Using the Theory of Planned Behavior to Predict International Students' Help-seeking Intentions and

Behaviors

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ABSTRACT

U.S. colleges and universities have hosted international students from all over the world. Along with the increase of international student enrollment, campus counselors are challenged with identifying the students who need professional help but are reluctant to utilize their campus counseling services (Zhang & Dixon, 2003; Mitchell et al., 2007). Employing the Theory of Planned Behavior (TPB), the current study investigated Virginia Tech international students' help-seeking process in terms of their attitudes toward counseling services, subjective norms, and perceived behavioral control. A total of 132 international students completed a cross-sectional online survey. Contrary to TPB, the results indicated that attitudes toward help-seeking and subjective norms were not correlated with help-seeking intentions. Perceived behavioral control, however, was identified as a predictor of international students' willingness to seek professional help. Intentions and perceived behavioral control were not predictors of international students' utilization of the Thomas E. Cook Counseling Center. The correlation between acculturation and self-stigma with international students' help-seeking intentions and behaviors was insignificant. Gender was a marginally significant predictor of help-seeking behavior. Previous experience of counseling services was strongly correlated with international students' help-seeking intentions and behavior. The majority of Virginia Tech international students reported emotional issues as their biggest challenge while studying in the U.S. Overall, as the first study which investigated international students' help-seeking process within the Theory of Planned Behavior framework, the present research expanded the literature about foreign students' adjustment issues and utilization of their campus counseling services. Limitations, future directions, and general implications were addressed.

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Introduction

U.S. institutions of higher education have recently witnessed an expansion of international student enrollment. The *Institute of International Education* (IIE) reported that in the 2011-2012 academic year, U.S. colleges and universities had a 6% increase in their international student enrollment. In the 2012-2013 academic year, international student enrollment in the U.S increased by 7%. According to these reports, in the last decade, the total number of foreign college students in the US has increased by 40% (*Open Doors,* 2013).

International students play a crucial role in the U.S. economy and education system. The 2012 report of *Association of International Educators* (NAFSA) found that by paying for educational and living costs, the foreign students added about $21.81 billion to the U.S. economy. According to the 2012 report of IIE, 75% of international students received most of their funding for their study from sources outside the United States (e.g., they provide their money from their home country). Moreover, international students bring new perspectives to the academic setting. Cultural diversity in educational environments allows students to meet a wide range of people, improve their leadership skills, and learn about different cultures and countries ("international student diversity," 2011, para. 1).

International students, however, have reported experiencing many issues while pursuing higher education in the U.S (Hyun et al., 2007). Research has shown that compared to the native students, foreign students experience more difficulties (Ebbin & Blankenship, 1986; Mallinckrodt & Leong, 1992). Language shock, cultural shock, family separation, financial

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crises, and academic problems have been identified as the most serious obstacles for international students (Detweiler, 1980; Oropeza & Fitzgibbon, 1991; Sandhu & Asrabadi, 1994; Chen, 1999; Lee et al., 2004). Brinton and Kotler's (1995) interview with 100 international university students revealed that different cultural values, family pressures, and fear of rejection are the challenges that international students face while studying in the U.S. Scholars discovered that dealing with these barriers causes various psychological issues for the students, among them sleep disorders, eating disorders, anxiety, stress, depression, homesickness, and loss of self-esteem (Mallinckrodt & Leong, 1992; Davis & Katzman, 1999; Chen, 1999).

Surprisingly, despite having these difficulties and presumably a high need for support, international students are unlikely to use counseling services (Brinson & Kottler, 1995; Mori, 2000). Many studies have investigated the reasons for underutilization of campus counseling services by international students and have found that students are varied in using counseling services based on their cultural values, attitudes toward help seeking behaviors, awareness about their university counseling services, and individual differences (Brinson & Kottler, 1995; Hyun et al., 2007; Johnson, 1993; Kilinc & Granello, 2003; Mori, 2000; Nina, 2009; Vogel et al., 2007; Zhang & Dixon, 2003). For instance, Kilinc and Granello (2003) suggested that as the Turkish culture values interpersonal relatedness and reinforces the stigma associated with seeking professional help, Turkish people are more likely to handle their problems through informal help sources such as family, friends, and peers rather than expressing their issues with an American counselor. Studies on U.S immigrants and foreign college students revealed that there is an inconsistency between individuals` attitudes toward counseling services and their help-seeking behaviors (Chebbet, 2012; Roldan-Bau, 2013). In his study on a sample of Latin American adults living in Canada, Roldan-Bau (2013) indicated that even those people who did not have negative

attitudes toward seeking professional psychological help might not use the counseling services. Thus, the researcher argued that there might be an inconsistency between individuals` attitudes toward counseling services and their help-seeking behaviors.

In fact, it is possible that multiple factors affect one's decision to seek professional help. The Theory of Planned Behavior (Ajzen, 1985, 1991) is one of the well-studied theories to address the multiple variables affecting individuals` help seeking behaviors (Ajzen, 2011). According to the theory, more favorable attitudes, subjective norms and perceived behavioral control increase one's behavioral intention, which in turn increases the likelihood of engaging in the particular behavior. Many studies have applied the theory to explain college students` help-seeking behaviors in general, but no studies have employed the theory to describe help-seeking behaviors among international college students. Therefore, the present study attempts to fill this gap in the literature by surveying Virginia Tech international students to scrutinize how the students' help-seeking intentions and behaviors are shaped based on three components of the Theory of Planned Behavior.

Obstacles Faced by International Students in the United States

According to a 2012 report of the Organization for Economic Cooperation and Development (OECD), foreign students are described as those who are not citizens of the country in which they are studying. This category includes some students who are permanent residents of the country where they are studying but are not citizens. Each country may define international students based on its national education system (World Education News and Reviews, 2007). According to the 2007 report of World Education News and Reviews, in the United States, "international students are defined as students who are enrolled at institutions of

higher education in the U.S. who are not citizens of the U.S., immigrants or refugees. These may include holders of F (students) visas, H (temporary workers/ trainers) visas, J (temporary educational exchange-visitors) visas and M (vocational training) visas. Data thus exclude students who have long-term or permanent residency" (p.8). France and Germany, however, classify students as international if they are from a foreign nation and have permanent residency without citizenship. The current study provides a more sophisticated definition and classifies students as international if (1) they left their country of origin and moved to the United Sates to study; (2) they have not grown up in the U.S.; (3) they do not have an American heritage; and (4) English is their second language. This study does not categorize international students based on their residency statuses.

Many studies have discussed the typical issues of foreign students, such as linguistic, academic, socializing, emotional, personal, psychological, financial problems as well as visa and immigration concerns (Brown, 2008; Boyer & Sedlacek, 1986; Chen, 1999; Davis & Katzman, 1999; Dyson & Renk, 2006; Mallinckrodt & Leong, 1992; Parr el al., 1992; Wilton & Constantine, 2003). Although all students may experience stress and difficulties during their college lives, research indicates that international students experience higher levels of stress due to the unique obstacles they face (Mori, 2000).

Language barriers are one of the most challenging problems for foreign college students (Brown, 2008; Chen, 1999; Ferris & Tagg, 1996; Mori, 2000). Native U.S. students may face typical academic difficulties, such as test and presentation anxiety, and time management (Yoon & Portman, 2004). Scholars highlighted that besides experiencing these issues, international students' lack of English proficiency may influence their academic performance as well as social life (Lee et al., 2004; Yoon & Portman, 2004). Cadieux and Wehrly (1986) discussed that

international students' lack of English proficiency has negative effects on their ability to make connections with their professors and colleagues, as well as their participation and understanding in classrooms. Ferris and Tagg (1996) highlighted that the university professors' most common concerns are about international students' inability to participate in class discussion and provide adequate answers to class questions.

According to Brinton and Kotler (1995), even though students face many different types of obstacles, academic concerns are the most common issue that may lead them to utilize professional help. Brinton and Kotler (1995) argued that compared to domestic students, international students are more concerned about their academic performance, often due to family pressures or their government policies. Since the students have been sent to the U.S. to study, their parents or their government often have high expectations that need to be fulfilled.

Previous studies have examined the effects of stress on international students' psychological adjustment in the United States and have found that academic stress is associated with negative effects on international college students' psychological adjustment (Lin & Yi, 1997; Nina, 2009). Nina`s (2009) survey on sixty two international college students indicated that the students with higher levels of stress exhibited higher levels of depression, confusion, and anxious.

It is important to note that linguistic problems influence international students' academic performance as well as their social interactions. According Ishiyama (1989), linguistic and communicative difficulties may make foreign college students uncomfortable and unsecure in their daily communications with people. The investigator discussed that lack of English proficiency may decrease international students' willingness to socialize with people who are not

from their culture. Avoiding interacting with others is associated with negative psychological issues including anxiety, loneliness, stress, low self-esteem, and depression (Ishiyama, 1989).

In addition, financial concerns have been identified as one of the main stressors during international college students' adjustment process (Oropeza & Fitzgibbon. 1991). Foreign students' educational process and daily routines might be endangered by any unplanned reduction in their budgets (Chen, 1999). Dealing with these concerns is associated with serious psychological problems and may distract the students from concentrating on their studies (Chen, 1999).

International students and Help-Seeking

Generally, help-seeking is defined as the process of asking help from other people (Rickwood et al., 2005). More specifically, it is communicating with other people to gain information, suggestions, and any help in order to handle a problem. There are two main forms of help sources: informal and formal. While informal help sources consist of family and friends, formal sources include counselors, health professionals, and social workers (Rickwood et al., 2005). Along with the increase of international student enrollment in U.S. universities, campus counselors are challenged with identifying the students who need to seek professional help, but are reluctant to utilize their campus counseling services (Mallinckrodt & Leong, 1992; Mitchell et., 2007; Zhang & Dixon, 2003). Kilinc and Granello (2003) discussed that one reason for underutilization of campus counseling services by international college students can be the fact that some students have not had the accessibility to such services in their own countries. Lack of awareness about their university counseling services and having negative perceptions about the counselors and counseling process are additional explanations for low utilization of counseling

services by foreign college students (Nina, 2009). Nina (2009) highlighted the impact of lack of awareness on international students' utilization of counseling services. The results of the study found that compared to those who were aware of their campus counseling services, those who were unaware of the services exhibited higher levels of academic stress.

Beyond the literature, several official meetings with the assistant director of the Virginia Tech Cranwell International Center and a clinical psychologist in Cook Counseling Center confirmed that compared to domestic students, foreign students are less likely to utilize the Virginia Tech campus counseling services (based on personal communication with Dr. Claire W. Shen, 25 July 2013). According to Cranwell International Center, in the 2011-2012 academic year, Virginia Tech hosted 2510 students (1697 Graduate and 813 Undergraduate students) from 108 countries. In addition, the center in October 2013 reported that, in the 2012-2013 academic year, Virginia Tech international student enrollment increased to 2867 (1868 Graduate and 999 Undergraduate students). Overall, the most recent report of Cranwell International Center indicated that, during the 2008-2013 academic years, international student enrollment increased by 28.7%. Figure 1 illustrates the increasing trend of Virginia Tech international student enrollment. According to 2013 Virginia Tech demographic information, total student enrollment is 29,071, including undergraduate, graduate, and professionals. 12% of students are international and 88% are identified as domestic students (*Factbook: Student Overview*, 2014)

Mitchell et al. (2007) highlighted that there are few studies which have sampled foreign college students who have utilized their university mental health services. The present study sampled Virginia Tech international students and examined their utilization of the Thomas E. Cook Counseling Center, attempting to fill the research gap. The Thomas E. Cook Counseling Center is the primary mental health resource for Virginia Tech students. The Center offers

various types of services, including individual, group, and couple counseling, crises intervention, consultation, and outreach programs. Students can seek professional help for their communicative, psychological, emotional, personal, and adjustment issues. The Center reported that in the 2011-2012 and 2012-2013 academic years, among Virginia Tech students who utilized the Thomas Cook Counseling services, only 5.73% and 5.71% were international students. In addition, recent statistics indicate that from July 2009 to December 2013, among the students who sought counseling services, only 6.18% identified themselves as international students. The low percentage of Virginia Tech international students' utilization of campus counseling services highlights the importance of research in this area.

Therefore, the purpose of this study is to (1) identify Virginia Tech international students' concerns, (2) identify the students' preferred source of help, (3) examine the students' utilization of campus counseling services within the framework of the Theory of Planned Behavior, (4) investigate the role of acculturation and stigma in the students' help seeking process, and (5) explore the relationship between gender and prior experience of counseling services with international students' intention to utilize counseling and their help-seeking behavior. By gathering and evaluating this information, the study attempts to raise awareness about foreign students` difficulties and to provide professionals in general and the Thomas E. Cook Counseling Center in particular with information to facilitate international students` adjustment process. It is hoped that this study can improve international college students' well-being in the U.S.

Literature Review

Theory of Planned Behavior (TPB)

Human behavior is a complex process. It is difficult to be explained by a single factor (Aguirre, 2012). Two validated models for predicting people's behaviors are the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) (Armitage & Conner, 2001; Ajzen, 2011). Both theories explain how individuals' behaviors are shaped based on their attitudes, subjective norms, and intentions. The Theory of Planned Behavior (TPB) was developed by Azjen (1985) as the recent extension of the Theory of Reasoned Action (see Figure 2) (Ajzen & Fishbein, 1980).

The Theory of Reasoned Action (TRA) explains the volitional behaviors which are voluntary and require individuals` conscious consideration (Hale et al., 2002). For instance, if an individual can deliberately decide to engage or not engage in a particular behavior, it is considered as a volitional behavior. Hale et al. (2002) pointed out several criticisms of the theory of reasoned action. According to the researchers, the TRA has been critiqued for not being able to describe those behaviors which are not completely under the volitional control of the actor, such as habitual behaviors. In addition, the TRA does not cover behaviors which need specific skills or resources, such as avoiding eating in a restaurant due to lack of enough money. By adding the perceived behavioral control (PBC) factor, the Theory of Planned Behavior (TPB) predicts individuals` volitional behaviors, as well as those which may need particular competencies, opportunity, resources, or the support of others (Hale et al., 2002). For example, a man who intends to learn to ski, but discovers that he does not have enough money or time to do so, will likely change his intention to attend the class. Considering the perceived behavioral control factor allows researchers to examine the impact of special skills, resources, and other factors on an individual's behavior that may not be under their control (Hale et al., 2002). More

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importantly, according to Armitage and Conner (2001), adding the PBC determinant helps to understand why behavioral intentions may not always predict one's actual behavior.

The Theory of Planned Behavior explains that individuals` intention to perform a behavior depends on three factors: attitudes towards a particular behavior, subjective norms associated with that action, and perceived control over performing the behavior (Ajzen, 1985, 1991; Ajzen & Fishbein, 1980). The TPB has been identified as one of the most well-studied theories to explain individuals' social behaviors (Perkins et al., 2007).

Behavioral Intention. According to Ajzen (1991), "intentions are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform a behavior" (p. 181). Behavioral intention then is simply defined as one's motivation to act (Ajzen, 1985, 1991; Ajzen & Fishbein, 1980). According to the theory, there is a positive correlation between individuals' intention to act and actually perform that action (Ajzen, 1991). Previous studies indicated that the behavioral intention is a good predictor of individuals' actual behaviors (Ajzen, 1991; Ajzen & Fishbein, 1980). According to the TPB, behavioral intention has been identified as a mediator variable. Three components of TPB—attitudes toward behavior, subjective norms, and perceived behavioral control—form an individual`s behavioral intention that in turn predicts one`s actual behavior.

Attitudes. Attitudes toward a behavior refers to one`s positive or negative perception of the behavior (Ajzen, 1991). The TPB posits that the attitude is explained by salient behavioral beliefs. The behavioral beliefs include two components: belief strength and outcome evaluation. Belief strength refers to individuals` perceptions about the likelihood of occurrence of the particular outcomes if they perform the given behavior. Outcome evaluation refers to the extent

to which the attribute is judged to be positive or negative. It simply means that if we believe that performing a behavior would be associated with positive outcomes, it is more likely to impact our attitudes. In general, there is a positive relationship between attitude and intentions to perform a behavior. Hence, a person with more positive attitudes toward a behavior should exhibit higher levels of intention to perform the behavior (Ajzen, 1985; Ajzen & Fishbein, 1980).

Subjective norms. Whereas the attitude refers to individuals' own positive or negative beliefs about an action, subjective norms refers to individuals' perceptions of their significant others` attitudes toward the behavior. The significant others are defined as people who may affect individuals` behaviors, including parents, siblings, partner, friends, etc. Subjective norms are defined as people`s perceptions of social pressure that may experience from their significant others (Ajzen, 1991). According to the theory, the subjective norms concept comprises of two parts: normative belief and motivation to comply. Normative belief is the extent to which individuals believe that their significant others agree or disagree with their decision to perform a particular behavior. Motivation to comply is the individuals' willingness to behave based on their significant others' opinions and expectations (Ajzen, 1985; Ajzen & Fishbein, 1980).

