Students of Indian Heritage and United States Citizen Students' Adaptation of College, Opinions About Mental Illness and Attitudes Toward Seeking Professional Counseling Help

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STUDENTS OF INDIAN HERITAGE AND UNITED STATES CITIZEN STUDENTS’ ADAPTATION TO COLLEGE, OPINIONS ABOUT MENTAL ILLNESS, AND ATTITUDES TOWARD SEEKING PROFESSIONAL COUNSELING HELP

by

Margaret Omotola Ajayi-Nabors

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Philosophy
Department of Counselor Education and Counseling Psychology
Advisor: Joseph R. Morris, Ph.D.

Western Michigan University
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The present study replicated Baysden’s (2002) multi-component model and tested its generalizability on a homogeneous demographic group. This study compared international college students from India \((n = 244)\) and U. S. student participants \((n = 393)\) on their adaptation to college, their opinions about mental illness, and their attitudes regarding their professional psychological help-seeking behavior. A structural regression model was utilized to examine if student origin influenced opinions about mental illness, student adaptation to college, and attitudes towards seeking professional psychological help.

The findings of this project supported Baysden’s (2002) multi-component model to understanding international students’ use of counseling. More specifically, opinions about mental illness, attitudes toward seeking professional psychological help, and adaptation to college, significantly predicted an international student’s use of counseling as compared to U. S. citizen students. Findings also supported Baysden’s (2002) results that students indicating negative opinions about mental illness also reported negative attitudes toward seeking professional counseling help. Furthermore, college students indicating negative opinions about mental illness reported having a higher level of difficulty in adjusting to college than did students indicating less negative opinions about mental
illness. College students with positive attitudes toward seeking professional counseling help indicated a significantly better adjustment to college.

One unexpected finding was that adaptation to college and attitudes toward seeking professional counseling help were not significant predictors in determining U. S. college students’ use of counseling but they were for international college students.
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Margaret Omotola Ajayi-Nabors
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CHAPTER I

INTRODUCTION

In recent years there has been a growing interest in the mental health utilization of undergraduate and graduate university students (Storrie, Ahern, & Tuckett, 2010; Turner, Hammond, Gilchrist, & Barlow, 2007; Yorgason, Linville, & Zitzman, 2008). One of the fastest growing groups of students enrolled in United States colleges and universities is that of international students. Since the academic year 2000–2001, the number of international students has more than doubled. Furthermore, the United States enrolls the largest number of post-secondary international students than any other nation in the world (Davis, 2001; Rahman & Rollock, 2003; Tidwell & Hanassab, 2007; Zhang & Dixon, 2003). This increase of international students on university and college campuses has affected the role of professional counselors working in these settings (Gregory, 1997; Tidwell & Hanassab, 2007; Yoon & Portman, 2004). Like all other higher education students, international students have access to a variety of counseling services such as academic, personal, career, and vocational counseling. These services, along with other programs, are generally designed to help students capitalize on institutional opportunities and address new responsibilities by identifying and improving the skills needed to cope with challenges both during college and after graduation. International students usually have to deal with a complicated, multifaceted transition because of issues related to being away from home (Mori, 2000; Zhang & Dixon, 2003). These students face challenges such as achieving financial stability, adapting and mastering the language, and cultural
differences in a new environment (Arthur, 1997; Leong & Chou, 2002; Luzzo, Henao, & Wilson, 1996; Samouilhan & Seabi, 2010).

Baysden’s (2002) interest in this area of study led to his investigation of exploring the adaptation and help-seeking behavior of international college students. Because of the myriad of possible contributing factors to these phenomena, Baysden (2002) found support for the use of a statistical multi-component model to understanding international students’ use of psychological services and confirm a proposal originally theorized by Wong in 1997. Baysden’s (2002) research specifically found that opinions about mental illness, attitudes toward seeking professional psychological help, and adaptation to college, were paramount in predicting international students’ low utilization of counseling services when compared to U. S. citizen students. While Baysden’s (2002) work advanced the knowledge base on this topic area, several limitations remained. His suggested recommendations for future scholars to explore focused on enhancing the effectiveness of Wong’s (1997) theoretical model through the exploration and comparison of a homogenous international student population (Baysden, 2002). Wong’s (1997) original model theorized that an individual’s attitudes towards seeking help, need for professional help, and barriers (perceived or actual) to assistance where the three primary factors hindering one from seeking counseling services. In an effort to test and generalize Baysden’s (2002) statistical model to other specific populations, the present study replicated Baysden’s (2002) multi-component model and tested its generalizability on a homogenous demographic group (international students from India).
Statement of Purpose

The present research study followed the original design and outline of Baysden’s (2002) study; however, the focus was on investigating its generalizability to a sample of international students from India. Since Baysden’s (2002) original study was conducted, many international events have occurred that could affect the attitudes of college students, especially those of foreign descent. Focusing on individualized research, new events, and using one homogenous international population will strengthen the utility of Baysden’s (2002) multi-component model and further confirm added validity to the instruments utilized in both studies. To date, research has been particularly lacking on the cultural adjustment of South Asians, and in particular those coming from India (Rahman & Rollock, 2004; Sheth, 1995; Sodowsky, Lai, & Plake, 1991; Sodowsky & Lai, 1997). To understand the psychosocial transition that South Asian (Indian) individuals make to life in the United States, it is important to identify the roles played by key variables such as their attitudes towards seeking help, need for professional help and their perceived and/or actual barriers to receiving assistance in order to further aide their transition in adapting to college life in the United States.

Stress and the Transition to College

College can be a stressful time for students and can at times feel almost overwhelming, causing both emotional and physical issues for college students (Altschuler, 2000; Mier, Boone, & Shropshire, 2009; Yorgason et al., 2008). While some students adapt to college life and experience little or no anxiety, many other students find the need for outside intervention to assist with the stress and strain that goes along with a new
lifestyle. In a study by Altschuler (2000) it was found that international students experience high amounts of stress adapting to American colleges. Although there may be some similarities between international and American students, there are also needs specific to international students. As a people in transition, international students choose to live in a foreign academic setting to realize their educational objectives. Because they are far from their families, relatives, and friends at home, they are also likely to have basic social support networks that are very distinct from those of American students. Being faced with a new set of basic values and beliefs, international students may continually be challenged to accommodate themselves to a variety of cultural differences (Mier et al., 2009; Mori, 2000; Yorgason et al., 2008).

For a student, whether American or international, success in an American university is contingent on the ability of the individual to be able to fully integrate all aspects of college life. Brower (1992) defines integration conceptually, as a product of the interaction between a student and his/her college environment. Research in the area of college success versus failure finds this skill to be central to a student’s decision of whether or not to remain in school (Brower, 1992). According to Brower (1992), students tend to stay enrolled in classes and the university when they learn the subtle and overt rules governing study and classroom habits, when they develop routine and pleasurable social relationships, and when they develop a “cognitive map” of the campus in which specific and personal meanings are attached to specific locations (Brower, 1992). In other words, students remain in school more often when they become engaged in campus life.

Factors contributing to or impeding the success of students in college vary widely. For example, in a study by Pascarella, Pierson, Wolniak, and Terenzini (2004), first-
generation college students had a more difficult time transitioning into college than their peers. Although these students faced the same anxieties, dislocations, and difficulties as any college student; they were shown to have added pressures that involved substantial cultural as well as social and academic transitions (Pascarella et al., 2004). Separation from family and friends can have a tremendous impact on students who enter a college or university and how they handle this adjustment can have an immediate impact on their success (Dahmus & Bernardin, 1992; Pascarella et al., 2004). Upon entering an American institution of higher learning, students are faced with increased academic pressure, realize there are higher performance expectations, experience lower grades, struggle with issues regarding time management, experience drug and alcohol issues, must confront sex and sexuality, and must learn to quickly accept personal responsibility (Dahmus & Bernardin, 1992; Kim, 2002; Pascarella et al., 2004; Storrie et al., 2010; Turner et al., 2007). Mental health professionals report that young adults today appear to be under much more stress than past generations. These younger adults seem to have fewer “stabilizing forces in their lives,” and there is a stigma attached to counseling services on college campuses that must be overcome (Altschuler, 2000; Kim, 2002; Storrie et al., 2010; Turner et al., 2007).

In general, student affairs professionals are faced with the task of assisting all students deal with an often stressful transition to college and attempting to find out what factors are the most important impediments in a student’s transition. In an attempt to minimize the trauma of freshman year, most colleges and universities supply peer counselors, residence hall advisers, faculty advisers, an academic advising center, a mental health clinic, and suicide prevention services (Altschuler, 2000; Kim 2002; Mier et al., 2009). However, because university resources are limited, it is difficult to meet the varied
demands of all students. In order to allocate resources more effectively; one could identify those students with a greater susceptibility to stressful reactions when adjusting to college (Mathis & Lecci, 1999). Studies have indicated that college students do not request help for various reasons and that trying to identify a student in need can then become difficult. The decision of whether or not to seek help, based on student’s opinions regarding mental illness or their attitude toward seeking professional psychological help, affects both American citizen students and international students. Sometimes the reasons are different; however, studies have shown both groups have certain attitudes, experiences, or other factors that affect their decisions about seeking help. Leaf, Bruce, Tischler, and Holzer (1987) found relationships among age, sex, race, household income, and education in the attitudes toward mental health services in American college students. The authors found nearly one-quarter (23%) of the participants indicated their families would get upset if they entered mental health treatment. The participants also indicated they were afraid of their families’ reactions to service use (Leaf et al., 1987). Fischer and Cohen (1972) found a relationship between demographic variables and help-seeking attitudes among American college students.

International Students of Indian Citizenship at U. S. Colleges and Universities

International students of Indian citizenship represent a large portion of all international students who study at American universities on student visas. The United States continues to be the favorite destination for Indian students seeking to pursue higher education and some estimates place Indian students at 25% of the international student community in America (Hyun, Quinn, Madon, & Lustig, 2007; Mori, 2000; Narayanan,
Although approximately two-thirds of the students from India have traditionally come to the United States for graduate education, more students are choosing American colleges and universities for undergraduate degrees (Dewan, 2008). The overwhelming majority of these Indian students (73.7%) are enrolled at the graduate level, while 16.6% are undergraduate students and 9.6% are enrolled in such other programs as English-language training (Rahman & Rollock, 2003; Thomas, 2006). In 2000 the United States issued 37,000 student visas to Indian students and the number issued increased to 67,000 in 2002 (Bhattacharjee, 2004). It is also expected that student visas to Indian students will reach 100,000 in the coming years (Narayanan, 2004). The number of international students of Indian citizenship for the 2006–2007 year amounted to 83,333, which was a 9.6% increase from the prior year (Dewan, 2008). Jane E. Schukoske, executive director of the U. S. Educational Foundation in New Delhi, states, “We can expect to see Indian students enrolling in a larger number of U. S. institutions in the coming years” (Thomas, 2006). As the number of international Indian students continues to increase, much more understanding will be needed to accommodate this population and student counseling services will need to gain the knowledge about Indian international students to assist their unique needs.

Among international students, one important factor related to academic success in the U. S. was that of acculturation. Students who were more acculturated to the American culture had more positive attitudes toward seeking professional psychological help than those who were less acculturated (Mier et al., 2009; Rahman & Rollock, 2003; Sunarto, 2001). Similarly, Ying and Miller (1992) found that more time spent in the United States, high level of acculturation of western culture, and being female were significant predictors
of positive attitudes toward seeking psychological help. Finally, several studies have shown members of non-Caucasian ethnic groups underutilize professional psychological help services compared to Caucasians (Mier et al., 2009; Ying & Miller, 1992; Yorgason et al., 2008). When students move to a foreign country, they encounter a totally different language, culture, climate, and educational system. These differences can be shocking to students and may become barriers in cross-cultural communication (Sue & Zane, 1987; Sunarto, 2001; Thomas & Althen, 1989; Zhang & Dixon, 2003). Although attending college is stressful for all incoming college students, attending college in a foreign country can create extra stress on a student and it can initially lead to excitement from being in a new and different place; however, this has been shown to soon turn into confusion and at times lead to depression (Sunarto, 2001). While the language barrier may seem like the biggest issue international students face, cultural differences can lead to larger and more complex issues (Rahman & Rollock, 2003; Sheth, 1995; Sunarto, 2001; Tidwell & Hanassab, 2007; Weber, 2004). Balancing studying and acculturation can be difficult and very stressful for international students and can lead to issues that students cannot deal with alone (Weber, 2004). Differing views such as research by Bailey and Weininger (2002) demonstrated race and ethnicity seemed more important factors than nativity in college success. Although the study concluded that a student’s place of birth, in the United States or abroad, did not have any influence on college success; the study did elucidate the complex relationship between nativity and education for different ethnic groups (Bailey & Weininger, 2002).
Additional Factors Impacting College Adaptation

Since the original study was conducted by Baysden (2002), many international events have occurred that could have an impact on an international student’s attitude and ability to seek counseling help. Violence and racism have increased on college campuses toward students of Middle Eastern descent, which has carried over onto international students who could be mistaken for this ancestry (Biasco, Goodwin, & Vitale, 2001; Hodson, Dovidio, & Gaertner, 2002; Prashad, 2005; Rankin & Reason, 2005). Unfortunately many Indian students are mistaken for Muslims and receive added pressure and stress due to the hateful words, expressions, and threats that are directed toward them. Indian students now must face profiling on campus, at campus social events, during class, and outside of college (Biasco et al., 2001; Hodson et al., 2002; Prashad, 2005; Rankin & Reason, 2005; Southwick, 2001). The complex phenomenon of racial profiling on college campuses has been difficult to ascertain and measure. However, it is known that many students have natural prejudices and categorize individuals prior to obtaining accurate information regarding their culture or nationality (Ancis, Sedlack, & Moore, 2000; Biasco et al., 2001; Cabrera & Nora, 1994; Leong & Ward, 2000). Following the New York attacks in 2001, reports of increased racism and violence toward Muslim and ‘perceived’ Middle Eastern students increased. Immediately following the 2001 bombing, many campuses reported increased aggression and attacks toward international students (Biasco et al., 2001; Prashad, 2005; Rankin & Reason, 2005; Southwick, 2001).

