, and behavior (Baruch, Budhwar, and Khatri, 2006; Card, 1988; Lu, Zong, and Schissel, 2009; Szelenyi; Chirkov, Safdar, de Guzman, and Playford, 2008). The usual hypothesis is that without an experience of positive adjustment to the host country, international students would not have positive perceptions of the host country and would not want to stay. Card (1988) and Baruch, Budhwar, and Khatri (2007) found that the type of experience in the U.S. was the most important variable determining change of intention to return to the home country. In relation to change of return intentions, Card (1988) used variables measuring (1) susceptibility to change, (2) length of stay abroad, and (3) the development of roots abroad. In studying susceptibility to change, Gans (1999) examined the willingness and ability of immigrants to "take leave of an old culture" and become "Americanized" or acculturated after living in the U.S. for some time. Card (1979) determined that an overall liking of American culture was an important determinant of a change in return intentions.

Several key factors—including length of time in the host country, various personality factors like openness to change, the ability to make friends with others in the host country, marital status or cohabitation practices in the host country, and the level of self-determination involved in the choice to study abroad—have been identified with adaptation or acculturation outcomes. Other researchers have looked at an obvious but

sometimes overlooked factor affecting social adjustment: a student's self-perceived language ability (Al-Jasir, 1993). Gu, Schweisfurth, and Day (2010) examined a complex set of factors, including language mastery, social interaction, personal development, and academic outcomes, and concluded that the management of all these factors resulted in successful intercultural adaptation and restructuring of identity. In addition, the student's perception of parents as facilitators of independence or sources of emotional support may be important in adaptive functioning (Lesser, 1999).

A longer length of time in the host country does not always lead to liking the country or its people or having good experiences (Selltiz and Cook, 1962), but it does increase the adaptation or acculturation chances of a migrant who has positive experiences in the host country (Soon, 2012; Card, 1982). In studies of international students, Soon (2012) and Card (1982) found that length of stay in the host country were primary determinants of change of migration intention. In Soon's (2012) study, stay duration was significantly related to the intention to stay for the doctoral group, and stay duration together with perception of skill-use opportunity were significant factors for the non-doctoral group. Soon (2012) concluded that a longer period of time in the host country gave students more time to assimilate the culture of the host country. Selltiz and Cook (1962) found some evidence that attitude changes and levels of adjustment happened in stages over time.

Personality traits are often linked to attitudes that might lead to wishing to stay in the U.S. To see if multicultural personality traits predicted international students' openness to

diversity and cross-cultural adjustment, Yakunina et al. (2012) looked at social initiative, emotional stability, open-mindedness, flexibility, and cultural empathy. They found that emotional stability and social initiative were directly correlated with international students' adjustment in the U.S., and that other traits were found to have indirect effects by influencing openness to diversity. Students who were more open-minded, flexible, and empathic showed greater openness to diversity, and this resulted in better adjustment outcomes. Chirkov, Safdar, de Guzman, and Playford (2008) and Chirkov, Vansteeenkiste, Tao, and Lynch (2007) considered curiosity and openness to change part of the profile of a migrant personality. Winchell and Carment (1988) suggested that an outward-looking personality or attitude was an important factor. Card (1982) found that youth and openness to American culture, together with the freedom to remain in the U.S., were primary factors involved in a change of return intentions.

Many researchers agree that the kinds of relationships international students have with others in their host countries influences their wish or intention to remain in their host countries or return home (Lu, Zong, and Schissel, 2009; Card, 1982; Alberts and Hazen, 2005). Deci and Ryan (2002) argue that the need for relatedness is a fundamental human need. This is why both family migration networks and relations with others in the host country are often considered determinants of migration motivation. Selltitz and Cook (1962) note that researchers have not found clear patterns connecting amount of social activity with attitudes about the host country, but having established a close friendship has been associated with a student's views toward the U.S. being more favorable, and

socializing with Americans has been linked to functioning well in American culture (Trice, 2004). However, there are mixed results concerning the causal process linking attitudes to behavior. Some researchers find that the causal direction goes from attitude to contact (Alreshoud and Koeske, 1997; Selltiz and Cook, 1962). Other researchers have found that the causal direction goes from successful contact to favorable attitude (Kamal and Maruyama, 1990).

The influence of self-determination on adaptation outcomes is less often studied, but seems important. Applying self-determination theory to the question of what motivates students to study abroad, Brown and Perkins (1992), Chirkov, Safdar, de Guzman, and Playford (2008), and Chirkov, Vansteenkiste, Tao, and Lynch (2007) found that autonomous motivation to study abroad is a predictor of adaptation outcomes. They determined that the *level* of self-determined motivation predicted the success of international students' cultural adaptation, but that self-development goals did not have any correlation with measures of adaptation. Preservation goals (the desire to avoid negative conditions in the home country), however, were negatively associated with adjustment outcomes (Chirkov, Vansteenkiste, Tao and Lynch, 2006; Chirkov, Safdar, Guzman, and Playford, 2008).

Although successful adaptation is often hypothesized to be a predictor of migration intentions, the conclusion that study abroad programs with successful adaptation outcomes often lead to change of return intentions is not often drawn. Some researchers do make this connection, however. As Szelenyi (2006) notes, international students'

experiences in the host country environment can be seen as part of a transformative process, a life-changing experience. Students change as a result of their study abroad experiences, and some change their minds about returning home. However, since many who successfully adapt to U.S. culture do have to return home, they are then faced with the possibility that they will no longer fit into the cultures in their home countries (Alberts and Hazen, 2005). This is why they often view the stay or go decision as a serious problem (Szelenyi, 2006).

Prior mobility and migration experience

Some research has demonstrated that migrants often have a personal and family history of mobility, have had prior contact with a receiving country, or have had prior migration experience (Winchie and Carment, 1988; De Jong, 2000). Although Winchie and Carment (1988) found that previous mobility was not important in their study of East Indians intending and beginning the process of migrating to Canada, they suggested that this factor may have influenced the difference between the two groups through personality variables. Previous mobility may have produced personality changes in migrants (Winchie and Carment, 1988). De Jong (2000) found that having had prior migration experiences strongly predicted migration intentions and behavior of men and women in rural Thailand.

Perceptions of place utility and the concept of place attachment

Some psychologically-oriented models or theories of migration motivation make an individual's perceptions as important as an individual's motives and values (Simmons,

1986; De Jong, 1986; Soon, 2012). Those studies that make an individual's perceptions of place important are sometimes called "studies based on the theory of place utility" (Simmons, 1986, p. 122). Their models often make socio-economic background factors and demographic variables predictors of perceptions of place utility (for example, prior contact with alternative places increases information and favorable attitudes) (Simmons, 1986). Perceptions of place are in turn seen as predictors of intentions, and intentions seen as predictors of behavior (Simmons, 1986).

Although these studies hypothesize that there is a predictive relation between perceptions of place utility and migration intentions, Simmons (1986) found that none of the place utility studies he reviewed supported the hypothesis that assessments of place utility and intentions intervene between background variables and actual migration. Simmons (1986) argued that in different settings, different constraints and facilitators are more important than perceptions of place utility in determining migration intentions and behavior. In different settings, these constraints and facilitators (as well as perceptions of constraints and facilitators) produce different migration decision processes (Simmons, 1986). Common constraints to immigration are a country's immigration policies (Lu, Zong, and Schissel, 2009; Agarwal and Winkler, 1986); Sharma (2011) notes that the plans and strategies of educational institutions also constrain students' migration intentions. Although perceptions of what is possible are not often studied in connection with international student migration, those perceptions very likely influence migration intentions together with students' ideas about what is desirable.

Perceptions of place utility, measured as perceptions of job issues or labor markets and working conditions, income issues, housing issues, service access issues, living standard issues, affiliation and family tie issues, and social rights issues, and so on, are included in many studies (e.g., De Jong et al., 1986; Soon, 2010a; Soon, 2010b). In a study of international students in New Zealand universities, Soon (2010b) found that students' perceptions of their home countries, including perceptions of work environments, opportunities to use acquired skills, lifestyle and family ties, were important determinants of return intentions. Hazen and Alberts (2006) found that students who wished to return home perceived a better quality and standard of life and a better political situation in their home countries, or said they felt negatively about U.S. culture (consumerism, individualism, materialism, racism, increasing conservatism, poor working conditions, and competitiveness). De Jong et al. (1986) found that intentions in Third World settings were predicted in part by favorable place utility perceptions connected to expectations of achieving valued goals. Asking people about what they perceive to be true of this or that place, De Jong (2000) measured subjective expectations of affiliation, income, stimulation, comfort and concluded that a person will choose the course of action for which expectations of the desired (highly valued) result are highest. (Expectations, in this context, are based on or related to perceptions.) In his view, expectations plus valued goals define motivations for migration (De Jong, 2000). De Jong (2000) argued that subjective expectations or perceptions about the outcomes of migration were variables that intervened between social-family variables and actual migration behavior.

Some researchers try to understand differences in perceptions at both the individual and national levels. For example, in relation to the U.S., Selltitz and Cook (1962) argue that international students arrive with preconceptions and expectations as well as motivations that influence whether their beliefs will change or not. Each individual student has different experiences in the host country, and some of those experiences influence their perceptions and attitudes and some do not (Selltitz and Cook, 1962). However, Selltitz and Cook (1962) argued that differences in national background are the main source of differences in perception of the host country. Perceivers judge things in relation to conditions in their own countries, and perceivers also are influenced by knowledge about political relations between the host country and country of origin (Selltitz and Cook, 1962). If this is true, Saudi international students share certain perceptions of the U.S., though individual Saudi students would have unique variations in perception. Some of these variations in perception of the U.S. would be related to different individual experiences in the U.S. as well as to different personality variables.

Place attachment and place attachment disruption are related concepts that refer to people's psychological attachment to natural and social phenomena in environments (Frieze et al., 2006; Brown and Perkins, 1992). Place attachment disruption is what happens when that attachment is broken. International students, like other kinds of migrants, experience place attachment disruption when they leave their home countries and local environments. Unlike political refugees, they have time to prepare themselves for change (Brown and Perkins, 1992). But if they are very strongly attached to places

and people in their home countries, separating might be difficult. Prior migration experience may help them adjust; however, adjusting to the new place often involves developing a new or desired identity and forming new attachments, which international students must disrupt again when they return to their home countries (Brown and Perkins, 1992). Having been through place attachment disruption and adjustment processes once, international students might fear having to experience disruption again or they might be unwilling to lose their new identity. After each disruption, they go through a phase of coping with loss, including the loss of the sense of identity they had in the place they left (Brown and Perkins, 1992).

Other Important Factors

The psychologically-oriented literature about migration identifies the following additional factors as influential in migration motivation psychology: age, gender, marital status, family economic status or social class, family pressure to migrate, the level of family support, the presence of migration networks, and various structural background or country-specific factors.

Place in the family life-cycle, or age, is often considered important (Whisler, Waldorf, Mulligan, and Plane, 2008; Winchic and Carment, 1988; De Jong et al., 1986; Card, 1982). Many studies have found that migrants are often young adults (18-35), relatively well-educated, with relatively high-status occupations (e.g., Winchic and Carment, 1988). De Jong et al. (1986) found that life cycle was one of the predictors of migration intentions in Third World settings. Card (1982), when studying international students'

change in return intentions, found that youth was one of three primary factors.

International students are by definition usually members of this young adult demographic group. However, Lu, Zong, and Schissel (2009), studying Chinese undergraduate students in Canada, found that students who held strong immigration intentions were slightly older than those who had no intention to migrate, though when they separated male and female students, the significant effect of age held for males only.

Gender differences are frequently tested in studies of migration psychology also, though possibly fewer researchers currently make gender an important variable. Lu, Zong, and Schissel (2009), found that different factors influenced male and female Chinese students' migration intentions. However, De Jong (2000), in a study of men and women in rural Thailand in the early 1990s, found that gender differences occurred mainly in intentions but not in actual migration behavior and that gender role indicators, rather than gender, were important determinants of migration intentions for both men and women. De Jong (2000) theorized that "migration expectations operate in the context of social/family norms and gender roles" (p. 307). He argued that intentions themselves are the product of social norms (De Jong, 2000).

Marital status is also considered important (Lu, Zong, and Schissel, 2009). De Jong (2000) found that family norms promoted and marital roles restricted migration. In another study, De Jong et al. (1986) found that being single was a significant predictor of migration intentions in third world settings. Married people were settled in their home countries. However, Lu, Zong, and Schissel (2009) found that Chinese students in

Canada who were married or had common law partners were more likely to hold strong intentions to migrate. Chirkov, Safdar, de Guzman, and Playford (2008) found that married international students (living with their spouses in the host country) had less difficulty with adjustment. They may have better overall emotional health, since international students living in a host country with their spouse and children are less likely to feel that they have given up important relationships. Place in the household is also considered important in some studies.

Individual or family economic status has frequently been examined in migration studies (e.g., De Jong, 1986; De Jong, 2000; Findlay, 2010; Gibson and McKenzie, 2011). De Jong et al. (1986) found that intentions in Third World settings were predicted by economic resources (income level, access to resources). International students' economic status is defined in part by the fact that students are usually still dependent financially on their families. They might not have the financial resources to migrate permanently or stay longer in host countries if their parents do not support them. Simmons (1986) considered economic status a possible migration constraining or facilitating factor. Findlay (2010) argued that middle class demand for international education is fueled by supply side marketing activities, and the same class-based aspirations might play a role in creating within students and/or their families the wish that the student could stay in the host country.

Social class has been associated both with access to higher education and with studying abroad (Findlay, 2010). Before King Abdullah's scholarship program, there

were only a small number of scholarship students, and mainly only wealthier Saudis could afford to send their children abroad for education. Currently, Saudi students studying abroad represent all social class levels, but in obtaining a degree from a Western university, all international students acquire a valuable cultural capital that gives them an advantage in the labor market at home in relation to locally educated students (Findlay, 2010). They qualify for a higher social status because they have studied abroad, not just because they have completed higher levels of education. They also obtain a higher social status in their home countries by having lived and worked abroad for some years after they have completed their studies.

The level of family support, or pressure from relatives to migrate, is also sometimes considered important (De Jong et al., 1986; De Jong, 2000; Findlay, 2000; Lu, Zong, and Schissel, 2009; Soon, 2012). De Jong et al. (1986) found that family pressure was one of the predictors of migration intentions in Third World settings. In another study based on the Thailand National Migration Survey, De Jong (2000) found that perceived family norms about migration behavior together with expectations of attaining goals in a new location determined migration intentions, and perceived family migration norms strongly determined migration behavior. De Jong (2000) concluded that migration behavior is under direct family normative control. Lu, Zong, and Schissel (2009) also found that parental expectations were important determinants of Chinese students' intentions to migrate to Canada. Soon (2012) found that for international students in New Zealand, the

family's support of the student's migration plan had significant marginal impacts on the stay decision.

The presence of family and friends (often called "migration networks") in receiving areas is often included as a variable in studies of migration (Baruch, Budhwar, and Khatri, 2006; Frieze et al., 2004). Chirkov, Vansteeenkiste, Tao, and Lynch (2007) identify networks of friends and family in the destination or host country as pull factors. However, research results have been insufficient (Wolpert, 1965) or mixed (De Jong, 2000). In a study of longitudinal data from the 1992 and 1994 waves of the Thailand National Migration Survey, De Jong (2000) found that the size of migrant networks was not statistically significant for intentions or behavior. Soon (2010a), Frieze et al. (2004), and Boneva, Hansen, and Frieze (2006) found that the presence of family and friends *in sending areas* was a more important determinant of migration intentions.

In addition, the following structural background variables are often considered important: conditions in the home country, including the degree of stability in the home country; employment opportunities in the home and receiving countries; and constraints and facilitators affecting migration. These are non-psychological variables.

3. Research on Saudi international students in the U.S.

Most studies of international students focus on cross-cultural attitudes held and social adjustment problems experienced by particular groups of international students. But only a very small number of such studies are concerned with Saudi students in the U.S., maybe

because large numbers of Saudi students were not enrolled in U.S. colleges and universities until recently.