Perceived Behavioral Control. Perceived behavioral control refers to the extent to which people evaluate the difficulty and easiness of performance of a behavior (Ajzen, 1985). Perceived behavioral control is comprised of control beliefs and perceived power (Ajzen, 1985). Control belief refers to one`s perception about the accessibility or lack of accessibility to opportunities and resources (e.g., time, money, and assistance of others) which are required for a particular behavior (Ajzen, 1991). Perceived power refers to the extent to which people believe they have control over accepting or refusing to perform a particular behavior. It is important to highlight that perceived behavioral control is a determinant of both behavioral intention and

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actual behavior. Therefore, people are more likely to have a higher intention for performing the behavior when they perceive it to be easy. As a determinant of actual behavior, having higher perceived control will increase the possibility of performing the behavior. For example, if two men have equally strong intentions to stop drinking alcohol, the man who finds this behavior easy (control belief) and is confident that he can do it (perceived power), is more likely to actually achieve it than the man who doubts his ability and perceives giving up drinking as a difficult behavior. Figure 3 illustrates the basic Theory of Planned Behavior.

The multidimensional approach of the TPB has allowed researchers to assess different factors affecting individuals` behaviors. The TPB introduces three independent determinants of behavioral intention. According to the theory, more positive attitudes, subjective norms, and higher perceived behavioral control increase the possibility of having a higher level of intention to engage in the particular behavior. It is important to note that there is a positive relationship between the importance of each factor to the person and the factor efficacy. According to the theory, in order to make a decision about whether to utilize counseling services or not, individuals consider three main factors: their attitudes toward counseling services, their significant others` agreement or disagreement about their help-seeking behavior, and their time, available sources, etc. Depending on which factor is the individuals' priority, that factor is more likely to affect their decision. Hence, if a woman has a positive attitude toward counseling services and she has the ability to manage her time and money, but her parents disapprove of her seeking help, she will be less likely to use the counseling service if her parents` approval is her first priority.

Efficacy of the TPB in help-seeking

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A review of the literature indicates that many studies have applied the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) to scrutinize human psychological help-seeking behaviors (Aguirre, 2012; Bayer and Peay, 1997; Cabassa & Zayas, 2007; Chebbet, 2012; Hartong, 2011; Kim & Park, 2009; Miller, 2004; Mo & Mak, 2009; Rogers, 2009; Roldan, 2013; Schomerous & Angermeyer, 2008; Schomerus et al., 2009). For instance, Bayer and Peay (1997) sampled 142 people in Australia to assess the adequacy of the Theory of Reasoned Action in predicting individuals' intentions to seek professional mental health services. Although the researchers found support for the TRA, the findings revealed that attitudes toward mental health services had a stronger effect than subjective norms on individuals' help-seeking intentions. Furthermore, Cabassa and Zayas (2007) applied the TRA to investigate the role of illness perception, attitude towards depression psychological services, and subjective norms on Latino immigrants' intentions to utilize depression treatments. Participants were exposed to a vignette depicting a person with a depressive disorder and were interviewed to report their intentions to seek psychological treatments if they were in the same situation. Participants exhibited their tendencies to utilize both formal sources, such as family and peers, and informal help sources including counselors and social workers. However, the results of the study indicated that they tended to primarily rely on informal sources, and if they were not satisfied, they then turned to formal sources for seeking depression care. Previous studies identified family members, clergy, and friends as the most important informal sources of help for Latinos with mental illness (e.g., Guarnaccia & Parra, 1996). Cabassa and Zayas's (2007) study revealed that as Latinos' perceptions about a chronicity of mental illness increased, they were likely to utilize formal sources of care. Finally, the results revealed that attitudes and subjective norms were predictive of Latinos' intentions to seek professional psychological help.

Recruiting 941 Chinese people, Mo and Mak (2009) applied the Theory of Planned Behavior to investigate the reasons of underutilization of professional mental health services among citizens of Hong Kong. The findings indicated that, among Chinese populations, all three components of the TPB (attitude, subjective norm, perceived behavioral control) significantly predicted their help-seeking intentions. Therefore, the researchers found support for the utilization of the TPB in understanding help-seeking intentions. The study then supported the importance of perceived behavioral control factors in investigating intentions to seek professional care.

Moreover, by employing the TPB to help-seeking, Schomerus et al. (2009) investigated how behavioral, normative, and control beliefs influenced the TPB components and in turn, affect intentions to seek psychiatric help for depression. The investigators sampled 2303 depressed and non-depressed people in Germany and exposed them to a vignette of a depressed person and asked them to report their tendency to utilize psychiatric help. The majority of participants (68.9%) expressed their tendency to consult a psychiatrist for depression. Interestingly, in both groups of people-- depressed and non-depressed—attitudes toward psychiatric help had the most influence on participants' help-seeking behaviors after seeing the vignette. The researchers suggested that the TPB may be more accurate for predicting help-seeking intentions among samples with mental health problems than among the general populations.

Hartong (2011) used the TPB for explaining college students' psychological help-seeking process. The result of the study partially supported the adequacy of the TPB among college students. While some studies have supported the correlation between attitude and subjective norms with behavioral intentions (Bayer & Peay, 1997; Bringle & Byers, 1997; Miller, 2005; Mo

& Mak, 2009), Hartong's (2011) study revealed that subjective norms were not predictive of college students' intentions to seek psychological help, and the relationship between attitudes and psychological help seeking intention was low. However, the results of the study demonstrated a strong correlation between perceived behavioral control and help-seeking intentions. Furthermore, Miller (2004) applied both the Theory of Reasoned Action and the Theory of Planned Behavior to scrutinize lawyers' intentions to seek mental health services for their psychological issues such as depression, anxiety, and alcohol and drug abuse. The study indicated that the TRA and the TPB models can explain the relations between lawyers' attitudes and beliefs about using mental health services and their intentions to utilize psychological treatments. Miller reported that in examining behavioral intentions to seek psychological help, three components of TPB model explained more of the total variance than two determinants of the TRA model. Therefore, the Theory of Planned Behavior was applied for the present study.

External Factors Contributing to the Utilization of Professional Help Services

Besides three predictive determinants of the TPB, the literature indicates that there are additional factors that may play a role in whether or not international students choose to utilize counseling services. As discussed earlier, the researcher's review of relevant literature demonstrated that few studies have explored college students' help-seeking behaviors. More importantly, to the author's knowledge, there is only one study which has explored international students' help-seeking intentions. However, that study was done based on the first theory, the Theory of Reasoned Action. In attempts to explain international students' help-seeking behaviors, Chebbet (2012) surveyed forty-eight African international students and assessed the relationship between attitudes toward seeking help for psychological issues and help-seeking behaviors, length of stay in the US, acculturative stress, and social connectedness. While the

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results revealed that social connectedness was positively correlated with help-seeking attitudes, there was no relationship between social connectedness and help-seeking behaviors among African international students. Furthermore, the study indicated that there was no relationship between acculturative stress and length of stay with African students' attitudes toward mental and physical health services and help-seeking behaviors.

Interestingly, Chebbet (2012) found that although some African students exhibited positive attitudes toward mental and physical help services, they were unlikely to utilize health services. The findings highlighted that some more factors might be responsible in one's help-seeking behaviors and intentions. Help-seeking research has shown that besides attitudes, subjective norms, and perceived behavioral control, some other factors such as acculturation level, stigma, and demographic variables may influence one's help-seeking intentions and behaviors.

Acculturation. According to Redfield et al. (1936), acculturation refers to "the process of cultural change that occurs when individuals from different cultural backgrounds come into prolonged, continuous, first-hand contact with each other" (p. 146). More specifically, acculturation occurs when immigrants integrate the beliefs and behaviors of their host culture with the context of their heritage cultural beliefs and behaviors (Berry, 1997). Berry (1997) distinguished between individual-level and group-level acculturation processes. Acculturation at the individual level examines how individuals adapt to a new culture (Berry, 1997; See also Roldan-Bäu, 2013). Those who are exposed to a new culture may need to change and adopt their beliefs, behaviors, and attitudes (Kim & Omizo, 2003). Cuellar et al. (1995) classified these changes in three groups: behavioral, affective, and cognitive changes. In terms of behavioral changes, individuals may need to change their cultural expressions, eating habits, and music

preferences. Affective changes take place when individuals' feelings change about their self-identity. Finally, cognitive changes occur when cultural transition transforms individuals' beliefs and attitudes.

Berry (1997) discussed that when exposed to a new culture, immigrants are faced with two problems: maintaining their original culture identity and maintaining their relations with people from the host culture. By considering these issues, Berry (1997) introduced the following acculturation strategies: assimilation, integration, separation, and marginalization. Assimilation refers to the strategy used by individuals who choose low heritage cultural maintenance and high contact with the host culture. For instance, those immigrants who reject their heritage cultural values but adopt their host culture apply assimilation strategy. In contrast with assimilation, separation refers to high heritage cultural maintenance and low contact with people from the host culture. Integration is defined as adoption of both cultures. For instance, it describes those immigrants who retain some aspects of their heritage culture and also adapt to the new culture. Marginalization refers to the rejection of both heritage cultural maintenance and relations with people from the host culture.

There are two theoretical models of acculturation: the unidimensional and the bidimensional models. From the unidimensional perspective, when individuals adopt the host culture's values and behaviors, they concurrently reject their own cultural values (Kim & Omizo, 2003; Roldan-Bäu, 2013). According to this model, individuals are simply categorized into two groups: those who completely identify themselves as a member of their heritage culture and those who completely identify themselves as a member of their host culture. This model has been criticized for defining acculturation as a linear process in which individuals who have high adherence to their heritage culture cannot have the same level of adherence to their host culture

(Ryder et al., 2000). Therefore, the bidimensional model was proposed to improve the unidimensional model of acculturation (Roldan-Bäu, 2013). According to this model, while individuals may accept some particular aspects of their host culture, they may still adhere to some aspects of their heritage culture (Ryder et al., 2000). According to Ryder et al. (2000), compared to the unidimensional model, the bidimensional approach provides a richer framework to explain immigrants' acculturation process. Thus, the present study applies a bidimensional approach to assess international college students' acculturation process in the U.S.

The findings related to the relationship between acculturation and help-seeking attitudes among immigrants and college students are mixed. As a result of interviews with 1055 Mexican Americans, Wells et al. (1989) found a positive correlation between Mexican Americans' level of acculturation and their intentions to seek professional help for their physical health problems. In other words, the study indicated that less acculturated Mexican Americans exhibited significantly lower willingness of inpatient and outpatient services for their physical health concerns. Miville and Constantine's (2006) study on 162 Mexican-American college students, demonstrated that acculturation into U.S. society is associated with greater utilization of professional psychological help. Ramos-Sanchez and Atkinson (2009), however, discovered that acculturation is not significantly correlated with Mexican Americans' willingness to utilize counseling services.

There are very few studies which have examined the relationship between the main components of the TPB and the acculturation process. Aguirre (2012) scrutinized the mediating role of acculturation on attitudes, subjective norms, perceived control, and intentions to seek professional psychological help among Latino college students. The investigator found that adding acculturation to the TPB model did not significantly affect any components of the TPB.

The study indicated that adding acculturation did not improve the TPB in predicting help-seeking behaviors. The present review of the literature on international students' help-seeking revealed that there is no study which has scrutinized the role of acculturation in foreign college students' help-seeking process within the Theory of Planned Behavior. Therefore, by employing the bidimensional approach of acculturation, the current study explored the relationship between Virginia Tech international students' acculturation and their help-seeking intentions and behaviors.

Stigma. A large European survey conducted in 2007 reported that half of people with mental disorders did not seek professional help for their issues (Alonso et al., 2007). Help-seeking research has identified stigma as one of the most important reasons for underutilization of counseling and mental health services (Corrigan, 2004; Rogers, 2009; Aguirre, 2012; Chebbet, 2012; Roldan-Bäu, 2013). It should be noted that there are two types of stigma—public and self—which influence individuals' help-seeking process (Corrigan, 2004; Roldan-Bäu, 2013). According to Vogel et al. (2007), public stigma refers to the negative perception that other people may have about someone who seeks professional treatment. The self- stigma, however, is defined as the perception that individuals may have about themselves if they utilize counseling or mental health services. For instance, people who have self-stigma about utilization of counseling services may perceive themselves as a person who is socially unacceptable and undesirable (Vogel et al., 2007). The focus of the present study is on self-stigma associated with seeking counseling services for any types of issues that Virginia Tech foreign students may face such as emotional, personal, and psychological.

According to Corrigan (2004), there is a negative correlation between stigma related to mental health services and utilization of professional help in that the higher level of stigma

people may have, the lower tendency they have to utilize mental health services. A review of the literature indicated that the results of previous studies about the relationship between stigma and help-seeking process are mixed. Sampling 470 college students, Vogel et al.'s (2006) study demonstrated that there is a negative correlation between self-stigma and willingness to seek professional treatment. The findings indicated that those students who reported greater self-stigma associated with utilization of mental health services, exhibited less intentions to seek professional treatment for their psychological and interpersonal issues. While some studies found that the stigma is one of the most important barriers in the help-seeking process among Latin Americans (Vogel et al., 2007; Bledsoe, 2008), Alvidrez's (1999) interview with 187 Latina, African American, and White women revealed that compared to African and European American women, Latin American women were less likely to exhibit stigma about mental health treatment. Moreover, Roldan-Bäu (2013) found no support for the impact of stigma on attitudes, subjective norms, and intentions to seek help. Testing the utility of Theory of Reasoned Action, Roldan-Bäu (2013) conducted quantitative and qualitative research on 223 Latin American adults living in Canada. The role of various factors including stigma, previous mental health services experience, and cultural variables on participants' help-seeking behaviors were assessed. The investigator expanded the Theory of Reasoned Action by adding stigma as a predictor of attitudes toward help-seeking, subjective norms and intentions to seek help. The findings indicated that the stigma did not have a significant effect on the determinants of the TRA.

Demographic Variables and Help-Seeking

Previous empirical studies explored the impact of several demographic variables including: gender, previous experience of mental health services, age and socioeconomic status on individuals' intentions to seek professional psychological help (Aguirre, 2012; Alvidrez,

1999; Andrews et al., 2001; Bayer & Peay, 1997; Chebbet, 2012; Moller-Leimkuhler, 2002; Rogers, 2009; Roldan-Bäu, 2013). Möller Leimkühler (2002) discussed that gender is a significant predictor of individuals' help-seeking process, in that compared to women, men's help-seeking utilization is significantly lower. In contrast with previous research, Roldan-Bäu's (2013) study found no support for the correlation between gender and intentions to seek help, and attitudes toward help-seeking. However, the results of the study revealed that gender was associated with subjective norms in that compared to men, women expressed higher subjective norms.

In general, help-seeking research has demonstrated that compared to women, men are less likely to use professional mental health services for emotional and mental issues (Andrews et al., 2001; Galdas et al., 2005). Similarly, Addis and Cohance (2005) found that although men face different types of psychological issues in their life, they are unlikely to seek professional psychological services. Surveying 401 male undergraduate students, Good et al. (1989) found that there was a negative correlation between having a traditional view of masculinity and attitudes toward help-seeking. The researchers discussed that those students who endorsed more traditional masculinity such as emotional control and avoidance of femininity, were more likely to report negative attitudes toward psychological treatment.

Many studies indicated that having previous experience of mental health services positively affects individuals' attitudes and intentions to seek professional help (Aguirre, 2012; Cabassa et al., 2006; Miller 2004; Rogres, 2009). Miller (2004) examined the relationship between 200 lawyers' help-seeking intentions toward seeking psychological services with their demographic information including age, gender, and prior experience of psychological treatment. The researcher found that compared to those who did not have previous experience of counseling

services, those who previously sought professional help exhibited greater intention to seek treatment. Consistent with Miller's (2004) study, Aguirre (2012) found that the previous experience of mental health services was predictive of help-seeking intentions and behaviors among students with Mexican origin. In addition, Rogers's (2004) study demonstrated that men who previously sought psychological treatment reported more positive attitude towards seeking professional psychological treatment. Similar to previous research, the current study examined the relationship between gender and prior experience of counseling services with international students' help-seeking intentions and behaviors.