The added pressure and stress from this bias can complicate the adjustment that already must take place since a student is disconnected from family and friends. This
added pressure can make an Indian student feel alone and not a part of the university and can lead to added resistance to seeking help from college counseling centers, college organizations, or other help groups (Prashad, 2005; Southwick, 2001; Weber, 2004). Feeling a part of the university is imperative to fully assimilating into the student body, which has been shown to be a major factor in international student’s success on American campuses (Brower, 1992; Weber, 2004).

Statement of the Problem

Many college students face obstacles in trying to fully integrate into the college and campus lifestyle as they face new pressures and issues they have not had to face previously. These obstacles can lead to stress, anxiety, and other problems that can require professional counseling assistance in assuring academic and personal success in completing their studies on American college and university campuses. However, as shown by Baysden (2002) and other researchers (Arthur, 1997; Leong & Chou, 2002; Luzzo et al., 1996; Samouilhan & Seabi, 2010), a student’s attitude and perception of mental illness and professional counseling services can determine if a student seeks help when faced with an issue. How well students adapt to college life can determine the amount of stress and anxiety they experience; however, their attitude toward mental illness and counseling services will ultimately determine if a student chooses to seek assistance (Klemens & Bikos, 2009; Rahman & Rollock, 2003; Rodriguez, Myers, Morris, & Cardoza, 2000; Sandhu & Asrabadi, 1994; Sheth, 1995; Zhou, Jindal-Snape, Topping, & Todman, 2008).
International students and U. S. citizen students may face some similar concerns in college, but each demographic has personal thoughts and feelings toward mental illness and counseling that can affect their decision to seek help in addressing the difficulties they face. Any students’ unwillingness to seek help, when needed, can severely undermine the college experience and can ultimately lead to unfulfilled academic pursuits or can lead to greater problems if certain issues are not addressed. Counseling centers are in place on American college and university campuses to assist all students with concerns related to stress, anxiety, adaptation, and other psychological illnesses; however, it remains the decision of each student to choose when and how to seek assistance. A stigma surrounds the use of counseling centers on college campuses and students may not utilize these essential services due to this stigma. Culture, ethnicity, and peer pressure may also inhibit a student from seeking assistance (Baysden, 2002; Mier et al., 2009; Mori, 2000; Yorgason et al., 2008).

Definitions

*United States Citizen:* A U. S. citizen is defined as individuals born in the United States, Puerto Rico, Guam, Northern Mariana Islands, Virgin Islands, American Samoa, or Swain’s Island; foreign-born children, under age 18, residing in the United States with their birth or adoptive parents, at least one of whom is a U. S. citizen by birth or naturalization; and individuals granted citizenship status by Immigration and Naturalization Services (INS) (New Hampshire Health and Human Services, 2001).

*International Student of Indian Citizenship:* An international student is defined by the U. S. Immigrations and Customs Department as a foreign citizen who visits the United
States for a temporary purpose, such as to obtain an education, and when finished, leaves the United States. The student must declare his intent for entering and staying in the United States and must obtain a student Visa, which is only valid for a predetermined period of time (ICE, 2007) (U. S. Immigration and Customs Enforcement (ICE), 2007). An Indian Student, for the purpose of this study, is any student who fits the definition of international student and is a citizen of the country of India.

*Adaptation to College:* Adaptation to college is defined by how well a student, either U. S. citizen or international student, handles the demands of college life including academic adjustment, personal-emotional adjustment, social adjustment, and attachment to the institution. The Student Adaptation to College Questionnaire (SACQ) is the most accepted measurement of adaptation (Feenstra, Banyard, Rines, & Hopkins, 2001).

*Attitude:* An attitude is an individual's disposition to respond favorably or unfavorably to an object, person, institution, or event, or to any other discriminating aspect of the individual's world (Al-Rowaie, 2001).

*Counseling:* Though counseling can be roughly translated to mean anytime a person provides advice, support, guidance, or help to one or more individuals, for the purpose of this study counseling will refer to the process in which a trained professional helps a person, or a group, function more effectively and improve his or her life by addressing problems in a preventive, developmental, or remedial way (Al-Rowaie, 2001).

*Acculturation:* Acculturation is a process in which members of one cultural group adopt the beliefs and behaviors of another group. Although acculturation is usually in the direction of a minority group adopting habits and language patterns of the dominant group, acculturation can be reciprocal—that is, the dominant group also adopts patterns typical
of the minority group. Assimilation of one cultural group into another may be evidenced by changes in language preference, adoption of common attitudes and values, membership in common social groups and institutions, and loss of separate political or ethnic identification (Marks et al., 1987).

Hypotheses

The research hypotheses for this study were based on Baysden’s (2002) original model and have been adapted to include international students of Indian citizenship and additional factors that have occurred since the conclusion of Baysden’s study. The hypotheses are as follows:

1. International students of Indian descent who have endorsed negative opinions about mental illness, and negative attitudes toward seeking professional counseling help, will report higher levels of difficulty in adjusting to college life.

2. An international college student’s use of counseling services will be predicted by their opinions about mental illness, attitudes towards seeking professional counseling help, and their adjustment to college.

3. An international student’s opinions about mental illness will predict their attitudes toward seeking professional counseling help.

4. An international student’s opinions about mental illness will predict their adjustment to college.

5. An individual’s attitudes toward seeking professional counseling services will be predicted by their adjustment to college.
6. An individual’s attitudes toward seeking professional help will predict their use of professional counseling.

7. In international students, adjustment to college will predict their use of professional counseling.

Limitations/Assumptions

All research has known limitations and assumptions that can affect the data, the participants, and the outcome of the study. As in the original study completed by Baysden, this study has several similar limitations:

1. All student participants are volunteers and no incentives will be offered or implied to gain consent from any participant.

2. All questionnaires are to be filled out on a voluntary basis and it is assumed that all participants will do so fully and honestly.

3. Students will be self-categorized as Indian or United States citizens.

4. Educational differences were not taken into account and all students will be separated into two groups only and gender, age, and academic level will not be defined.

5. The study involved a convenience sample from only three universities. Involving students from other universities or other regions of the country may produce different results as different regions may possess different attitudes.

Assumptions must be made regarding this research study as all items cannot be fully under the researcher’s control:

1. It is being assumed that all participants are volunteering and will comply with the research instructions to the best of their ability.
2. The researcher must assume that all participants have the ability to comprehend and understand all materials and questionnaires and have the ability to complete the information.

3. The researcher must assume that any participant who chooses to complete the study will do so of his own volition and will not seek outside help or assistance that will affect the data.
CHAPTER II

REVIEW OF RELATED LITERATURE

The following chapter will review and address important concepts and variables relevant to an individual's adaptation to college, overall views of mental illness among students, and how an individual's culture may impact their particular opinion regarding mental health. The present research study focused on a specific population of students—international students of Indian citizenship—and will also provide a review of the limited research with this group. Although each Asian group has had its own unique experience in the United States, past research efforts have focused largely on how Asian Americans differ from American students and little attention has been paid to the intra-cultural experience of these groups (Dana, 1993; Rahman & Rollock, 2003). Moreover, despite continuing expansion of psychological investigations with Asian populations, research has been particularly lacking on the cultural adjustment of South Asians—those coming from places such as India (Sheth, 1995). To understand the psychosocial transition that South Asians, and in particular Indian individuals make to adapt, it is important to identify the roles played by key variables such as acculturation, adaptation to college, and their specific views regarding mental health and mental illness. The review of current studies has determined Indian students have been classified as Asian and have been grouped along with this demographic. In order to understand the culture and attitudes, significant research into this population is warranted.
Students' Adaptation to College

People must face a great number of changes throughout their lives, such as transition from elementary school to middle school, from middle school, to high school, and college, and stepping into the workforce in society. Entering a college campus environment is an important turning point for college freshmen in their early adulthood. The college life is both an opportunity and a challenge for them. If the freshmen cannot adapt to the new environment quickly, their academic and psychological development may be negatively impacted (Wang, Chen, Zhao, & Xu, 2006). Feenstra et al. (2001) studied the impact family life and stress had on a student's ability to adapt to college life in his/her first semester. Their study showed that students' adjustment to college had a great impact on their educational success. While some students adapted to college immediately and naturally, others struggled with the transition and even withdrew from school entirely (Feenstra et al., 2001).

The way in which a student copes with the stress of college can also have an effect on his/her adjustment to the college environment. Feenstra et al. (2001) and others reviewed a number of studies that have looked at the connection between individual coping and adaptation to college, and most of the studies reviewed indicated active coping styles were related to more positive adaptation to college (Feenstra et al., 2001; Hutz & Martin, 2007; Lapsley, Rice, & Fitzgerald, 1990). Controlling for distress severity and more active coping strategies were positively correlated with self-reported success, whereas more avoidant strategies were negatively correlated with self-reported success. Positive academic adjustment and personal-emotional adjustment were predicted by active coping
Studies on international students have shown that they tend to have a more difficult time adjusting to American universities than their U. S. citizen counterparts and have been described as less well adjusted (Harik-Williams, 2003; Ramsay, Barker, & Jones; 1999; Sandhu, 1997). This lack of adjustment can be attributed to international students’ being less involved in campus activities or groups and having more difficulty socializing or interacting with other students, especially of different nationalities. International students have shown greater difficulty in adjusting to the college academic work, working with the finances (sometimes involving different currencies), adjusting to new living conditions and accommodations that are unfamiliar, and coping with alternative curriculum and teaching procedures (Harik-Williams, 2003). In a study by Surdam and Collins (1984), 143 randomly selected international students were obtained to study their adjust-
ment and adaptation to college life in America. Almost half of the students were from Asia or the Middle East, which would include Indian students, and were rated on problems with housing, interaction with U. S. citizen students, finances, interpersonal relationships, academics, discrimination, and loneliness. The study concluded that the greatest issues facing international students in relation to adaptation to college were academics, language barriers, and cross-cultural interactions. Most students believed their language skills were the biggest obstacles to adaptation and led to perceived discrimination, which resulted in greater adaptation issues (Surdam & Collins, 1984). Sexual problems, low self-esteem, depression, social isolation, problems with acculturation, and academic difficulties were also highlighted as major concerns in a study conducted by Marion (1986). Heikenheimo and Shute (1986) found many of the same factors in their study of 46 international students from Southeast Asia and Africa. Over 90% of those studied reported racial discrimination which resulted in over 60% feeling social isolation. Many of the students reported difficulties in adjusting to college life and found language skills, academic differences, and social relations to be major causes of their adjustment (Heikenheimo & Shute, 1986).

Cultural differences can be a leading factor causing adjustment issues for international students, and Barletta and Kobayashi (2007) found international students experienced high levels of anxiety and depression, increased pressure to succeed in a new culture, and loneliness and isolation from their culture. Studies such as this indicated that international students, from places other than European countries, experienced much more difficulty in adjusting to college life in American college campuses.
When looking at psychological and behavioral adaptation to college among 311 international first-year students from China, Wang et al. (2006) found that students who come from low socioeconomic status, have language barriers, or major in science or engineering have a more difficult time adapting to college than their counterparts who do not display these issues. Wang and colleagues (2006) also found that first-year international students’ psychological and behavior adaptation to college was influenced directly by their coping strategies and indirectly by social supports. Therefore the complex combination of positive coping strategies and social support play a vital role in assisting students’ adaptation to college (Wang et al., 2006). Based on the review at hand, it appears that the major factors affecting international students are homesickness, cultural differences, finances, racism, language barriers, and social isolation (Barletta & Kobayashi, 2007; Harik-Williams, 2003; Heikenheimo & Shute, 1986; Surdam & Collins, 1984; Wang et al., 2006).