The majority of studies on Saudi students in the U.S. have been done by Saudi or Arab PhD candidates in U.S. universities to satisfy doctoral degree requirements. Like the majority of studies on international students, these studies are generally focused on specific educational issues and students' attitudes toward these as well as on adaptation problems or outcomes. A list of topics highlights favorite issues: Attitudes of Saudi female faculty and students toward online learning, language attitudes of Saudi graduate students in the U.S., attitudes toward native and nonnative English-speaking teachers, attitudes toward the utility of English, attitudes of Saudi students in the U.S. toward women's roles in Saudi Arabia, perceptions of the ideal university instructor in Saudi Arabia and in the U.S., the role of motivation in the acquisition of English by Saudi students, factors impacting the adjustment of Saudi students in the U.S., the language needs of Saudi students, attitudes of Arab students toward social contact with Americans, Saudi students' perceptions of financial and academic problems while in the U.S., the impact of going from a gender-segregated society to a mixed-gender environment, the impact of cross-cultural education on modernizing attitudes and values, the effects of cultural values on decision-making style, attitudes toward religion of Saudi students in the U.S., academic problems encountered by Saudi students in the U.S., problems in living due to the stress of acculturation, and adjustment problems experienced by Saudi students at a particular university.

Studies linking Saudi students in the U.S. with migration desires, intentions, or behaviors are rare among both experienced research professionals who publish in peer-reviewed journals and among Saudi or Arab PhD candidates. Those researchers who do focus on one specific international student group usually do not focus on Saudi students.

News articles in popular media seem to address the subject of Saudi international students more often and focus on similar themes: host country adaptation outcomes, the difficulties Saudi women face both abroad and when they return home, and social and labor market conditions in Saudi Arabia. Journalists who interview Saudi students often report that Saudi students say they don't make friends with Americans, but surround themselves with siblings, other Saudi international students, or other Arabs while they are living in the U.S. Some Saudi students report that they perceive a huge cultural gap between themselves and Americans, and they do not know how to relate to Americans (Lebaron and Hausheer, 2013).

If many Saudi students experience difficulty associating with Americans, female Saudi students face additional challenges when they return to Saudi Arabia after experiencing much more freedom in the U.S. or other countries (Wagner, 2012; Knickmeyer, 2012). According to Wagner (2012), the Saudi women he interviewed felt that they were facing a personal crisis when they thought about whether to try to stay in their host countries or return home after graduation. Some Saudi women felt that they had no choice except to return home. If they stayed, they would have to give up family relationships. However, many had adapted to a less restrictive life in the U.S. and knew that when they returned to

Saudi Arabia, they would return to restrictive conditions they would no longer be able to accept (women in Saudi Arabia are not allowed to drive, and guardianship laws make access to jobs difficult). For these reasons, Knickmeyer (2012) reports that female Saudi students often end up unhappy in Saudi Arabia when they return and later decide to migrate to some other place. Wagner (2012) claimed that the difficulty these women experienced about returning home was an unintended consequence of King Abdullah's scholarship program, but most students he interviewed felt the issue was so sensitive that they were unwilling to discuss it using their own names.

A related topic that is not explored in research studies linking international students to migration is female international students' desire to give birth to their children in the U.S. so that their children will gain U.S. citizenship rights. The topic applies to female Saudi students in the U.S. Their decision to give birth to children in the U.S. so that their children will gain U.S. citizenship rights has an effect on their own migration motives, because once their children start going to U.S. schools, they often want their children to continue going to U.S. schools. Saudi schools emphasize religious studies over practical subjects that help students succeed in jobs (Knickmeyer, 2012). Thus, female Saudi students who value education and labor market advantages often prefer to stay in the U.S. for the benefit of their children if not for their own benefit.

Returning home is the more socially desirable plan, perceived as more patriotic (Card, 1988). But labor market conditions in Saudi Arabia complicate the future for Saudi international students who return there (Pakkiasamy, 2004). Unemployment for both

young male and female Saudi graduates is high, but unemployment is worse for female Saudis who have limitations on where they can work. Still, competition for good jobs among Americans in the U.S. makes some Saudis perceive better employment opportunities for them in Saudi Arabia.

Migrating for work is not unknown in Saudi Arabia, however. Many Saudis seek work in Qatar or Bahrain, and Saudis are used to thinking of employment opportunities in regional if not global terms, in part because there are a high number of foreigners living and working in Saudi Arabia (Pakkiasamy, 2004; Denman and Hilal, 2011). Despite the government's effort to nationalize the labor force, high numbers of foreigners still live and work in the country, with the largest proportion of foreign workers being Asian and East-Asian people employed mainly in low-paid, low-skilled occupations. Westerners are generally employed in skilled occupations with higher salaries (Pakkiasamy, 2004). Kono (2013) reports that at present about 90% of KSA's private sector occupations are occupied by foreigners.

The government of Saudi Arabia has determined upon a number of strategies to help reduce high unemployment rates in the country and the country's dependence on foreign workers. One of these strategies is the "Saudization" strategy, a strategy to train Saudi nationals to move into the private sector and diversify the economy (Pakkiasamy, 2004). Another strategy is to create 3 million jobs for Saudis by 2014 (Kono, 2013). Still another strategy is to spend a large percent of government revenue on education (Kono, 2013). Thus, the King Abdullah Scholarship program (KASP) is part of the effort to diversify

the economy and improve labor market conditions in Saudi Arabia for Saudi nationals (Kono, 2013). Although KASP students are not required to return home unless they have made separate employment-related agreements, they are expected to return home to help in this effort (Kurtz, 2012).

For those dedicated to making KASP a success, it is good news that most Saudi students will return home for various reasons (Saudi Aramco World, 1979; Finn, 2012). Compared to other international student groups, Saudi students have a high return/low stay rate: Finn (2012) found that among international science and engineering doctoral students of varying nationalities, Saudi students had one of the lowest (5%) stay rates, along with students from Thailand (12%) and from South Africa (28%).

However, it is interesting and useful to ask whether all the Saudi students who return home wish to return home. As the total number of Saudi students in the U.S. increases, chances are the numbers of Saudi students who wish to stay longer or permanently after completing their studies will increase too, and some of them will find a way to stay in the U.S. Thus, knowing more about the attitudes of Saudi students in the U.S. toward migration after graduation is important.

Chapter III

Research Design and Analytical Methodology

This exploratory study used a mixed-method design. Both a survey (see Appendix A) and in-person interviews (see Appendix B) were used to test predictions concerning the study's population, all Saudi students in the U.S. as of September 2013 studying at the Bachelors level or higher, including ESL students. A quantitative survey approach was chosen at first because one purpose of the study was to discover what percent of the total number of Saudi students in the U.S. wished to remain in the U.S. longer than one year. Another purpose was to compare the numbers of female Saudi students who wished to remain in the U.S. to the numbers of male Saudi students who wished to remain in the U.S. But a review of the literature and first attempts at designing the survey showed that though a survey would shed light on attitudes and perceptions, it would not uncover reasons for these attitudes and perceptions. So a small number of exploratory, semi-structured interviews based on the same close-ended questions used in the survey were added to the study. This was a way of getting more in-depth qualitative data. A quantitative approach was needed, however, to gain a "descriptive account of the wider framework" (Gillham, 2008, p. 38). IRB approval of the study design was granted on October 7, 2013 (see Appendix C).

The majority of Saudi international students in the U.S. are King Abdullah scholarship program (KASP) students. The Saudi Cultural Mission (SACM), which oversees Saudi scholarship students in the U.S., reported that there were 100,000 Saudi scholarship

students in the U.S. in 2013. No data was available on how many Saudi non-scholarship students there were in the U.S. in 2013. Estimates that in 2013 an additional 200 non-scholarship Saudi students were in the U.S. studying at the Bachelors level or higher and paying their own tuition may have been too high.

The sampling method

Using a method of determining sample size discussed in Dillman, Smyth, and Christian (2009), it was determined that for a 95% confidence level and a 3% margin error at a 50/50 split, a scholarship student sample size of 1,056 and a non-scholarship student sample size of 111 were needed. Initially, SACM's list of 100,000 students in colleges and universities in various U.S. states was to be used as a sampling frame from which 5,000 Saudi students would be randomly selected and a stratified sample based on location in the U.S. formed from that random sample. However, just before SACM was to distribute the survey, SACM reversed its decision and stated that it would not be able to distribute the survey due to a new ruling by the Saudi Ministry of the Interior (see Appendices D and E). This had a harmful effect on the study design. Without a sampling frame representing almost the entire population, there was nothing to do but post the survey on Facebook (see Appendix F)) and use a convenience and snowball sampling methods to select study participants.

An invitation to participate in the survey was posted on two Facebook pages, one that is dedicated to Saudi students in the U.S., and one belonging to SACM. These sites attracted both scholarship and non-scholarship student respondents, and most respondents

participated in the survey from these sites within the first few days of posting the survey. In addition, links to the survey were distributed by email separately to a group of about 20 Saudi students known to me personally, who were asked to distribute the link to the survey to other Saudi students. Using this second method, I was able to send an invitation to respond to the survey to about 70 additional people meeting population requirements. The second group of respondents received reminder emails. Reminder emails have been proven to increase responses rates sometimes by as much as 50% (Dillman, Smyth, and Christian, 2009; Gillham, 2008), but unfortunately no reminders could be sent to participants who saw the link to the survey on a Facebook page. The announcement on the Facebook site dedicated to Saudi students in the U.S. was moved up to the top of the page after a few days, but this did not increase response rates.

Completing the survey, hosted by Survey Monkey, took respondents about 15 minutes. Trial tests of my first survey draft showed that a longer survey would not work well with the population. Trial participants complained that they did not want to do a long survey. In a discussion of survey effects, Larossi (2006) reported that long surveys both discourage participation and affect response accuracy by hurting respondents' attention to question wording. I therefore removed from my final survey draft many questions that I would have liked to include. Unfortunately, this may have introduced measurement error. In a short survey I could not use any of the measurement scales developed and tested by other researchers to measure variables in a valid way. Instead of measuring a variable like open-mindedness, I had to ask participants to self-report. This problem led me to the

conclusion that surveys are not the best instruments to use when many different kinds of questions need to be asked but the population is time-sensitive.

The survey was conducted from October 9, 2013 to October 31, 2013. Three hundred and sixty-three Saudi international students in the U.S. voluntarily participated in the survey and 100% of them submitted valid questionnaires. The gender ratio of the sample was 254 to 102 (male to female) (N=363, 7 missing). The high proportion of men to women was consistent with the ratio of men to women in the Saudi student scholarship group (See Table 1: Demographic Sample Frequencies). Approximately 30% of King Abdullah Scholarship Program students in 2013 were female, and the majority of them were studying for advanced degrees (Kurtz, 2012).

Table 1: Demographic Sample Frequencies

	Students	Frequency	Percent	Cumulative Percent
Student status*	Scholarship	346	95.3	96.1
	Nonscholarship	14	3.9	100.0
Gender**	Male	254	70.0	71.3
	Female	102	28.1	100.0

Saudi students included in the analysis were between the ages of 18 and 57, with 46.8% being between the ages of 18 to 25, 45.2% being between the ages of 26 to 33, 7.2% between the ages of 34 to 41, and .3% each between the ages of 42 and 49 and 50 and 57. Students were distributed throughout the U.S. states, with the largest proportions being in Virginia (9.9%), California (8.5%), Ohio (7.2%), Texas (5.8%), and Pennsylvania (5.5%). Because the study sample constituted only .03% of the total

population of Saudi international students in the U.S. in 2013, however, the findings must be qualified.

Four (4) interview participants selected by the convenience method were asked to answer the same questions used in the survey, but the interview design allowed for open-ended answers. All four interviewees were Saudi women studying in the U.S. on scholarships. One was married without children, one was married with children, and two were single. All were in the 18-27 age range.

Measures

The survey (see Appendix A) was a 35-41 item questionnaire (6 questions were contingent on answering other questions in specific ways) measuring independent variables consisting of background demographic variables (including family relationship variables), personality or psychological variables, quality of experience in the U.S. variables, and place perception variables hypothesized to be related to the dependent variable. When designing the survey, a decision was made to include in the study as many of the variables the literature identified as important as possible.

The question order was revised after a trial test of the survey, and the new order was tested again for unwanted question order effects. The order of answer options was set to flip randomly in Survey Monkey to help prevent question order bias. Survey respondents did not have to answer any questions they did not want to answer. Survey Monkey prevented any respondent from completing the survey more than once from the same computer.

The dependent variable was how long the student wished to stay in the U.S. after completing the highest level of study intended. It was ordered by category of time:

- (1) Only as much time as it takes me to pack up my things and go
- (2) 2-3 weeks
- (3) 1-6 months
- (4) 7-11 months
- (5) 1-2 years
- (6) 3-5 years
- (7) 6-8 years
- (8) 9-11 years
- (9) 12-20 years
- (10) More than 20 years
- (11) Permanently

For purposes of statistical analysis, the first four categories were treated as missing data. The remaining categories were used to classify someone as having a definite wish to stay after completing his or her studies. However, all values were included when analyzing interviewees' answers to this question.

Family relationships conditions favorable to wishing to stay in the U.S. were hypothesized as being single (not separated from spouses and children) or being married with spouses and children living in the U.S.; having family in the U.S. whose status is that of permanent resident; having family members in Saudi Arabia who visit at least once a year; and having family who would want the student to stay in the U.S. if he or she got a job in the U.S.

The presence of nuclear family members in the U.S. was operationalized as spouse and children living with the student in the U.S. all year, if the student was married. Not having to give up extended family relationships if the student (single or married) stayed in the U.S. was measured by the number of times a student's larger family (parents and siblings) visited him or her in the U.S. per year. The presence of family migration networks in the U.S. was measured by the presence of family as permanent residents in the U.S. Family psychological or moral support for or possible pressure on making the decision to stay was measured by whether the student's parents would want the student to stay if he or she got a job in the U.S. Family financial resources (money available to use) were measured by whether the student reported that he or she will have the financial resources to move to the U.S.

Prior familiarity with the U.S. in the context of family travel was operationalized as the number of times the student visited the U.S. prior to studying in the U.S. Previous mobility history was operationalized as the number of trips abroad (including to the U.S.) the respondent has taken during his/her life.

Having had enough time to become familiar with U.S. culture was measured by the length of time the student had been studying in the U.S. as of the survey date. Liking the U.S. was measured by whether the student was extending his or her studies in the U.S. and whether the student reported that he or she was mainly extending his or her studies to continue living in the U.S.

Degree of successful social adaptation was measured by the extent to which the student was satisfied with relationships he or she had established with other people living permanently in the U.S. and by satisfaction with residence in the U.S. Satisfaction with residence in the U.S. was measured by how much the respondent liked his/her U.S. city or town.

Attractivity of residence in the U.S. was measured by characteristics of the U.S. state the student lived in, as determined by the researcher's knowledge of U.S. states and what Saudis find desirable and attractive. Attractivity of residence in Saudi Arabia was measured by the characteristics of the city where the student reported being from, as determined by the researcher's knowledge of these characteristics' attractivity.

Perceptions of place utility were assessed using six items: work opportunity, standard of living, climate, housing issues, access to services, and opportunities for self-development. These appeared in a matrix question format in the survey.

Prior professional contracts influencing the stay/go wish were operationalized as an existing job in the U.S. and/or in Saudi Arabia. Future professional contracts influencing the stay/go wish were operationalized as promises of a job in the U.S. and/or in Saudi Arabia.

A desire to avoid negative home conditions was operationalized as a preference for living somewhere other than Saudi Arabia because the student reported things happening in Saudi Arabia that he or she didn't like. This desire is sometimes called a "preservation

factor” (Chirkov, Vansteenkiste, Tao and Lynch, 2006; Chirkov, Safdar, Guzman, and Playford, 2008).

A number of psychological factors were also measured. Being open-minded was measured by self-report: whether the student reported that he or she was very or moderately or somewhat open-minded. Having become more open-minded was measured by whether the student reported that he or she had become more open-minded as a result of his or her experience in the U.S. Highly valuing self-development was measured by whether the student rated self-development as very important. Highly valuing personal freedom was measured by whether the student rated personal freedom as very important. Valuing professional development more than geographical closeness to family was measured by self-report. The degree to which the student’s attitude toward freedom and restrictive social norms influenced his or her place preference was measured by how much influence the student reported these factors had on his or her place preference.