Research Questions and Hypotheses

A review of prior research indicated that no studies have applied the TPB to explain help-seeking behaviors among international college students. According to the TPB, attitudes toward behavior, subjective norms, and perceived behavioral control shape an individual`s behavioral intention that in turn predicts one`s actual behavior (Ajzen, 1985, 1991; Ajzen & Fishbein, 1980). In addition, the TPB posits that intentions to seek help and perceived behavioral control directly influence help-seeking behaviors. Hence, by proposing following hypotheses, the present study tested the bivariate relationship between each element of the TPB with international students' intentions to seek counseling services and help-seeking behaviors. (See figure 4).

H1. Attitudes toward help-seeking (1a), subjective norms (1b), and perceived behavioral control (1c) will predict intentions to seek counseling services.

H2. Intentions to utilize counseling services (2a) and perceived behavioral control (2b) will predict help-seeking behaviors.

The literature identified acculturation as an important factor that may influence one's decision to seek help. In explaining the role of acculturation in individuals' help-seeking process, previous studies found mixed results. Furthermore, as discussed earlier, only one study has examined the effect of acculturation on the components of the TPB. Therefore, the present study proposed the following research question:

RQ1. What is the relationship between acculturation, and (a) international students' help-seeking intentions and (b) behaviors?

Schomerus and Angermeye' (2008) review of the literature indicated that few studies have investigated the impact of stigma on help-seeking. Consistent with Schomerus and Angermeye (2008), to the author's knowledge, there is no study that has investigated the role of stigma in international students' help-seeking intentions and behaviors. The author's review of the literature indicated that the results of previous studies about the relationship between stigma and help-seeking process were mixed. By proposing the following research question, the present study scrutinized the relationship between international students' level of self-stigma and their intentions and help-seeking behaviors:

RQ2. What is the relationship between international students' self-stigma with (a) their help-seeking intentions and (b) behaviors?

Many studies investigated the role of gender differences in individuals' help-seeking intentions and behaviors. While some studies found that compared to women, men are less likely to seek professional mental health services (e.g., Addis and Cohance, 2005; Andrews et al., 2001; Galdas et al., 2005), Roldan-Bäu's (2013) study found no support for the correlation between gender and intentions to seek professional help. By proposing the following research

question, the present study scrutinizes the relationship between gender and international college students' help-seeking intentions and behaviors:

RQ3. Is there any relationship between gender, and (a) intention to seek counseling services and (b) help-seeking behavior among international students?

Consistent with previous studies that examined the role of individuals' prior experience of counseling services in their help-seeking process, this study also explores the relationship between international college students' previous experience of counseling services with their intentions toward counseling services, and utilization of their campus counseling services.

RQ4. Is there any relationship between international students' past experience of counseling services with (a) their intention to seek counseling services and (b) help-seeking behavior?

Finally, research indicated that international students face a variety of obstacles while studying abroad. Surprisingly, despite dealing with these different issues, professional help sources are low on international students' priority list. Thus, the following research questions are proposed:

RQ5. What are the international students' obstacles while pursuing higher education in the U.S.?

RQ6. Which help sources would international students consider using in dealing with their persistent adjustment issues?

Methodology

Participants

The sample included 132 international students attending Virginia Tech. They were recruited to participate in an online survey examining international students' help-seeking intentions and behaviors. Subjects ranged in age from 18 and 40 (M=26.60, SD=4.40). The sample was comprised of 60 women (45.50 %) and 72 men (54.50 %). Subjects' academic classifications were as follows: Ph.D. students (84%, n= 79), Master's students (21.96%, n= 29), Undergraduate (15.90%, n= 20), and other (2.27%, n= 4). Out of all the participants, 62.12% were single, 31.06% were married, 3.03% living with a partner and 3.78% who identified as "other." Average length of stay in the US was 3 years. 32.06% of subjects identified themselves as Iranian (n=42), 19.08% Indian (n=25), 12.97% Chinese (n=17), 3.05% Egyptian (n=4), 2.29% German (n=3), and 1.52% South Korean (n=2), Saudi Arabic (n=2), Pakistan (n=2), Brazil (n=2), Dominican Republic (n=2), Thailand (n=2), and 21.37% from other countries (n=28). One participant did not specify his country of origin. (See figure 5 for respondents' countries of origin.) In reporting their utilization of their campus counseling services, 83.20% (109 out of 131) of participants reported that they have never used Thomas E. Cook Counseling services. 16.80 % (22 out of 131) of Virginia Tech international students, however, reported that they have utilized the Center. One subject did not specify if she has utilized Thomas E. Cook Counseling Center.

Procedure

The study recruitment materials were approved by the Institutional Review Board (IRB). Before distributing the study, four graduate student colleagues completed the survey. The researcher evaluated the average duration of survey completion. In addition, the participants' feedback was used to modify some parts of the survey and make it shorter and simpler to understand. The participants were not allowed to complete the main survey.

The survey invitation was distributed in five ways. At first, the recruitment materials were sent through email by Virginia Tech graduate school, as well as Virginia Tech cultural organizations and student associations such as Asian, African, Iranian, and Indian student Associations. Secondly, the announcement was sent to VT students through Virginia Tech campus notices. Thirdly, invitations were posted on the Facebook pages of all Virginia Tech student organizations, associations, and clubs. Moreover, the email survey invitation was sent to different Virginia Tech departments to send to their email lists. In addition, the recruitment flyers were posted at the Graduate School building (GLC) and Cranwell International Center. Finally, the researcher handed out flyers to students in several campus buildings, including the VT Graduate School building, Cranwell International Center, and Newman library. The email, campus notice and Facebook post included a brief description of the study, purpose of the survey, request for eligible students, and the research team contact information, along with the URL of the survey. Participants were informed that the study may take 30-40 minutes to complete. The flyer was attached to the email. The flyer consisted of the purpose of the survey, inclusion criteria, and the researcher's contact along with the URL of the survey.

In each recruitment strategy, the study inclusion criteria was highlighted. Students were informed that they should be a Virginia Tech international student who (1) is 18 or older (2) left his/her country of origin and moved to the United Sates to study (3) has not grown up in the US (4) does not have an American heritage, and (5) whom English is his/her second language. Students meeting these requirements were then directed to complete the online informed consent form and start the survey.

At the beginning of the survey, participants were asked to read the consent form and give their voluntary consent if they agreed with the conditions of the project. Additionally, after

completion of consent form, participants` ages were requested. If they were younger than 18 years old, they were asked to exit the study. At the end of the survey, participants were debriefed and thanked for their participation.

Measures

Demographic questionnaire. Participants completed a demographic questionnaire. Items on the demographic questionnaire consisted of gender, age, academic classification, country of origin, relationship status, and length of time spent in the U.S. Additionally, subjects were asked to answer items inquiring about their parents' country of origin, perceived English proficiency, and previous experience with counseling services created by the researcher and based on previous studies.

Attitudes toward help-seeking behavior. According to Miller (2004), assessing both belief-based and direct measures of the TPB components provides researchers with more accurate results. For all three components of the TPB, this study assessed both direct and belief-based measures. Miller (2004) obtained *the direct measure of attitude* by means of a five item set of evaluative semantic differential scales including "good-bad", "wise-unwise", "beneficial-harmful", "comfortable-uncomfortable", and "useful-useless." This study removed the "beneficial-harmful" scale because the "useful-useless" scale was sufficient for the purpose of the study. Participants were asked to evaluate the utilization of counseling services on a 5-point scale ranging from "very (good, wise, comfortable, helpful)" = 2 to "very (bad, unwise, uncomfortable, helpless)" = -2. The higher score represented more favorable attitudes toward help-seeking behaviors.

The current study found an acceptable Cronbach's alpha reliability coefficient for the direct measure of attitudes toward help-seeking behaviors (Cronbach's α = .79). Cronbach's alpha is a test reliability technique which measures the internal consistency of indices (Gliem, & Gliem, 2003). In the present study Cronbach's alpha values of 0.6 and higher were regarded as satisfactory. More specifically, instruments with Cronbach's alpha score of 0.6 were considered as moderately reliable, and indices with Cronbach's alpha values of 0.7 and higher were regarded as acceptable.

The belief-based measure of attitude was adapted from Miller's (2004) and Aguirre's (2012) studies. The measure was comprised of two 5-point scales. The first belief-based scale measured participants' belief strength regarding seeking professional help. The scale listed 10 consequences of seeking professional help and asked participants to rate how likely or unlikely such a consequence would be for them. The questions included 6 positive consequences (e.g., "seeking counseling services shows that I am taking care of myself.") and 4 negative consequences (e.g.," seeking counseling services causes others think I am less component."). The items were ranged from "very unlikely" (-2) to "very likely" (2). The second belief-based scale assessed participants' outcome evaluation about 10 consequences of seeking professional help. Subjects were asked to rate how good or bad it would be for them if such a consequence occurred on a 5-point scale ranging from "very bad" (-2) to "very good" (2). The following table illustrates the point values of belief strength and outcome evaluation:

Belief Strength	Outcome Evaluation
Very Likely = 2	Very Good= 2
Quite Likely = 1	Good = 1

Undecided = 0	Neither = 0
Quite Unlikely = -1	Bad = -1
Very Unlikely= -2	Very Bad = - 2

For each question, the belief strength score was multiplied by the outcome evaluation score. Following that, the results were summed and were divided by 10 to calculate the mean score, as in Miller (2004) and Aguirre (2012). The higher positive scores represented more positive attitudes toward seeking counseling services. According to Aguirre (2012), higher positive scores indicated that either positive consequences of seeking counseling services were scored as likely and good or negative consequences of seeking counseling services were scored as unlikely and bad. In addition, higher negative scores represented more unfavorable attitudes toward seeking counseling services.

Miller (2004) found an acceptable Cronbach's alpha for the belief-based measure of attitudes (α = .78). No reliability data, however, was reported for the scale by Aguirre (2012). In the current study, some modifications were made. The word "counseling services" was replaced with "professional mental health treatment." In addition, some irrelevant items were deleted. Since Miller designed the scale for lawyers, some of the items targeted this population specifically (e.g., "cause me to lose clients."). In order to shorten the scale, the items which were repeated several times were eliminated (e.g., "cause me to be in treatment for years."). Although Aguirre (2012) scored the belief-based measure of attitude on a 7-point scale, in the present study the scale was scored on a 5-point scale. Finally, in the outcome evaluation scale, the word "very unacceptable" was replaced with "very bad" and "very acceptable" was replaced with "very good". The wording was changed to facilitate understanding of the questions for

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international participants, many of whom who were not native speakers of English. The present study found low Cronbach's alpha (Cronbach's $\alpha = 0.47$) for the belief-based measure of attitudes toward help-seeking.

Subjective norms. To assess *the direct measure of subjective norms* participants were asked: "Assuming you are experiencing a linguistic, academic, psychological, emotional, or personal issue, how likely is it that most people important to you would want you to utilize professional counseling services? (Bayer & Peay, 1997; Rogers, 2009) and "To what extent would you want to comply with what they want you to do?" (Miller, 2004; Aguirre, 2012). In order to calculate the direct score of subjective norms, each normative belief was multiplied by the corresponding motivation to comply with the referent. According to Aguirre (2012), positive scores indicated favorable subjective norms toward seeking counseling services and negative scores represented unfavorable subjective norms toward utilization of counseling services. The Cronbach's alpha reliability coefficient for the direct measure of subjective norms was found moderately reliable (Cronbach's $\alpha = 0.65$).

Belief-based measure of subjective norms was adapted from Aguirre's (2012) study. The measure consisted of two 5-point scales. The first belief-based scale was based on the normative beliefs concerning the expectations of twelve salient referents: father, mother, siblings, relatives, spouse, partner, best friend, friends, colleagues, professor, supervisor, and clergy. Participants were asked to rate the strength of the likelihood each referent would want them to seek professional help on a 5-point scale ranging from "very likely" (2) to "very unlikely" (-2). The second belief-based scale measured participants' motivation to comply with each referent on a 5 point scale ranging from "strongly agree" (2) to "strongly disagree" (-2). Participants were asked

to rate the extent to which they would agree to comply with each referent. The following table

illustrates the point values of normative beliefs and motivation to comply

Normative Beliefs	Motivation to Comply
Very Likely = 2	Very Likely = 2
Likely = 1	Likely = 1
Doubtful = 0	Doubtful = 0
Unlikely = -1	Unlikely = -1
Very Unlikely= -2	Very Unlikely = - 2

Each normative belief was multiplied by the corresponding motivation to comply with

the referent. Following that, the results were summed and were divided by 12 to calculate the

mean score, as in Aguirre (2012). Higher positive scores indicated more favorable subjective

norms. In other words, it indicated that either participants agreed that their referents wanted them

to utilize counseling services, and they are motivated to comply with their referents' expectations

or they did not agree that their referents wanted them to utilize counseling services and were not

motivated to comply with it. The negative scores represented unfavorable subjective norms.

More specifically, it showed that either participants agreed that their referents did not approve

their utilization of counseling services, and they were motivated to comply with their referents'

expectations or they agreed that their referents approved their utilization of counseling services

and were not motivated to comply with the approval.

For the purpose of this study, some modifications were made. The word "mental health

treatment" was replaced with "counseling services." Three referents including parents, extended

family, and significant others were removed, and ten referents including father, mother, spouse,

partner, relatives, best friend, colleagues, boss, clergy, and professor were added. Finally, although Miller (2004) and Aguirre (2012) scored the subjective norms measure on a 7-point scale, in the current study, the subjective norms measure was scored on a 5-point scale. The Cronbach's alpha for each scale was acceptable (Cronbach's $\alpha = .80$).

Perceived behavioral control. Perceived behavioral control also was assessed in two ways: (1) belief-based measure and (2) direct measure of perceived control toward help-seeking behavior as in Miller (2004). Miller's study revealed high internal consistency (.93) for the belief-based measure of perceived control. To assess *the belief-based measure* of perceived control toward utilization of counseling services, six out of sixteen reasons listed by Miller (2004) were selected. Transportation difficulty and English proficiency were added. Participants were asked to rate the likelihood of each reason to stop them from seeking professional help if they assumed they were experiencing a linguistic, academic, psychological, emotional, or personal issue for a long time. By averaging the sum of the eight items, the total belief score was calculated. The 7-point scale was scored from "very likely" (-3) to "very unlikely" (3), with higher positive scores representing more favorable perceived control and higher negative scores representing more unfavorable perceived control toward seeking professional help. The reliability for the belief-based measure of perceived behavioral control was acceptable (Cronbach's $\alpha=0.70$).

The direct measure of perceived control toward seeking professional help was measured by asking two questions from participants: "Assuming you were experiencing a persistent issue (e.g., emotional, psychological, etc.), how confident are you that you could utilize counseling services?" The possible answers were "a lot", "slightly", "a little", "not at all." The second question was "How much control do you have over whether or not you could utilize counseling

services?" (Miller, 2004). The possible responses were "extremely confident", "quite confident", "slightly confident", "neither confident nor unconfident", "extremely unconfident", "slightly unconfident", "quite unconfident" The total direct measure of perceived behavioral control was calculated by summing the scores of these questions. Higher scores indicated greater perceived behavioral control over their decision to seek counseling services. The reliability for the direct measure of perceived behavioral control was moderately reliable (Cronbach's α =0.60).

Help-seeking intention. In order to assess intentions to seek counseling services, a 6-item scale was designed. The scale was adapted from Aguirre's (2012) study. For the purpose of the current research, some modifications were made. First, instead of asking about participants' intention of seeking help across five emotional problems (anxiety, depression, academic stress, family stress, and personal stress), the present study categorized international students' concerns in 6 groups including linguistic, academic, psychological, socializing, emotional, and personal issues. For each item, participants indicated how likely they would be to utilize counseling services if they experienced one of the aforementioned issues for a long time. Subjects rated their degree of intention to seek professional help for each of the six questions on a 6-point scale ranging from "very unlikely" (1) to "very likely" (6). The higher score represented higher intentions to seek professional help. Secondly, in order to simplify data analysis, the present study ranged the scale from 1 to 6 rather than -3 to 3. Thirdly, the word "professional psychological treatment" was replaced with "counseling services." Cronbach's alpha reliability coefficient was acceptable (Cronbach's α = 0.79).

Help-seeking behavior. As a part of demographic questions, participants were asked if they have ever used Virginia Tech Thomas E. Cook Counseling Center. Possible responses included Yes= 1 and No=0.