Opinions Regarding Mental Illness

Society has many different opinions about mental illness and many factors can go into a person’s own opinion toward this subject. Research studies have been conducted on both U. S. citizens’ opinions about mental illness and international citizens’ opinions on mental illness. Demographics, background, ethnicity, and age group affect one’s opinions and sometimes life factors can change a person’s attitude towards the subject. Determining a person’s opinion about mental illness has been observed in many ways and different approaches have been taken in ascertaining how a person feels about a person suffering from a mental illness.
Opinions About People With Mental Disorders

Socall and Holtgraves (1992) found negative stereotypes play an important role in the etiology of mental disorders and people are more apt to reject someone who suffers from a mental illness as opposed to a physical illness. Regardless of the disease that leads to a person being labeled as mentally ill, and regardless of a person's actions or behaviors, being labeled as mentally ill can lead to public rejection (Ben-Zeev, Young, & Corrigan, 2010; Socall & Holtgraves, 1992; Wesselmann & Graziano; 2010). Being labeled as mentally ill can have grave social consequences that can follow a person throughout life and can affect educational pursuits, relationships, and employment opportunities. This stigma alone can lead a person to avoid any possibility of receiving such a label and can lead them to reject any instance, including counseling, that could result in either receiving the label or being perceived as someone who could be mentally ill (Ben-Zeev et al., 2010; Socall & Holtgraves, 1992; Wesselmann & Graziano; 2010).

Many scholars believe that negative opinions about mental illness, attitudes toward help-seeking, and expectations about psychotherapy are responsible for the limited use of mental health services and that negative opinions of the mentally ill and related stigma can inhibit a decision to seek help (Gonzalez, Tinsley, & Kreuder, 2002). According to a study by Gonzales and colleagues (2002), individuals with mental illness are often regarded with fear, distrust, and dislike and tend to be perceived negatively and are often stigmatized and rejected by others. Rahav, Struening, and Andrews (1984) found adults in Israel had a positive attitude toward treating those with mental disorders; however, when it came to an attitude of working or being involved with someone labeled mentally
ill, their attitudes changed. The respondents demonstrated fear, mistrust, and rejection of the mentally ill on issues concerning close, more intimate involvement with them. This study found that opinions of the mentally ill were in part affected by people’s education level, age and religiosity (Rahav et al., 1984). Similar negative outcomes have been found by other researchers observing negative opinions among attitudes toward individuals with physical limitations (Stovall & Sedlacek, 1983).

Attitudes toward the mentally ill and those seeking counseling or treatment for an illness have also been viewed differently by men and women. Women tend to hold more positive attitudes toward mental illness than men do and are much more apt to seek help or counseling services. Results of the study indicated women scored higher regarding benevolence, while men were found to have more stereotyping, restrictive, pessimistic and stigmatizing attitudes towards mental illness. Men perceived mental illness as a weakness and seeking help for issues was associated with lower levels of masculinity. Men also tended to believe mental illness was much more damaging to their status than any other type of illness or injury (Mathis & Lecci, 1999; Ng, 2000; Wirth & Bodenhausen, 2009).

Knowing a person who is mentally ill, having close contact through work or family, or having previously received treatment for an illness can also have a great impact on a person’s opinions of mental illness. Ng, Martin, and Romans (1995) found that having known a person with mental illness facilitates more intimate relationships with people with a mental illness. Most respondents who had been in contact with the mentally ill held informed and enlightened views of the disease and had a much more positive view of the individual and the illness. Corrigan, Edwards, Qreen, Lickey, and Perm (2001) also found similar results in their study. Therefore, if a person has been
exposed to someone who has received treatment for mental illness or has been labeled mentally ill, he/she is much more likely to have a positive interaction and a positive opinion about mental illness, which reiterates the belief that misunderstanding of the illness leads to a negative opinion of those having mental disorders (Corrigan et al., 2001).

*Impact of Cultural Differences on Opinions of Mental Illness*

Cultural differences can have an impact on opinions of mental illness. Furthermore, the country or region a person comes from can in part determine their opinion or at least provide an explanation as to why they feel a certain way. In some cultures negative attitudes are caused by religious beliefs, while in other cultures mental illness is perceived as a weakness or deformity. Americans are hesitant to interact with people who have mental illnesses and a recent poll showed 38% of those who participated in the survey were unwilling to be friends with someone having mental health difficulties; 64% did not want someone who had schizophrenia as a close coworker, and more than 68% were unwilling to have someone with depression marry into their family (Pescosolido, Martin, & Link, 2000). Many of these respondents were ill-informed about mental illness and were found to have formed their opinions from cultural images such as news and articles showing the mentally ill to be violent and unpredictable. Studies such as these clearly indicate that many perceptions of mental illness or those seeking treatment are not based on facts; most perceptions about mental illness seem to be based on prejudice and historical stigmas (Pescosolido et al., 2000).

Stigmas and prejudices, held within a culture, form an individual’s opinion about mental illness. Studies show many citizens in the United States and most Western nations
endorse stigmatizing attitudes about mental illness. These attitudes appear to affect public behavior toward persons with mental illnesses such as schizophrenia or toward individuals who choose to seek counseling or help (Corrigan et al., 2001). United States citizens are less likely to hire persons who are labeled mentally ill, less likely to lease them apartments, and less likely to freely interact with them. Other personal variables also affect prejudice toward mental illness. In particular, persons from minority ethnic groups experience mental health stigma more harshly than those from the majority group and seem to be less likely to endorse prejudice about mental illness (Corrigan et al., 2001). Mental health utilization and contact during childhood, where Indian nationals are shown to utilize mental illness services less and have a more negative view of mental illness, can predict opinions of older individuals about mental illness. One recent study found that many respondents believed that stigma resulted from mental health treatment during childhood. This stigma continued to have negative ramifications into adulthood. In fact, more than half of the individuals in the study were skeptical about confidentiality, and more than one-third expected parents of children with mental illness to experience self-stigma (Pescosolido, Perry, Martin, McLeod, & Jenson, 2007).

**Attitudes of College Students Toward Seeking Psychological Help**

The role and function of college counseling centers continues to evolve and change in response to a variety of social, political, and economic factors. Counseling centers are also affected in part by changes in the demographics of today's college student population. Today's college students are increasingly diverse: 30% are American-born racial minorities, 20% are foreign born, 55% are female, and 44% of all undergraduates
are over the age of 25 (Kitzrow, 2003). The attitudes students have toward seeking professional help can determine their use of counseling and the overall outcome of counseling (Fischer & Turner, 1970). Negative attitudes toward counseling and mental illness can lead to a decrease in counseling and psychological services, generally due to stigma attached to mental illness.

Stigma toward mental illness and psychosocial services is a major barrier to someone, especially college-age persons, seeking psychological help or counseling services (Hyun et al., 2007; Kim, 2002; Rahman & Rollock, 2003; Storrie et al., 2010; Tidwell & Hanassab, 2007; U. S. DHHS, 1999). Attitudes toward psychological or counseling services have a significant impact on whether or not a person would pursue help for perceived mental illness or stress. This effect is independent of outside factors such as psychopathology or socioeconomic status (Leaf et al., 1987). Although Leaf and colleagues (1987) found certain factors do not lead to a negative attitude toward counseling, Fischer and Turner (1970) found low socioeconomic status, lower levels of education, unfamiliarity with mental illness, and male gender have a negative impact on the attitudes of individuals toward mental illness and their help-seeking behavior. In studies by Duncan (2003), contradictory evidence was found; for example older, Black, male students who attended college and came from lower socioeconomic statuses, had a more favorable attitude toward seeking professional psychological help. In additional studies by Duncan and colleagues (Duncan & Johnson, 2007), multiple regression analysis indicated gender, cultural mistrust, and socioeconomic status were significant predictors of attitudes toward counseling with lower socioeconomic class, lower cultural mistrust, and female being associated with more favorable attitudes toward seeking counseling. With the amount of
conflicting studies on what external factors impact help-seeking behavior, the current study attempted to factor in all internal, social, economic, and other external factors that may affect help-seeking behaviors of both U. S. and Indian students.

College students have been shown to place a negative stigma on seeking counseling or professional psychological help. A doctor’s appointment to control a common ailment such as injury or illness can be viewed as a positive proactive event; however, an appointment to address stress or factors relating to coping is often viewed as a negative reactive event amongst college students. Mathis and Lecci (1999) attributed the difference in perception of the two events as a difference in hardiness. The authors defined hardiness as control (feeling that all events are a consequence of one’s own actions), commitment (active attempts to infuse meaning into one’s life), and challenge (where changes in life are defined as exciting and stimulating, rather than stressful experiences). Together, these characteristics comprised the global trait of hardiness, and hardy individuals were shown to experience the fewest deleterious effects of stress (Mathis & Lecci, 1999). Though hardiness was not a measurable quality in this study, it did contribute to the negative attitude toward psychological help in college students.

Some students are more likely to seek professional help than others and many factors combine to make this distinction. Al-Rowaie (2001) found females in general were more receptive to seeking help than their male counterparts. Also, individuals who had sought professional help had a much more favorable attitude toward seeking help than those who had never sought help. This study went further and indicated students who had intimate knowledge of others who had favorable professional help were more apt to seek help for themselves (Al-Rowaie, 2001). The availability of same-race or
same-sex counselors has been indicative of more help-seeking behaviors by many student populations, particularly minority students. In a study by Duncan and Johnson (2007), African Self-consciousness and cultural mistrust were highly endorsed, Black college students tended to prefer a Black counselor, and Black students who tended to have low levels of African Self-consciousness and who were male preferred a male counselor when faced with personal concerns. For environmental concerns, analyses indicated that higher African Self-consciousness and being female were associated with a preference for Black female counselors. Finally, any student who either majored or minored in any psychology field had a much more positive attitude toward counseling (Al-Rowaie, 2001). Gonzalez et al. (2002) also found numerous variables predicted attitudes toward help-seeking, including gender, ethnicity, education level, fears of social stigma, and expectations about counseling. Fears and concerns about the nature of mental health services also negatively influenced attitudes toward help-seeking. These findings suggest contact with the discipline of psychology, its practitioners, or with mental health facilities can reduce these fears and promote favorable attitudes toward seeking mental health treatment.

Impact of Acculturation on Attitudes of Indian Students Seeking Psychological Help

It has been well established that level of acculturation has a significant impact on attitudes towards seeking psychological help among international students (Al-Krenawi, Graham, Al-Behah, Kadri, & Sehwail, 2009; Al-Rowaie, 2001; Hyun et al., 2007). From the myriad of studies on this subject, it appears acculturation has a major impact on a student’s willingness to seek professional psychological help and as an international student’s acculturation increases, so does his/her willingness to seek help (Harik-Williams,
Assimilation into a culture can also be a factor in whether or not international students seek help from professional psychologists. Assimilation occurs when international students immerse themselves in the culture of the host country, ignoring their own native culture (Harik-Williams, 2003). An international student who assimilates will tend to seek out friendships with those from the host country and will adopt the attitudes and values of those they befriend. This would entail that an international student who is assimilated would now share similar attitudes towards help-seeking as those individuals from the host country (Harik-Williams, 2003).

In a study by Baello and Mori (2007), researchers found individuals who endorsed greater affiliation with Asian values were more likely to endorse negative attitudes toward psychotherapy. Stigma and shame affected the willingness of Asian Americans to report psychological problems and express them publicly. Since mental illness is seen as reflecting negatively on the family and not just the individual, Asian Americans showed more extended and intense family involvement in help-seeking and also showed the longest delays in seeking professional mental health care when compared to other American ethnic groups (Baello & Mori, 2007). Since Indian students are categorized as Asian students, research may reflect a general attitude similarity between the groups.

**Indian Students’ Experiences on College Campuses**

Evidence and reports show that international students of Indian citizenship comprise a much larger segment of the international student population and this trend appears to be continuing in the foreseeable future as more and more international students seek opportunities for education in America (White, 2007). The United States receives more
international students from India than from any other country, a trend that continues to
shape and impact the cultural, economic, and diplomatic dialogue between the two coun-
tries (White, 2007). India is the leader in sending its students overseas for international
educational exchange, with over 123,000 students studying outside the country in 2006.
More than 76,000 of these Indian students have chosen the United States as their aca-
demic destination and the numbers are increasing yearly (White, 2007). This increase in
Indian students continues despite new immigration procedures by the U. S. Department
of Homeland Security (DHS), which requires personal interviews of international stu-
dents and growing racism and stereotyping of international students since 2001.