Data Analysis

To address the research questions and test the hypotheses, interview data were analyzed qualitatively and survey data were analyzed quantitatively. Descriptive statistics were collected and a multivariate analysis of survey responses was done, using SPSS version 21. Because the dependent variable had ordered categories, an ordered logistic regression was used. Ordered logistic regression explains variation in a dependent variable with an ordinal level of measurement, or different ordered categories. It determines the probability of a unit (e.g., individual) being on a higher or lower category

of the dependent variable when the individual moves up one unit on an independent variable (for continuous independent variables) or when comparing two categories on the independent variable (for nominal and ordinal independent variables).

Descriptive statistics of all the variables included in the bivariate analyses and ordered logistic regression are included in Table 2: Descriptive Statistics on the next page. These variables were kept in the regression analysis after a first regression analysis revealed that some variables represented by the questions found not to be significant could be removed from the analysis. The intention was to reduce the number of variables in the final analysis.

Table 2. Descriptive Statistics

Variable	N		Mean	Med.	Mode	SD	Var.	Min.	Max.	Percentiles		
	Valid	Miss.								25	50	75
Wish to stay	326	37	2.263	1.000	1.00	2.15500	4.644	1.00	8.00	1.000	1.000	3.000
Plan to extend studies beyond current level	351	12	1.290	1.000	1.00	.45469	.207	1.00	2.00	1.000	1.000	2.000
Likes area of living in U.S.	354	9	2.929	3.000	3.00	.83350	.695	1.00	4.00	2.000	3.000	4.000
Satisfied with relations in U.S.	350	13	2.408	2.000	2.00	1.19283	1.423	1.00	5.00	1.000	2.000	3.000
Value orientation is open-minded	340	23	3.376	4.000	4.00	1.60550	2.578	1.00	7.00	2.000	4.000	4.000
Became more open-minded in U.S.	339	24	2.705	3.000	3.00	.94915	.901	1.00	4.00	2.000	3.000	3.000
Value self-development highly	332	31	1.400	1.000	1.00	1.02199	1.044	1.00	5.00	1.000	1.000	1.000
Value personal freedom highly	333	30	1.522	1.000	1.00	.94595	.895	1.00	5.00	1.000	1.000	2.000
Value professional development more than closeness to family	331	32	1.706	2.000	2.00	.45585	.208	1.00	2.00	1.000	2.000	2.000
Amount of travel abroad (non-U.S.)	331	32	3.543	4.000	5.00	1.45239	2.109	1.00	5.00	2.000	4.000	5.000
Amount of travel abroad (U.S.)	328	35	1.588	1.000	1.00	1.11349	1.240	1.00	5.00	1.000	1.000	2.000
Family members are permanent residents of U.S	328	35	1.817	2.000	2.00	.38720	.150	1.00	2.00	2.000	2.000	2.000
Family visits per yr	330	33	2.278	2.000	1.00	1.53019	2.341	1.00	5.00	1.000	2.000	3.000
Job in KSA	329	34	1.762	2.000	2.00	.42594	.181	1.00	2.00	2.000	2.000	2.000
Job in U.S.	328	35	1.923	2.000	2.00	.26575	.071	1.00	2.00	2.000	2.000	2.000
Promised job in KSA	328	35	1.759	2.000	2.00	.42825	.183	1.00	2.00	2.000	2.000	2.000
Promised job in U.S.	329	34	1.917	2.000	2.00	.27488	.076	1.00	2.00	2.000	2.000	2.000
Can afford to move to U.S.	326	37	1.533	2.000	2.00	.49963	.250	1.00	2.00	1.000	2.000	2.000
Parents would be happy if got job and stayed in U.S.	324	39	1.728	2.000	2.00	.44548	.198	1.00	2.00	1.000	2.000	2.000
Length of planned stay after graduating highest level study	326	37	1.604	1.000	1.00	1.47174	2.166	1.00	8.00	1.000	1.000	1.000
Return intention changed while in U.S.	324	39	1.611	2.000	2.00	.48825	.238	1.00	2.00	1.000	2.000	2.000
Where better job opportunities	319	44	.5423	1.000	1.00	.49899	.249	.00	1.00	.0000	1.000	1.000
Where higher standard of living	320	43	.5156	1.000	1.00	.50054	.251	.00	1.00	.0000	1.000	1.000
Where better climate	317	46	.7603	1.000	1.00	.42760	.183	.00	1.00	1.000	1.000	1.000
Where better housing opportunities	318	45	.5629	1.000	1.00	.49681	.247	.00	1.00	.0000	1.000	1.000
Where better access to services	319	44	.8245	1.000	1.00	.38103	.145	.00	1.00	1.000	1.000	1.000
Where better opportunities to develop self	319	44	.9091	1.000	1.00	.28793	.083	.00	1.00	1.000	1.000	1.000
Importance of rules about men and women	316	47	2.803	3.000	3.00	1.40276	1.968	1.00	5.00	1.000	3.000	4.000
Do not like something in KSA, want to live elsewhere	310	53	3.071	3.000	5.00	1.48175	2.196	1.00	5.00	2.000	3.000	5.000
Age	362	1	1.616	2.000	1.00	.65658	.431	1.00	5.00	1.000	2.000	2.000
Gender	356	7	1.286	1.000	1.00	.45277	.205	1.00	2.00	1.000	1.000	2.000
Family status or household type	361	2	1.695	1.000	1.00	.87952	.774	1.00	3.00	1.000	1.000	3.000
If married, spouse living in U.S. too	48	315	1.291	1.000	1.00	.61742	.381	1.00	3.00	1.000	1.000	1.000
If married with children, spouse and children in U.S. too	101	262	1.198	1.000	1.00	.52952	.280	1.00	3.00	1.000	1.000	1.000
Length of time studying in the U.S.	355	8	2.588	3.000	3.00	1.02229	1.045	1.00	5.00	2.000	3.000	3.000
Extending studies mainly to continue in U.S.	256	107	1.671	2.000	2.00	.47045	.221	1.00	2.00	1.000	2.000	2.000
Pre-move migration intentions	193	170	1.860	2.000	2.00	.34778	.121	1.00	2.00	2.000	2.000	2.000

N=363

Chapter IV

Findings

Quantitative Analysis

The quantitative results are based on using almost all 41 of the survey questions in SPSS 21, since many questions measure the independent variables in the thirteen hypotheses and many others were considered control variables. Control variables are other possible causes of the dependent variable that were not contained in the hypotheses.

Data for the dependent variable (the length of time the student wished to stay in the U.S. after completing the highest level of study intended) were available for 326 people or 89.8% of the sample (N=363) (See Table 3, below). All responses in categories 1-4 were put into a new category called "less than a 1", which meant creating 2 new values for the question measuring the dependent variable.

Table 3: Wish to Stay Frequencies of Saudi Students in the U.S.

		Frequency	Percent	Cumulative Percent
Saudi Students in the U.S.	Only as much time as it takes me to pack up my things	71	19.6	21.8
	2-3 weeks	44	12.1	35.3
	1-6 months	62	17.1	54.3
	7-11 months	17	4.7	59.5
	1-2 years	45	12.4	73.3
	3-5 years	38	10.5	85.0
	6-8 years	6	1.7	86.8
	9-11 years	5	1.4	88.3
	12-20 years	3	.8	89..3
	More than 20 years	7	1.9	91.4
	Permanently	28	7.7	100.0

Bivariate Analyses

Interpretations of bivariate analyses (see Appendix G: Bivariate tables) are as follows:

The independent samples t-test of the variable “extending studies mainly to continue living in the U.S.” and the dependent variable, the length of time the student wished to stay in the U.S. after completing the highest level of study intended, indicated that people who answered yes to whether they were extending their studies mainly to continue living in the U.S. had a higher mean score on the length of time they wished to stay in the U.S. compared to people who answered no, and the mean scores for both the yes and no groups were statistically significant ($p < 0.05$) different from each other. This is based on the t-test statistic that assumes variances are equal, since the p-value for the F-test is above 0.05. This t-test statistic is -6.441, with a value of .000.

The independent samples t-test of gender and the dependent variable indicated that the mean scores for both women and men on the length of time they wished to stay in the U.S. after completing all intended studies were NOT statistically significant ($p < 0.05$) different from each other. This is based on the t-test statistic that assumes variances are equal, since the p-value for the F-test is above 0.05. This t-test statistic is -0.718, with a value of 0.473.

The post-hoc ANOVA test of marital status, or household type, and the dependent variable indicated that there were no statistically significant ($p < 0.05$) differences between responses to one’s family status, or household type, and the mean score on the length of time the student wished to stay in the U.S. after completing all intended studies.

The post-hoc ANOVA test of whether the student's spouse was living with him or her in the U.S. and the dependent variable indicated that there were no statistically significant ($p < 0.05$) differences between responses to one's spouse living in the U.S. and the student's mean score on the length of time he or she wished to stay in the U.S. after completing all intended studies. The post-hoc ANOVA test of whether both spouse and children were living with the student in the U.S. and the dependent variable indicated that there were NO statistically significant ($p < 0.05$) differences between responses to one's spouse and children living in the U.S. and the mean score on the length of time the student wished to stay in the U.S. after completing all intended studies.

The post-hoc ANOVA test of the length of time the student had been studying in the U.S. and the dependent variable indicated that there were NO statistically significant ($p < 0.05$) differences between responses to length of time studying in the U.S. and the mean score on the length of time the student wished to stay in the U.S. after completing all intended studies. Students who had been in the U.S. less than one year did not differ significantly from those who had been in the U.S. longer in the length of their wish to stay in the U.S. after completing all intended studies.

The independent samples t-test of having pre-move migration intentions and the independent variable indicated that people who answered yes to having pre-move migration intentions had a higher mean score on the length of time they wished to stay in the U.S. after completing all intended studies than people who answered no, and the mean scores for each group were statistically different from each other at the $p < 0.05$

level. This is based on the t-test statistic that assumes variances are NOT equal, since the p-value for the F-test is below 0.05. This t-test statistic is 3.632, with a p-value of 0.001.

Ordered Logistic Regression

Ordered logistic regression was performed to measure which variables might be related to the wish to stay in the U.S. for a year or more after completing the highest level of study intended (see Table 6: Ordered Logistic Regression). A total of 37 variables were included in the final regression analysis.

The 2-log likelihood (see Table 4: Model Fitting Information) indicated that the model was a statistically significant improvement from a model that included no predictors/independent variables (or an “intercept only” model). If the statistic for the “Final” model is lower than the “Intercept only” model, and if the former is statistically significant, then the model with predictors (i.e., the “Final” model) is better than the “Intercept Only” model.

Table 4: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	718.192			
Final	469.441	248.751	66	.000

Goodness of fit measures indicate how well a regression model fits the data, or how good a model is at explaining variation in the DV: the amount of time a student wishes to stay. A good fitting model will indicate that the Pearson and Deviance Chi-Square measures are *not* statistically significant at the p-value less than 0.05. As indicated in

Table 5, the Pearson and Deviance measures provide mixed support for how well the regression model (with 28 independent variables) fits the data, or can explain all the variation in the DV. The large Chi-Square value for the Pearson measure, with a p-value that is less than 0.05, indicates that the model is not a good one. On the other hand, the much smaller Chi-Square value for the Deviance measure, with a p-value that is less than 0.05, indicates that the model is a good one.

Table 5: Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	8372.534	1866	.000
Deviance	469.441	1866	1.000

Interpretations in the next paragraph are of the “Estimates” found on Table 6: Ordered Logistic Regression. These estimates had a “Sig.” level below 0.05, which means that I am more than 95% certain that the estimate was not due to sampling error. For all analyses, probability values below 0.05 were considered significant.

Logistic regression results showed that eleven of the thirty four independent variables included in the analysis had a statistically significant relation to the dependent variable. These are presented by category of variable in the list below.

Several results concerned the quality of experience in the U.S. variables. Two were found to be significant.

- The extent to which the student likes the U.S. city/town where he or she lives—
Compared to the highest group (I like the US city/town where I am living in almost every way), people who like the US city/town where they are living only a little

(group 2) will be *less* likely to want to stay longer, controlling for all other variables in the regression model.

- The extent to which the student is satisfied with the relationships he or she has established with other people living permanently in the U.S. (American and non-American)—Compared to the highest group (very unsatisfied), people who are more satisfied with the *relationships* they have established in the U.S. (groups 1-4) will be *less* likely to want to stay longer, controlling for all other variables in the regression model.

Several results were related to psychological variables or values. Three were found to be significant.

- The importance to the student to be able to develop him or herself as a person—Compared to the highest group (very unimportant), people who feel it is very important or somewhat important to develop personally (groups 1 and 2) will be *less* likely to want to stay longer, controlling for all other variables in the regression model.
- The importance of personal freedom—Compared to the highest group (very unimportant), people who feel it is very important, somewhat important, and neither important nor unimportant (groups 1-3) to have personal freedom will be *more* likely to want to stay longer, controlling for all other variables in the regression model.

- The extent to which the student's attitude toward rules about what men and women can and cannot do in either country affect his or her preference for one place or another—Compared to the highest group (people who absolutely agree with the statement that the rules about what men and women can and cannot do affect their place of living preference), people who agree only a little with the statement that rules about what men and women can and cannot do affect their place of living preference (group 2) will be *less* likely to want to stay longer, controlling for all other variables in the regression model.

Several results were related to background demographic variables. Two were found to be significant.

- How many times the student traveled abroad (to countries other than the U.S.) before coming to study in the U.S.—Compared to the highest group (more than 8 times), people who have traveled only 3-4 times to non-US countries (group 3) will be *less* likely to want to stay longer, controlling for all other variables in the regression model.
- Whether the student would have enough money to move to the U.S. if he or she got a job in the U.S. and could stay in the U.S.—Compared to the highest group (people who don't have enough money), people who have enough money to move to the U.S. if offered a job in the U.S. (group 1) will be *more* likely to want to stay longer, controlling for all other variables in the regression model.

One result concerned a family relationship variable. Several had been included in the analysis, but only one variable was found to be significant.

- Whether the student has family members who live in the U.S. as permanent residents—Compared to the highest group (people who have no family members who are permanent residents of the U.S.), people who have family members in the U.S. who are permanent residents of the U.S. (groups 1), will be *more* likely to want to stay longer, controlling for all other variables in the regression model.

Other results related to perception of place utility variables. A number of these had been included in the analysis, but only three were found to be significant.

- Students who perceive that housing opportunities are more favorable to them in one of the two countries or equally favorable in both—Compared to the highest group (people who think that the U.S. or both the U.S. and KSA have better housing opportunities), people who think that only KSA has better housing opportunities (group 1) will be *less* likely to want to stay longer, controlling for all other variables in the regression model.
- Students who perceive that they will have more opportunities to develop themselves personally in the U.S. or equal opportunities to do this in both countries—Compared to the highest group (people who think that the US or both the US and KSA have good opportunities to develop as a person), people who think that only KSA has better opportunities to develop as a person (group 1) will be *less* likely to want to stay longer, controlling for all other variables in the regression model.

- The extent to which the student agrees with the statement that because things are happening in Saudi Arabia that he or she doesn't like, he or she feels the need to live elsewhere—Compared to the highest group (people who strongly disagree with the statement that there are things happening in KSA that cause them to want to live somewhere else), people who strongly agree or somewhat agree (groups 1 and 2) with the statement that there are things happening in KSA that cause them to want to live somewhere else will be *less* likely to want to stay longer, controlling for all other variables in the regression model.

Several study hypotheses found some support. Hypothesis 3, concerning valuing personal freedom highly, found relatively strong support because three of the five categories for this variable were statistically significant. The three statistically significant lower categories say that when personal freedom is more important, people will want to stay longer compared to people who say the personal freedom is very unimportant. Hypothesis 5, concerning having family members who are permanent residents of the U.S., found some support. Hypothesis 9, concerning liking the U.S. city or town where they live, also found some support. Hypothesis 11, concerning having enough money to move to the U.S., found some support. And hypothesis 12, concerning having perceptions of place favorable to the U.S. or judging the U.S. and KSA equal in these respects, also found some support.

However, many variables hypothesized to be correlated with the wish to stay showed no statistically significant relation in the regression analysis. These are listed below:

- Gender
- History of visiting the U.S. at least once prior to studying in the U.S.
- Seeing themselves as at least moderately open-minded
- Valuing professional development more than geographic closeness to family members
- Having family in Saudi Arabia who visit them in the U.S. at least once a year
- If married, living with spouse and children in the U.S.
- Having parents who would be happy for them if they got a job in the U.S. and stayed in the U.S.