Acculturation. The Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuellar et al., 1995) was used in this study for several reasons. According to Stephenson (2000), this instrument is widely used and reliable to measure acculturation through a bidimensional approach. Cuellar et al. (1995) found good internal and test-retest reliability for the scale. The researchers reported coefficients alpha of .83 for the Anglo Orientation Scale and .88 for the Mexican Orientation Scale (Cuellar et al., 1995). Secondly, previous studies of help-seeking used this scale and found high internal consistency (Aguirre, 2012; Roldan-Bäu, 2013). Aguirre's (2012) study among Mexican Latinos revealed the internal reliability of .86. Roldan-Bäu's (2013) study demonstrated high internal consistency of .85 for Latino cultural orientation and internal consistency of .84 for Canadian cultural orientation. The Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995) has two scales. The first scale measures Mexican and American cultural orientations and describes two aspects of acculturations, assimilation and integration. The second scale assesses the other two aspects of acculturation, separation and marginalization. However, since the validity of the second scale of ARSMA-II is not well-established, Cuellar et al. (1995) suggested that this scale should be used with caution. The present study only used the first scale of the ARSMA-II. As this study sampled college students with diverse ethnic groups, some modifications were made to the ARSMA-II. For instance, item 1 on the ARSMA-II, "I speak Spanish," was modified to "I speak my native language." Item 22 on the ARSMA-II, "I like to identify myself as a Mexican," was modified to "I like to identify myself as a person from my own country." In addition, in the present study, 7 irrelevant items of ARSMA- II were deleted. In the current study, the first scale of the ARSMA-II was comprised of two subscales: an 11-item scale which measures individuals' cultural orientation to their own culture, and an 11-item scale which assesses individuals' cultural

orientation to Anglo (AOS). The scale reports two scores, with higher scores representing greater

orientation in the respective culture. The scale was scored on a 5-point Likert scale, ranging from

"not at all" (1) to "almost always" (5). The total score of each subscale was measured by

summing the responses in the subscale and dividing the number of items in the subscale to get a

mean score. The total acculturation score was calculated by subtracting the participants' own

culture mean score from the AOS mean score. According to Aguirre (2012), participants' scores

are ranged into the following levels of acculturation: (a) Level 1 = participants who were very

oriented to their own culture (< -1.33), (b) Level 2 = participants who were low assimilated and

high integrated (>-1.33 to <-.07), (c) Level 3 = slightly Anglo-oriented bicultural (>-.07 to

<1.19), (d) Level 4 = strongly Anglo oriented (>1.19 to <2.45), and (e) Level 5 = very

assimilated/Anglicized (> 2.45). The Cronbach coeffient alpha of the whole scale was

moderately reliable (Cronbach's α = .64). The reliability for "their own culture" and AOS

measures were acceptable (Cronbach's α= .75 & Cronbach's α= 78).

Self-stigma of seeking help. The SSOSH (Vogel et al., 2006) assessed perceptions of

self-stigma associated with seeking professional help. Participants were asked to rate the degree

to which each item described how they might react about utilization of counseling services on a

5-point Likert-type scale, ranging from "strongly disagree" (1) to "strongly agree" (5) with

higher scores indicating higher self-stigma for seeking counseling services. A sample item from

the SSOSH is "I feel inadequate if I go to a counseling center for my problems." Vogel et al.

(2006) reported high internal consistencies on the SSOSH, ranging from .92 to .94. For the

purpose of this study, minor modifications were made to the SSOSH. The word "mental health

professional" was replaced with "counselor" and "professional mental health services" was

replaced with "counseling services." Two irrelevant items were removed. The wording was

changed for the consistency of the terminology throughout all of the study materials and to indicate that the focus of this research was not merely on mental health services. Any professional help sources that international students may consider to seek help from for their linguistic, academic, psychological, emotional, socializing, and personal concerns were included in this study. The Cronbach's alpha for the eight items were .34. The items with low alpha were removed until an alpha higher than .70 was achieved. Questions 1,3,6,8 were retained and the alpha coefficient for the four items was acceptable (Cronbach's α= .77). Hence, these four items were calculated in the analyses.

International students' obstacles. A 26 item scale was designed to assess the obstacles that international students may have while studying in the US. The scale was adapted from Chebbet's (2012) study. In the proposed study several modifications were made. First, instead of 9 items listed in the original scale, in the present study, the researcher designed a 26 -item scale. The scale included six subscales: (1) linguistic problems (3 items, e.g. "My skill in English language has negative effect on my social life in America."); (2) academic concerns (3 items, e.g., "I feel anxious when I should participate in the class."); (3) Socialization issues (5 items, e.g., "Socializing with Americans is hard for me. "); (4) Psychological issues (9 items, e.g., "I feel Depressed."); (5) emotional issues (3 items, e.g., "I have missed my family members.") ; (6) personal issues (3 items, e.g., "I have a job concern"). Secondly, instead of yes and no options, participants were asked to use a 5-point scale to indicate their likelihood of experiencing each issue, ranging from "never" (0) to "always" (4). The Cronbach's alpha was acceptable (Cronbach's α= .91) which suggests that all 26 items had relatively high internal consistency.

Formal and informal help sources. Previous studies indicated that people seek different help sources to deal with their problems. For instance, the author's review of the literature

suggested that Mexican and Asian college students are more likely to utilize informal help sources including their parents, siblings, and peers rather than seeking professional help from counselors and mental health professionals. To identify Virginia Tech international students' preferences for help sources for dealing with their persistent issues, three questions regarding academic and linguistic, psychological, and personal issues, were designed by the researcher. In addition, 10 help sources including, family, partner, spouse, friend, professors, spiritual leader, Virginia Tech Thomas E. Cook Counseling Center, off-campus professional help sources, nobody, and others, were listed. For each question, subjects were asked to drag the help sources that they would consider to deal with their persistent issue to place them in the preferred order. Participants ranked the help sources from 1-10 with "1" being the most preferred and "10" being the least.

Results

This section will address the data analyses performed to examine the study hypotheses and research questions. In addition, the role of English proficiency in international students' help-seeking behaviors and their reasons for underutilization of their campus counseling services will be discussed. In the present paper, as a first step toward validating the proposed conceptual model of the TPB, the researcher merely investigated each of the simple bivariate relationships in the model. In addition, due to the limited sample size of the study, the overall model fit along with indirect relationships of the TPB elements on help-seeking behavior through behavioral intention, were not examined.

The data was reviewed to identify the missing values. While 202 students started the survey, only 132 finished it. The dropout rate of the survey was 34.00% (69 out of 202 did not

finish the study). In terms of the time duration for survey completion, subjects ranged from 15 to 70 minutes (*M*=30.02*, SD*=14.88). According to Miller (2004), assessing both belief-based and direct measures of the TPB components provides researchers with more accurate results. Since it is the first study which investigated international students' help-seeking process within the Theory of Planned Behavior framework, for all three components of the TPB, both direct and belief-based measures were assessed to obtain comprehensive results. Although both belief-based and direct measures of all three elements of the Theory of Planned Behavior were calculated, the close review of the data revealed that direct measures had higher weights. The weight indicates to what extent each measure causes change in each construct. The acceptable weight is 0.7. Thus the weights less than 0.7 were removed. In addition, Aguirre (2012) also found that belief-based measures were a poor index of the Theory of Planned Behavior construct. Hence, the researcher used only direct measures. In the present study, a path analysis in SmartPLS was conducted to examine the effects of belief-based and direct measures on attitude, subjective norms, and perceived behavioral control. The analysis indicated that the weights of belief-based measures of attitudes, subjective norms, and perceived behavioral control were less than 0.7. In the current paper only direct measures were considered. (See figure 6 for the weights of belief-based measures compared to direct measures).

Bivariate correlation assesses the relationship between two variables (Cohen, Cohen, West, and Aiken, 2013). The variables should be quantitative including nominal, ordinal, interval, and ratio, and the data should be selected randomly. In order to select an appropriate bivariate inferential statistic, in each analysis the types of variables should be determined first. When both variables are continuous, product-moment correlation can be used (Panik, 2012; MacCallum, Zhang, Preacher & Rucker, 2002). When one factor is categorical and the other one

is continuous, point-biserial is appropriate (Varma, 2006). Finally, Phi Coefficient is used when both factors are categorical (MacCallum et al., 2002). Pearson correlation (r) is the most common measure of bivariate correlation. R is ranged from -1 to +1 with "-1" indicating the strong negative relationship and "+1" representing the strong positive relationship between the variables. The value "0" shows that there is no relationship between the variables (Varma, 2006). In the current study, bivariate correlation was computed to analyze all hypotheses and research questions in SPSS.

The first hypothesis predicted that attitudes toward help-seeking (1a), subjective norms (1b), and perceived behavioral control (1c) will predict intentions to seek counseling services. The product-moment correlation was performed to test the first hypothesis. 1a) The analysis revealed that there was no correlation between attitudes toward seeking counseling services and intention among international students, r (127) = 0.09, p= 0.27. 1b) In addition, subjective norms were not correlated with intentions, r=0.06, n=128, p=0.47. 1c) However, the results revealed that perceived behavioral control was significantly correlated with international students' intentions to seek counseling services, r (125) =0.33, p <.001. In other words, the positive significant correlation indicated that those who have higher levels of control over their utilization of counseling services have greater intentions to seek such services. Hence, the first hypothesis was partially supported.

The second hypothesis predicted that intentions to utilize counseling services (2a) and perceived behavioral control (2b) will predict international students' help-seeking behaviors. 2a) A product-moment correlation was computed to test the correlation between two continuous variables of perceived behavioral control and intention. The analysis indicated that perceived behavioral control was not predictive of help-seeking behavior, r (127) = 0.05, p=0.54. 2b) The

point-biserial correlation revealed that the intention is not a predictor of help-seeking behavior among international students, r (127)=0.04, p=0.62. Thus, the hypothesis was not supported.

The first research question inquired into the relationship between international students' acculturation with their help-seeking (a) intentions and (b) behaviors. Similar to Agurrie's (2012) study, the present paper categorized participants' acculturation scores into five levels of acculturation. The data indicated that 11.53% of respondents were strongly oriented toward their own culture (level 1, n=15), 51.55% exhibited low assimilation and high integration (level 2, n=67), 33.07% of subjects were slightly Anglo-oriented bicultural (level=3, n=43), 3.07% became strongly Anglo oriented (level 4, n=4), and only one participant exhibited high assimilation (level=5, n=1). (See figure 7).

A product-moment correlation was performed to examine if there was a correlation between acculturation and foreign students' intentions to utilize counseling services. No significant correlation was found, r (127) = -0.12, p=0.15. In addition, the point-biserial correlation indicated that acculturation and help-seeking were not correlated, r (128) = -0.02, p=0.80.

The third research question asked about the relationship between international students' self-stigma with their help-seeking (a) intentions and (b) behaviors. A product-moment correlation was assessed to investigate the relationship between self-stigma and intention to seek counseling services among international students. No correlation was found, r (126) =-0.06, p=0.44. Furthermore, the point-biserial correlation analysis indicated self-stigma was not correlated with international students' utilization of counseling services, r (126) = -0.14, p=0.10.

The third research questions dealt with the relationship between gender, and (a) behavioral intention and (b) help-seeking behavior. a) In order to examine the correlation

between gender and behavioral intention, a phi coefficient correlation was assessed. No correlation was found between international students' genders and their intentions to seek counseling services, r (127) = 0.05, p=0.57. b) However, the results revealed that gender is marginally significant as a predictor of help-seeking behavior, r (129) = 0.16, p=0.05. Figure 8 illustrates different percentages of international students' utilization of counseling services based on their genders. Out of those who utilized Cook counseling center, 63% (n=22), identified themselves as female and 37% male.

The fourth research question asked about the relationship between participants' prior experience of counseling services with their help-seeking (a) intentions and (b) behaviors. a) The point-biserial analysis showed that previous experience of counseling services was significantly correlated with the students' intentions to utilize the counseling services, r (127) = 0.18, p= 0.04. More specifically, those who previously utilized counseling services exhibited higher intention to utilize counseling services for dealing with their persistent issues. b) Additionally, the phi coefficient correlation was performed to examine the correlation between prior experiences of counseling services and international students' utilization of counseling services. The results indicated that the previous utilization of counseling services was a predictive of foreign students' help-seeking behavior, r (129) =0.56, p<.001. See figure 10 for a diagram of correlations between all variables.

The fifth research question inquired into international students' obstacles while pursuing higher education in the US. Of all participants, 54.36% reported emotional concerns as their most important issues. Hence, missing their families, friends, and countries were identified as the most challenging obstacle that international students have. Following that, personal challenges (11.65%) and academic concerns (14.56%) were identified as second and third important

obstacles of international students. Linguistic problem (6.80%), socializing issues (6.80%), and psychological concerns (5.80%) have been reported as their difficulties while studying in the U.S.

The last research question inquired into preferred help sources that international students may use to deal with their persistent issues. The data indicated that international students' preferred help sources may change based on the type of obstacle encountered. The analyses revealed that for linguistic or academic issues (e.g., lack of English proficiency, presentation anxiety, etc.), 21.5% of subjects (26 out of 121) selected Cook Counseling Center as their first three preferences. In addition, in order to deal with personal issues (e.g., visa and job, etc.), 21.2% (24 out of 113) of subjects chose Thomas E. Cook Counseling center as their top three preferred help sources. However, the findings revealed that only 12.5% (14 out of 113) selected Thomas E. Cook Counseling center as their first three preferred help sources in dealing with psychological issues.

English proficiency and help-seeking behavior. Of all respondents, 13.74% (18 out of 131 participants) evaluated their English proficiency as excellent, and 74.04% reported very good and good English proficiency(97 out of 131). Only 8.40% (11 out of 131 participants) evaluated their English skills as not too bad, and 3.80% (5 out of 131 respondents) were not sure. The data indicated that 33.33% of those who perceived their English proficiency as excellent utilized the Thomas E. Cook Counseling services. However, among the participants who reported their English skills as not too bad (n=11), only one student utilized the counseling services. (See figure 11).

Reasons for underutilization of counseling services. Similar to findings reported in the literature review, the results of the current study indicated that international students are concerned about not being fully understood by the counselors. In responding to a question concerning participants' specific reasons for not utilizing Virginia Tech Cook counseling services, 6.50 % of participants specified that they do not think that the counselor can understand them. One respondent stated: "I think they do not understand problems of international students. They just do their job and cannot solve any problem regarding international students." Although Virginia Tech provides orientations and campus tours at the beginning of each semester, 27.03% of students reported that either they have never heard about Virginia Tech Thomas E. Cook Counseling Center or they are not familiar with its services. One participant mentioned: "I did not know about it. If it was mentioned in orientation, I do not remember it." Of all participants, 33.84% reported unawareness of Thomas E. Cook Counseling center at Virginia Tech. One student stated that lack of English proficiency is the main reason that she has not utilized counseling services: "I think I cannot explain my feelings because I cannot speak English very well." One student also expressed his concern about his information confidentiality. He mentioned: "It might affect my future career or citizenship, they might keep my records and in (the) future when I want to become a resident or citizen or for my future job, it might cause me some problem(s)."

Overall, the results of the study revealed that contrary to TPB, attitudes toward help-seeking and subjective norms were not correlated with international students' willingness to seek professional help. Perceived behavioral control, however, was found as a predictive of international students' intentions toward utilization of counseling services. Intentions and perceived behavioral control were not predictors of utilization of Thomas E. Cook Counseling

Center. The correlation between acculturation and self-stigma with international students' help-seeking intentions and behaviors was insignificant. The findings indicated that while gender was not a predictor of behavioral intention, it was marginally significant as a predictive of help-seeking behavior. Furthermore, previous utilization of counseling services was strongly correlated with international students' help-seeking intentions and behavior. Interestingly, the results of the study revealed that emotional issues including missing parents, friends, and their native countries was the biggest challenge of Virginia Tech foreign students while studying in the U.S. Finally, lack of awareness about their campus counseling center, privacy and confidentiality concern, lack of English proficiency, and having doubt about counselors' ability to understand their issues, have been identified as the main reasons for underutilization of Thomas E. Cook Counseling Center by Virginia Tech international students.

Discussion

The present study employed Theory of Planned Behavior (Ajzen, 1985, 1991) to explain help-seeking intentions and behaviors among international college students. While the main model of TPB predicted that individuals' intentions to seek help is affected by their attitudes toward help-seeking, subjective norms, and perceived behavioral control, the results of the current study did not find support for the relationship between of attitudes and subjective norms on international college students' help-seeking process. However, consistent with the TPB, perceived behavioral control was found to be a strong predictor of international students' intentions to seek professional help sources for their persistent issues. As discussed earlier, according to Ajzen (1985), control belief and perceived power are the components of perceived behavioral control. The belief-based measure of perceived behavioral control examined the international students' control belief over utilization of their campus counseling services.

However, the path analysis of the TPB indicated that the weight of belief-based measure of perceived behavioral control was less than 0.7 and thus, it was not considered in the study data analyses. Therefore, by considering the direct measure, international students' perceived behavioral control was assessed based on their perceived power. Perceived power is defined to the extent to which people believe they have control over accepting or refusing to perform a particular behavior. In order to deal with their adjustment issues, international students who believed that they have higher control and confidence over accepting or refusing to utilize their campus counseling treatments, exhibited greater willingness to visit a counselor.