Indian students, like most international students, face many new challenges when
they choose to study in the United States and may have a difficult time adapting to the
U. S. college culture. Lack of cultural awareness of Indian students’ heritage impacts these
students’ experiences in the United States. U. S. students’ lack of cultural awareness of
Indian students can be traced to the educational systems in elementary and middle school
texts in America (Glod, 2005). Research conducted and shown in the Washington Post
illustrates that many American textbooks contain outdated information regarding Indian
culture and religion that can lead American children to see Indian people in a negative
light (Glod, 2005). As shown in this research, stereotypes and racism by students on col-
lege campuses can make adaptation difficult for international students, including Indian
students. Stereotyping exists between African-Americans and Indians in college that may
affect student social development based on experiences in and outside the classroom
(Coates, 2004). The conceptualization of voluntary/involuntary minority groupings helps
to classify and contextualize the differences between Indians and African-Americans in
college that manifest itself as racial tensions between the groups (Coates, 2004). Voluntary minority groups, such as Indians, are characterized as those groups of immigrants who moved voluntarily to America because of the wide-held belief that the move would result in more economic well-being, better opportunities, and/or more freedom for the immigrants. An involuntary minority group, such as African Americans, are defined as individuals that are a part of American society and culture due to slavery or colonization rather than by choice or opportunity. Involuntary minorities show more distrust, lower acclamation, and a tendency to compare their chances of success with the dominant racial groups; however, involuntary minority groups are often viewed as more accepted due to circumstances outside of their control. The study concluded the racial stereotypes of Indians were harmful as a majority of respondents recorded the stereotype of Indians as “jack of all trades and master of none, arrogant, thrifty, pushy and clannish” (Coates, 2004). This research identifies some of the dominant group stereotyping existing among minority-minority relationships as well as majority-minority relationships that exist in American society. These stereotypes abound on college campuses and can lead to isolation for the minority groups (Coates, 2004).

*Indian Students' Attitudes Towards Mental Health*

Asians, including Indians, have negative views of mental illness and these illnesses carry a major stigma in their culture and as a result of this stigma, Indians often do not seek mental health care (Hyun et al., 2007; Kim, 2002; Nand, 2008; Rahman & Rollock, 2003). Family cohesion, spirituality, academic excellence, willingness to work hard, and motivation for upward mobility are common traits for most Asian cultures,
including the Indian culture. Since mental illnesses carry enormous stigma, Asian Americans and Pacific Islanders often do not seek treatment (Hyun et al., 2007; Kim, 2002; Nand, 2008; Rahman & Rollock, 2003).

In a study conducted by Mori (2007), views of international students on mental illness and psychotherapy were investigated; the study found Asians typically reported the greatest misconceptions of mental illness and the least confidence in psychotherapy in contrast to White and Hispanic participants (Mori, 2007). The factors behind the psychological underutilization rates of Asian (Indians) remain unclear, although several variables have been hypothesized. Suggested reasons include discrepancies in how mental illness and psychotherapy are viewed, perceived social stigma attached to receiving psychological services, what types of consultation/treatment should be accessed, and barriers to therapy, such as language differences between clients and therapists, and culturally insensitive aspects of therapy (Mori, 2007).

By utilizing the Attitudes Toward Seeking Professional Psychological Help Scale, Fung and Wong (2007) found that the most significant factor predicting attitudes towards seeking professional help for Asian Americans was perceived access and those subscribing more to a Western stress model of illness had a more positive attitude towards seeking professional help, while those subscribing more to supernatural beliefs had a more negative attitude. Since Indians are often grouped with Asians, this study may in part indicate possible explanations for the attitudes of Indians toward seeking professional psychological help.

To grasp an even greater comprehension of the attitudes of Indian students towards mental health services, it is important to examine the concrete set of beliefs that these
students bring from their native county. Research shows that the majority of this popula-
tion is steadfast in their spiritual beliefs that are often considered fatalistic in nature
(Panganamala & Plummer, 1998). To further elaborate, the notion of dharma (i.e., the
establish order) and karma (a repetitive cycle of birth, death, rebirth, and death) forms the
individual’s identity and worldview (Jayakar, 1994). This perspective is often shown
through Indian students’ conservative attitudes about issues such as seeking professional
help. For example, a student may feel that their depressed mood or change in affect may
be in some way connected to their karma and thus not see the need to seek help for the
issue. Hence, it is clear that conservative religious or spiritual views may play a key com-
ponent in shaping the worldview of Asian Indian students concerning psychological
interventions.

Furthermore, the notion of pride, perceived prestige, and privacy are cultural
variables that are predictive of Indian students’ negative attitudes towards mental health.
For many Asian Indian students at an American university the concept of pride is
connected with a feeling of self-esteem and worth that is rooted within their progress
within this country. Indian international students are the most highly represented in pro-
fessional occupations than any other immigrant/minority group (Panganamala & Plummer,
1998). This fact may at time put pressure on these students to inherently demonstrate that
they possess the talent, skills, and personal characteristics for success. The latter example
illustrates the source of these students’ pride and may prevent this student population
from using counseling services.

Perceived prestige is another cultural variable that impacts attitudes towards mental
health services. Prestige is often defined as the accumulation of material possessions,
wealth, educational and career achievements. Jayakar (1994) stated that the old casting
system of India is often embedded within the psyche of Asian Indian international stu-
dents. Originating back to the casting system of their native land of India, social status is
a function of caste; thus the cultural variable of prestige is inextricably linked to this
system (Jayakar, 1994). Within the United States, Asian Indians have been found to do
exceedingly well occupationally and economically (Panganamala & Plummer, 1998). These
factors contribute to their felt prestige and could prevent these students from seeking help
when faced with serious transitional life issues and mental illness, for fear of losing their
perceived prestige.

Another important cultural belief that Asian Indian international students often
value is the notion of privacy. This concept of privacy is related to the freedom from
unwanted intrusion in one’s life, especially from non-nuclear family members. As
Panganamala and Plummer (1998) point out, a prominent Indian’s value is to not share
one’s problems with individuals who are outside of the family. It is considered extremely
disrespectful to talk about one’s personal problems with persons outside of the family.
Thus, it is clear that the latter core value may make it even more difficult for these stu-
dents to reach out for help.

Indian students, due to these stigmas, do not seek help for fear they could be
labeled mentally ill (Hirai & Clum, 2000). These attitudes and perceptions can lead Indian
students to turn to alternative sources for help and treatment; however, the greatest num-
bers of students ignore the stress and anxiety and attempt to deal with psychological
issues themselves. Much more research is needed on Indian students to accurately assess
this culture and to separate the findings away from the Asian subgroups. Indians are
becoming a much larger segment of the American population and understanding the culture of this population will be important for colleges and universities to become more effective in facilitating their academic progress and success.

Conclusion

The current study and review of the literature has shown that students can have a difficult time adjusting to the new routines, social settings, and stresses that are placed upon them when they enter college or a university. Students who are unable to adjust to these new routines can suffer from depression, anxiety, eating disorders, substance abuse issues, or other serious physical and psychological problems. These issues can manifest themselves in student attrition, burnout, poor academic performance, or even suicidal thoughts or actions. Indian international students have been shown to have a harder time adjusting to campus life in the United States because in addition to the same issues U. S. citizen students face, these students are also confronted with the added pressure of cultural differences, language barriers, social stereotypes, and often bigotry. College students and especially international college students have social and cultural stigmas that define how they react and deal with those with a mental illness or perceived to be mentally ill. These cultural or social biases tend to affect how a student not only views a person with a mental illness, but can adversely affect a student’s attitude toward being labeled mentally ill. Mental illness carries a significant stigma and the thought of being thought of as mentally ill can affect a person’s views on counseling and help-seeking behavior.

Indian international students at college campuses have different approaches to help-seeking behavior and one of the leading factors in whether or not a student will seek
help for specific psychological problems is the student’s attitude toward psychological help. A student may not want to appear weak, may not want to be labeled as sick, or may not want to be ostracized by his peers, which can lead to a student not seeking proper help for psychological problems. Indian international students also have to face added cultural pressures (e.g., trying to maintain family cohesion) that can and will affect their attitudes toward seeking professional psychological help for the difficulties they face at college.

As the literature shows, Indian citizen students make up the largest percentage of international students in the United States, and thus it is essential to further study this population. The obstacles faced may lead to different behaviors, attitudes, and actions between international students and U. S. citizen students. Moreover, the literature illustrates a definitive need for further research on the differences between international students of Indian citizenship and U. S. citizen students in the areas of adjustment to college, opinions on mental illness, and attitudes on seeking professional psychological help.

This study is built upon the work first begun by Baysden (2002), and applies his current multi-component approach to further validate the variables as they relate to international students and the obstacles they face in adapting to college, their opinions on mental illness, and their attitudes toward seeking professional counseling help. By replicating Baysden’s (2002) model, this study aimed to further generalize its applicability to one international student population—international students of Indian citizenship—and further strengthen the statistical model components. Therefore the goal of the present study was to review Baysden’s (2002) findings and evaluate not only if attitudes have changed since the original study, but to also choose one particular group of international student. In this study Indian students are the homogenous group, to compare and study in
depth. Since Baysden’s study was first completed the face of college campuses has changed dramatically and attitudes toward international students, particularly those with Middle Eastern appearances, have been thought to have declined. Recent outbreaks of campus violence have led to a concern for safety on college campuses across the country and these concerns are causing additional stress and anxiety for students (Southwick, 2001). Not only does this study further strengthen the components of the model but it also revealed if international students were facing more integration obstacles since the original study. These additional issues may lead to the utilization of services and change of attitudes of all students toward counseling services.
CHAPTER III

RESEARCH METHODOLOGY

Introduction

This chapter presents a discussion and description of the exact procedures and methods used in the research study. The methodology presented in this study duplicated the work done by Baysden (2002) in order to maintain consistency and replication. To choose different collection methods, use different instruments, or different methods of study would undermine the credibility and statistical integrity of the study. The only areas that differed from the original study were the participants obtained and the collection sites. The research design was an *ex post facto* design. This section details the participants, variables, instruments, and procedures that were followed in order to conduct the study.

Participants

Six hundred thirty-seven participants were obtained for this study. The sample was comprised of more female (61.9%) than male (38.1%) participants. Their ages ranged from 17 to 57 years of age. The majority of participants were single (92.9%) while about 6.9% were married and less than 1% consisted of individuals who were divorced (0.2%). The majority of the participants endorsed a U. S. citizenship (61.7%) while thirty-eight percent reported an Indian citizenship (38.3%). Among the participants, fifty-four percent of them reported being Caucasian (54.2%) while the next largest group consisted of those
reporting to be Indian (38.1%). The remaining 7% consisted of individuals endorsing African American (3.3%), Asian (1.3%), Hispanic (0.5%), or Multicultural (1.9%) ethnicities. Finally, one percent (0.8%) of the individuals in the study did not endorse any ethnic category in the survey.

For the purpose of this study, United States citizen students were any student who was a natural born or naturalized citizen of the United States upon entering the university. The Fourteenth Amendment to the U. S. Constitution states that “All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside.” The Supreme Court endorsed the universality of this rule in *U. S. v. Wong Kim Ark*, 169 U. S. 649, 18 S. Ct. 4561142 L. Ed. 890 (1898). International students of Indian citizenship were defined as any student who currently held a United States student visa, whose national citizenship status was from the country of India, and who was enrolled as a student in any of the universities being utilized in this study. The universities that were utilized for the purposes of participant collection were three mid-western universities.

The first university had a full-time student body of 17,285 students (Fall 2007). According to the university’s demographic information, the university had 362 students that were registered as international students. The researcher, through contacts at the university’s Office of International Students, determined the current enrollment of international students of Indian citizenship as being 221. The second university had a current full-time enrollment of 12,289 students (fall 2007). Although the university website showed only 224 international students registered, this researcher determined the number of international students of Indian citizenship to be 304. The discrepancy in the statistics was
attributed to the high number of students who did not specify their country of origin. The third university had a current student population of 23,892 students. As of the 2005 student demographics survey conducted by the university, the institution had a combined enrollment of 135 students identified as Indian and a total of 44 students of Indian citizenship in the Fall of 2009. The 44 students identified as Indian provided the institution with documentation of Indian citizenship for enrollment purposes.