Table 6 (below) contains the results from the ordered logistic regression analysis. The table is presented on the following three pages.

Table 6: Ordered Logistic Regression

		Estimate	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Threshold	[wish to stay=1-2 years]	-19.782	4849.948	.997	-9525.506	9485.941
	[wish to stay=3-5 years]	-18.383	4849.948	.997	-9524.106	9487.341
	[wish to stay=6-8 years]	-16.817	4849.948	.997	-9522.541	9488.907
	[wish to stay=9-11 years]	-16.508	4849.948	.997	-9522.232	9489.215
	[wish to stay=12-20 years]	-16.235	4849.948	.997	-9521.959	9489.488
	[wish to stay=More than 20 years]	-16.017	4849.948	.997	-9521.740	9489.707
	[wish to stay=Permanently]	-15.695	4849.948	.997	-9521.419	9490.028
	[plan to extent studies=yes]	.502	.420	.232	-.321	1.324
	[plan to extent studies =no]	0 ^a	.	.	.	.
	[like city or town where living=don't like it at all]	-.560	.928	.547	-2.380	1.260
Location	[like city or town where living =like it only a little]	-1.192	.607	.050*	-2.382	-.002
	[like city or town where living =like it in most ways]	-.568	.405	.161	-1.362	.226
	[like city or town where living =like it in almost every way]	0 ^a	.	.	.	.
	[extent satisfied with relationships=very]	-1.434	.728	.049*	-2.860	-.008
	[extent satisfied with relationships =moderately]	-1.685	.733	.021*	-3.122	-.249
	[extent satisfied with relationships =neither satisfied nor unsatisfied]	-2.036	.815	.012*	-3.633	-.439
	[extent satisfied with relationships =moderately unsatisfied]	-1.865	.818	.023*	-3.468	-.263
	[extent satisfied with relationships =very unsatisfied]	0 ^a	.	.	.	.
	[value orientation=very open-minded]	-.407	1.234	.741	-2.825	2.010
	[value orientation =moderately open-minded]	-.371	1.254	.767	-2.828	2.085
	[value orientation =somewhat more open-minded than conservative]	-.667	1.276	.601	-3.168	1.834
	[value orientation =equally open-minded and conservative]	-.600	1.251	.631	-3.052	1.852
	[value orientation =somewhat more conservative than open-minded]	-1.934	1.476	.190	-4.828	.960
	[value orientation =moderately conservative]	-.154	1.346	.909	-2.792	2.484
	[value orientation =very conservative]	0 ^a	.	.	.	.
	[became more open-minded=not at all]	.495	.606	.414	-.692	1.682
	[became more open-minded =only a very little]	.834	.591	.158	-.324	1.993
	[became more open-minded =somewhat]	.692	.481	.150	-.251	1.634
	[became more open-minded =very much]	0 ^a	.	.	.	.
	[import of self-development=very]	-2.357	.814	.004**	-3.953	-.760
	[import of self-development =somewhat]	-2.219	1.046	.034*	-4.269	-.168
	[import of self-development =neither important nor unimportant]	-2.183	2.157	.311	-6.409	2.044
	[import of self-development =somewhat unimportant]	1.357	2.063	.511	-2.686	5.401
	[import of self-development =very unimportant]	0 ^a	.	.	.	.
	[import of personal freedom=very]	4.919	1.735	.005**	1.518	8.319
	[import of personal freedom =somewhat]	5.137	1.786	.004**	1.636	8.638
	[import of personal freedom =neither important nor unimportant]	3.757	1.839	.041*	.153	7.361
	[import of personal freedom =somewhat unimportant]	-14.164	.000	.	-14.164	-14.164

	Estimate	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
[import of personal freedom =very unimimportant]	0 ^a	.	.	.	.
[live near relatives or self-development=live near relatives more important]	-.165	.430	.702	-1.007	.678
[live near relatives or self-development =develop self more important]	0 ^a	.	.	.	.
[Times traveled abroad (non-U.S.)=never]	-.064	.592	.914	-1.224	1.096
[Times traveled abroad (non-U.S.)=1-2 times]	.416	.525	.428	-.613	1.444
[Times traveled abroad (non-U.S.)=3-4 times]	-1.121	.567	.048*	-2.231	-.010
[Times traveled abroad (non-U.S.)=5-7 times]	-.632	.511	.216	-1.634	.370
[Times traveled abroad (non-U.S.)=more than 8 times]	0 ^a	.	.	.	.
[Times traveled abroad (U.S.)=never]	.108	.825	.896	-1.508	1.724
[Times traveled abroad (U.S.)=1-2 times]	-.109	.849	.898	-1.773	1.555
[Times traveled abroad (U.S.)=3-4 times]	.133	1.142	.907	-2.105	2.372
[Times traveled abroad (U.S.)=5-7 times]	-.909	1.248	.467	-3.354	1.537
[Times traveled abroad (U.S.)=more than 8 times]	0 ^a	.	.	.	.
[Family members perm. residents of U.S. =yes]	1.156	.456	.011*	.262	2.050
[Family members perm. residents of U.S. =no]	0 ^a	.	.	.	.
[Number of times family members visit=never]	-.050	.435	.908	-.903	.802
[Number of times family members visit =1-2 times per year]	-.528	.524	.314	-1.556	.499
[Number of times family members visit =3-4 times per year]	-.799	1.022	.434	-2.802	1.204
[Number of times family members visit =5 or more times per year]	-.344	1.397	.805	-3.083	2.394
[Number of times family members visit =They don't; I visit them in KSA]	0 ^a	.	.	.	.
[Has job currently in KSA=yes]	-.301	.455	.508	-1.192	.591
[Has job currently in KSA =no]	0 ^a	.	.	.	.
[Has job currently in U.S.=yes]	.516	.656	.432	-.770	1.802
[Has job currently in U.S.=no]	0 ^a	.	.	.	.
[Promise of job in KSA=yes]	-.650	.457	.155	-1.547	.246
[Promise of job in KSA =no]	0 ^a	.	.	.	.
[Promise of job in U.S. =yes]	.356	.680	.601	-.977	1.689
[Promise of job in U.S. =no]	0 ^a	.	.	.	.
[Financial resources to move=yes]	.818	.367	.026*	.098	1.537
[Financial resources to move=no]	0 ^a	.	.	.	.
[Parents would want student to stay=yes]	.634	.441	.150	-.230	1.498
[Parents would want student to stay =no]	0 ^a	.	.	.	.
[Time plan to stay in U.S.=1-2 years]	-22.014	4849.948	.996	-9527.737	9483.708
[Time plan to stay in U.S.=3-5 years]	-20.824	4849.948	.997	-9526.546	9484.899
[Time plan to stay in U.S.=6-8 years]	-17.823	4849.948	.997	-9523.546	9487.900
[Time plan to stay in U.S.=9-11 years]	-18.105	4849.948	.997	-9523.828	9487.618
[Time plan to stay in U.S.=12-20 years]	-17.471	4849.948	.997	-9523.194	9488.252
[Time plan to stay in U.S.=more than 20 years]	-20.123	4849.948	.997	-9525.846	9485.600
[Time plan to stay in U.S.=permanently]	0 ^a	.	.	.	.

	Estimate	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
[Change of return intention while in U.S.=yes]	-.103	.367	.779	-.822	.616
[Change of return intention while in U.S.=no]	0 ^a	.	.	.	.
[Where perceives better job opportunities =U.S. or U.S. and KSA are equal]	-.147	.374	.694	-.881	.587
[Where perceives better job opportunities _two_categories=KSA]	0 ^a	.	.	.	.
[Where perceives higher standard living = U.S. or U.S. and KSA are equal]	.019	.396	.962	-.757	.794
[Where perceives higher standard living =KSA]	0 ^a	.	.	.	.
[Where climate more suitable = U.S. or U.S. and KSA are equal]	-.114	.488	.816	-1.071	.844
[Where climate more suitable =KSA]	0 ^a	.	.	.	.
[Where perceives favorable housing opp's = U.S. or U.S. and KSA equal]	-.893	.400	.026*	-1.678	-.108
[Where perceives favorable housing opp's =KSA]	0 ^a	.	.	.	.
[Where perceives better access to services = U.S. or U.S. and KSA are equal]	.501	.586	.392	-.648	1.650
[Where perceives better access to services=KSA]	0 ^a	.	.	.	.
[Where perceives more self-dev. opportunities = U.S. or U.S. and KSA equal]	-3.668	1.191	.002**	-6.003	-1.334
[Where perceives more self-dev. opportunities=KSA]	0 ^a	.	.	.	.
[Attitude toward social rules=not at all]	-.065	.543	.904	-1.130	.999
[Attitude toward social rules =only a little]	-1.554	.632	.014*	-2.793	-.315
[Attitude toward social rules =somewhat]	.157	.508	.757	-.838	1.152
[Attitude toward social rules =very much]	-.384	.621	.537	-1.600	.833
[Attitude toward social rules =absolutely]	0 ^a	.	.	.	.
[Feel need to live outside KSA=strongly agree]	2.819	.591	.000***	1.660	3.978
[Feel need to live outside KSA =somewhat agree]	1.461	.575	.011*	.334	2.587
[Feel need to live outside KSA =neither agree nor disagree]	.894	.606	.140	-.294	2.081
[Feel need to live outside KSA =somewhat disagree]	.162	.665	.808	-1.141	1.465
[Feel need to live outside KSA =strongly disagree]	0 ^a	.	.	.	.

a = is the base category, which is set at zero.

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Qualitative Analysis

Quantitative results are based on analyzing four interviews with Saudi students. The students reported a range of answers concerning the dependent variable, how long they wished to stay after completing the highest level of study they intended to complete: no extra time, six months, three years, and six to eight years.

One interviewee, who at the time of being interviewed knew she would be in the U.S. another seven years to complete her medical training, said she did not wish to stay after she completed this training, but she did hope to return to the U.S. to visit. Another interviewee wished to stay six months after completing the highest level of study she intended to complete. She wanted to use that time to relax and travel around in the U.S.; she wanted to be a tourist because she had not had a chance to be a tourist while she was studying. A third interviewee reported wanting to stay three years after completing the highest level of study she intended to complete. She thought that a three-year period would give her enough time to gain work experience that would be useful to her when she returned to Saudi Arabia and looked for a job. The fourth interviewee wished to stay six to eight years after completing the highest level of study she intended to complete. Her reasons for this were similar to the third interviewee: she wanted to develop her career and thought that gaining work experience in the U.S. would give her an advantage in the job market in Saudi Arabia. However, she also wanted to stay in the U.S. because it was “more fun” in the U.S. compared to Riyadh, where she was from. But most important, she had two small children, both of whom had been born in the U.S. and who

thus had American citizenship status. The oldest of these children was already in school, and she wanted both her children to be educated in American schools, where they would learn English and obtain other benefits from an American education. This interviewee was extending her studies beyond her current level only because she wanted to continue living in the U.S.

An analysis of interview data in general supported more of the study's hypotheses than a quantitative analysis of survey data. However, the interview sample is very small, so results must be qualified. With only female interviewees, no data could be collected about gender, the variable in hypothesis 1.

Concerning hypothesis 2, all interviewees saw themselves as equally open-minded and conservative or slightly more conservative than open-minded. In all cases they identified their conservative orientation with their religious orientation but were willing to be open-minded about what did not directly conflict with their religious beliefs. However, all agreed that they had become slightly more open-minded after living in the U.S., and three of the women said that their experience of driving in the U.S. played an important role in their becoming slightly more open-minded. None of the women thought of themselves as moderately open-minded, which was hypothesized to be related to the wish to stay in the U.S. at least a year after completing the highest level of intended studies. So interview data did not support the hypothesis about open-mindedness.

Hypothesis 3, concerning the importance of personal freedom to the student, was not fully supported by interview data, although it was strongly supported by an analysis of

survey data. The interviewee who wished to stay six to eight years rated personal freedom as only somewhat important, though she spoke positively of freedom of speech and personality, the freedom not to be judged, and the freedom to drive, which she said makes women stronger. The interviewee who wished to stay three years stated that she has the same freedom in Saudi Arabia as she has in the U.S., but like the other interviewee, she mentioned the freedom to drive as being important to her. The interviewee who wanted to stay six months to relax and be a tourist was careful to say that personal freedom was important, but unrestricted freedom was bad. However, she also mentioned the freedom to drive as important to her, and stated that she wanted to be able to drive in Saudi Arabia. The interviewee who did not want to stay for any length of time after completing her studies rated personal freedom the highest, without reservations. She stated that one of the reasons she likes it in the U.S. is that people don't interfere.

Hypothesis 4, concerning the number of visits family members in Saudi Arabia make to the student in the U.S. per year, was not supported by an analysis of the interview data. Both interviewees who wished to stay and interviewees who didn't wish to stay were visited by family members at least once a year. The interviewees who wished to stay the longest reported the most family visits per year, but the interviewee who wished to stay the next longest period of time reported no family visits per year.

Hypothesis 5, concerning whether the student has family members who are permanent residents in the U.S., was somewhat supported by interview data. The interviewee who

wished to stay six to eight years longer had family members who were permanent residents of the U.S., but the others did not.

Hypothesis 6 also seemed to be supported by the interview data, though it was not supported by a statistical analysis of survey data. The interviewee who reported wishing to stay the longest, six to eight years, lived with her husband and children in the U.S. The interview who reported wishing to stay in the U.S. the next longest was in the U.S. with her husband, although her husband was in a university in another state. The interviewees who wished to stay less than a year or only enough time to pack up and go were single.

Hypothesis 7 was also somewhat supported. Both interviewees who reported wishing to stay in the U.S. the longest also reported valuing professional development more highly than geographic closeness to family. The others rated geographical closeness to family as more important or valued both equally. One of them was concerned about aging family members in Saudi Arabia, and the other, rating both equally, said that she was glad for the experience of living alone in the U.S. because it was helping her to become more independent of her parents. Although she viewed it as a necessary stage in her development, she did not think it was more important than geographic closeness to family.

Hypothesis 8 appeared to have been somewhat supported by an analysis of interview data. Both interviewees who reported wishing to stay longest in the U.S. had visited the U.S. before, and the interviewee who wished to stay longest had visited many times. The other interviewees had never visited the U.S. prior to coming to the U.S. to study.

Hypothesis 9 was supported by statistical analysis of survey data and also by a qualitative analysis of interview data: Interviewees who liked the U.S. city or town where they were living in almost every way or very much reported wishing to stay in the U.S. longer than those who reported not liking the city or town where they lived very much.

Hypothesis 10, concerning being very satisfied with relationships the student had made with others living permanently in the U.S., was not supported by statistical analysis or qualitative analysis of interview data. None of the interviewees reported being more than moderately satisfied with relationships with others living permanently in the U.S., and they explained that they generally socialized with other Saudis or other Arab students while they lived in the U.S. The interviewee who did not wish to stay for any length of time after completing her studies stated that she had no American friends because the American culture is too different from Saudi culture; she thought that Americans were very open-minded, but that she was not, and Americans had different habits. The interviewee who wished to stay the longest reported having American friends and relationships with Americans, but rated those relationships as only moderately satisfactory because as a student she didn't have much time for any relationships with others. She explained that people in the U.S. are busier than they are in Saudi Arabia, especially students.

Hypothesis 11 was supported by an analysis of interview data. Students who reported having no financial resources to move to the U.S. did not wish to stay longer than a year

in the U.S. after completing the highest level of studies intended. Both interviewees who wished to stay the longest answered that they had enough money to move to the U.S.

Although a quantitative analysis of survey data showed some support for hypothesis 12, concerning place utility perceptions, the results of analyzing interview data on place utility perceptions did not show support for the complete hypothesis and differed from regression analysis results. The interviewee who wished to stay the longest rated items measuring place utility 4 to 6 in favor of the U.S. But the interviewee who wished to stay only an additional six months to relax and be a tourist before returning home rated these items 5 to 6 in favor of the U.S. The interviewee who wished to stay three years longer and the interviewee who did not wish to stay longer at all both gave the U.S. and KSA a 3 out of 6 rating. All interviewees rated the U.S. as more favorable to them in opportunities for self-development but not in housing opportunities. Three out of four interviewees considered standard of living conditions more favorable to them in Saudi Arabia because of the lack of taxes in Saudi Arabia.