The study results indicated that intention and perceived behavioral control did not influence international students' utilization of Thomas E. Cook Counseling Center. One possible explanation could be that the present survey inquired merely about international students' past utilization of their campus counseling services. A follow-up study can investigate whether participants who reported high intentions and a great level of confidence and control over their utilization of professional help sources would utilize Thomas E. Cook Counseling Center in the future.

Contrary to Miville and Constantine's study on Mexican Americans (2006), the findings of the current research revealed that there is no relationship between acculturation and help-seeking behavior among Virginia Tech foreign students. Moreover, the proposed study found no support for the relationship between international students' acculturation and their intentions to seek professional help. One possible interpretation could be that the proposed study considered merely the total acculturation score which had a bit low reliability (Cronbach's $\alpha=.64$).

Similar to Roldan-Bäu's (2013) research, the present study did not find significant correlation between self-stigma and international students' help-seeking intentions and behaviors. One possible explanation could be limited questions of the self-stigma scale. Since the Cronbach's alpha of the original scale was so low (.34), 4 items were removed. Thus, participants' self-stigmatization toward help-seeking was measured based on only 4 remaining questions.

Although gender differences did not play a significant role in subjects' intentions to utilize counseling services, the results of the study indicated that women's utilization of Thomas E. Cook Counseling center was significantly higher than men. Gender role conflict can be a factor which affects men`s utilization of professional treatments. According to O'Neil and Good (1995), "Gender role conflict is a psychological state in which socialized gender roles have negative consequences on the person or others" (p. 336). O'Neil et al. (1986) introduced four patterns for male gender role conflicts. The first pattern is achievement, power, and competition, which addresses the importance of personal achievement and individual success for men. The second pattern, restricted emotionally, refers to men`s difficulty in expressing their feelings. Thirdly, restricted affectionate behavior between men explains how men may have troubles in expressing their affection for other men. Finally, the fourth pattern is conflict between work and family. It is the degree to which men may struggle with balancing family life and professionalism. The literature indicated that there is a strong negative correlation between men's gender role conflict and their psychological help-seeking in that greater levels of gender conflict are associated with less utilization of professional help sources (Good et al., 1989). Therefore, the low rate of men's utilization of counseling services found in the current study, is

consistent with prior research (Addis & Cohance, 2005; Andrews et al., 2001; Galdas et al., 2005; Good et al., 1989).

Consistent with previous studies (Aguirre, 2012; Alvidrez, 1999; Cabassa, et al., 2006; Miller 2004; Rogres, 2009), the results of the current research found that prior experience of counseling services was strongly correlated with international students' help-seeking intentions and behaviors. It is assumed that international students who have already sought professional treatments are familiar with the general procedure of counseling treatments. Hence, compared to those students who have never utilized such these services, the students with prior experience have more information regarding the professional treatments in general as well as the way counselors react to international students' feelings, and thus, they may be more comfortable to make an appointment with a counselor to discuss their serious difficulties.

The current research provided a foundation for future studies into international students' help-seeking process. It is the first study to investigate the international college students' help-seeking intentions and behaviors within the Theory of Planned Behavior framework. Thus, the study attempted to expand the literature about foreign students' adjustment issues and utilization of their campus counseling services.

For the first time, the present study included a scale inquiring about 26 obstacles that international students may face while studying abroad. The issues were categorized in six groups, including: linguistic, academic, socializing, psychological, personal, and emotional. Participants indicated their likelihood of experiencing any of these issues through their adjustment process. Rather than merely focusing on foreign students' psychological issues, the

current study raised awareness about different types of international college students' adjustment challenges.

General Implications. The current review of the literature revealed that psychological and linguistic issues of international students have been highlighted by many studies (Brown, 2008; Chen, 1999; Davis & Katzman, 1999; Ferris & Tagg, 1996; Mallinckrodt & Leong, 1992; Mori, 2000). However, the students' emotional concerns have been underestimated. Interestingly, the present research found that Virginia Tech international students' biggest challenge is emotional issues such as missing their parents, friends, and countries. Therefore, the following suggestions are proposed for Thomas E. Cook Counseling Center, Cranwell International Center, and other campus centers who are in touch with international students: 1) Peer mentoring may be a very effective solution to assist international students in overcoming their emotional issues or perhaps even preventing emotional issues from manifesting. Each student may receive an anonymous survey from either Thomas E. Cook Counseling Center or Cranwell international center, in which they may specify personality qualities or lifestyle tendencies that they would prefer in an international mentor. For instance, couples may express their interest in being connected to couples from their country who are current students at Virginia Tech. Or single international students may indicate that they want to be in touch with another international student from their home country who has the same/opposite gender. Mentors to incoming students may consist of international student volunteers who have been studying at Virginia Tech for at least one year. Their data may be saved in the center database. Then, based on the collected information from both groups, Cook Counseling Center can assign each interested current student to be a mentor for an incoming student. The mentors can meet and engage in social activities with mentees, sharing their experiences, offering advice and

friendly support, and possibly referring them to Thomas E. Cook Counseling Center for further assistance. In this way, the center also can serve more international students and facilitate their adjustment process. 2) In communicating with international students, it is recommended to personalize the emails. For instance, the email may start with the student' name, adding a personalized touch. In addition, the counselors or officers may introduce themselves briefly and express their interest in reaching the student specifically. Finally, since international students may be uncomfortable talking over the phone, it would be encouraging for student services to welcome communication via email.

Although Virginia Tech offers a free visit to Thomas E. Cook Counseling Center for all new students as a part of the university orientation, 33.84% of students reported that they were not aware of the center, and 83.20% (109 out of 131) of participants reported that they have never used Thomas E. Cook Counseling services. It is suggested that the center conducts some free public workshops several times during each academic year to present their services thoroughly to both domestic and international students. More importantly, since international students are less likely to utilize the counseling center in comparison with domestic students, Cook Counseling Center can reach this group of students specifically by conducting some free presentations and open discussions through VT international students' associations, clubs, and organizations.

Limitations. Like any other study, the present research has some limitations that should be acknowledged. At first, as mentioned earlier, while 202 students started the survey, only 132 finished it. The researcher identified lack of compensation and survey length as the most important reasons for the high rate of dropout (34.00%). Because participants were recruited from different departments, they could not receive a credit hour in exchange for their research

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participation. Additionally, the study was completely anonymous, and personal information such as subjects' names and contact information were not obtained. Hence, offering monetary compensation also was not possible. Additionally, in order to get accurate results, the researcher used both belief-based and direct measures to assess attitude toward help-seeking, subjective norms, and perceived behavioral control, three elements of the Theory of Planned Behavior. It made the survey long.

Secondly, lack of sample representativeness has been identified as another limitation of the study. Despite hard work recruiting Virginia Tech international students from different countries, 32.06% of participants were from Iran, the researcher's home country. Since the study did not offer any types of compensation, it is possible that Iranian students' participation in the study was mainly due to having a similar ethnic background with the researcher. Moreover, it is assumed that after receiving the study invitation, Iranian students of Virginia Tech were more likely to complete the survey to support a person from their own community. Although Chinese students are the highest population of Virginia Tech, only 17 Chinese students participated in the study. In addition, from Spain, Bangladesh, Sweden, Lebanon, Vietnam, Japan, Italy, France, Turkey, Tunisia, Colombia, Costa Rica, El Salvador, Russia, Switzerland, Venezuela, and Serbia, only one participant from each country completed the survey. The main strategy in recruiting participants was announcing the survey invitation via Virginia Tech weekly email and the Facebook pages of international student organizations. However, as part of the recruitment process, the researcher handed out the study flyers to international students across the campus. Therefore, the lack of representatives of some populations in the study may be due to non-random methods in recruitment.

Thirdly, according to Tavakol and Dennick (2011), normally the Cronbach's alpha score of higher than 0.70 is regarded acceptable. In the proposed study, however, some of the indices which were included in data analyses had moderate reliability. The Cronbach's alpha reliability coefficients were moderately reliable for the direct measure of perceived behavioral control (Cronbach's α = .60), the direct measure of subjective norms (Cronbach's α =.65), and the whole scale of acculturation (Cronbach's α = .64). The bivariate correlation analyses did not find any significant relations between subjective norms and level of acculturation with international students' help-seeking process. It might be possible that the results of the study were affected by the low internal reliability of the instruments. The Cronbach's alpha for the direct measure of perceived behavioral control was low (0.60). Therefore, the significant correlation found between international students' perceived behavioral control and their utilization of campus counseling services should be interpreted cautiously.

Furthermore, the researcher made some modifications on the original scales of belief-based and direct measures of the TPB as well as acculturation and self-stigma scales. The modifications were applied to facilitate understanding of the questions for international participants, to shorten the survey, and for consistency of the terminology throughout all of the study materials. However, it might be possible that the modification of items in the scales may have caused problems with reliability.

Finally, since the focus of the current study was only on international students at Virginia Tech and their utilization of Thomas E. Cook Counseling Center, the generalizability of the data to all international students and different campus counseling centers is not recommended.

Future Studies. Considering the lack of representativeness of some populations and limited sample size of the study, future researchers should recruit more participants from each country to achieve more accurate information regarding international college students' utilization of their campus counseling services. Since this is the first research study to scrutinize help-seeking intentions and behaviors among international students, more research is needed in this area to examine different factors that may influence the students' decision about utilization of professional help sources.

Secondly, previous studies examined if the addition of acculturation and stigmatization can improve the TPB in predicting help-seeking behavior among college students. The present study, investigated the relationship between acculturation and self-stigma with international students' help-seeking intentions and their utilization of campus counseling services. It is important to note that the researcher's review of the literature indicated that there is no study that has investigated the extended model of TPB among international students in the U.S. Thus, it is suggested that future studies take a step forward and explore if the addition of self-stigma and acculturation can improve three elements of TPB in predicting international students' intention and help-seeking behaviors.

Thirdly, since the proposed study merely used the first scale of the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995), it examined merely international students' level of assimilation and integration. Future studies can consider both scales of ARSMA-II and investigate international college students' level of marginalization and separation as well. By considering both scales of acculturation, they may obtain different results regarding the correlation between subjects' acculturation level, and their help-seeking intentions and behaviors.

Furthermore, the current study merely explored the role of self-stigma in international students' help-seeking process. According to Corrigan (2004), public stigma is another important factor in individuals' underutilization of mental health treatments. More specifically, the author discussed that people with mental health issues are reluctant to seek professional help to avoid being labeled as mentally ill. It is recommended that future research scrutinize the relationship between social stigmatization and foreign college students' willingness to utilize counseling services as well as their help-seeking behaviors.

Additionally, the current study examined the relationship between gender and past experience of counseling services with international students' intention and help-seeking behaviors. A study focusing on gender, previous experience with counseling services, and education classification as covariates, may be the next step for future studies.

Moreover, the current paper did not consider the indirect effects of attitude, subjective norms, and perceived behavioral control on help-seeking behavior. Of course, analyzing the indirect effects of these three elements of TPB on help-seeking behavior through the behavioral intention would provide the researchers with some more adequate information. Hence, they would be able to discuss different factors that may influence international students' decision to utilize or not to utilize their campus counseling centers.

Finally, it is recommended that future studies explore some complex interactions between the variables. For instance, investigating the interaction between gender and level of acculturation or gender and stigmatization, with international students' help-seeking intentions and behaviors may be an avenue for future studies.

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APPENDICES

Appendix A

Demographic Information

Directions:

NOTE: There are no right or wrong answers. It is important that you answer every item as honest as you can. For some statements you may need to depict situations that you have not experienced earlier, please imagine yourself in those situations while responding to those questions.

Please answer the following questions by checking the box beside the appropriate answer or filling the blanks when instructed.

1. What is your gender? [   ] Male   [   ] Female   [   ] Other (please specify) _____

2. What is your age? _____

3. What is your current academic classification? ?

[   ] Freshman   [   ] Sophomore   [   ] Junior   [   ] Senior   [   ] Master's students   [   ] Ph.D. student

[   ] Other (please specify) _____

4. What is your major: _____

5. In what country were you born?

6. What is your native language? _____

7. How long have you been in the USA? Years _____, Months_____.

8. Did you complete High School in your country of origine before coming to the United States?

Yes (I completed high school in my country of origin)

No (I completed high school in the United States)

Other (Please specify): _____

8. In what country was your mother born? _____.

9. In what country was your father born? _____.

10. What is your current immigration status?

[   ] US Citizen

[   ] US permanent resident

[   ] F1 student visa holder

[   ] Other (Please specify): _____

11. What is your current relationship status?

[ ] Single   [ ] Married

[   ] Separated (living apart due to disagreement between the spouses)

[ ] Divorced   [ ] Widowed (having lost a husband or wife through death)

[ ] Living with partner   Other (please specify): _____

12. How do you evaluate your English proficiency?

[ ] Excellent   [ ] Very good   [ ] Good

[ ] Not sure   [ ] Not too bad   [ ] Bad   [ ] Very bad

13. Have you ever taken any English classes/courses in your country?

[ ] Yes

[ ] No

IF YES: Which classes/courses? _____

How long? (years) _____

14. Have you ever used counseling services in the past?

[ ] Yes (please answer questions 14.a-14.d).

[ ] No (skip to question 14.d)

14.a. Where did you use the counseling services?

_____

14.b. How many sessions did you have?

14.c. Generally speaking, how helpful were your experiences with counseling services?

[ ] Extremely Unhelpful   [ ] Unhelpful [ ] Neither Unhelpful or Helpful

[ ] Helpful   [ ] Extremely Helpful

14.d. Are you aware of the counseling services available at VT through the

Virginia Tech Thomas E. Cook Counseling Center?

15. Have you ever used Virginia Tech Thomas E. Cook Counseling Center?

[ ] Yes (if yes, please answer questions 15.a - 15.c)

[ ] No (if no, please answer question 15.d)

15.a. Please specify when have you used the Thomas E. Cook Counseling

services?

_____

15.b. How many sessions did you have?

_____

15.c. Generally speaking, how helpful have your experiences with the VT Cook

Counseling services been?

[ ] Extremely Unhelpful   [ ] Unhelpful   [ ] Neither Unhelpful or Helpful

[ ] Helpful   [ ] Extremely Helpful

15.d. Please specify if you have any specific reason not utilizing the VT Cook counseling services:

_____

Appendix B

Belief-Based Measure of Attitudes (1)

For each of the following possible consequences of seeking counseling services, please rate how likely or unlikely such a consequence would be for you.

1 -------------------2------------------3---------------4----------------5

Very unlikely　　Quite unlikely　　　Neither　　Quite likely　Very likely

I believe that utilizing counseling services_____.

	Very unlikely	Quite unlikely	Undecided	Quite Likely	Very Likely
1. Improve the overall quality of my life.					
2. Make me appear weak.					

3. Show that I am taking care of myself.					
4. Give me hope that the problem can be resolved.					
5. Cause others to think I am less competent.					
6. Give me peace of mind.					
7. Make life more enjoyable.					
8. Cause me to be in treatment for years.					
9. Teach me strategies to apply in other areas of my life.					
10. Probably not help me.					

Belief-Based Measure of Attitudes (2)

For each of the following possible consequences of seeking professional treatment, imagine that

such a consequence occurred and rate how good or bad it would be for you.

1 --------------------2------------------3--------------------4---------------------5

Very bad   Bad   Neither   Good   Very Good

I believe that utilizing counseling services that_____ is _____.

	Very bad	Bad	Neither	Good	Very Good

1. Improve the overall quality of my life.					
2. Make me appear weak.					
3. Show that I am taking care of myself.					
4. Give me hope that the problem can be resolved.					
5. Cause others to think I am less competent.					
6. Give me peace of mind.					
7. Make life more enjoyable.					
8. Cause me to be in treatment for years.					
9. Teach me strategies to apply in other areas of my life.					
10. Probably not help me.					

Direct Measure of Attitudes

When someone has a persistent issue, utilizing counseling services is:

	Very	Quite	Neither	Quite	Very	
	2	1	0	-1	-2	
Good						Bad

Useful						Useless
Comfortable						Uncomfortable
Wise						Unwise

Appendix C

Normative beliefs

For each of the following people, please rate how likely or unlikely it is that such person/group would want you to seek counseling services if you were experiencing a persistent problem.