The primary investigator contacted all of the students who were registered as Indians, with the goal of collecting completed information from a combined total of at least 300 Indian students between the three universities. In the study conducted by Baysden (2002), student response rates were 45% for the overall participants who were contacted. Since the original study studied only a total of five students identified as Indian, the exact participation level of this group was not determined or calculated (Baysden, 2002). While Baysden originally contacted a small group of Indian students to participate, the final number of Indian student participants was not known. This indicated that Indian students, for all intents and purposes, were not represented in Baysden’s (2002) study to a degree that allowed for numerical interpretation or inclusion in the research questions. With this limitation in mind, the researcher attempted to contact and study all Indian students at three universities. The assumption was made that a combined participation rate of 28% was achievable from all students in the Indian subgroup. All three universities’ student bodies encompassed in excess of 10,000 United States citizen students and achieving the required 300 United States citizen students was assumed to be assured. To obtain the required, and equal, number of participants the researcher recruited an initial group of 250 American citizen students. Not all students contacted completed the packet,
nor did all returned packets contained complete information to include in the research study, so the researcher felt that obtaining an excess number of participants would provide more data for analysis. No sub-classifications were made regarding gender, age, or academic level of either group.

Prospective students were invited to participate on campus and through campus message boards. Indian students were contacted through Indian student groups at all college campuses. Students were located through the university’s Indian Students Association and were also recruited through classes with special permission obtained by professors that allowed a brief presentation about the research. Finally potential participants were recruited through student message boards, online social networking, and word of mouth recruiting techniques.

Dependent Variables

The dependent variables of this study matched those found by Baysden (2002) and included student attitudes toward seeking professional counseling help, opinions of students regarding mental illness, the student’s adaptation to college and campus life, and the overall use of counseling services by the participants. These variables were tested and operationalized through the use of carefully selected and tested research instruments.

Independent Variable

The independent variable, as defined in this research study, was the classification of the student’s citizenship. Though information was obtained from the university’s Office of International Students, all citizenship information was self-identified by participants.
Other Important Variables

As in Baysden’s (2002) initial study, the antecedent variable was the type of student (U. S. or Indian) with use of counseling being the outcome variable. Intervening and/or mediating variables consisted of attitudes toward seeking professional psychological help, opinions about mental illness, and student adaptation to college.

Instruments

A total of four independent instruments were used in this research study. Each of the chosen instruments was identical to those utilized in the initial study by Baysden (2002) and no modifications were needed or justified. To assure validity of this study all information collected was done so by the same instruments as the original researcher.

*Demographics Questionnaire*: Baysden (2002) developed the demographics questionnaire to acquire the demographic information from the volunteer student participants. The questionnaire obtained information (variables) such as age, gender, major, United States citizenship, years in the United States, religion, and marital status. Though much of the information contained in the demographics questionnaire was irrelevant to the present study, the researcher kept this instrument in its original format. The student’s use of counseling services was included as a dependent variable on the questionnaire. Finally, information was obtained regarding participants’ attitudes toward seeking professional counseling help; the questionnaire asked their attitudes toward seeking professional counseling help, their personal opinions about mental illness, and ascertained their level of adaptation to college. Since the demographics questionnaire was developed by Baysden (2002) for the purpose of his study, no further empirical data or validity was conducted.
on this instrument. The instrument was kept intact as written by the original researcher in order to maintain uniformity of the study.

*Attitudes Toward Seeking Professional Psychological Help Scale:* The measure of attitudes of the participants and their views on the matter of seeking professional counseling was measured using the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH). The ATSPPH scale consists of 29 questions that are rated on a 4-point Likert-type scale that range from “strongly disagree” (1) to “strongly agree” (4). This scale was originally developed to ascertain the likelihood that one would seek professional help if he/she were experiencing any type of psychological issues. The scale was originally designed in 1970 by Fischer and Turner on a sample of 212 students from high school and college and reliability and validity estimates were reported following the study. Internal consistency reliability of the ATSPPH was reported as .86 and, over intervals ranging from five days to two months, test-retest reliability ranged from .82 to .89 (Fischer & Turner, 1970). The ATSPPH was also demonstrated to possess adequate discriminating power as participants who had or were currently seeing a mental health professional scored higher than those that had no prior counseling experiences. Correlating Marlow-Crowne Social Desirability Scale scores with those from the ATSPPH demonstrated adequate discriminant validity (Fischer & Turner, 1970). Dadfar and Friedlander (1982) used the ATSPPH in a survey of 76 international students, which was relevant to the current study being proposed. Their results showed prior counseling experience indicated more positive attitudes toward seeking professional help, which was similar to U. S. citizen students’ results. Harik-Williams (2003) used the ATSPPH in her study of 108 international college students and the results were similar to that achieved in
previous studies on both U. S. citizen students and international students. Nineteen participants in the research were Indian students and the results were promising in that the ATSPPH can be utilized on this demographic (Harik-Williams, 2003). Baysden (2002) found that alpha coefficients used to test the internal consistency of the scales were very similar to those published in data studies and that alpha coefficients were found to be .83 to .86 in normative studies, .94 in his study for U. S. students, and .80 for international students in his study.

Opinions About Mental Illness Scale: Cohen and Streuning (1962) developed the Opinions About Mental Illness Scale (OMI) to measure a person’s feelings and attitudes toward mental illness. The OMI scale contains 51 questions designed to assess the individual’s feelings in regard to any person who has been labeled mentally ill or is suffering from any type of mental illness. A Likert-type 6-point scale is used to score each response from “strongly agree” (1) to “strongly disagree” (6). The scale was designed around five factors:

1. Authoritarianism, which is an individual’s prejudice toward the mentally ill. This factor consists of 11 items that represent opinions of the mentally ill as a class of people inferior to normal individuals. High scores on this factor indicate a belief that the mentally ill are inferior to normal individuals. Some questions dealing with authoritarianism include: “There is something about mental patients that makes it easy to tell them from normal people.” “People with mental illness should never be treated in the same hospital as people with physical illness.”

2. Mental Hygiene Ideology, which measures the beliefs about the treatability of mental illness. This factor consists of 9 items representing a professional view of
treatment that views mental health patients as normal people and resists the stigma associated with mental illness. High scores on this factor indicate a positive regard for serious mental illness. Questions for this factor include: “Most mental patients are willing to work.” “If our hospitals had enough well trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital.”

3. Social Restrictiveness, which relates to the question of whether the mentally ill are a danger to society. This factor consists of 10 items that regard the mentally ill as a danger to society and suggests they should be restricted both during and after hospitalization. Low scores of this factor would be for the development of less restrictive environments for patients. Examples of such questions include: “Anyone who is in a hospital for a mental illness should not be allowed to vote.” “The small children of patients in mental hospitals should not be allowed to visit them.”

4. Benevolence, which measures nurturing view of those who are mentally ill. This factor is composed of 14 items which represent attitudes that are encouraging of patients but still acknowledge some fear of the mentally ill. Questions of benevolence include: “To become a patient in a mental hospital is to become a failure in life.” “Regardless of how you look at it, patients with severe mental illness are no longer really human.”

5. Interpersonal Etiology, which measures the belief that mental illness can arise from interpersonal experiences. This factor is composed of 7 items that suggest the belief that mental illness results from bad interpersonal experiences such as the lack of parental love and attention. Questions for this factor include: “People who are successful in their work seldom become ill.” “Mental patients come from
homes where the parents took little interest in their children.” High scores on this factor reflect a respondent’s opinion that mental health is subject to an individual’s choices in life.

Baysden (2002) found that alpha coefficients used to test the internal consistency of the scales were very similar to those published in data studies and that alpha coefficients were found to be .76 to .80 Authoritarianism, .69 to .72 Benevolence, .21 to .39 Mental Hygiene, .70 to .71 Social Restrictiveness, and .65 Interpersonal Etiology in normative studies, .78, .68, .55, .81, and .78 respectively in his study for U.S. students, and .68, .68, .33, .68, and .70 respectively for international students in his study.

**Student Adaptation to College Questionnaire:** Baker and Siryk (1989) developed the 67-item Student Adaptation to College Questionnaire (SACQ) to measure the degree to which students adapted to college life. Four subscales were developed measuring academic, social, emotional, and attachment adjustment of college students. Again a Likert-type 9-point scale was used to score the responses from “applies very close to me” (1) to “doesn’t apply to me at all” (9). The Academic Adjustment subscale has 24 questions relating to the educational demands that face college students. An example of an item from this subscale is: “Lately I have been having doubts regarding the value of a college education.” The Social Adjustment subscale contains 20 questions that address the interpersonal-societal demands that affect students on campus. An example question from this subscale is: “I have some good friends or acquaintances at college with whom I can talk about any problems I may have.” The Personal/Emotional Adjustment subscale addresses the level of psychological distress and somatic complaints of the college student and contains 15 questions. A question from this subscale is: “I haven’t been able to control my
emotions very well lately.” Finally, the *Attachment* subscale has 15 questions relating directly to the student’s feeling about their particular college and overall assessment of the college experience. The higher the score is on these scales, the more positive the adjustment to college. Because adaptation to college can change from semester to semester, internal consistency reliability has been calculated for this scale instead of test-retest reliability. Baker and Siryk (1989) reported alpha coefficients for the full scale ranging from .92 to .95, for the Academic Adjustment subscale ranging from .81 to .90, for the Social Adjustment subscale ranging from .83 to .91, and for the Personal-Emotional Adjustment subscale ranging from .77 to .86 (Feenstra et al., 2001).

Feenstra et al. (2001) used the SACQ in their study on the perceived link between college adaptation for students and family demographics. This study found the mean response for the full scale score was 400.4 (*SD* = 71.2), with scores that ranged from 162 to 577. The mean response for the Academic subscale was 136.7 (*SD* = 25.1), with a range of 64 to 215, for the Social subscale mean was 126.4 (*SD* = 28.7), with a range of 31 to 179, for the Personal-Emotional subscale the mean was 79.9 (*SD* = 20.1), with a range of 31 to 128 (Feenstra et al., 2001). The researchers gave further validation to the usefulness and reliability of the SACQ. Baysden (2002) found that alpha coefficients used to test the internal consistency of the scales were very similar to those published in data studies and that alpha coefficients were found to be .92-.95 SACQ Sum, .81-.90 Academic Adjustment, .83-.91 Social; Adjustment, .77-.86 Personal Emotional Adjustment, and .85-.91 Attachment in normative studies, .95, .88, .88, .90, and .86 respectively in his study for U.S. students, and .94, .87, .78, .82, and .78 respectively for international students in his study.
Statistical Hypotheses

The following statistical (null) hypotheses, which mirror those found in Baysden’s study, were set forth and were tested at the .05 alpha level of significance:

1. College students’ citizenship is not predictive of opinions about mental illness, attitudes toward seeking professional counseling help, adjustment to college, and use of counseling.

2. Opinions about mental illness, attitudes toward seeking professional counseling help, and adjustment to college, do not combine to predict international college students’ use of counseling.

3. Opinions about mental illness do not predict international student’s attitudes toward seeking professional counseling help.

4. Opinions about mental illness do not predict adjustment to college.

5. Attitudes toward seeking professional counseling help do not predict adjustment to college.

6. Attitudes toward seeking professional counseling help do not predict use of counseling.

7. Adjustment to college does not predict use of counseling.

Statistical Methodology

Because Baysden (2002) desired to “examine the relationships directly from one variable to another while simultaneously examining the relationship of mediating variables,” he employed a Structural Equation Model to test the research hypothesis. Baysden, citing various resources for his decision, chose a structural regression model as the most
appropriate for his study. The model allows the researcher to postulate “a specific explanatory relationship among constructs, while simultaneously examining patterns of interrelationship among differing constructs” (Baysden, 2002). Unlike path analysis, the structural regression model allows for an examination of patterns of interrelationships among constructs as well as examining directional relationships. This model differs greatly from confirmatory factor analysis because it allows for the examination of directional relationships. Structural Equation models are largely a confirmatory technique, rather than a more exploratory technique, which allows a researcher to determine the validity of a model. This type of model focuses on latent constructs, psychological variables such as attitudes, rather than on the manifest variables used to measure these constructs. Ed Rigdon (2008) states, “Once the model’s parameters have been estimated, the resulting model-implied covariance matrix can then be compared to an empirical or data-based covariance matrix. If the two matrices are consistent with one another, then the structural equation model can be considered a plausible explanation for relations between the measures” (para. 4).