Hypothesis 13 seemed to be supported by an analysis of interview data. The interviewee who wished to stay the longest reported that both parents would want her to stay in the U.S. if she got a job in the U.S. The interviewee who wished to stay the next longest (3 years) reported that her father, but not her mother, would want her to stay in the U.S. if she got a job in the U.S. Both interviewees who wished to stay less than one year after completing the highest level of study intended reported that their parents would not want them to stay in the U.S. if they got jobs in the U.S. The interviewee who said

she would stay only long enough to pack up and go said in a strong voice, “they want me to go back.”

Three out of four interviewees had a partial change of return intentions while they were in the U.S., and all three reported some wish to stay longer after completing their studies. The interviewees who wished to stay the longest reported that they had changed their minds about going back to Saudi Arabia after about a year to two years in the U.S. One mentioned that she had gotten the wrong idea about the U.S. from movies, but after living in the U.S. for a while she realized that it was safe, and she liked the people because they were polite and friendly. The interviewee who felt she needed to be available to aging family members in Saudi Arabia stated that after two years in the U.S., she had had a fantasy about all her family living with her in the U.S. But she realized that in reality she had to go back because her family was there. The interviewee who had no change of return intentions while in the U.S. stated firmly that she knew from the beginning that she would study and go back. When the interviewee who wished to stay longest was questioned about why she wished to stay only six to eight years and not more, she admitted that she wasn’t sure exactly how long she wanted to stay. She could see herself staying about six years, and then a little more, and then a little more, but she didn’t want to give up her Saudi passport, and she wanted to be able to go back some day if she wanted to. Like one of the other interviewees, she was concerned about being able to be with her parents as they got older. On the other hand, concerns about her children’s future were pulling her to stay in the U.S.

Chapter V

Discussion

This study started by asking the following questions: Do Saudi international students in the U.S. wish to stay in the U.S. after they complete the highest level of studies they intend to complete? And if so, how long do they wish to stay? Findings showed that at least 46% of the Saudi students surveyed wished to stay in the U.S. beyond the expiration of their I-20s (these expire 60 days after graduation). 40% wished to stay at least 1 year more in the U.S., and 25% wished to stay various ranges of time from three years longer to permanently. Almost 8% had permanent migration wishes.

Why do they wish to stay? Interview findings showed a variety of reasons why Saudi students wished to remain in the U.S. These included having time to travel as a tourist; gaining work experience in the U.S., since that work experience would be considered valuable when they returned to Saudi Arabia; raising children as Americans; and having more fun and freedom in the U.S. These findings were obtained from only a few interviews, rather than from survey data, and much more could have been learned about Saudi students' reasons for wishing to stay in the U.S. for various lengths of time if a greater number of interviews had been conducted or if surveys had included open-ended questions asking students why they wished to stay.

When did Saudi students acquire the wish to stay longer? Did some students change their minds about returning home while they were in the U.S.? Although some students chose not to answer the question about whether they changed their minds while in the

U.S. about returning to Saudi Arabia after completing their studies, almost 35% of the 324 students who answered this question reported that they had decided while they were living in the U.S. that they would prefer to continue living in the U.S. for many years more or permanently. In other words, at least a third of the Saudi international students surveyed reported that during their study abroad experience they had changed their minds about returning immediately to Saudi Arabia after completing their studies. According to Szelenyi (2006), migration decisions that are effects of the study abroad experience happen in the context of transnationalism and globalization, but they seem to happen as a result of the study abroad experience. Did any of them come to the U.S. wishing to migrate temporarily or permanently? 7% of 193 students who answered the question about pre-move migration intentions reported that they knew before they came to the U.S. that they wanted to find a way to stay in the U.S. after they completed their studies.

This study also asked this question: Which variables are correlated with Saudi students' wish to stay in the U.S. longer after completing the highest level of studies they intend to complete? Following the example of results obtained from other migration studies about the importance of family relationship variables (e.g., De Jong, 1986; De Jong, 2000; Frieze, Hansen, and Boneva, 2006; Alberts and Hazen, 2005; Chirkov, Vanstteenkiste, Tao, and Lynch, 2007; Szelenyi, 2006), family relationship variables were hypothesized to be strongly associated with the wish to stay in the U.S. for longer lengths of time. However, these variables were theorized to work together with other

personal background variables, personality variables, perception of place variables, and quality of experience in the U.S. variables to influence wish to stay outcomes.

To determine the relationships of these variables to the dependent variable, the study tested thirteen factors hypothesized to be significant: gender; being more open-minded or more conservative; valuing personal freedom highly; valuing professional development more than geographic closeness to family; the frequency of family visits to student in the U.S.; having family members who were permanent residents of the U.S.; if married, having spouse and children present in the U.S.; having parents who would be happy for the student if he or she got a job in the U.S. and stayed in the U.S.; having had prior contact with the U.S. through travel; having enough money to move to the U.S.; liking the city or town in the U.S. where they live; being satisfied with relationships established with people who live as permanent residents in the U.S.; and perceiving more utility in the U.S. or equal utility to KSA on a number of place utility measures. The study also tested a number of control variables that might be significant.

Of the variables tested, logistic regression analysis showed that 11 were significantly related to the wish to stay longer in the U.S. (1) valuing personal freedom highly, (2) having family members who were permanent residents of the U.S., (3) having enough money to move to the U.S., (4) liking the city or town where the student lived in the U.S. (5) being satisfied with relationships established with permanent residents of the U.S., (6) valuing self-development highly, (7) perceiving housing opportunities as more favorable in the U.S. or equal in both the U.S. and KSA, (8) perceiving more self-development

opportunities in the U.S. or in both the U.S. and KSA equally, (9) having previously travelled abroad many times (not to the U.S.); (10) feeling the need to live outside KSA because of things happening in KSA; and (11) believing that the rules about what men and women can and cannot do in either country have important effects on the student's place preference. Of these, greater satisfaction with relationships established with people living permanently in the U.S., valuing self-development, and feeling the need to live outside KSA because of things happening in KSA were negatively associated with the dependent variable.

Gender was not found to be significantly related to the wish to stay in the U.S. for longer periods of time. Female Saudi students may experience more freedom in the U.S. than in Saudi Arabia, but this does not make them more likely than men to wish to stay in the U.S. longer after they complete their studies. Other variables must be more significant than gender in this relationship

It was hypothesized that a number of family relationship variables would be significant in relation to the wish to stay in the U.S. longer. However, regression analysis did not support many of the hypotheses, though an analysis of interview data did support them. Variables not found to be statistically significant in the regression analysis were the following: If married, whether the spouse was living in the U.S. also, or if married with children, whether the spouse and children were living in the U.S. also; whether the extended family in Saudi Arabia was able to visit the student at least once a year in the U.S.; and whether the student had parents who would be happy if he or she got a job in

the U.S. and could stay in the U.S. However, having family members that live in the U.S. as permanent residents was found to be statistically significant.

These results might be interpreted as follows: although family relationship variables have been found to be important in migration decision-making, studies have generally found that those who wish to migrate or intend to migrate are less influenced by these variables than they are by other variables. It may be enough to have family members who are permanent residents of the U.S., a kind of migration network, but really a family network. With these family members present in the U.S., the student who wishes to stay longer does not have to feel that he or she will completely give up family relationships if he or she stays, and the number of visits family in Saudi Arabia make to the student in the U.S. may not be important therefore, especially if the student can visit those family members in Saudi Arabia. Family members who are permanent residents of the U.S. represent a stable family presence that makes up for the lack of spouse and children in the U.S., and they provide a sense of family relatedness in the U.S. that acts as an opposite force to the pull coming from Saudi Arabia for family relatedness there.

Having enough money to move to the U.S. also had a statistically significant relationship with the dependent variable. Since many students are still financially dependent on their families, having enough money to move to the U.S. might be considered a family-related variable. A more in-depth exploration of this finding might use interviews to determine if having the money to move to the U.S. meant that the student perceived his or her family as supportive of a longer stay or move to the U.S.

Only a number of personality or psychological variables hypothesized to be strongly associated with the wish to stay longer in the U.S. after completing the highest level of study intended were shown to be statistically significant. Perceiving oneself to be at least moderately open-minded was not significant. Valuing professional development over geographic closeness to family members was not significant, and this seems to go against findings in other studies which contrast achievement motivation with affiliation motivation (e.g., Frieze, Hansen, and Boneva, 2006). Saudi students who valued professional development over geographic closeness to family members were not more likely to wish to stay in the U.S. longer. However, this study's other findings that some family relationships variables were not significant are consistent with those studies that have determined that family affiliation is weaker in migrant types than in non-migrant types.

Highly valuing personal freedom was strongly associated with wishing to stay longer in the U.S. This finding was also supported by a similar finding concerning attitudes toward social norms: people who strongly agreed that social norms in each country affected their preference of living place were more likely to want to stay longer in the U.S. than people who agreed only a little. Since there are many more rules in Saudi Arabia about what men and women but especially women can and cannot do, this finding seems to indicate that the psychological issue concerns the value given to freedom of behavior. The finding reflects the importance of macro-level characteristics of countries in migration decision-making and is likely to be a finding that applies to Saudi

international students but not to some other international student groups in the U.S., such as international students from the U.K., Canada, or France.

Highly valuing self-development, on the other hand, was found to be negatively associated with the wish to stay for longer periods in the U.S. This result is puzzling and requires additional testing in a future study, especially because perceiving greater opportunities for self-development in the U.S. or perceiving KSA and the U.S. equal in this respect were significantly related to wishing to stay in the U.S. for longer periods of time. If self-development is important to the Saudi student and acts as a pull factor back to Saudi Arabia, the only anti-pull factor would be if opportunities for self or personal development are better in the U.S. or at least equal to those the student expects to have in Saudi Arabia.

Of the place utility perception variables tested, only perceiving housing opportunities and opportunities to develop oneself as better in the U.S. or equal in the U.S. and KSA were statistically significant. Differences in perceptions relating to which places had a more favorable climate, a higher standard of living, better job opportunities, and better access to services were not found to be significant. Card (1982) also found that return and non-return intentions were not associated with perceptions of economic standards or career opportunities. She found that return and non-return intentions were instead related to the different experiences students had in the U.S. It is possible that housing and self-development opportunities are significant in relation to wishing to stay in the U.S. for longer periods of time because these issues are associated with experiences Saudi

students have in the U.S. Many Saudi students in the U.S. have their first experiences with renting houses or apartments when they are in the U.S., whereas before they came to the U.S. to study, they lived at home with their parents. In addition, as students, they are completely focused on self-development. Their perception of these associated experiences in the U.S., if positive, may influence their wish to stay for longer periods of time in the U.S.

Results of testing quality of experience in the U.S. variables were mixed. Liking the city or town residence in the U.S. was found to be significant, but being highly satisfied with relationships made with people who were permanent residents of the U.S. was negatively related to the wish to stay in the U.S. longer; that is, the more satisfied students were with these relationships, the less likely they were to wish to stay longer periods of time. This result is surprising and also requires additional testing in a future study. Interview data analysis showed that Saudi students generally rated their relationships with Americans and others living in the U.S. as moderately satisfying mainly because by choice or habit they usually associated with other Saudis or other international students, and either felt less comfortable associating with Americans or were too busy to establish relationships with anyone outside their schools. Interviewees' assessment of relationships with permanent U.S. residents as only moderately satisfying or less did not seem to make those who wished to stay in the U.S. wish to stay for shorter periods of time.

A last finding concerns the student's wish to live anywhere other than Saudi Arabia. People who strongly agreed with the statement that things were happening in Saudi Arabia that they didn't like and that they therefore felt the need to live elsewhere were less likely to want to stay in the U.S. for longer periods of time. Other research has shown that this kind of completely negative perception is associated with poor adaptation outcomes in the host country: the student's migration motive is a negative get-away-from motive, not a positive come-to-learn-something-or experience-new-things motive (Chirkov, Safdar, de Guzman, and Playford ; 2008; Chirkov, Vanstteenkiste, Tao, and Lynch, 2007). If a negative motivation to get away from Saudi Arabia without a balancing positive motivation to enjoy or learn from the new environment interferes with adaptation outcomes, and adaptation outcomes affect migration wishes or intentions, Saudi students who want to live someplace other than Saudi Arabia may not necessarily wish to live in the U.S.

To summarize, regression analysis showed that the following variables had positive significant relationships to the dependent variable: (1) liking the city or town where the student lived in the U.S. (2) valuing personal freedom highly, (3) having family members who are permanent residents of the U.S., (4) having enough money to move to the U.S., (5a) perceiving housing opportunities as more favorable in the U.S. or equal in both the U.S. and KSA, (5b) perceiving self-development opportunities as more favorable in the U.S. or equal in both the U.S. and KSA.

Positive factors identified in the analysis of interview data were all of the above but included additional family relationship and personal background variables: (1) if married, having spouse and children in the U.S., (2) having parents or a parent who would be happy if the student got a job in the U.S. and stayed in the U.S., and (3) having prior experience visiting the U.S.

These findings must be qualified because of the limitations discussed below. These limitations must be taken into consideration.

Limitations

In migration research, where international student migration issues are understudied, any research on the migration psychology of international students adds knowledge to the field. Even a limited focus on Saudi students is useful, since Saudi students are an understudied population group within the understudied field of international student migration research. The U.S. as a destination country is appropriate because currently the majority of KASP students studying abroad are enrolled in colleges and universities in the U.S.

However, this study has several limitations due to the lack of a sample frame and the lack of a random selection process (participants self-selected and were selected by a convenience and snowball sampling method). In addition, the study has a small sample size, which means that findings cannot be generalized to the larger population of Saudi international students in the U.S. Survey respondents and the students interviewed do not make up a quantitative representative sample. The study's findings might not apply to

the population of Saudi students in the U.S., to Saudi international students in the U.S. in previous years, and they might not apply to international students of other nationalities.

In addition, non-responses error and measurement error in this study must be taken into consideration. Non-responses to survey questions reduced the number of participants that could be included in the regression analysis. It is possible that participants lost interest in completing the survey half way through the survey or decided half way through the survey that questions were moving into sensitive areas. This study had a number of questions asking students about returning home, and any questions about returning home would be considered sensitive questions. Returning home is the more socially desirable plan, perceived as more patriotic (Card, 1988). To avoid making an unpopular response or giving a socially undesirable answer to a sensitive question, some students may have distorted answers. Research has demonstrated that respondents often give inaccurate answers to questions on sensitive topics (Tourangeau, Conrad, and Couper, 2013, p. 132). This is a cause of serious measurement error. Although the survey was not sponsored by a Saudi government agency, many respondents might have answered questions as if the Saudi government or SACM would see the results of the study. Saudis are especially sensitive to sensitive questions because there is no freedom of speech in Saudi Arabia, and saying the wrong thing can result in a jail sentence. Social desirability bias is thus of greater concern in survey studies that ask Saudi students sensitive questions.

However, suggestions for future research can be made. This thesis study was an exploratory study and findings represent only a point of departure for future follow-up studies. Future studies can follow through with a more in-depth examination of the variables explored in this study. Future studies could utilize stronger measures of variables found significant in this study, or stronger measures of those variables that were found to have negative relations to the dependent variable could be created and explored in a follow-up study.

Instead of using a survey, using an interview method or a survey method with more interviews might help researchers who suspect social desirability bias to find the true answers hidden behind the distorted answers that some Saudi students give to sensitive questions. A survey study yielding results that can be generalized with a high degree of confidence to the entire population of Saudi international students in the U.S. would require the cooperation of the Saudi Arabia Cultural Mission, but interviews on a large scale would be necessary as well to determine which answers were likely distorted.

Related topics that could be explored, using surveys or interviews, include re-entry difficulties or culture shock effects Saudi students might experience when they return home after living for many years as temporary migrants in the U.S. A comparison of re-entry difficulties faced by Saudi men and women would be interesting.