Likelihood they would want me to seek treatment…

	Very Unlikely	Unlikely	Doubtful	Possibly	Likely	Very Likely
Most people who are important to me						
My father						
My mother						
My siblings						
My relatives						
My spouse						
My partner						

My best friends						
My friends (peers)						
My colleagues						
My professor or advisor						
My boss or supervisor						
My clergy (religious leader)						

Motivation to comply

This part of the survey asks you to imagine you were experiencing a persistent issue and people who are important to you approve or disapprove your decision for seeking professional counseling services. For each of the following people, please rate the extent to which you would want to comply with what the person/group wants you to do.

I would want to comply with they wanted me to do

	Very Unlikely	Unlikely	Doubtful	Possibly	Likely	Very Likely
Most people who are important to me						
My father						
My mother						

My siblings					
My relatives					
My spouse					
My partner					
My best friends					
My friends (peers, classmates)					
My colleagues					
My professor or advisor					
My boss or supervisor					
My clergy (religious leader)					

Appendix D

Perceived Belief Control

Research indicated that there are some reasons that people hesitate to seek professional counseling treatments. Please rate how likely or unlikely it is that these would stop you from seeking professional help assuming you were experiencing a persistent issue (e.g., emotional, psychological, academic stress, etc.).

	Likely						unlikely
	Very -3	Quite -2	Slightly -1	Neither 0	Slightly 1	Quite 2	Very 3
1. I do not know from whom I can seek professional help.							
2. I do not know whether the treatment will be covered by my insurance or not.							
3. I am unaware of what treatment will involve.							
4. I am unaware of what treatment is available.							
5. I have transportation difficulty.							
6. I cannot talk about my problem with others.							
7. My English proficiency does not allow me to express my feelings with an English native counselor or psychologist.							
8. I do not know if I can afford the treatment.							

Perceived Power

Assuming you were experiencing a persistent issue (e.g., emotional, psychological, etc.), how confident are you that you could utilize counseling services?

[   ] A lot

[   ] Slightly

[   ] A little

 [   ] At all

How much control do you have over whether or not you could utilize counseling services?

[   ] Extremely confident

[   ] Quite confident

 [   ] Slightly confident

[   ] Neither

[   ] Slightly not confident

[   ] Quite not

[   ] Extremely not confident

Appendix E

Intentions of Seeking Counseling Inventory (ISCI)

The following list states some reasons why college students decide to utilize counseling services. Read each item carefully and imagine that you were experiencing the same issue. Please indicate how likely you would be to use counseling services if you had the same concern using the following scale:

Very Unlikely   Unlikely   Doubtful   Possibly   Likely   Very Likely

1------------------2----------------3---------------4---------------5------------------6

Remember, there are no wrong or right answers. It is important that you answer all the questions.

I intend to seek my campus counseling center, if I experience:

	Very Unlikely	Unlikely	Doubtful	Possibly	Likely	Very Likely
1. Linguistic issues (e.g., lack of English proficiency, etc.)						
2. Academic concerns (e.g., presentation anxiety, etc.)						
3. Socializing concerns (e.g., communicating with people)						
4. Psychological concerns (e.g., stress, loneliness, etc.)						

5. Emotional issues (e.g., relationship concerns, sexual problems, etc.)					
6. Personal concerns (e.g., job, visa, and immigration concerns, etc.)					

Appendix F

Self-stigma of seeking help

Research indicated that people have different reactions about seeking professional help services. Please use the 5-point scale to rate the degree to which each item describes how you might react about utilizing counseling services.

	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
1. I would feel inadequate if I went to a counseling center.					
2. My self-esteem would increase if I talked to a counselor.					
3. Seeking professional treatment would make me feel less intelligent.					
4. My view of myself would not change just because I made the choice to see a counselor.					
5. I would feel okay about myself if I made the choice to seek counseling services.					

6. I would feel worse about myself if I could not solve my own problems.					
7. My self-confidence would remain the same if I sought counseling services for a problem I could not solve.					
8. If I went to a counseling center, I would be less satisfied with myself.					

Appendix G

Acculturation Rating Scale for International Students in the U.S.

Please read each statement carefully and indicate your response according to the following scale:

1-------------------2----------------3---------------------4--------------------5

Not at all   Not very often   Moderately   Very often   Almost Always

There are no wrong answers. It is important that you answer every item.

	Not at all	Not very often (Very little)	Moderately	Very often	Almost always
1. I speak my native language.					

2. I speak English.					
3. I spend time with Americans.					
4. I spend time with my compatriots (people from my country).					
5. I enjoy listening to music in my native language.					
6. I enjoy listening to English language music.					
7. I enjoy television in my native language					
8. I enjoy English language TV.					
9. I enjoy my native language movies.					
10. I enjoy English language movies.					
11. I enjoy reading (e.g., books) in my native language.					
12. I enjoy reading (e.g., books) in English.					

13. I write (e.g., letters, emails) in my native language.					
14. I write (e.g., letters, emails) in English.					
15. My thinking is done in my native language.					
16. My thinking is done in the English language.					
17. My friends, while I was growing up, were from my country.					
18. My friends, while I was growing up, were Americans.					
19. My friends now are from my country.					
20. My friends now are Americans.					
21. I like to identify myself as American.					
22. I like to identify myself as a person from my own country.					

Appendix H

International Students' Obstacles and Help-Seeking Behavior

The following are some obstacles that international students may face with while studying

abroad. Please indicate how likely you may experience following issues.

	Never	Rarely	Sometimes	Most of the time	Always
	0	1	2	3	4
1. My English speaking skills bother me when I am in the class.					
2. I cannot express my knowledge and ideas in the class.					
3. I feel anxious when I should participate in the class.					
4. Conducting a presentation is stressful for me.					

5. Communicating with my colleagues is hard for me.					
6. My skill in the English language has a negative effect on my academic life.					
7. I have difficulties socializing with my English-native colleagues.					
8. I have difficulties communicating with my English-native professors.					
9. Socializing with Americans is hard for me.					
10. My skill in the English language has a negative effect on my social life.					

11. I have difficulty sleeping.					
12. I have difficulty eating.					
13. I gain weight.					
14. I lose weight.					
15. I feel Depressed.					
16. I feel lonely.					
17. I feel anxious.					
18. I feel stressed out.					
19. I feel that I am less than my English peers (feeling of Inferiority).					
20. I have financial issues.					
21. I have immigration/visa concerns.					
22. I have job concerns.					

23. I have missed my family members.					
24. I have missed my friends.					
25. I have missed my country.					
26. I have problem making friendships here.					

Appendix I

Formal and Informal Help Sources

If you have a linguistic or academic issue (e.g., lack of English proficiency, presentation anxiety, etc.) please RANK the help sources you would consider from 1-10 with "1" being the most preferred and "10" being the least, Please DRAG items to place them in the preferred order.

My Family	1
My Partner	2
My spouse	3
My Friend	4

| My Advisor/Professors	5
My Spiritual leader (e.g,m Minister/Imam/Clergy/Spiritual healer)	6
Virginia Tech Thomas E. Cook Counseling Center	7
Off-campus professional help sources	8
Nobody	9
Other	10

If you have a psychological issue (e.g., stress, loneliness, etc.) please RANK the help sources you would consider from 1-10 with "1" being the most preferred and "10" being the least, Please DRAG items to place them in the preferred order.

My Family	1
My Partner	2
My spouse	3
My Friend	4
My Advisor/Professors	5
My Spiritual leader (e.g,m Minister/Imam/Clergy/Spiritual healer)	6

Virginia Tech Thomas E. Cook Counseling Center	7
Off-campus professional help sources	8
Nobody	9
Other	10

If you have a personal issue (e.g., visa, job, etc.) please RANK the help sources you would consider from 1-10 with "1" being the most preferred and "10" being the least, Please DRAG items to place them in the preferred order.

My Family	1
My Partner	2
My spouse	3
My Friend	4
My Advisor/Professors	5
My Spiritual leader (e.g,m Minister/Imam/Clergy/Spiritual healer)	6
Virginia Tech Thomas E. Cook Counseling Center	7
Off-campus professional help sources	8
Nobody	9
Other	10