Procedures

Following approval by the dissertation proposal doctoral committee and completion of the first part of the written dissertation (introduction, methodology, and literature review), the principal investigator submitted the proposal with all corresponding appendices to the Western Michigan University HSIRB for approval to recruit and then obtain participants. Once HSIRB approval was received (see Appendix A) the following procedures were implemented.
The researcher originally gained access to the study population through the Office of International Students at the first university, where the researcher had contacts from previous work done in the department. The researcher was able to obtain names and contact information for all students on each of the two campuses that had been identified as international students of Indian citizenship. At this university the researcher coordinated with the Indian Student Association (ISA) to gain access to Indian students through clubs, activities, and organizations. The researcher recruited participants from the second university in the same manner. The third university also had the Indian Students Association (INDSA) which assisted in contacting the Indian student population. Using these two specific groups allowed the researcher to gain better access to the target population. Once the researcher received the information, attempts were made to contact the desired populations to solicit volunteers for the study. The researcher coordinated with professors to obtain access to individual classes to solicit both Indian and citizen participants. Telephone, e-mail, and face-to-face solicitations were used to acquire the proper number of participants for each group. Once a student was contacted the researcher explained the research study and explained to the potential participant any benefits participation could have on future students enrolled in college. Potential participants received a research study consent form (Appendix B) that explained the purpose of the study was to assess the cross-cultural (Indian and United States citizens) aspects of the student’s personal opinion and relevant experience about seeking professional counseling. Participation in this study was voluntary. All participants also received a guarantee of confidentiality of all information and responses. Students who consented to the study were then given a packet of information with directions on how to complete it (Appendix C) and all previously described
questionnaires. Research from Baysden (2002) ascertained the average time to complete
the information was between 20 and 50 minutes. Students were requested to immediately
fill out the information; however, any student who was unable to do so was given the o-
portunity to return the questionnaire at a later time. The researcher followed up with any
student, who had consented and received information, but who had not returned the packet,
on a weekly basis, until a required number of forms had been received or a duration of 30
days had passed.

Summary

The methodology section explained and detailed the construction of the research
and introduced the instruments that were utilized to complete this research study. As
previously explained, the study mirrored the original design of Baysden’s (2002) study
with the exception of population and study location. The replication was done to assure
validity and integrity of the study and allow for generalizability to a specific sample.
CHAPTER IV

RESULTS

Introduction

The purpose of this study was to build upon the foundational work of Baysden (2002), and his model focusing on factors impacting international students’ adaptation to college, their opinions on mental illness, and their attitudes toward seeking professional counseling help. In an effort to apply this model to a more homogenous sample, this study replicated Baysden’s original structural equation model and individualized it to a specific international student population. The intent was to expand Baysden’s study to include the fastest growing segment of the international student body—international students of Indian citizenship.

A structural equation modeling (SEM) analysis of Baysden’s original model was undertaken using the AMOS statistical program (version 7.0). SEM was selected as a statistical methodology because of its several advantages over regression modeling, including its more flexible assumptions (particularly allowing interpretation even in the face of multicollinearity), the desirability of testing models overall rather than coefficients individually, and finally the ability to model mediating variables rather than be restricted to an additive model as in multiple regression (Byrne, 1994; Tenko & Marcoulides, 2006).
Descriptives

Descriptive and statistical analyses were performed on six hundred and thirty-seven individuals. A power analysis utilizing Cohen's (1992) power tables revealed that a sample size of 637 participants was a sufficient sample size to test the hypotheses in this study. An adequate sample size of 200 or more participants is commonly accepted as sufficient (Cohen, 1992; Tabachnick & Fidell, 2001). The sample was comprised of more female (61.9%) than male (38.1%) participants. Their ages ranged from 17 to 57 years of age. The majority of participants were single (92.9%) while about 6.9% were married and less than 1% consisted of individuals who were divorced (0.2%). The majority of the participants endorsed a U. S. citizenship (61.7%) while thirty-eight percent reported an Indian citizenship (38.3%). Among the participants, fifty-four percent of them reported being Caucasian (54.2%) while the next largest group consisted of those reporting to be Indian (38.1%). The remaining 7% consisted of individuals endorsing African American (3.3%), Asian (1.3%), Hispanic (.5%), or Multicultural (1.9%) ethnicities. Finally, one percent (0.8%) of the individuals in the study did not endorse any ethnic category in the survey.

Because SEM requires normally distributed variables (Byrne, 1994), an examination of the distributional properties of all observed variables was conducted. Following data cleaning procedures, analyses indicated that the values of kurtosis and skewness ranged from minimal to moderate; thus allowing the use of Maximum Likelihood procedures. As a rule of thumb, data may be assumed to be acceptable if skew and kurtosis indicators are within the range of +/- 1.0 to 2.0 (Hildebrand, 1986; Schumacker & Lomax, 2004). In terms of the scales’ skewness, the OMI Authoritarianism scale was slightly
negatively skewed while the rest were within an adequate range (see Table 1 and Appendix D). When evaluating the scales' level of kurtosis, several scales were platykurtic; these scales tended to have a flat-topped distribution (see Table 1 and Appendix D).

Table 1

Means, Standard Deviations, Skewness and Kurtosis of Measured Variables ($N = 637$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATSPPH Full Scale</td>
<td>74.69</td>
<td>16.67</td>
<td>-1.08</td>
<td>2.36</td>
</tr>
<tr>
<td>Recognition of need for psychological help</td>
<td>20.10</td>
<td>5.17</td>
<td>-0.618</td>
<td>.996</td>
</tr>
<tr>
<td>Stigma Tolerance</td>
<td>13.34</td>
<td>3.48</td>
<td>-0.724</td>
<td>.849</td>
</tr>
<tr>
<td>Interpersonal Openness</td>
<td>17.78</td>
<td>4.30</td>
<td>-0.762</td>
<td>1.88</td>
</tr>
<tr>
<td>Confidence in Mental Health Practitioner</td>
<td>23.46</td>
<td>5.30</td>
<td>-1.03</td>
<td>2.21</td>
</tr>
<tr>
<td>OMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarianism</td>
<td>41.78</td>
<td>11.06</td>
<td>-0.943</td>
<td>1.21</td>
</tr>
<tr>
<td>Benevolence</td>
<td>47.16</td>
<td>8.93</td>
<td>-2.45</td>
<td>1.02</td>
</tr>
<tr>
<td>Social Restrictiveness</td>
<td>31.51</td>
<td>7.05</td>
<td>-1.19</td>
<td>.166</td>
</tr>
<tr>
<td>Interpersonal Etiology</td>
<td>26.59</td>
<td>8.61</td>
<td>-0.775</td>
<td>2.19</td>
</tr>
<tr>
<td>SACQ Full Scale</td>
<td>407.43</td>
<td>94.61</td>
<td>-1.16</td>
<td>3.15</td>
</tr>
<tr>
<td>Academic Adjustment</td>
<td>145.63</td>
<td>34.78</td>
<td>-0.969</td>
<td>2.64</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>118.13</td>
<td>33.50</td>
<td>-0.650</td>
<td>.708</td>
</tr>
<tr>
<td>Personal Emotional Adjustment</td>
<td>86.70</td>
<td>24.91</td>
<td>-0.463</td>
<td>.528</td>
</tr>
<tr>
<td>Attachment</td>
<td>98.53</td>
<td>24.27</td>
<td>-1.14</td>
<td>2.22</td>
</tr>
</tbody>
</table>
The assumptions of multivariate normality and linearity were additionally evaluated through AMOS using cases with the largest contribution to Marda's coefficient. Although a few multivariate outliers were detected, their impact was minimal due in part to a sufficient sample size of 637 participants and ample variability among the variables being analyzed. Histograms produced by SPSS 17 also provided graphical representations of variable distributions of all scales and their corresponding subscales (see Appendix G). The sample contained several subscales with missing values. A Missing Values Analysis (MVA) on SPSS 17 revealed missing data for all scales to fall between 6 to 11%. These percentage scores were well within an acceptable range of missing data percentages for each scale (Tabachnick & Fidell, 2001). An MVA also revealed no significant differences between groups and their corresponding scales. The large sample size of 637 also makes up for the small percentage of missing data, making missing data a minor impact in all final analyses.

Additional descriptive assessment involved running comparison $t$-test analyses between the International and U. S. citizens to evaluate whether the two groups differed significantly from each other on all of the scales. Table 2 shows a comparison of the means and standard deviations along with $t$-test statistics showing significance level of the differences. The U. S. citizen student participants scored significantly higher on all subscales of the ATSPPH and on the SACQ. When compared to international students, U. S. students scored significantly lower on all subscales of the OMI.
Table 2
Comparison of Scale Means Between U. S. Citizen Student and the Indian Citizen Student

<table>
<thead>
<tr>
<th></th>
<th><strong>U. S. Students</strong></th>
<th></th>
<th><strong>Indian Students</strong></th>
<th></th>
<th><strong>T</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ATSPPH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition of need for psychological help</td>
<td>81.77</td>
<td>11.25</td>
<td>62.29</td>
<td>17.39</td>
<td>16.55*</td>
</tr>
<tr>
<td>Stigma Tolerance</td>
<td>22.33</td>
<td>3.97</td>
<td>16.22</td>
<td>4.72</td>
<td>16.81*</td>
</tr>
<tr>
<td>Interpersonal Openness</td>
<td>14.64</td>
<td>2.50</td>
<td>11.06</td>
<td>3.79</td>
<td>13.82*</td>
</tr>
<tr>
<td>Confidence in Mental Health Practitioner</td>
<td>19.48</td>
<td>3.16</td>
<td>14.81</td>
<td>4.42</td>
<td>14.93*</td>
</tr>
<tr>
<td><strong>OMI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarianism</td>
<td>19.80</td>
<td>6.49</td>
<td>35.22</td>
<td>10.79</td>
<td>-21.20*</td>
</tr>
<tr>
<td>Benevolence</td>
<td>50.56</td>
<td>6.45</td>
<td>36.76</td>
<td>13.62</td>
<td>16.33*</td>
</tr>
<tr>
<td>Social Restrictiveness</td>
<td>16.99</td>
<td>6.81</td>
<td>31.82</td>
<td>10.93</td>
<td>-19.85*</td>
</tr>
<tr>
<td>Interpersonal Etiology</td>
<td>12.15</td>
<td>4.79</td>
<td>24.27</td>
<td>8.56</td>
<td>-21.60*</td>
</tr>
<tr>
<td><strong>SACQ</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Adjustment</td>
<td>432.9</td>
<td>71.1</td>
<td>358.9</td>
<td>113.3</td>
<td>9.42*</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>152.9</td>
<td>27.75</td>
<td>131.7</td>
<td>42.01</td>
<td>7.11*</td>
</tr>
<tr>
<td>Personal Emotional Adjustment</td>
<td>127.7</td>
<td>28.66</td>
<td>99.98</td>
<td>34.7</td>
<td>10.06*</td>
</tr>
<tr>
<td>Attachment</td>
<td>90.39</td>
<td>22.31</td>
<td>79.68</td>
<td>27.97</td>
<td>4.91*</td>
</tr>
</tbody>
</table>

*Means differ significantly at the \( p \leq 0.00 \) level
Reliability

Data obtained from Indian citizens and U. S. citizens, were compared with normative data to evaluate the internal consistency of each scale. Cronbach's alpha (alpha coefficient) is a commonly used measure, testing the extent to which multiple indicators for a latent variable belong together, varying from 0 to 1.0. A common rule of thumb is that the indicators should have a Cronbach's alpha of .70 or higher to judge the set reliability (Tabachnick & Fidell, 2001). Table 3 displays a comparison of the alpha coefficients of the instruments between the previously published normative data and the two groups in the present study. Alpha coefficients throughout both groups were generally very similar to those published in normative data studies. Acceptable reliability was demonstrated for 12 of the 14 scales for U. S. citizens and all scales for the Indian citizens. All scales of the ATSPPH (Full, RN, ST, IO and CM) had alpha coefficients ranging from .70 to .91 for the U. S. citizen students, while alpha coefficients for the Indian students ranged from .82 to .96 for the same scales. When comparing alpha coefficients for the OMI scale, the "Benevolence" subscale displayed a low alpha coefficient (.323) for the U. S. student sample, but not for the Indian students (.754). The "Social Restrictiveness" subscale also had a low alpha coefficient (.583) for the U. S. sample but not for the Indian student participants (.826). These scales were still included in subsequent analysis due to their theoretical importance, similar previous normative results for the OMI scale and previous published data supporting their inclusion in the OMI (Cohen & Streuning, 1962). The final scale (SACQ) had alpha coefficients well above the acceptable range (.70) for both U. S. and Indian student participants. The alpha coefficients for all scales of the SACQ
(FS, AA, SA, PE, and AT) ranged from .83 to .94 for U. S. students and .89 to .97 for the Indian student sample participants (see Table 3).