Chapter VI

Conclusions

The U.S. government classifies international students as "nonimmigrant," but migration scholars studying international students often classify them as temporary migrants. The temporary migrant classification seems to make more sense for several reasons: (1) international students often stay in their host countries for long periods of time; (2) they go through adaptation and acculturation processes; (3) their experiences in the host countries can change their identities in ways that make them feel that fitting back in to their old lives in their home countries would be a problem and some come to prefer living in their host countries.; and (4) their stay period is often elastic. In the U.S., they can extend their studies if they want to continue to live in the U.S.; they can stay longer by getting special permission to work in their field of study, or they can stay longer if they are hired by a U.S. employer. In addition, classifying international students as temporary migrants is a way of incorporating current knowledge about the increasing numbers of international students worldwide who find ways to stay in their host countries for many years or permanently. Although research indicates that only small percentages of international students know that they want to migrate before they study abroad, many international students change their minds about returning home while they are in their host countries, and the temporary stay for many students turns into a permanent stay. As Hazen and Alberts (2006) note, "a natural progression of professional and personal

decisions leads many to become permanent immigrants.” Migration for some, therefore, is both a condition and an effect of the study abroad experience.

Unlike the U.S. government, many U.S. universities seem to classify international students as professional migrants or about-to-be migrants. They therefore offer international students migration-related services. The official status of international students in the U.S. as “nonimmigrant” means that international students who wish to stay must officially apply to change their status, and some U.S. universities offer to help them with this change. Towson University’s International Student & Scholar Office (ISSO), for example, helps international students with post-graduation career plans by providing a job fair and an immigration attorney to give students free immigration consultations. The attorney presents international students with a “Visas After Graduation” workshop about the various U.S. visa options available to them.

Although U.S. government immigration laws often appear to be push-out factors, and some university policies seem to be opposite pull-in factors, these opposite forces may act together to reduce the numbers of international students who end up staying in the U.S. after completing their studies while also helping students who do stay to achieve successful transitions. But even if U.S. immigration policies were more favorable to international students, this study suggests that sending countries like Saudi Arabia at present do not need to worry that large numbers of their skilled or highly educated students will choose to stay in the U.S. after completing their studies. This research has shown that only some Saudi students in the U.S. wish to stay in the U.S. after completing

their studies, and many of those who do wish to stay longer wish to stay only long enough to gain professional work experience or long enough to provide their children with a strong early education experience. (This study did not explore the possible link between temporary stay wishes and eventual permanent migration behavior.) Only a small number of Saudi students wish to stay permanently. Although no country would want to lose its educated citizens, losing a small number of international students is not a serious enough problem to cause the cancellation of the King Abdullah Scholarship program, for example.

The results of this study further show that determinants of student migration wishes are not something that the sending country can fully control, because some determinants are probably personality related, other are probably related to an individual's background, and others are probably related to chance (e.g., which U.S. city or town the student ends up living in). The results suggest that valuing personal freedom highly, having family members who are permanent residents of the U.S., liking the city or town where they live in the U.S., and perceiving greater or equal place utility concerning housing opportunities and self-development opportunities are related to a Saudi student's wish to stay for longer periods of time in the U.S. Some additional family-related variables may also be influential.

Students' perceptions of place utility, however, are somewhat under the control of the sending country because the sending country can make changes in its internal conditions. Saudi Arabia could influence students' perceptions of place utility by making changes to

social and physical conditions inside Saudi Arabia that result in creating better housing opportunities and better self-development opportunities for returning students. It would be more difficult to protect against international student migration by completely changing social norms in the country, but this study's findings suggest that some relaxation of rules about what men and women can and cannot do in KSA, including rules that currently do not allow women to drive, would be a good place to start.

Appendices

Appendix A: Informed Consent Form and Survey

السلام عليكم

This is an invitation to participate anonymously in a Saudi graduate student's survey of Saudi students' opinions and attitudes about their experiences in the U.S. All Saudis 18 years of age or older currently studying in the U.S at the Bachelors level or higher, including ESL students who are not yet enrolled in a degree program, are eligible to participate.

By completing the survey, you will help M. Mansour, a Saudi social science graduate student at Towson University, complete a Master's thesis that other Saudi students can build upon to do important research of their own. Since Saudi students in the U.S. have not been studied enough in comparison with other student groups, having this study and similar research to build upon is especially important for Saudi researchers. This study will also benefit all researchers interested in the attitudes of international students studying in the U.S.

The survey will take only about 15 MINUTES of your time and can be completed with absolute confidence that your answers are and always will be completely confidential and **anonymously** recorded. Neither the researcher nor anyone else will ever be able to link your answers to you personally. When the completed surveys are collected and a report written, only group data will be presented.

There are no known risks to participating in the study. Your anonymous participation is voluntary and can be ended at any time. You will not receive any form of payment for completing the survey, but you can be assured that the participation of each and every Saudi student is **very much appreciated!**

This research project has been reviewed and approved by the Institutional Review Board for the Protection of Human Participants at Towson University (410-704-2236). If you have any questions about the study, please contact M. Mansour by phone at 571-340-5641 or by email at mmanso4@towson.edu. The faculty sponsor of the study is Dr. Charles Schmitz, who can be reached by phone at 410-704-2966 or by email at cschmitz@towson.edu. You can also call the Towson University Institutional Review Board Chairperson, Dr. Debi Gartland, at 410- 704-2236, or contact her by mail at 8000 York Road, Towson University, Towson, Maryland, 21252.

By beginning the survey, you acknowledge that you have read this information and agree to participate in this research, with the knowledge that you are free to withdraw your participation at any time without consequence.

Thank you in advance for completing the survey!

M. Mansour, Social Science researcher, Towson University, Towson, Maryland

Saudi international students' opinions and attitudes about their experiences

1. You are a Saudi student studying in the U.S. Are you studying in the U.S. on a scholarship?

- ☐ Yes
- ☐ No

2. What is your age?

- ☐ 18-25
- ☐ 26-33
- ☐ 34-41
- ☐ 42-49
- ☐ 50-57

3. What is your gender?

- ☐ Male
- ☐ Female

Saudi international students' opinions and attitudes about their experiences**4. Where are you from in Saudi Arabia?**

- ☐ Riyadh
- ☐ Jeddah
- ☐ Mecca
- ☐ Medina
- ☐ Qassim
- ☐ Ta'if
- ☐ Khobar
- ☐ Dammam
- ☐ Qatif
- ☐ Ha'll
- ☐ Abha
- ☐ Najran
- ☐ Other city
- ☐ I am not from a city in Saudi Arabia

Saudi international students' opinions and attitudes about their experiences**5. What is your family status?**

- Single
- Married without children
 - 5a. If you are married without children, is your spouse living with you in the U.S. while you complete your studies?
 - Yes
 - No
 - He/she lives with me in the U.S. part of the time
- Married with children
 - 5b. If you are married with children, are both your spouse and your children living with you here in the U.S. while you complete your studies?
 - Yes
 - No
 - They live with me in the U.S. part of the time

Saudi international students' opinions and attitudes about their experiences**6. How long have you been studying in the U.S.?**

- ☐ Less than 1 year
- ☐ 1-2 years
- ☐ 3-4 years
- ☐ 5-6 years
- ☐ 7 years or more

7. Are you planning to extend your studies beyond the level you are currently engaged in?

- ☐ Yes
 - 7a.[If yes,] Are you extending your studies mainly because you want to continue living in the U.S.?
 - ☐ Yes
 - ☐ No
- ☐ No

Saudi international students' opinions and attitudes about their experiences

8. In what state in the U.S. are you living?

Alabama	Kentucky	North Dakota
Alaska	Louisiana	Ohio
Arizona	Maine	Oklahoma
Arkansas	Maryland	Oregon
California	Massachusetts	Pennsylvania
Colorado	Michigan	Rhode Island
Connecticut	Minnesota	South Carolina
Delaware	Mississippi	South Dakota
District of Columbia (D.C.)	Missouri	Tennessee
Florida	Montana	Texas
Georgia	Nebraska	Utah
Hawaii	Nevada	Vermont
Idaho	New Hampshire	Virginia
Illinois	New Jersey	Washington
Indiana	New Mexico	West Virginia
Iowa	New York	Wisconsin
Kansas	North Carolina	Wyomin

Saudi international students' opinions and attitudes about their experiences

9. To what extent do you like the U.S. city/town where you are living?

- ☐ I don't like it at all
- ☐ I like it only a little
- ☐ I like it in most ways
- ☐ I like it in almost every way

10. To what extent are you satisfied with the relationships you have established with other people living permanently in the U.S. (American and non-American) while you have been in the U.S.?

- ☐ Very satisfied
- ☐ Moderately satisfied
- ☐ Neither satisfied nor unsatisfied
- ☐ Moderately unsatisfied
- ☐ Very unsatisfied

Saudi international students' opinions and attitudes about their experiences

11. How would you classify your value orientation?

- ☐ Very open minded
- ☐ Moderately open minded
- ☐ Somewhat more open-minded than conservative
- ☐ Equally open-minded and conservative
- ☐ Somewhat more conservative than open-minded
- ☐ Moderately conservative
- ☐ Very conservative

12. Has your value orientation become more open-minded as a result of your experience as an international student in the U.S.?

- ☐ Not at all
- ☐ Only a very little
- ☐ Somewhat
- ☐ Very much

Saudi international students' opinions and attitudes about their experiences**13. How important is it to you to be able to develop yourself as a person?**

- ☐ Very important
- ☐ Somewhat important
- ☐ Neither important nor unimportant
- ☐ Somewhat unimportant
- ☐ Very unimportant

14. How important is it to you to have personal freedom?

- ☐ Very important
- ☐ Somewhat important
- ☐ Neither important nor unimportant
- ☐ Somewhat unimportant
- ☐ Very unimportant

15. Which is more important to you, living near your relatives or developing yourself professionally?

- ☐ Living near my relatives
- ☐ Developing myself professionally

Saudi international students' opinions and attitudes about their experiences

16. Before coming to the U.S. to study, approximately how many times did you travel abroad (outside Saudi Arabia) to countries other than the U.S.?

- ☐ Never
- ☐ 1-2 times
- ☐ 3-4 times
- ☐ 5-7 times
- ☐ more than 8 times

17. Before coming to the U.S. to study, approximately how many times did you visit the U.S.?

- ☐ Never
- ☐ 1-2 times
- ☐ 3-4 times
- ☐ 5-7 times
- ☐ more than 8 times

Saudi international students' opinions and attitudes about their experiences

18. Do any members of your family live in the U.S. now as permanent residents, not students?

- Yes
 - 18a. [If yes] Which **members of your family live in the U.S. now as permanent residents, not students?** (Check all that apply)
 - ☐ A parent or both parents
 - ☐ One or more siblings
 - ☐ One or more cousins and/or aunts or uncles
 - ☐ Other
- No

Saudi international students' opinions and attitudes about their experiences

19. How often do family members in Saudi Arabia visit you per year while you study in the U.S.?

- Never
- 1-2 times a year
- 3-4 times a year
- 5 or more times a year
- They don't come here; I visit them in Saudi Arabia instead.

Saudi international students' opinions and attitudes about their experiences

20. Do you currently have a job in Saudi Arabia?

- ☐ Yes
- ☐ No

21. Do you currently have a job in the U.S.?

- ☐ Yes
- ☐ No

22. Have you been promised a job in Saudi Arabia after you graduate?

- ☐ Yes
- ☐ No

23. Have you been promised a job in the U.S. after you graduate?

- ☐ Yes
- ☐ No

Saudi international students' opinions and attitudes about their experiences

24. Imagine that you have been promised a job in the U.S. after you graduate and that you could stay in the U.S. legally to work that job. Would you have the financial resources to move to the U.S.?

- ☐ Yes
- ☐ No

25. Would your parents want you to stay in the U.S. if you got a job in the U.S. and could stay in the U.S.?

- ☐ Yes
- ☐ No

Saudi international students' opinions and attitudes about their experiences

26. How long do you plan to stay in the U.S. after you graduate from the highest level program you intend to complete?

- ☐ Only enough time to pack up my things and go back to Saudi Arabia
- ☐ 2-3 weeks
- ☐ 1-6 months
- ☐ 7-11 months
- ☐ 1-2 years
- ☐ 3-5 years
- ☐ 6-8 years
- ☐ 9-11 years
- ☐ 12-20 years
- ☐ More than 20 years
- ☐ Permanently

27. How long do you wish you could stay in the U.S. after you graduate from the highest level program you intend to complete?

- ☐ Only as much time as it takes me to pack up my things and go back to Saudi Arabia
- ☐ 2-3 weeks
- ☐ 1- 6 months
- ☐ 7-11 months
- ☐ 1-2 years
- ☐ 3-5 years
- ☐ 6-8 years
- ☐ 9-11 years
- ☐ 12-20 years
- ☐ More than 20 years
- ☐ Permanently

Saudi international students' opinions and attitudes about their experiences

28. Did you come to the U.S. thinking that you would go back to Saudi Arabia after graduation, but decide at some point during your stay in the U.S. that you would prefer to continue living in the U.S. for many years or permanently?

- ☐ Yes
- ☐ No
 - ☐ If no, Did you know BEFORE you came to the U.S. to study that you wanted to try to find a way to stay in the U.S. after you completed your studies?

Saudi international students' opinions and attitudes about their experiences

In answering the following questions, imagine that you have the choice to return to Saudi Arabia or to live for as long as you want to in the U.S. after you graduate.

		In Saudi Arabia	In the U.S.	Both places are equal in this respect
29.	Where do you believe you will have better job opportunities in your line of work?			
30.	Where do you think your standard of living will be higher?			
31.	Where do you believe the climate (temperature, natural conditions, natural scenery) is more suitable to your nature?			
32.	Where do you think housing opportunities are more favorable for you?			
33.	Where do you think access to services (TV, internet, doctors, schools, etc.) are more favorable for you?			
34.	Where do you think you will have more opportunities to develop yourself as a person?			

Saudi international students' opinions and attitudes about their experiences

35. Does your attitude toward rules about what men and women can and cannot do in either country currently affect your preference for one place or the other?

- Not at all
- Only a very little
- Somewhat
- Very much
- Absolutely

Saudi international students' opinions and attitudes about their experiences

36. *To what extent do you agree or disagree with the following statement? Although I love my country, things are happening in Saudi Arabia that I don't like, and I feel the need to live somewhere else as a result.*

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

THANK YOU VERY MUCH FOR COMPLETING THE SURVEY!

Appendix B : Informed Consent Form and Interview Questionnaire

السلام عليكم (Translation: Greetings, or Hello)

This interview is part of a study of opinions and attitudes of Saudi Students in the U.S. about their experiences in the U.S. and their possible changes in attitude.

I, Maha Mansour, a Saudi graduate student at Towson University, will sit with you for approximately one hour in a comfortable setting of your choosing and ask you questions about your experience as an international student in the U.S. I will ask you questions about personal characteristics, such as marital status and age, length of time studying in the U.S., previous experience traveling abroad, and questions about your views, including your views about opportunities in Saudi Arabia and the U.S., and whether or not you wish you could stay in the U.S. after graduation.

Your participation in the study is confidential and voluntary. There are no known risks or discomforts associated with participating in this interview or in the study. You can decide not to answer questions you do not want to answer and you can stop the interview whenever you want to.

All information collected from the interview will always be completely confidential. The study findings may be made public and available to other researchers, but no one but me, the researcher, will ever be able to link your answers to you personally. Your name will never be included on the pages on which I will write interview notes, and your name will never be included in recordings of the interview or appear on transcripts of the interview. When the completed interviews are analyzed and a report written, only group data will be presented. Your complete privacy is assured.

You will not receive any form of payment for your participation, but you can be confident that your participation is **very much appreciated**.

This project has been reviewed and approved by the Institutional Review Board for the Protection of Human Participants at Towson University (410-704-2236). If you have any questions after today, please contact me, Maha Mansour, by phone at 571-340-5641 or my faculty sponsor, Dr. Charles Schmitz, at 410-704-2966. You can also contact the Towson University Institutional Review Board Chairperson, Dr. Debi Gartland, by phone at 410-7044-2236 or by mail at 8000 York Road, Towson University, Towson, Maryland, 21252.

I, _____, affirm that I have read and understood the above statement and have had all my questions answered.