Figures
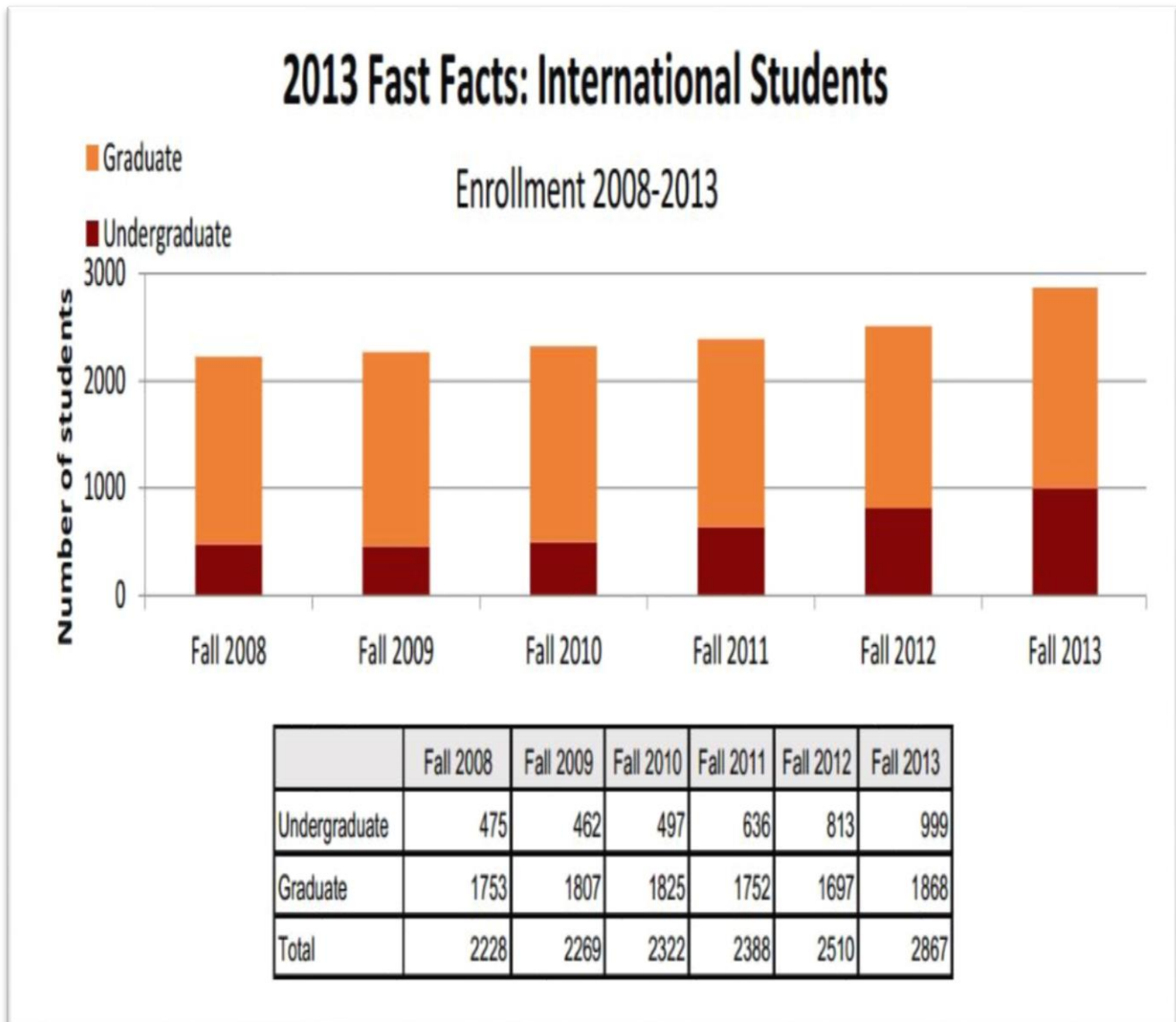
Figure 1: 2013 Fast Facts: International Students by Cranwell International Center at Virginia Tech
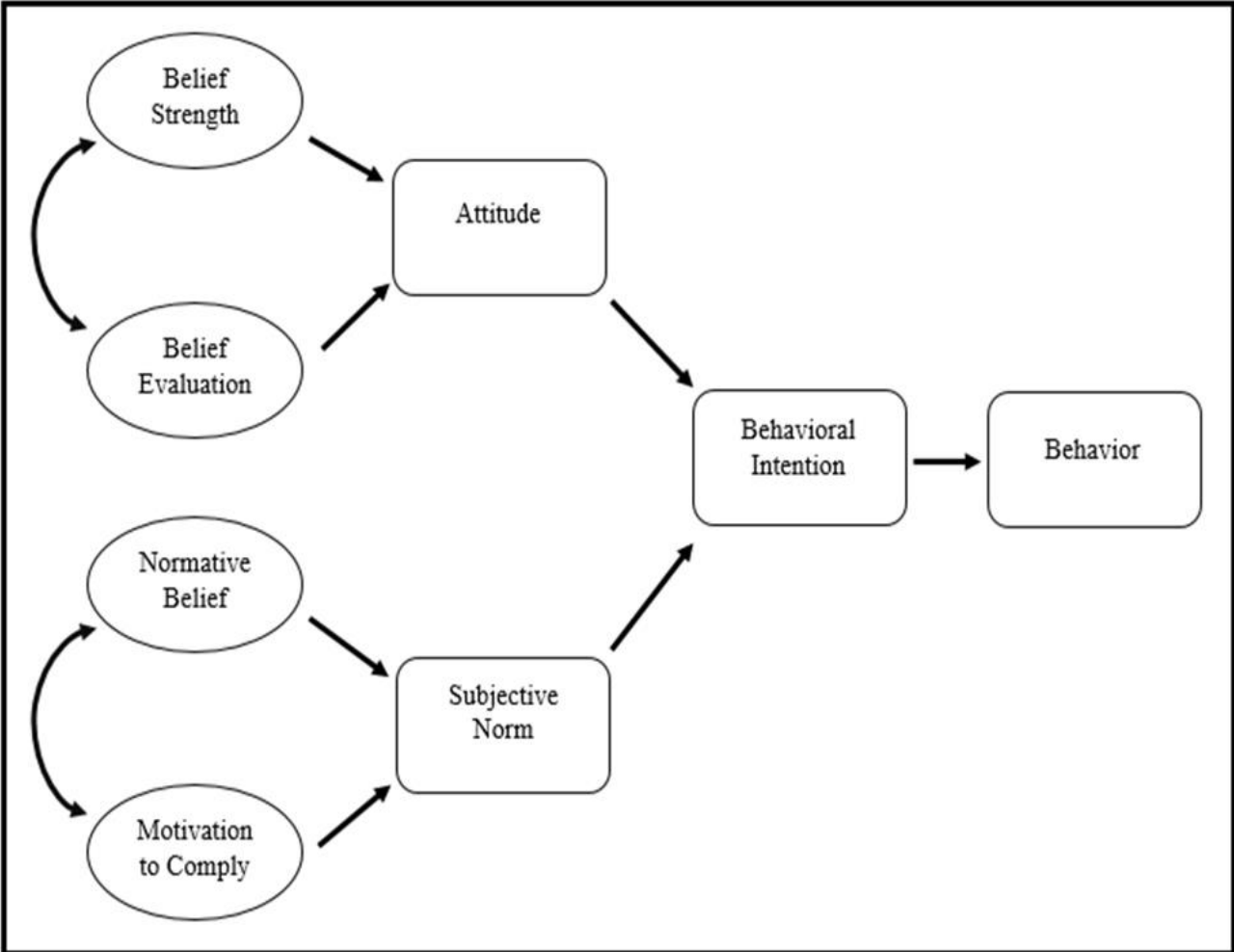
Figure 2. The basic theory of reasoned action.
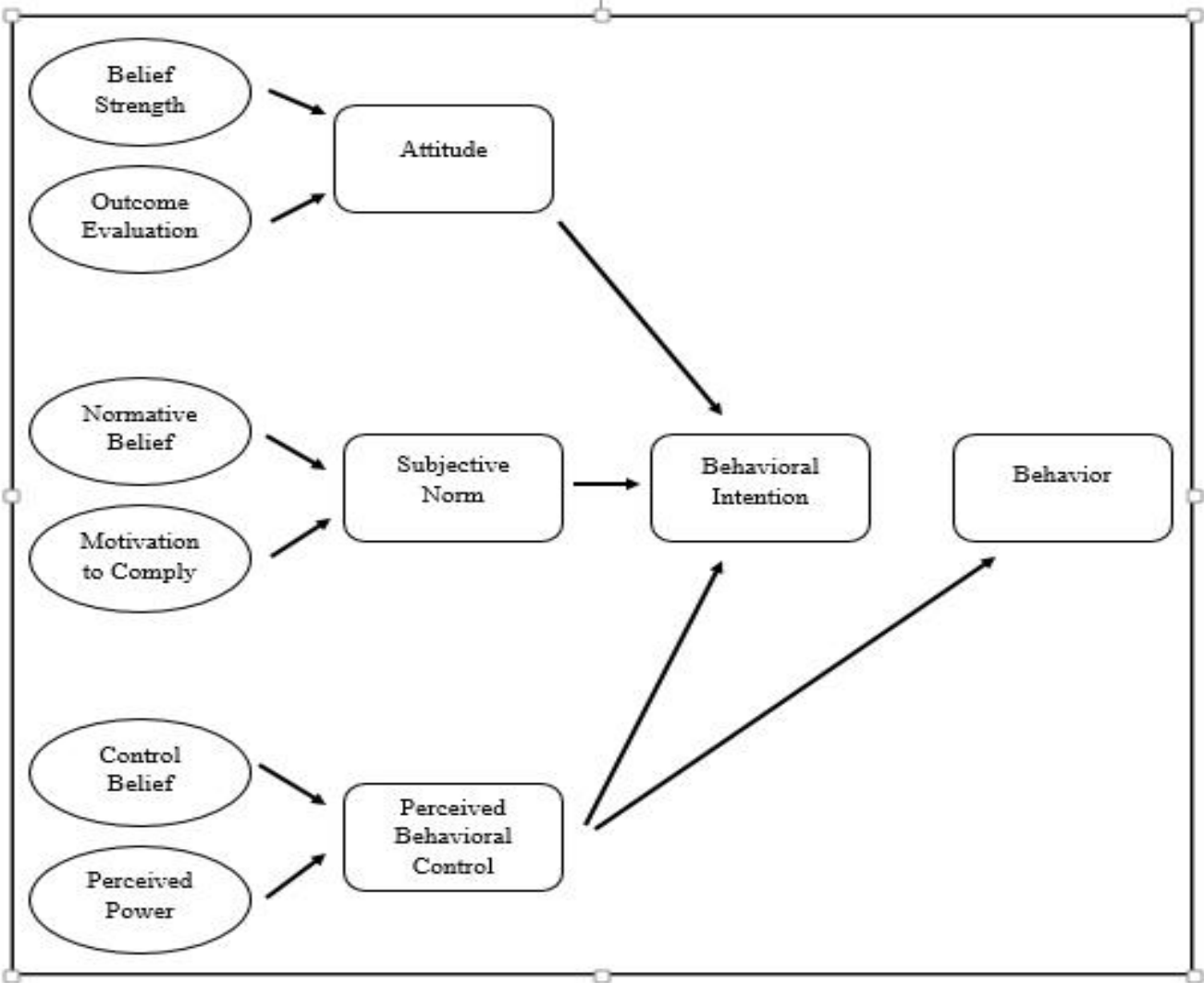
Figure 3. The basic theory of planned behavior
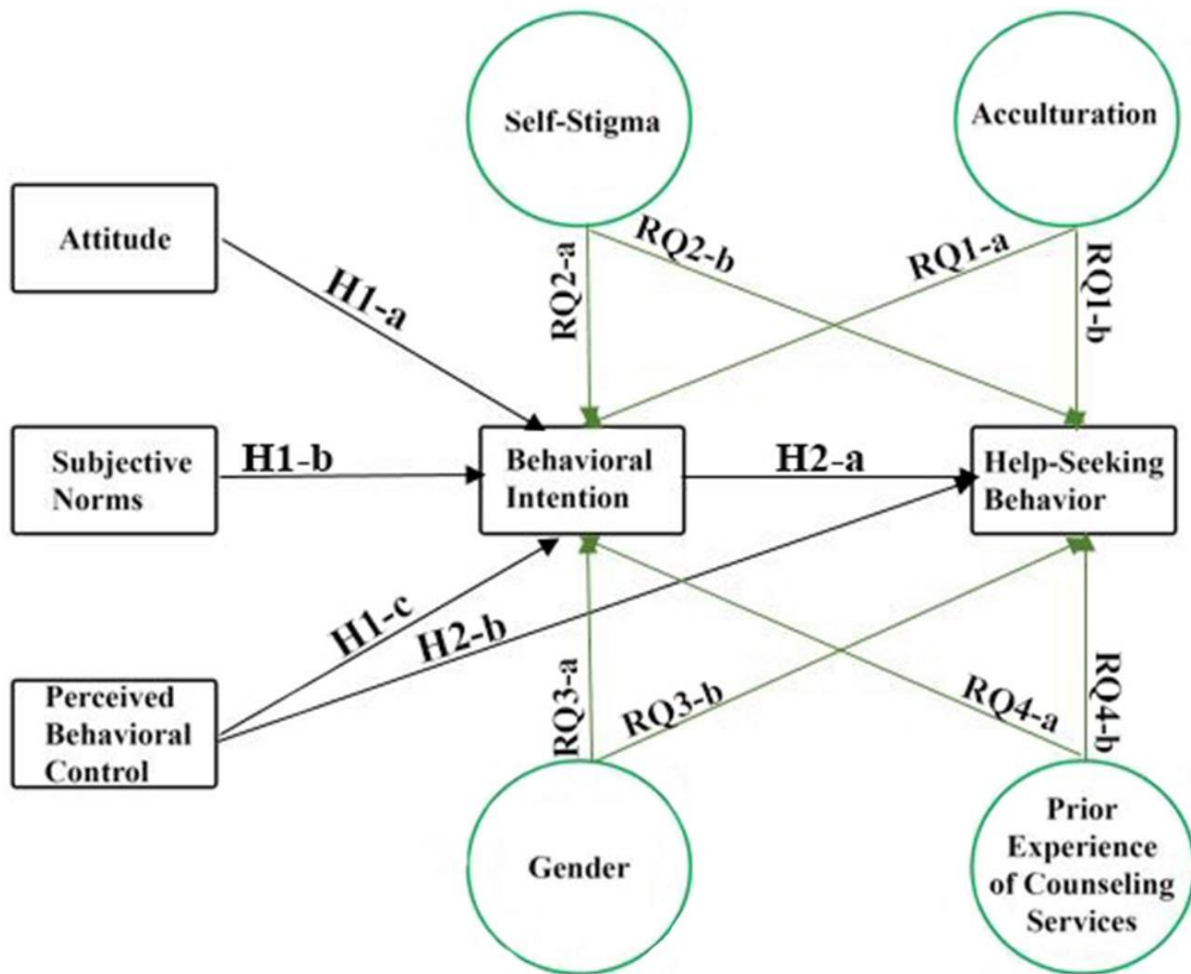
Figure 4. Proposed Hypotheses and Four Research Questions.
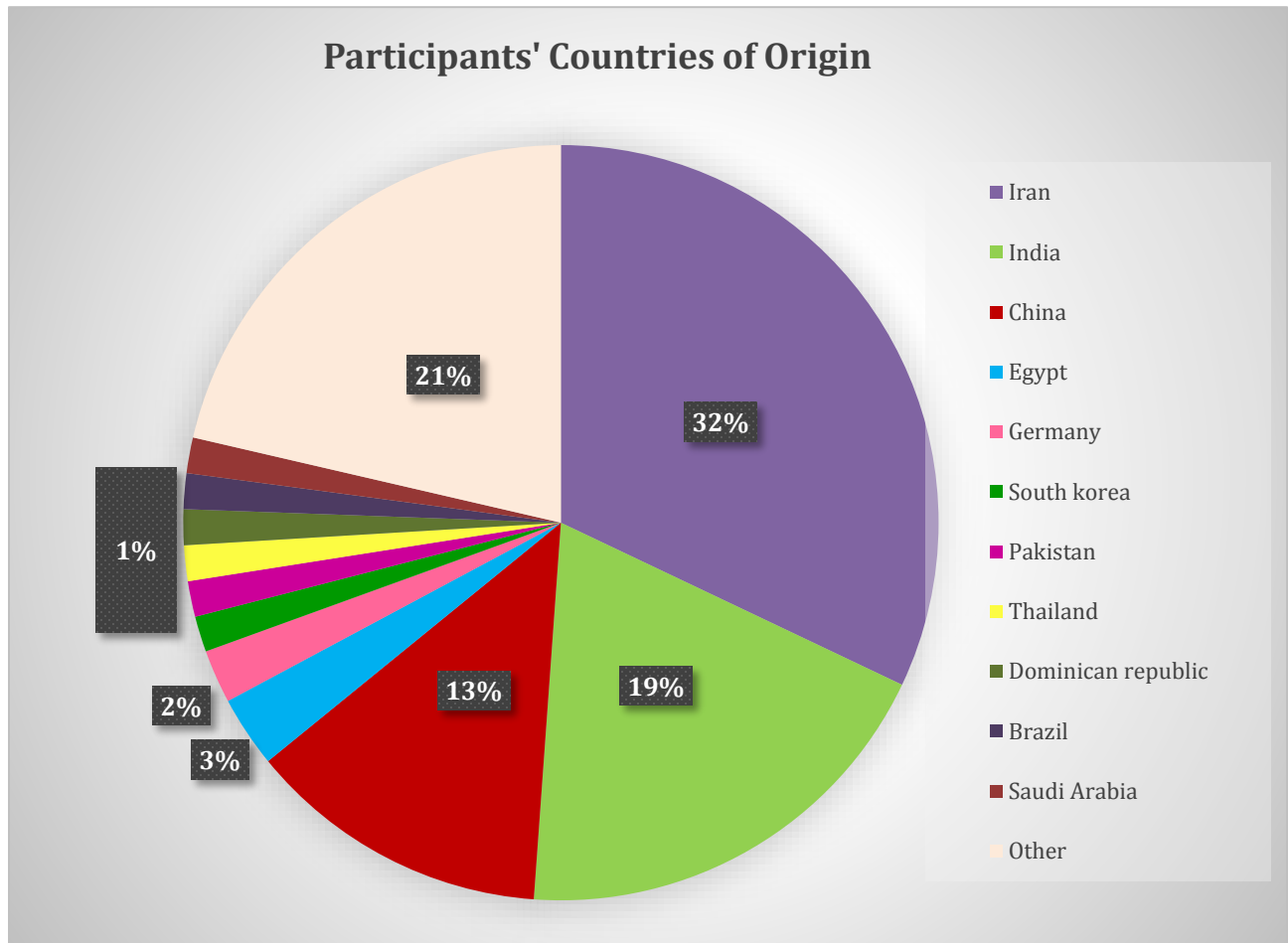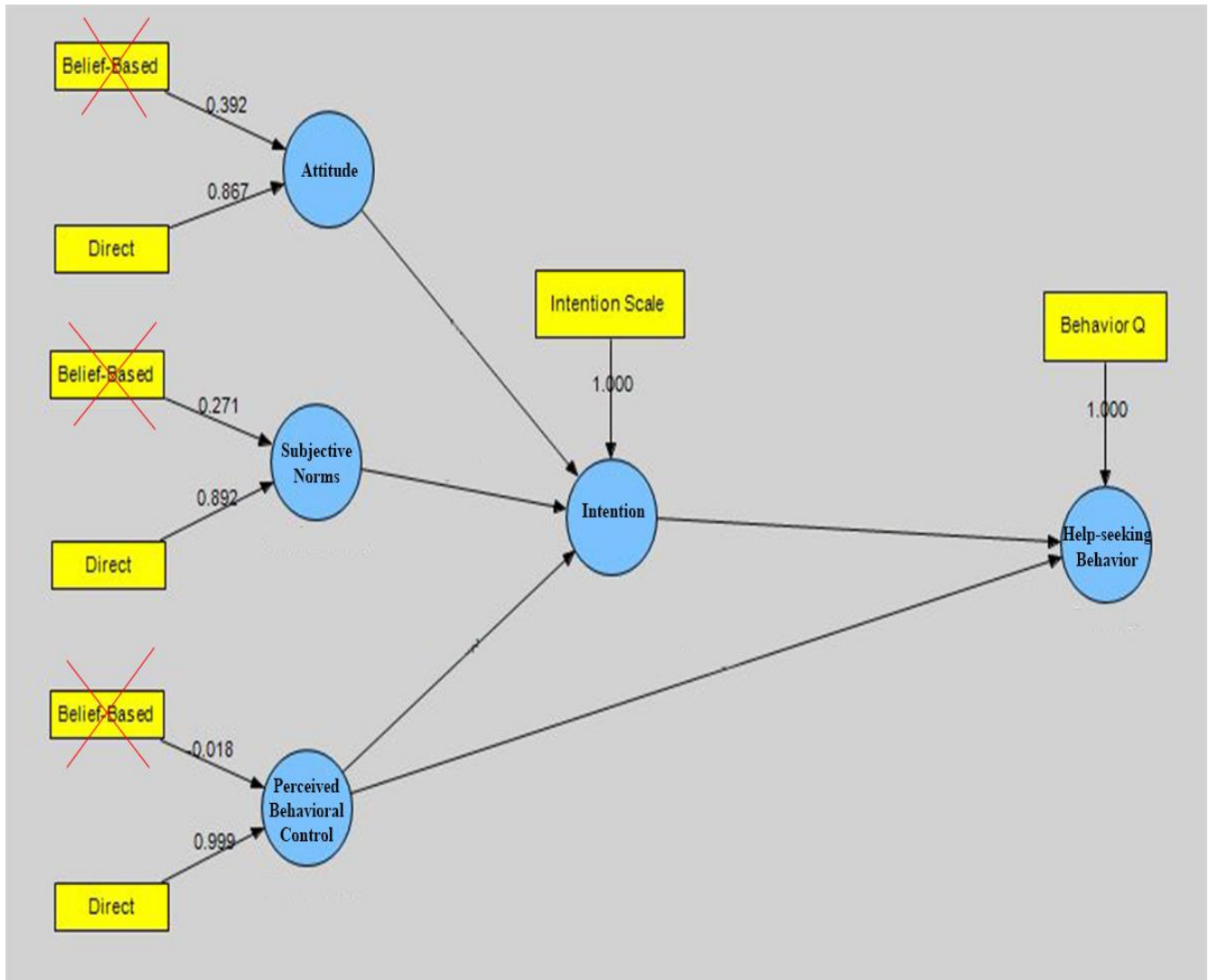
Figure 5. Participants' countries of origin