Table 3

Comparison of Internal Consistency Between U. S. and Indian Citizen Students, Against Test Instruments in Original Normative Studies

<table>
<thead>
<tr>
<th></th>
<th>ALPHA COEFFICIENTS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normative Studies</td>
<td>U. S. Students</td>
<td>Indian Students</td>
</tr>
<tr>
<td>ATSPHH</td>
<td>.82 - .89</td>
<td>.908</td>
<td>.956</td>
</tr>
<tr>
<td>Recognition of need for psychological help</td>
<td>.83 - .86</td>
<td>.812</td>
<td>.858</td>
</tr>
<tr>
<td>Stigma Tolerance</td>
<td>.73 - .86</td>
<td>.717</td>
<td>.842</td>
</tr>
<tr>
<td>Interpersonal Openness</td>
<td>.70 - .86</td>
<td>.702</td>
<td>.821</td>
</tr>
<tr>
<td>Confidence in Mental Health Practitioner</td>
<td>.80 - .86</td>
<td>.786</td>
<td>.895</td>
</tr>
<tr>
<td>OMI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarianism</td>
<td>.69 - .72</td>
<td>.719</td>
<td>.839</td>
</tr>
<tr>
<td>Benevolence</td>
<td>.21 - .39</td>
<td>.323</td>
<td>.754</td>
</tr>
<tr>
<td>Social Restrictiveness</td>
<td>.55 - .85</td>
<td>.583</td>
<td>.826</td>
</tr>
<tr>
<td>Interpersonal Etiology</td>
<td>.65</td>
<td>.701</td>
<td>.916</td>
</tr>
<tr>
<td>SACQ</td>
<td>.92 - .95</td>
<td>.940</td>
<td>.977</td>
</tr>
<tr>
<td>Academic Adjustment</td>
<td>.81 - .90</td>
<td>.883</td>
<td>.946</td>
</tr>
<tr>
<td>Social Adjustment</td>
<td>.83 - .91</td>
<td>.888</td>
<td>.926</td>
</tr>
<tr>
<td>Personal Emotional Adjustment</td>
<td>.77 - .86</td>
<td>.859</td>
<td>.924</td>
</tr>
<tr>
<td>Attachment</td>
<td>.85 - .91</td>
<td>.832</td>
<td>.899</td>
</tr>
</tbody>
</table>
Correlational Analyses

Correlational matrices for U. S. citizen college students and Indian citizen college students were generated and are presented in Table 4 and Table 5, respectively. Examination of these correlation matrices indicated appropriate levels of correlations among most of the variables of interest for both student groups. When observing the correlation coefficients between the scales for the U. S. student participants only, appropriate positive relationships were found among the subscales within their respective scale. The ATSPPH subscales were highly correlated with each other and ranged from .57 to .88. The OMI subscales ranged from appropriate correlations to being highly correlated with each other (.44 to .69). The final scale (SCACQ) had subscale correlations ranging from .47 to .87. When focusing on the relationships between the subscales, the ATSPPH was negatively correlated with the OMI and had an appropriate level of significant correlations between the subscales (-.23 to -.42). However, one scale did not correlate well with any of the other subscales. The SACQ did not have significant relationships with either the ATSPPH or the OMI for the U. S. student sample (.03 to -.17). The only relationship found with an appropriate correlation coefficient was found between the OMI: Benevolence subscale and the SACQ: Academic Achievement scale (.27).

Upon evaluating the same scales for the Indian student population, a different result was discovered. When assessing the relationship within each scale, all scales had significantly high correlation coefficients with their respective subscales. The ATSPPH subscales ranged from .75 to .93 while the OMI subscales ranged from .61 to .87. The OMI subscales also displayed highly correlated coefficients within some of its subscales.
Table 4
Correlation Matrix for U. S. Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
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<th>12</th>
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<tbody>
<tr>
<td>1 ATSPPH - FS</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2 ATSPPH - RP</td>
<td>0.875**</td>
<td>1.00</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>3 ATSPPH - ST</td>
<td>0.753**</td>
<td>0.515**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4 ATSPPH - IO</td>
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<td>0.578**</td>
<td>0.557**</td>
<td>1.00</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5 ATSPPH - CM</td>
<td>0.880**</td>
<td>0.723**</td>
<td>0.566**</td>
<td>0.569**</td>
<td>1.00</td>
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</tr>
<tr>
<td>6 OMI - AU</td>
<td>-0.420**</td>
<td>-0.379**</td>
<td>-0.333**</td>
<td>-0.361**</td>
<td>-0.323**</td>
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</tr>
<tr>
<td>7 OMI - BE</td>
<td>0.361**</td>
<td>0.352**</td>
<td>0.298**</td>
<td>0.248**</td>
<td>0.295**</td>
<td>-0.497**</td>
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<td></td>
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</tr>
<tr>
<td>8 OMI - SR</td>
<td>-0.349**</td>
<td>-0.323**</td>
<td>-0.346**</td>
<td>-0.253**</td>
<td>-0.254**</td>
<td>0.651**</td>
<td>-0.631**</td>
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<td></td>
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</tr>
<tr>
<td>9 OMI - IE</td>
<td>-0.289**</td>
<td>-0.255**</td>
<td>-0.229**</td>
<td>-0.241**</td>
<td>-0.236**</td>
<td>0.685**</td>
<td>-0.441**</td>
<td>0.540**</td>
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</tr>
<tr>
<td>10 SACQ - FS</td>
<td>0.026</td>
<td>-0.096</td>
<td>0.034</td>
<td>0.082</td>
<td>0.086</td>
<td>-0.111*</td>
<td>0.145**</td>
<td>-0.123*</td>
<td>-0.142**</td>
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</tr>
<tr>
<td>11 SACQ - AA</td>
<td>0.100</td>
<td>0.021</td>
<td>0.045</td>
<td>0.092</td>
<td>0.167**</td>
<td>-0.177**</td>
<td>0.267**</td>
<td>-0.190**</td>
<td>-0.163**</td>
<td>0.825**</td>
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</tr>
<tr>
<td>12 SACQ - SA</td>
<td>-0.027</td>
<td>-0.127*</td>
<td>0.021</td>
<td>0.042</td>
<td>0.002</td>
<td>0.005</td>
<td>-0.002</td>
<td>-0.055</td>
<td>-0.055</td>
<td>0.803**</td>
<td>0.435**</td>
<td>1.00</td>
<td></td>
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</tr>
<tr>
<td>13 SACQ - PE</td>
<td>-0.071</td>
<td>-0.198**</td>
<td>-0.015</td>
<td>0.020</td>
<td>-0.012</td>
<td>-0.040</td>
<td>0.006</td>
<td>0.019</td>
<td>-0.089</td>
<td>0.782**</td>
<td>0.546**</td>
<td>0.473**</td>
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<tr>
<td>14 SACQ - A</td>
<td>0.047</td>
<td>-0.051</td>
<td>0.056</td>
<td>0.089</td>
<td>0.081</td>
<td>-0.104*</td>
<td>0.146**</td>
<td>-0.147**</td>
<td>-0.135**</td>
<td>0.844**</td>
<td>0.547**</td>
<td>0.862**</td>
<td>0.511**</td>
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</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Table 5

Correlation Matrix for Indian Participants

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<th>Variable</th>
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<th>11</th>
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<td></td>
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</tr>
<tr>
<td>2 ATSPCH-RP</td>
<td>0.940**</td>
<td>1.00</td>
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<td></td>
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</tr>
<tr>
<td>3 ATSPCH-ST</td>
<td>0.908**</td>
<td>0.751**</td>
<td>1.00</td>
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</tr>
<tr>
<td>4 ATSPCH-IO</td>
<td>0.904**</td>
<td>0.798**</td>
<td>0.813**</td>
<td>1.00</td>
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<tr>
<td>5 ATSPCH-CM</td>
<td>0.940**</td>
<td>0.845**</td>
<td>0.820**</td>
<td>0.750**</td>
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<tr>
<td>6 OMI-AU</td>
<td>-0.652**</td>
<td>-0.661**</td>
<td>-0.605**</td>
<td>-0.661**</td>
<td>-0.517**</td>
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<tr>
<td>7 OMI-BE</td>
<td>0.656**</td>
<td>0.564**</td>
<td>0.677**</td>
<td>0.539**</td>
<td>0.650**</td>
<td>-0.611**</td>
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<tr>
<td>8 OMI-SR</td>
<td>-0.736**</td>
<td>-0.677**</td>
<td>-0.727**</td>
<td>-0.674**</td>
<td>-0.663**</td>
<td>0.796**</td>
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<tr>
<td>9 OMI-IE</td>
<td>-0.657**</td>
<td>-0.631**</td>
<td>-0.622**</td>
<td>-0.637**</td>
<td>-0.564**</td>
<td>0.872**</td>
<td>-0.742**</td>
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</tr>
<tr>
<td>10 SACQ-FS</td>
<td>0.301**</td>
<td>0.260**</td>
<td>0.315**</td>
<td>0.352**</td>
<td>0.211**</td>
<td>-0.512**</td>
<td>0.270**</td>
<td>-0.342**</td>
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</tr>
<tr>
<td>11 SACQ-AA</td>
<td>0.323**</td>
<td>0.277**</td>
<td>0.325**</td>
<td>0.357**</td>
<td>0.254**</td>
<td>-0.516**</td>
<td>0.309**</td>
<td>-0.357**</td>
<td>-0.414**</td>
<td>0.975**</td>
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</tr>
<tr>
<td>12 SACQ-SA</td>
<td>-0.296**</td>
<td>0.270**</td>
<td>0.307**</td>
<td>0.335**</td>
<td>0.206**</td>
<td>-0.452**</td>
<td>0.228**</td>
<td>-0.319**</td>
<td>-0.371**</td>
<td>0.939**</td>
<td>0.880**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 SACQ-PE</td>
<td>0.226**</td>
<td>0.172**</td>
<td>0.266**</td>
<td>0.320**</td>
<td>0.118</td>
<td>-0.463**</td>
<td>0.187**</td>
<td>-0.265**</td>
<td>-0.339**</td>
<td>0.937**</td>
<td>0.891**</td>
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<tr>
<td>14 SACQ-3</td>
<td>0.251**</td>
<td>0.228**</td>
<td>0.262**</td>
<td>0.303**</td>
<td>0.161**</td>
<td>-0.479**</td>
<td>0.225**</td>
<td>-0.313**</td>
<td>-0.380**</td>
<td>0.950**</td>
<td>0.905**</td>
<td>0.895**</td>
<td>0.851</td>
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</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
and ranged from .47 to .84. Finally the SACQ subscales had highly correlated coefficients ranging from .55 to .81. The Indian student sample also differed from the U. S. citizen students on the correlation coefficients between the scales. For the Indian student sample, all scales were appropriately correlated with each other. The ATSPPH correlated well with the SACQ (.16 to .32) as well as with the OMI (-.52 to -.74). The SACQ also correlated well with the OMI (-.19 to -.52). Unlike the U. S. student sample, the Indian citizen group had highly correlated relationships within and between the scales. Because of these highly correlated relationships, the possibility of multicollinearity was anticipated when testing the structural equation modeling and was addressed in the model a priori.

The Proposed Model

Structural equation modeling (SEM) grows out of and serves purposes similar to multiple regression, but in a more powerful way which takes into account the modeling of interactions, nonlinearities, correlated independents, measurement error, correlated error terms, and multiple latent independents each measured by multiple indicators. SEM may be used as a more powerful alternative to multiple regression, factor analysis, and analysis of covariance. In practice, much of SEM research combines confirmatory and exploratory purposes: a model is tested using SEM procedures, found to be deficient, and an alternative model is then tested based on changes suggested by SEM modification indexes. This is the most common approach found in the literature (APA, 2009; Bentler, 1990; Byrne, 1994; Hildebrand, 1986; Kline, 1998; McDonald & Ho, 2002; Raykov & Marcoulides, 2000; Schumacker & Lomax, 2004).
SEM results vary widely among researchers, but standard reporting conventions developed by the American Psychological Association (2009) and by McDonald and Ho (2002) were followed in this study. The hypothesized structural equation model was tested using AMOS 7.0. Maximum likelihood estimation was used to obtain estimates of the path coefficients and goodness-of-fit indices for the proposed model in this study. According to Tenko and Marcoulides (2006), the statistical program tests whether or not the set of multiple cause-effect relationships included in the proposed model is consistent with the observed data, allowing for a simultaneous analysis of both direct and mediating effects. Even though structural equation modeling cannot prove that the relationships between variables are causal, it can test whether or not causal hypotheses are supported by the data. The degree of consistency between the proposed set of relationships and the data observed is evaluated by comparing the covariance matrix obtained from the data with the matrix resulting from the parameters of the hypothesized model.