Date: _____

Signature: _____

Witness: _____

1. You are a Saudi student studying in the U.S. Are you studying in the U.S. on a scholarship?
2. What is your age?
3. What is your gender?
4. Where are you from in Saudi Arabia?
5. What is your family status?
 - 5a. If you are married without children, is your spouse living with you in the U.S. while you complete your studies?
 - 5b. If you are married with children, are both your spouse and your children living with you here in the U.S. while you complete your studies?
6. How long have you been studying in the U.S.?
7. Are you planning to extend your studies beyond the level you are currently engaged in?
 - 7a. If yes, are you extending your studies mainly because you want to continue living in the U.S.?
8. In what state in the U.S. are you living?
9. To what extent do you like the U.S. city/town where you are living?
10. To what extent are you satisfied with the relationships you have established with other people living permanently in the U.S. (American and non-American) while you have been in the U.S.?
11. How would you classify your value orientation?
12. Has your value orientation become more open-minded as a result of your experience as an international student in the U.S.?
13. How important is it to you to be able to develop yourself as a person?
14. How important is it to you to have personal freedom?
15. Which is more important to you, living near your relatives or developing yourself professionally?
16. Before coming to the U.S. to study, approximately how many times did you travel abroad (outside Saudi Arabia)?
17. Before coming to the U.S. to study, approximately how many times did you visit the U.S.?
18. Do any members of your family live in the U.S. now as permanent residents, not students?
 - 18a. If yes, which members? Parents, siblings, cousins, etc?
19. How often do family members in Saudi Arabia visit you per year while you study in the U.S.?
20. Do you currently have a job in Saudi Arabia?
21. Do you currently have a job in the U.S.?
22. Have you been promised a job in Saudi Arabia after you graduate?
23. Have you been promised a job in the U.S. after you graduate?

24. Imagine that you have been promised a job in the U.S. after you graduate and that you could stay in the U.S. (legally) to work that job. Would you have the financial resources to move to the U.S.?

25. Would your parents want you to stay in the U.S. if you got a job in the U.S. and could stay in the U.S.?

26. How long do you plan to stay in the U.S. after you graduate from the highest level program you intend to complete?

27. How long do you wish you could stay in the U.S. after you graduate?

28. Did you come to the U.S. thinking that you would go back to Saudi Arabia after graduation, but decide at some point during your stay in the U.S. that you would prefer to continue living in the U.S. for many years or permanently?

In answering the following questions, imagine that you have the choice to return to Saudi Arabia or to live for as long as you want to in the U.S. as a legal immigrant after you graduate.

29. Where do you believe you will have better job opportunities in your line of work?

30. Where do you think your standard of living will be higher?

31. Where do you believe the climate (temperature, natural conditions, natural scenery) is more suitable to your nature?

32. Where do you think housing opportunities are more favorable for you?

33. Where do you think access to services (TV, internet, doctors, schools, etc.,) are more favorable for you?

34. Where do you think you will have more opportunities to develop yourself as a person?

35. Does your attitude toward rules about what men and women can and cannot do in either country currently affect your preference for one place or the other?

36. *To what extent do you agree or disagree with the following statement. Although I love my country, things are happening in Saudi Arabia that I don't like, and I feel the need to live somewhere else as a result.*

THANK YOU VERY MUCH FOR YOUR PARTICIPATION. IT IS VERY MUCH APPRECIATED!

Appendix C: IRB Approval Letter



EXEMPTION NUMBER: 14-x023

To: Maha Mansour
From: Institutional Review Board for the Protection of Human
Subjects Debi Gartland, Chair 
Date: Monday, October 07, 2013
RE: Application for Approval of Research Involving the Use of
Human Participants

Office of University
Research Services

Towson University
8000 York Road
Towson, MD 21252-0001

t. 410 704-2236
f. 410 704-4494

Thank you for submitting an application for approval of the research titled,
Saudi students in the US: The desire to stay or to go back to Saudi Arabia

to the Institutional Review Board for the Protection of Human Participants
(IRB) at Towson University.

Your research is exempt from general Human Participants requirements
according to 45 CFR 46.101(b)(2). No further review of this project is
required from year to year provided it does not deviate from the submitted
research design.

If you substantially change your research project or your survey
instrument, please notify the Board immediately.

We wish you every success in your research project.

CC: Charles Schmitz (Geography)
File

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Appendix D: Letters from SACM Agreeing to Distribute the Survey

Royal Embassy of Saudi Arabia

Cultural Mission To The U.S.A.



سفارة المملكة العربية السعودية

الملحقية الثقافية بالولايات المتحدة الأمريكية

August 6, 2013

Dear Ms. Mansour,

This letter is to inform you that we have received and reviewed your dissertation survey.

On behalf of the Saudi Arabian Cultural Mission to the USA, We are happy to inform you that your request has been approved and the Cultural and Social department is willing to assist you in distributing your survey among the targeted audience.

Please coordinate with myself at malkhalaf@sacm.org and Mrs. Nehal Elrefia at nelrefia@sacm.org if you have any question regarding your survey.

Thank you and we wish you continued success on your future accomplishments.

Sincerely,

Dr. Mody Alkhalaf
Assistant Attaché for Cultural and Social Affairs
Cultural Mission of the Royal Embassy of Saudi Arabia
8500 Hilltop Road
Fairfax, VA 22031
Phone: 571-327-2555
Fax: 571-327-2761

From: malkhalaf@sacm.org
To: sweet_memo_86@hotmail.com
Date: Thu, 30 May 2013 09:26:56 -0400
Subject: RE:

WE can send the survey on your behalf.

Please send official letter from your school regarding your student, and your targeted population.

Also draft the questionnaire request and a link.

Dr. Mody Alkhalaf

Assistant Attaché for Cultural and Social Affairs
Cultural Mission of the Royal Embassy of Saudi Arabia
8500 Hilltop Road
Fairfax, VA 22031
Phone: 571-327-2555
Fax: 571-327-2761

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Appendix E: Letter from the SACM Declining to Distribute the Survey

October 11 2013

Dear Ms. Mansour,

Thank you for your email. We are more than happy to help you distribute your survey among the students via face book and Twitter.

Unfortunately this month we received an official letter from the Ministry of Higher Education in Saudi that we are no longer allowed to send mass emails to students and we can only help distribute surveys or students information via our social media official pages.

We apologize for the inconvenience and I wish you submitted your survey before we received the letter, as I know how important the results are for you.

Please do not hesitate to contact me if you or your university has any questions or if I can be of any further assistance.

Thank you again and have a wonderful day.

Sincerely,

Mrs. Nehal Elrefia
Cultural Advisor
Cultural Mission of the Royal Embassy of Saudi Arabia
Phone: 571.327.2295
Fax: 571.327.2761

Disclaimer: The information in this email and in any files transmitted with it; is intended only for the addressee and may contain confidential and/or privileged material. Access to this email by anyone else is unauthorized. If you receive this in error, please contact the sender immediately and delete the material from any computer. If you are not the intended recipient, any disclosure, copying, distribution or any action taken or omitted to be taken in reliance on it, is strictly prohibited.

Appendix F: Survey Announcement Posted to Facebook Pages

October 10, 2013

Dear Students,

عليكم السلام

Because I'm a student too, I know how valuable your time is right now. But I'm hoping that you can give me about **fifteen minutes** before the semester gets really busy to help me collect important information for my graduate research study. I'm asking you to complete a short survey on your attitudes about your experiences while living and studying in the U.S.

Please click on the link below to go to the survey website (or copy and paste the survey link into your Internet browser). Thank you in advance for completing the survey!

Survey Link:

<https://www.surveymonkey.com/s/FNBYKH8>

Sincerely,

Maha Mansour, Social Science researcher, Towson University

Appendix G: Bivariate Tables

Independent Samples T-Test

Group Statistics

Extending studies MAINLY because want to continue living in the U.S.		N	Mean	Std. Deviation	Std. Error Mean
Length of time wished to stay	1.00 Yes	75	3.7333	2.82045	.32568
	2.00 No	157	1.8599	1.59911	.12762

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	T	df	Sig. (2-tailed)
Length of time wished to stay	Equal variances assumed	66.244	.000	6.441	230	.000
	Equal variances not assumed			5.356	97.383	.000

Independent Samples Test

		t-test for Equality of Means			
		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				Lower	Upper
Length of time wished to stay	Equal variances assumed	1.87346	.29086	1.30037	2.44655
	Equal variances not assumed	1.87346	.34979	1.17926	2.56766

Independent Samples T-Test

Group Statistics

	q0003 What is your gender?	N	Mean	Std. Deviation	Std. Error Mean
Length of time wished to stay	1.00 Male	229	2.2140	2.06741	.13662
	2.00 Female	94	2.4043	2.38417	.24591

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	T	df	Sig. (2-tailed)
Length of time wished to stay	Equal variances assumed	3.452	.064	-.718	321	.473
	Equal variances not assumed			-.676	153.312	.500

Independent Samples Test

		t-test for Equality of Means			
		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				Lower	Upper
Length of time wished to stay	Equal variances assumed	-.19028	.26507	-.71179	.33122
	Equal variances not assumed	-.19028	.28131	-.74603	.36546

Oneway ANOVA

ANOVA

Length of time wished to stay

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	26.758	2	13.379	2.915	.056
Within Groups	1482.555	323	4.590		
Total	1509.313	325			

Multiple Comparisons

Dependent Variable: q31_8categories 8 categories

Tukey HSD

(I) q0005 What is your family status?	(J) q0005 What is your family status?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00 Single	2.00 Married without children	.70913	.36462	.128	-.1494	1.5676
	3.00 Married with children	.50596	.27324	.155	-.1374	1.1493
2.00 Married without children	1.00 Single	-.70913	.36462	.128	-1.5676	.1494
	3.00 Married with children	-.20317	.40035	.868	-1.1458	.7395
3.00 Married with children	1.00 Single	-.50596	.27324	.155	-1.1493	.1374
	2.00 Married without children	.20317	.40035	.868	-.7395	1.1458

q31_8categories 8 categoriesTukey HSD^{a,b}

q0005 What is your family status?	N	Subset for alpha = 0.05
		1
2.00 Married without children	42	1.7857
3.00 Married with children	90	1.9889
1.00 Single	194	2.4948
Sig.		.108

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 74.859.

b. The group sizes are unequal. The harmonic mean of the group sizes is used.

Type I error levels are not guaranteed.

ANOVA

q31_8categories 8 categories

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.560	2	1.780	.437	.649
Within Groups	154.879	38	4.076		
Total	158.439	40			

Multiple Comparisons

Dependent Variable: q31_8categories 8 categories

Tukey HSD

(I) q0006 If you are married without children, is your spouse living with you in the U.S. while you complete your studies?	(J) q0006 If you are married without children, is your spouse living with you in the U.S. while you complete your studies?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00 Yes	2.00 No	.93939	1.06885	.657	-1.6674	3.5461
	3.00 He/she lives with me in the U.S. part of the time	.43939	1.06885	.911	-2.1674	3.0461
2.00 No	1.00 Yes	-.93939	1.06885	.657	-3.5461	1.6674
	3.00 He/she lives with me in the U.S. part of the time	-.50000	1.42754	.935	-3.9815	2.9815
3.00 He/she lives with me in the U.S. part of the time	1.00 Yes	-.43939	1.06885	.911	-3.0461	2.1674
	2.00 No	.50000	1.42754	.935	-2.9815	3.9815

q31_8categories 8 categories

Tukey HSD^{a,b}

q0006 If you are married without children, is your spouse living with you in the U.S. while you complete your studies?	N	Subset for alpha = 0.05 1
2.00 No	4	1.0000
3.00 He/she lives with me in the U.S. part of the time	4	1.5000
1.00 Yes	33	1.9394
Sig.		.716

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.657.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Oneway ANOVA

ANOVA

q31_8categories 8 categories

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13.540	2	6.770	1.788	.173
Within Groups	329.449	87	3.787		
Total	342.989	89			

Multiple Comparisons

Dependent Variable: q31_8categories 8 categories

Tukey HSD

(I) q0007 If you are married with children, are both your spouse and your children living with you here in the U.S. while you complete your studies?	(J) q0007 If you are married with children, are both your spouse and your children living with you here in the U.S. while you complete your studies?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00 Yes	2.00 No	1.14103	.76780	.303	-.6898	2.9718
	3.00 They live with me in the U.S. part of the time	1.14103	.89772	.415	-.9996	3.2816
2.00 No	1.00 Yes	-1.14103	.76780	.303	-2.9718	.6898
	3.00 They live with me in the U.S. part of the time	.00000	1.13944	1.000	-2.7170	2.7170
3.00 They live with me in the U.S. part of the time	1.00 Yes	-1.14103	.89772	.415	-3.2816	.9996
	2.00 No	.00000	1.13944	1.000	-2.7170	2.7170

q31_8categories 8 categories

Tukey HSD^{a,b}

q0007 If you are married with children, are both your spouse and your children living with you here in the U.S. while you complete your studies?	N	Subset for alpha = 0.05
		1
2.00 No	7	1.0000
3.00 They live with me in the U.S. part of the time	5	1.0000
1.00 Yes	78	2.1410
Sig.		.454

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8.435.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Oneway ANOVA

ANOVA

q31_8categories 8 categories

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18.529	4	4.632	.991	.412
Within Groups	1485.948	318	4.673		
Total	1504.477	322			

Multiple Comparisons

Dependent Variable: q31_8categories 8 categories

Tukey HSD

(I) q0008 How long have you been studying in the U.S.?	(J) q0008 How long have you been studying in the U.S.?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1.00 Less than 1 year	2.00 1-2 years	-.05042	.41566	1.000	-1.1908	1.0899
	3.00 3-4 years	-.45968	.41375	.801	-1.5948	.6755
	4.00 5-6 years	-.75000	.57289	.686	-2.3217	.8217
	5.00 7 years or more	-.38095	.59668	.969	-2.0179	1.2560
2.00 1-2 years	1.00 Less than 1 year	.05042	.41566	1.000	-1.0899	1.1908
	3.00 3-4 years	-.40926	.27740	.579	-1.1703	.3518
	4.00 5-6 years	-.69958	.48370	.598	-2.0266	.6275
	5.00 7 years or more	-.33053	.51165	.967	-1.7342	1.0732
3.00 3-4 years	1.00 Less than 1 year	.45968	.41375	.801	-.6755	1.5948
	2.00 1-2 years	.40926	.27740	.579	-.3518	1.1703
	4.00 5-6 years	-.29032	.48206	.975	-1.6129	1.0322
	5.00 7 years or more	.07873	.51010	1.000	-1.3207	1.4782
4.00 5-6 years	1.00 Less than 1 year	.75000	.57289	.686	-.8217	2.3217
	2.00 1-2 years	.69958	.48370	.598	-.6275	2.0266
	3.00 3-4 years	.29032	.48206	.975	-1.0322	1.6129
	5.00 7 years or more	.36905	.64592	.979	-1.4030	2.1411
5.00 7 years or more	1.00 Less than 1 year	.38095	.59668	.969	-1.2560	2.0179
	2.00 1-2 years	.33053	.51165	.967	-1.0732	1.7342
	3.00 3-4 years	-.07873	.51010	1.000	-1.4782	1.3207
	4.00 5-6 years	-.36905	.64592	.979	-2.1411	1.4030

Wish to stay_8categories 8 categoriesTukey HSD^{a,b}

q0008 How long have you been studying in the U.S.?	N	Subset for alpha = 0.05
		1
1.00 Less than 1 year	35	2.0000
2.00 1-2 years	119	2.0504
5.00 7 years or more	21	2.3810
3.00 3-4 years	124	2.4597
4.00 5-6 years	24	2.7500
Sig.		.565

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 37.223.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Independent Samples T-Test**Group Statistics**

	q0033 Did you know BEFORE you came to the U.S. to study that you wanted to try to find a way to stay in the U.S. after you completed your studies?	N	Mean	Std. Deviation	Std. Error Mean
q31_8categories 8 categories	1.00 Yes	27	3.4815	2.88724	.55565
	2.00 No	166	1.4398	1.09239	.08479

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
q31_8categories 8 categories	Equal variances assumed	75.173	.000	6.686	191	.000
	Equal variances not assumed			3.632	27.223	.001

Independent Samples Test

		t-test for Equality of Means			
		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
				Lower	Upper
q31_8categories 8 categories	Equal variances assumed	2.04172	.30538	1.43938	2.64407
	Equal variances not assumed	2.04172	.56208	.88887	3.19458