Figure 6: Path Analysis: Comparing the weights of belief-based measures with the direct measures of the TPB elements.
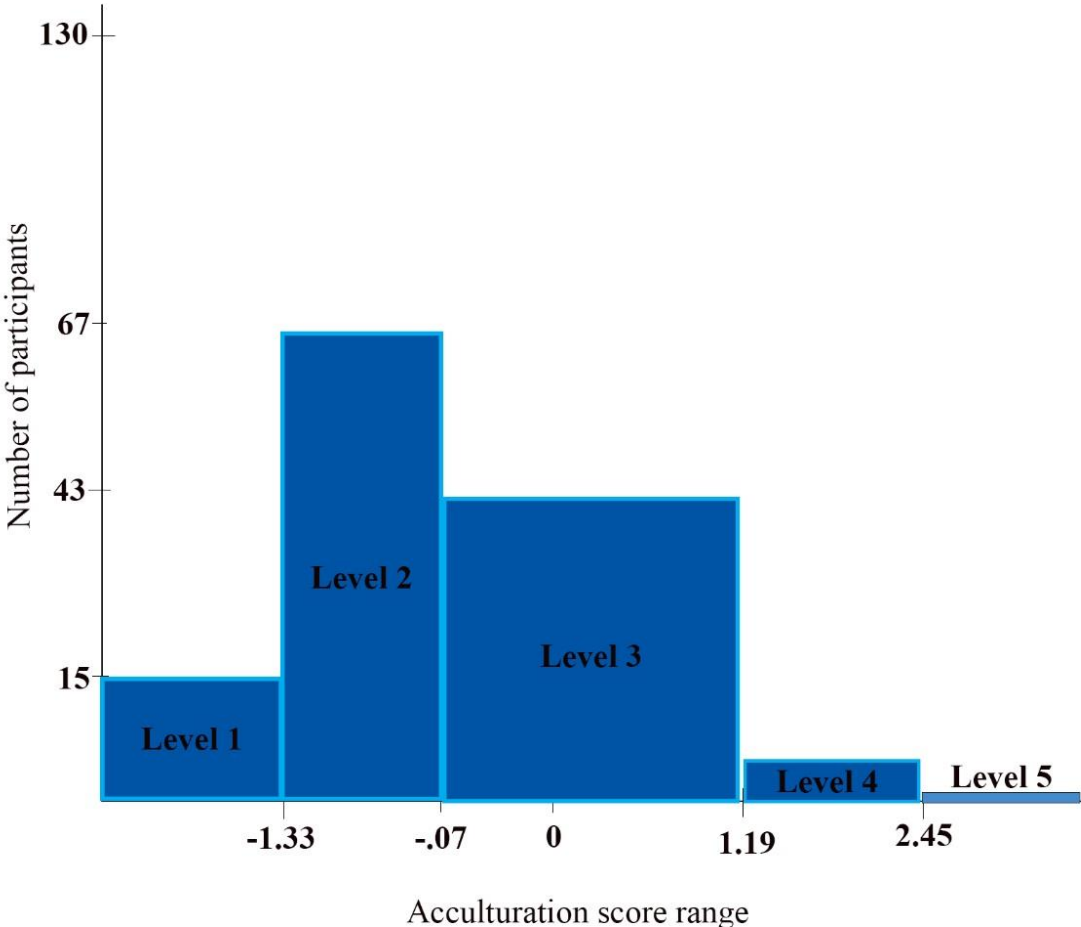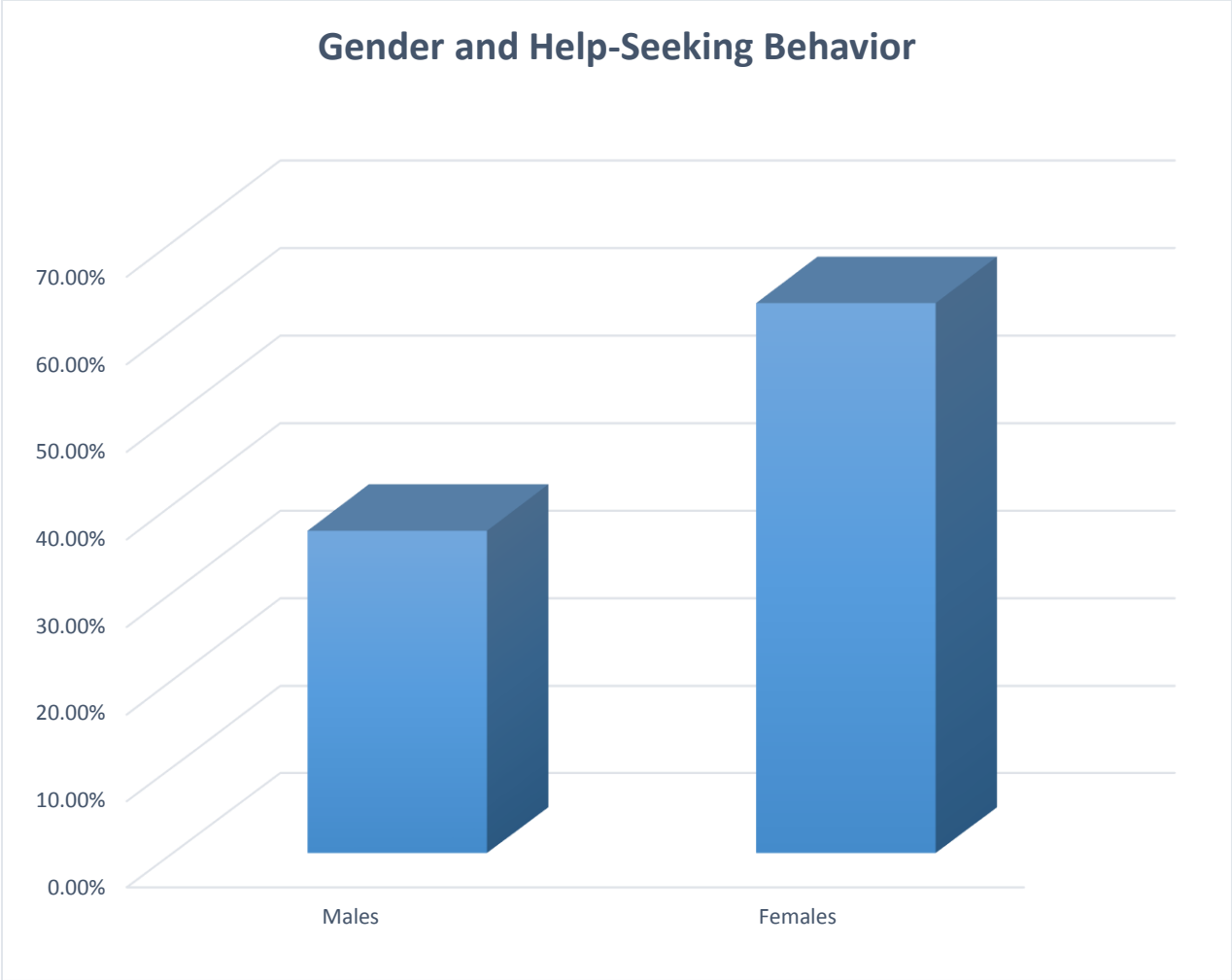
Figure 7. International students' acculturation levels
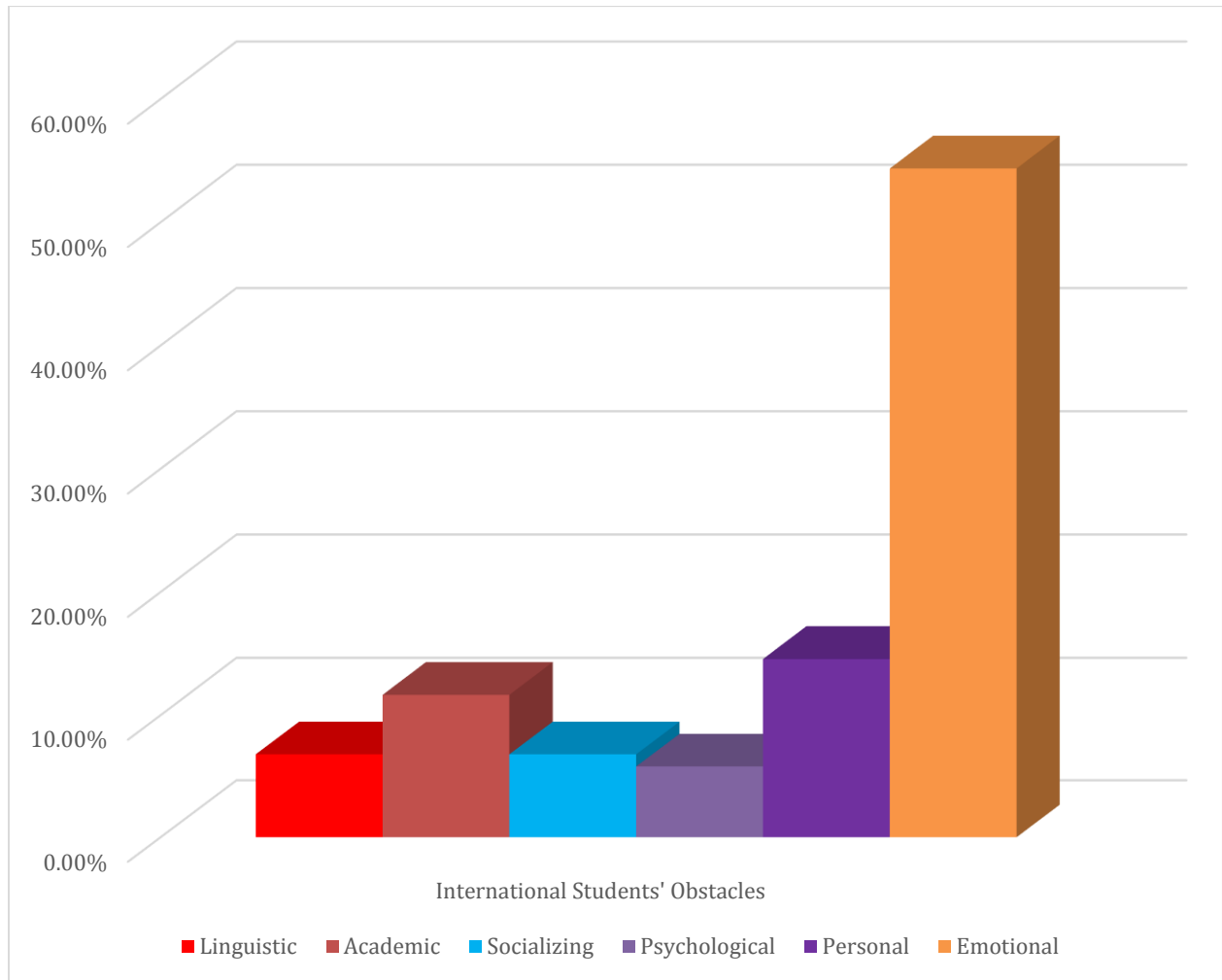
Gender and Help-Seeking Behavior

Figure 8. The relationship between gender and help-seeking behavior

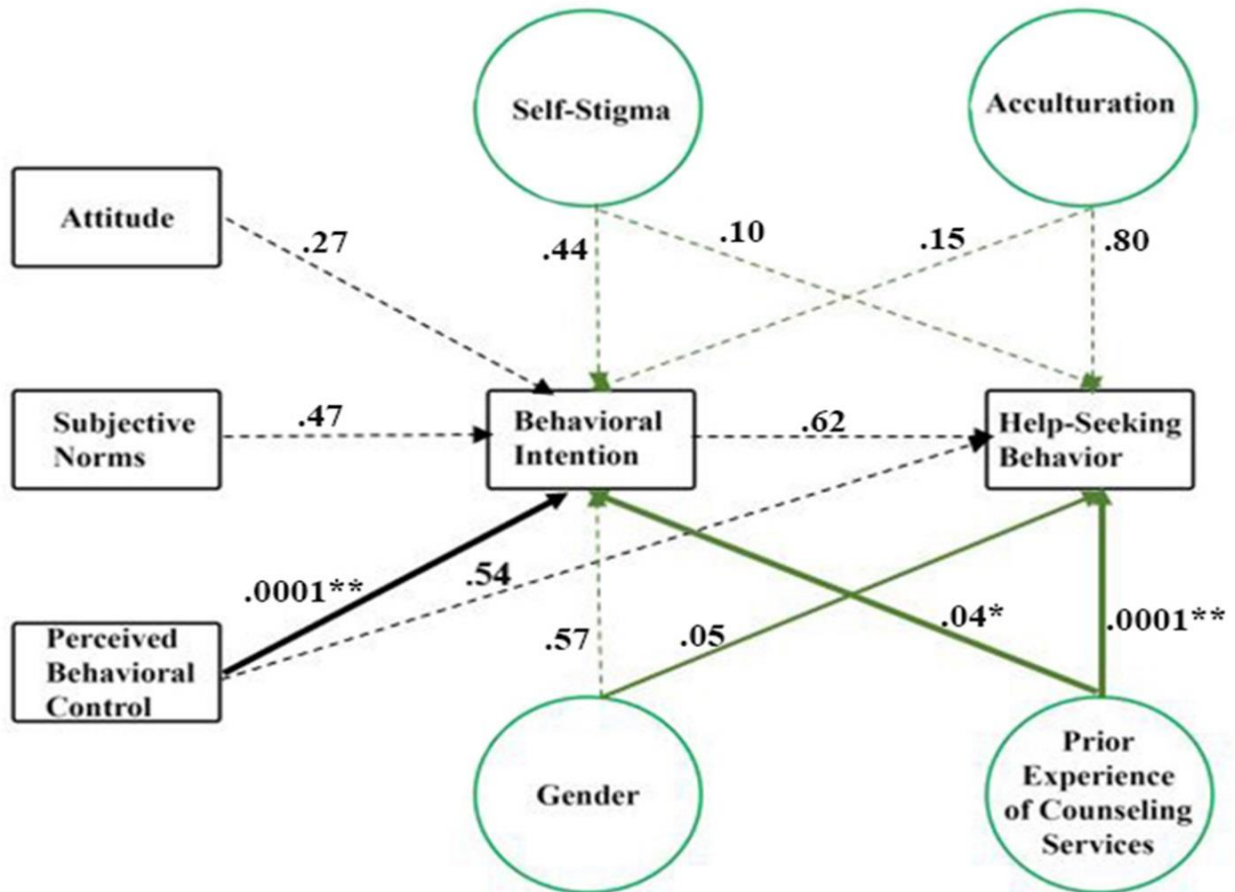Figure 9. International students' concerns while pursuing higher education in the U.S.

Figure 10. The results of hypotheses and research questions. Solid lines indicate significant correlations, and dashed lines represent non-significant correlations. **. Correlation is significant at the 0.01 level. *. Correlation is significant at the 0.05 level.
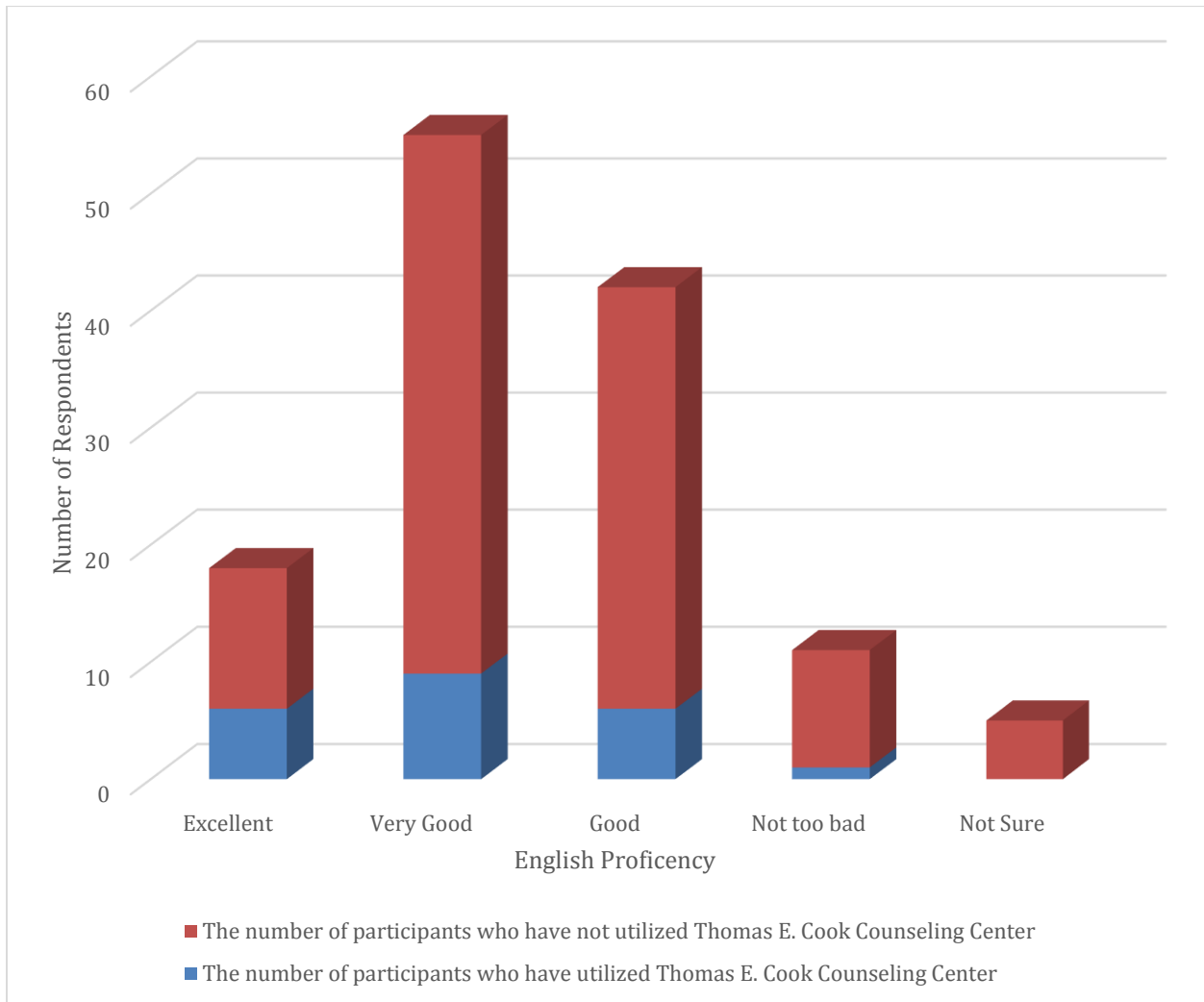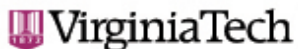
Figure 11. English Proficiency and Help-Seeking Behavior

Institutional Review Board Approval Letter

VirginiaTech

Office of Research Compliance
Institutational Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website http://www.irb.vt.edu

MEMORANDUM

DATE: March 17, 2014

TO: Adrienne Holz Ivory, Elmira Hamidi

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: International Students’ Barriers and Campus Counseling Services

IRB NUMBER: 14-044

Effective March 17, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2**
Protocol Approval Date: **February 24, 2014**
Protocol Expiration Date: **N/A**
Continuing Review Due Date*:   **N/A**
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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