Bibliography

- Abdulaziz, K.A. and Mruyama, G. (1990). Cross-cultural contact and attitudes of Qatari students in the United States. *International Journal of Intercultural Relations*, 14, 123-134. Retrieved from [http://dx.doi.org/10.1016/0147-1767\(90\)90001-D](http://dx.doi.org/10.1016/0147-1767(90)90001-D).
- Agarwal, V. B. and Winkler, D. R. (1985) Migration of foreign students to the United States. *The Journal of Higher Education*, 56, 509-522. Retrieved from <http://www.jstor.org/stable/1981208>.
- Alberts H.C., and Hazen, H. D. (2005). “There are always two voices...”: International Students' Intentions to Stay in the United States or Return to their Home Countries (pages 131–154). *International Migration*, 43, 131-152. Retrieved from Wiley Online Library. doi: 10.1111/j.1468-2435.2005.00328.x.
- Al-Jasir, A.S. (1993). Social, cultural, and academic factors associated with adjustment of Saudi students in the United States. University of Urbana-Champaign: UMI Dissertations Publishing, 1993. Retrieved from ProQuest.
- Alreshoud, A. and Koeske, G.F. (1997) Arab students’ attitudes toward and amount of social contact with Americans: a causal process analysis of cross-sectional data. *Journal of Social Psychology*, 137, pp. 235-245. Retrieved from <http://go.galegroup.com.proxy-tu.researchport.umd.edu/>

- Baruch, Y., Budhwar, P. S., and Khatri, N. (2006). Brain drain: inclination to stay abroad after studies. *Journal of World Business*, 42, 99-112. Retrieved from www.sciencedirect.com. doi: :10.1016/j.jwb.2006.11.004
- Bista, K. (2011) Review of *Who Goes Where and Why: An Overview and Analysis of Global Educational Mobility* Macready, C. and Tucker, C. (2011). *Journal of International Students*, 2, 123. Retrieved from <http://jistudents.org/>.
- Boneva, B., Frieze, I.H., Ferligoj, A., Jarosova, E., Paukenerova, D., and Orgock, A. (1998). Achievement, power, and affiliation motives as clues to (e)migration desires: a four-countries comparison. *European Psychologist*, 3, 247-254. Retrieved from <http://www.efpa.eu/journal>.
- Boneva, B., and Frieze, I.H. (2001). Toward a concept of a migrant personality. *Journal of Social Issues*, 57, 477-491. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291540-4560>.
- Brown, B.B. and Perkins D.D. (1992). Disruptions in Place Attachment. *Place Attachment*. Eds. Irwin Altman and Setha M. Low. New York: Plenum Press.
- Card, J.J. (1982). The correspondence between migration intentions and migration behavior: data from the 1970 cohort of Filipino graduate students in the United States. *Population and Environment*, 5, 3-25. Retrieved from <http://www.springer.com/social+sciences/population+studies/journal/11111>
- Chirkov, V., Vansteeenkiste, M. Tao, R., and Lynch, M. (2007). The role of self-determined motivation and goals for study abroad in the adaptation of international

- students. *International Journal of Intercultural Relations*, 31, 199-222. Retrieved from www.sciencedirect.com. doi: 10.1016/j.ijintrel.2006.03.002.
- Chirkov, V.I, Safdar, S., de Guzman, J., and Playford, K. (2008). Further examining the role motivation to study abroad plays in the adaptation of international students in Canada. *International Journal of Intercultural Relations*, 32, 427-440. Retrieved from www.sciencedirect.com. doi: 10.1016/j.ijintrel.2007.12.001.
- Deci, E.L. and Ryan, R.M., Eds. (2002). *Handbook of Self-Determination Research*. Rochester, NY: University of Rochester Press.
- De Jong, G.F. (2000). Expectations, Gender, and Norms in Migration Decision-Making. *Population Studies: A Journal of Demography*, 54, 3, pp. 307-319. Retrieved from <http://www.jstor.org/stable/2584787>.
- De Jong, G. F., Root, B.D., Gardner, R.W., Fawcett, J.T., and Abad, R.G. (1986). Migration intentions and behavior: decision making in a rural Philippine province. *Population and Environment*, 8, 41-62. Retrieved from <http://www.springer.com/social+sciences/population+studies/journal/11111>.
- Denman, B.D. and Hilal, K.T. (2011). From barriers to bridges: an investigation on Saudi student mobility (2006-2009). *International Review of Education*, 57, 299-318. Retrieved from <http://www.springer.com/education+%26+language/journal/11159>. doi: 10.1007/s11159-011-9221-0.
- Dillman, D.A., Smyth, J..D., and Christian, L.M. (2009). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design*. Hoboken, NJ: John Wiley & Sons, Inc.

- Fawcett, J.T. (1986). Migration psychology: new behavioral models. *Population and Environment*, 8, 5-14.. Retrieved from <http://www.springer.com/social+sciences/population+studies/journal/11111>.
- Findlay, A. M. (2010). An assessment of supply and demand-side theorizations of international student mobility. *International Migration*, 49, 162–190. Retrieved from Wiley Online Library. doi: 10.1111/j.1468-2435.2010.00643.x.
- Finn, M.G. (2012). Stay rates of foreign doctorate recipients from U.S. universities, 2009. Oak Ridge Institute for Science and Education. Retrieved from <http://orise.orau.gov/files/sep/stay-rates-foreign-doctorate-recipients-2009.pdf>.
- Fletcher, D. (2008). Review of Kemal Guruz's *Higher education and international student mobility in the global knowledge economy* in the *Journal of International Students*. Retrieved from <http://jistudents.org/>
- Frankfort-Nachimias, C. and Nachmias, D. (1992). *Research Methods in the Social Sciences*. New York: St. Martin's Press.
- Frieze, I.H., Hansen, S.B., and Boneva, B. (2006). The migrant personality and college students' plans for geographic mobility. *Journal of Environmental Psychology*, 26, 170-177. Retrieved from <http://www.journals.elsevier.com/journal-of-environmental-psychology>.
- Frieze, I.H., Boneva, B.S., Sajlija, N., Horvat, J., Ferligoj, A., Kogovsek, T. Miluska, J. Popova, L., Korobanova, J., Sijhareva, N. Erokhina, L and Jarosova, E. (2004). Psychological differences in stayers and leavers: emigration desires in Central and

- Eastern European university students. *European Psychologist* 9, 15-23. Retrieved from <http://www.efpa.eu/journal>. doi: 10.1027/1016-9040.9.1.15.
- Gans, H.J. (1999). Filling in some holes: six areas of needed immigration research. *American Behavioral Scientist*, 42, 1302-1313. Retrieved from <http://abs.sagepub.com/content/42/9/1302>. doi: 10.1177/00027649921955083.
- Gibson, J. and McKenzie, D. (2011). The microeconomic determinants of emigration and return migration of the best and brightest: evidence from the Pacific. *Journal of Development Economics*, 95, 18-29. Retrieved from <http://www.journals.elsevier.com/journal-of-development-economics>.
- Gillham, B. (2008). *Small-scale Social Survey Methods*. London and New York: Continuum Books.
- Gribble, C. (2008). Policy options for managing international student migration: The sending country's perspective. *Journal of Higher Education Policy and Management*, 30, 25-39. Retrieved from <http://www.tandfonline.com/loi/cjhe20#.Ui9eZj-Bmkw>. doi: 10.1080/13600800701457830
- Gu, Q., Schweisfuth, M., and Day, C. (2010). Learning and growing in a 'foreign' context: intercultural experiences of international students. *Compare: A Journal of Comparative and International Education*, 40, 7-23. Special Issue: *Globalization, Educational Governance and Decentralisation*. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/03057920903156888#preview>. doi: 10.1080/03057920903115983.

- Hazen, H.D. & Alberts, H.C. (2006). Visitors or immigrants? International students in the United States. *Population, Space and Place*, 12, 201-216. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291544-8452>. doi: 10.1002/psp.409
- Institute of International Education (IIE). (2011a). Press release: Open Doors 2011: international student enrollment increased by 5 percent in 2010/2011. Retrieved from <http://www.iie.org/en/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2011/2011-11-14-Open-Doors-International-Students>.
- Institute of International Education (IIE). (2011b) Press release: fall survey data: continued growth in international students enrollments in the U.S. Retrieved from <http://www.iie.org/Who-We-Are/News-and-Events/Press-Center/Press-Releases/2011/2011-11-14-Open-Doors-Fall-Survey-International-Students>.
- Institute of International Education (IIE). (2012a). Fast facts. Retrieved from <http://www.iie.org/search.aspx?q=Fast%20facts>.
- Institute of International Education (IIE). (2012b). Open Doors: report on international educational exchange. Retrieved from www.iie.org/opendoors.
- Institute of International Education (IIE). (2013). Open Doors Report on International Educational Exchange. Retrieved from <http://www.iie.org/opendoors>.
- Kent, R. 2001. *Data Construction and Data Analysis for Survey Research*. Basingstoke, Hampshire, and New York: Palgrave.

- Knickmeyer, E. (2012). Saudi students flood in as U.S. opens door. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424052702304830704577492450467667154.html>.
- Kono, Y. (2013). Globally mobile Saudi students: agents of economic, social, and cultural transformation? *WES Research and Advisory Services' World Education News and Reviews*, 26. Retrieved from <https://www.wes.org/ewenr/13july/mobilitymonitor.htm>.
- Kurtz, S. (2012). Thanks to scholarship, Saudi students return to U.S. in droves. *The Washington Diplomat*. Retrieved from http://washdiplomat.com/index.php?option=com_content&id=8544:thanks-to-scholarship-saudi-students-return-to-us-in-droves&Itemid=501.
- Larossi, G. (2006). *The Power of Survey Design: A User's Guide for managing Surveys, Interpreting Results, and Influencing Respondents*. Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank.
- Lebaron, R. and Hausheer, S. (2013). Americans must do more to welcome Saudi scholarship students. *U.S. News World Report*. Retrieved from <http://www.usnews.com/opinion/blogs/world-report/2013/03/01/americans-must-do-more-to-welcome-saudi-scholarship-students>.
- Lesser, E.L.(1999). Predicting adjustment to college: a comparison between international and American students. Retrieved from Dissertation Abstracts International, 59 (9-B), 5093.

- Lewin, T. (2011). Universities seeking out students of means. September 21, 2011. *The New York Times*. Retrieved from www.nytimes.com/2011/09/21/education/21admissions.html.
- Lu, Y. Zong, L., Schissel, B. (2009). To Stay or Return: Migration Intentions of Students from People's Republic of China in Saskatchewan, Canada. *Journal of International Migration and Integration*, 10, 283-310. Retrieved from link.springer.com. doi 10.1007/s12134-009-0103-2
- McGill, J. (2013). International student migration: outcomes and implications. *Journal of International Students*, 3, 167-181. Retrieved from <http://jistudents.org>
- NAFSA: Association of International Educators. (2011). "What is the value of international students to your state? Retrieved from <http://www.nafsa.org/publicpolicy/default.aspx?id=29416>
- OECD. (2013). Who studies abroad and where? Education at a glance 2013: OECD indicators. Retrieved from <http://www.uis.unesco.org/Library/Documents/education-at-a-glance-oecd-indicators-2013-en.pdf>.
- Pakkiasamy, D. (2004). Saudi Arabia's plan for changing its workforce. Retrieved from <http://www.migrationinformation.org/USfocus/display.cfm?ID=264>.
- Price, A. (2004). Mixing it up: international graduate students' social interactions with American students. *Journal of College Student Development*, 45, 671-687. Retrieved from <http://muse.jhu.edu/journals/csd/>.
- Project Atlas. (2013). About Project Atlas. Retrieved from <http://www.iie.org/en/Research-and-Publications/Project-Atlas/About>.

Saudi Aramco World. (1979). The students and the states. *Saudi Aramco World*, 30, 26-32. Retrieved from

<http://www.saudiaramcoworld.com/issue/197903/the.students.and.the.states.htm>

Selltiz, C. and Cook, S.W. (1962). Factors influencing attitudes of foreign students toward the host country. *Journal of Social Issues*, 18, 7-23. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1540-4560.1962.tb02567.x/abstract>. doi: 10.1111/j.1540-4560.1962.tb02567.x

Sharma, G. (2011). Review of *Student Mobility and the Internationalization of Higher Education: National Policies and Strategies from Six World Regions (A Project Atlas Report)* by Rajika Bhandari, Raisa Belyavina, and Robert Gutierrez (Eds). *Journal of International Students*, 2, 198. Retrieved from <http://jistudents.org/>.

Simmons, A.B. (1986) Recent studies on place-utility and intention to migrate: an international comparison. *Population and Environment*, 8, 120-140. Retrieved from <http://www.springer.com/social+sciences/population+studies/journal/11111>.

Soon, J. (2010a). A change of heart? A bivariate probit model of international students' change of return intention. *International Journal of Business and Economics*, 9, 115-129. Retrieved from <http://search.proquest.com/docview/758393970?accountid=14541>.

Soon, J.J. (2010b). The determinants of students' return intentions: A partial proportional odds model. *Journal of Choice Modelling*, 3, 89-112. Retrieved from <http://www.jocm.org.uk/index.php/JOCM/article/view/57/58>.

- Soon, J.J. (2012). Home is where the heart is? Factors determining international students' destination country upon completion of studies abroad. *Journal of Ethnic & Migration Studies*, 38, 147-162. Retrieved from <http://web.ebscohost.com.proxy-tu.researchport.umd.edu/>. doi: 10.1080/1369183X.2012.640026.
- Szelényi, K. (2006). Students without borders? Migratory decision-making among international graduate students in the U.S. *Knowledge, Technology & Policy*, 19, 64-86. Retrieved from <http://link.springer.com.mutex.towson.edu/journal/volumesAndIssues/12130>
- Tourangeau, R., Conrad, F.G., and Couper, M.P. (2013). *The Science of Web Surveys*. Oxford: Oxford University Press.
- US Department of State. (2012). *Student visas*. Washington, D.C. Retrieved from http://travel.state.gov/visa/temp/types/types_1268.html#7.
- U.S. Immigration and Customs Enforcement Agency. (2013). Student and exchange visitor information system: general summary quarterly review. Retrieved from <https://www.ice.gov/doclib/sevis/pdf/by-the-numbers.pdf>.
- Wagner, R.L. (2012). Western ways woo Saudi women. *The Jerusalem Post*. Retrieved from <http://www.jpost.com/Features/In-Thespotlight/Western-ways-woo-Saudi-women>.
- Whisler, R.L. Waldorf, B.S., Mulligan, G.F, and Plane, D.A. (2008). Quality of life and the migration of the college-educated: a life-course approach. *Growth and Change*,

- 39, 58-94. Retrieved from <http://web.ebscohost.com.proxy-tu.researchport.umd.edu>.
doi: 10.1111/j.1468-2257.2007.00405.x.
- Winchie, D.B., and Carment, D. W. (1988). Intention to migrate: a psychological analysis. *Journal of Applied Social Psychology*, 18, 727-736. Retrieved from <http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291559-1816>.
- Yakunina, E.S., Weigold, I.K., Weigold, A., Hercegovac, S. and Elsayed, N. (2012). The multicultural personality: Does it predict international students' openness to diversity and adjustment? *International Journal of Intercultural Relations*, 36, 533-540.
Retrieved from www.elsevier.com/locate/ijintrel.
- Wolpert, J. (1965). Behavioral aspects of the decision to migrate. *The Regional Science Association Papers, Volume Fifteen*. Philadelphia, PA: Regional Science Association. pp. 159-169.

Curriculum Vitae

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Universities Attended:

Institution	Dates	Degree	Date of Degree
King Saud University, Riyadh, Saudi Arabia	September 2005- June 2009	Bachelors in Business Administration	June 2009
George Mason University	September 2010 – December 2011	Certificate in English as a Second Language	December 2011
Towson University, Towson, Maryland.	January 2012- December 2013	Master of Social Science	December 2013

Major: Social Science, General Track

Work Experience:

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Ministry of the Interior, Riyadh, Saudi Arabia

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Interviewed and counseled approximately 50 women whose sons or husbands had been involved in terrorist groups or activities to find out why they thought their sons or husbands had gotten involved in these groups and activities and to advise them what to do to keep themselves safe. Helped them to see their husbands if their husbands were in jail. Helped them to contact social services if they needed money. Provided counseling on how to help their sons and husbands. Wrote interview and counseling reports for social service authorities.