Several goodness-of-fit indices were observed in evaluating the proposed model, and their relevance is explained below. The first goodness-of-fit index is the chi-square \( \chi^2 \), which indicates that the observed data fit the model when the result is non-significant (Kline, 1998). However, the chi-square goodness-of-fit statistic is only one fit indicator and is extremely sensitive to sample size. When a sample size increases above 200 participants, the chi-square has a tendency to indicate a significant probability level (Schumacker & Lomax, 2004). Additional goodness of fit indices examined were Bentler's (1990) fit indices such as the Lisrel GFI, Bentler-Bonnet Normed Fit Index (NFI), the Bentler-Bonett Non-normed Fit Index (NNFI), the Comparative Fit Index (CFI), the Root Mean Square-Error of Approximation (RMSEA), and finally the Root
Mean Square Residual (SRMR). The NFI, NNFI, and CFI indices all range from 0 to 1, and are considered to be indicative of well fitting models when at or above .95 (Raykov & Marcoulides, 2000). A value of the RMSEA at or below .10 is indicative of the model being a reasonable approximation to the data. RMSEA is not contingent on sample size and yields an estimate of the average discrepancy per degree of freedom (Browne & Cudeck, 1993; Raykov & Marcoulides, 2000; Schumacker & Lomax, 2004). SRMR is a standardized summary of the average covariance residuals, which shows the difference between the observed and model-implied covariances. According to Kline (1998) an SRMR value of .10 or less is favorable. Therefore, a well fitting model to the observed data will have higher GFI, NFI, NNFI, CFI, and chi-square values while lower RMSEA and SRMR values.

The proposed model incorporating the hypotheses and the theoretically relevant parameters is presented in Figure 1. The model proposed that college students' use of counseling would be predicted by mediating variables such as their opinions about mental illness, attitudes toward seeking professional counseling, and adjustment to college. Specifically, college students' citizenship (i.e., U. S., India) would predict their opinions about mental illness, attitudes toward seeking professional counseling, adjustment to college, and their actual use of counseling. In addition, participants' reported use of counseling was hypothesized to be mediated by opinions about mental illness, attitudes towards seeking professional counseling, and adjustment to college. In addition, an individual's opinion about mental illness would also predict their attitudes towards seeking professional counseling and their adaptation to college. Finally, it was hypothesized that a student's attitude toward seeking professional help would determine their level of adaptation to college.
Figure 1. Conceptual Model Integrating All Relevant Hypotheses and Theoretically Relevant Paths.
Chi Sq = 169 597, p = 0.00, CFI = 0.96, RMSEA = 0.13

Figure 2. Results of the Hypothesized Structural Equation Model With Standardized Path Coefficients
The Structural Model

The results of the initial run of the hypothesized model (see Figure 2) revealed a poor fit to the observed data, $X^2 (14) = 166.854$, $p < 0.00$ (GFI = 0.92, NFI = 0.95, NNFI = .91, CFI = 0.96, RMSEA = .14, SRMR = 0.053). Despite this poor fit, the initial proposed model provided support to the extent to which the observed variables of Authoritarianism, Benevolence, Social Restrictiveness, and Interpersonal Etiology subscales represented the latent variable of Opinions about Mental Illness. The initial model’s path coefficients for Authoritarianism (0.94), Benevolence (-0.81), Social Restrictiveness (0.90), and Interpersonal Etiology (0.93) indicated a strong description of the latent variable of opinions about mental illness. The negative path coefficient for Benevolence (-0.81) was expected as it is a measure of a positive nurturing view of the mentally ill, in contrast to the remaining three subscales of the OMI which measure negative opinions towards the mentally ill.

The initial model’s poor fit was due in part to particular misspecifications. The first was the highly correlated subscales of the OMI, which produced linearly dependent parameters, therefore lowering the goodness-of-fit indices. The other two had to do with the overall model. By utilizing the recommendations of the multivariate Wald test for dropping certain parameters, two paths in the original model were dropped in an effort to increase parsimony and a better fit to the data. The first parameter was the direct relationship between Attitudes toward Seeking Professional Counseling Help and a student’s adaptation to college (.07). The second parameter affecting the goodness-of-fit indices was the direct relationship between the student’s country of citizenship and their actual
use of counseling (.03). Revisions were made to the initial model by dropping these specific parameters and constraining the covariances between the OMI subscales in order to account for the highly correlated items making up the OMI. The final structural model required no additional fitting.

The final structural model provided an adequate fit to the data, $X^2 (16) = 72.077, \ p < 0.00$ (GFI = 0.97, NFI = 0.95, NNFI = .97, CFI = 0.98, RMSEA = .08, SRMR = 0.023). The Chi-square index remained low and significant, which can be attributed to the high sample size of 637 participants. As mentioned earlier, Chi-square tends to reflect significance as the sample increases beyond 200 participants. Once constrained, the factor loadings of Authoritarianism (.94), Benevolence (-.81), Social Restrictiveness (.91), and Interpersonal Etiology (.94) remained stable. Thus constraining the covariances within the scale positively affected the overall fit of the model, therefore increasing goodness-of-fit to the data. Removing the above mentioned parameters also improved the model’s overall fit and parsimony.

Upon revision, the final structural model (see Figure 3) supported the hypotheses that student citizenship predicted a student’s opinion about mental illness ($b = .71, \ p < 0.00$), their attitudes towards seeking professional counseling help ($b = .08, \ p < 0.00$), and their use of counseling ($b = .03, \ p < 0.00$). As proposed, a student’s opinion about mental illness also predicted their attitudes towards seeking professional counseling help ($b = -.72, \ p < 0.00$) which mediated their actual reported use of counseling ($b = -.54, \ p < 0.00$). As predicted, a student’s opinion about mental illness also predicted their adaptation to college ($b = -.49, \ p < 0.00$) which in turn also mediated their actual use of counseling ($b = .19, \ p < 0.00$). The hypotheses not supported by the model were that a
Chi Sq. = 72.077, p = 0.00, CFI = 0.98, RMSEA = 0.08

Figure 3. Results for Revised Structural Equation Model With Standardized Path Coefficients.
student’s adaptation to college was not determined by their attitudes towards seeking professional counseling nor by their country of citizenship (reflected in the dropped parameters in the revised model).

Summary

Although the initial model did not fit the observed data, once the covariances between the subscales for the OMI were constrained and the recommended parameters were eliminated from the model, the model yielded support for a more parsimonious integrative component model. The revised model revealed meaningful relationships between a student’s origin and their opinions about mental illness, their attitudes towards seeking professional counseling help, and their actual use of counseling. Despite the removal of two parameters, all other predicted parameters were in the expected direction, providing an excellent fit to the data at hand.
CHAPTER V

DISCUSSION

Introduction

This chapter presents a general review of the study and an interpretation of the statistical findings. Implications of the results are discussed and recommendations for future research are suggested.

Summary of Study

This study compared U. S. citizen and Indian citizen college students on their opinions about mental illness and adjustment to college as related to their attitudes toward seeking professional counseling help. In an effort to build upon and generalize Baysden’s (2002) multi-component attitudinal model, this study focused on replicating his research findings and individualized the sample comparisons to Indian citizen college students instead of using a general international student sample as in Baysden’s (2002) original study. Eight hundred and thirty-seven questionnaires were obtained for this research study. However, since the aim was focused on the comparison between U. S. citizen and Indian citizen college students, the sample comprising of only these two groups was assessed. The final sample contained six hundred and thirty-seven participants. Demographic information revealed more female (61.9%) than male (38.1%) participants, ranging
from 17 to 57 years of age. The majority of the participants endorsed a U. S. citizenship (61.7%) while thirty-eight percent reported an Indian citizenship (38.3%).

Instruments used to collect the relevant research information were as follows: a demographic questionnaire adapted from Baysden’s (2002) original design, the Attitudes Towards Seeking Professional Counseling Help Scale (ATSPCH), Opinions about Mental Illness Scale (OMI), and the Student Adaptation to College Questionnaire (SACQ). The Attitudes Towards Seeking Professional Counseling Help Scale yielded a single score, the Student Adaptation to College Questionnaire yielded a single score for each of the four subscales (academic adjustment, social adjustment, personal/emotional adjustment, and attachment) that were summed up for an overall score of adjustment. The Opinions about Mental Illness Scale yielded a single score from each of the four subscales (Authoritarianism, Benevolence, Social Restrictiveness, and Interpersonal Etiology).

The current study replicated Baysden’s (2002) extended multi-component model of international and U. S. citizen students’ help-seeking behaviors. The focus of this study was aimed at specifically comparing Indian citizen college students and U. S. citizen college students on evaluating their help-seeking behavior. The research hypotheses generated for this study were tested at the .05 level of significance utilizing a structural equation model. It was hypothesized that college students’ use of counseling would be impacted by their opinions about mental illness, their attitudes toward seeking professional counseling help, and their overall adjustment to college.

The initial model did not fit the observed data, however, with minimal model fitting procedures (i.e., covariances between the subscales for the OMI were constrained and the recommended parameters were eliminated from the model), the model yielded
support for a more parsimonious integrative component model. The revised model revealed meaningful relationships between a student's origin and their opinions about mental illness, their attitudes towards seeking professional counseling help, and their actual use of counseling. Despite the removal of two parameters, all other predicted parameters were in the expected direction, providing an excellent fit to the data at hand. This finding allowed for the partial support of the first statistical hypothesis, which stated that international students of Indian descent who had negative opinions about mental illness, and negative attitudes toward seeking professional counseling help, also had difficulty in adjusting to colleges. Student citizenship predicted an individual's opinions about mental illness and their attitudes toward seeking professional counseling help. However, their overall adaptation to college was not directly impacted by whether the individual's citizenship was from U. S. or India. The second hypothesis was supported in full by the data. The multi-component model showed that opinions about mental illness, attitudes toward seeking professional counseling help, and adjustment to college all predicted college students' use of counseling services.

The third statistical hypothesis was also supported by the data in that college students' opinions about mental illness predicted their attitudes toward seeking professional counseling help. The results of the multi-component model also supported the fourth hypothesis which showed that a college student's opinions about mental illness predicted their adjustment to college. Furthermore, the next hypothesis stating that an individual's adjustment to college predicted their professional counseling use was also supported by the statistical findings. In addition, a college student's attitudes toward seeking professional help were also predictive of their professional counseling, as
predicted in the sixth hypothesis. A final hypothesis stating that an individual’s attitudes toward seeking professional counseling services were predictive of their adjustment to college was not supported by the data at hand.

Conclusions

Based on the statistical findings and within the parameters and limitations of this study, the following conclusions and implications can be drawn from the data at hand. Overall, U. S. students tended to endorse more positive attitudes towards seeking professional counseling help, had more positive opinions regarding mental illness, reported a better adjustment to college, and were also more likely to use counseling services when compared to their Indian counterparts. Therefore a college student’s citizenship was predictive of their opinions about mental illness, their attitude towards seeking professional counseling help, and their use of counseling. Although a college student’s citizenship did not directly predict their adjustment to college, it was mediated by their opinions about mental illness. As a result, Indian citizen college students who endorsed negative opinions about mental illness also endorsed a negative attitude towards seeking professional counseling help. On the other hand, being an Indian citizen or a U. S. citizen was not necessarily predictive of how the participant was adjusting to college. In addition, a participant’s view regarding their attitudes toward professional counseling help did not appear to be related to how well they were adjusting to college life for either college group. What is interesting, however, is that although citizenship of the college student was not directly related to whether they would adapt to college, their opinions regarding mental illness mediated their coping and adjusting to college life.
From the structural equation model, it was also concluded that a student’s opinion about mental illness, their attitude towards seeking professional counseling help, and adaptation to college, when taken together, significantly predicted their use of counseling. Therefore, a student’s use of counseling was indirectly impacted by their opinions about mental health. In particular, their use of counseling was affected by their opinions about mental health, only when mediated by their attitudes towards seeking professional counseling help and how they were adapting to college. A student therefore was less likely to use psychological services on his or her local campus if they had negative attitudes towards counseling services brought on by their negative opinions about mental illness. It was also of importance to note that a participant’s negative opinions about mental illness predicted how they were adjusting to college, which in turn affected whether they would use counseling services. Students were also less likely to use counseling services based on their perceptions regarding mental illness and mental health, despite how well they were adjusting to college life.

When focusing on specific areas of the multi-component model, Baysden’s (2002) model was supported in that students’ opinions about mental illness significantly predicted their attitudes towards seeking professional psychological help and how they adapted to college. Therefore, a student’s opinions regarding mental illness strongly predicted how their attitudes towards seeking professional counseling help would be determined and also impacted their overall adjustment in college.

Although Indian citizens were less likely to use counseling services overall, their adaptation to college and attitudes toward seeking professional counseling help were significantly stronger predictors in determining whether they were likely to seek counseling
services on their college campus. Interestingly, the variables most impactful in this model were related to the individual’s opinions about mental illness, but even more so when they were mediated by their attitudes towards seeking counseling help and whether they were also having a difficult time adjusting to college.

Discussion

The findings of this study partially support Wong’s (1997) original multi-component theory to an understanding of international students’ use of counseling services and differed slightly from the original multi-component model derived from Baysden’s (2002) work. This study found partial support for the model when implemented on an Indian citizen college student sample. Similar to Baysden’s (2002) findings, this study examined and found statistical support for an attitudinal component (opinions about mental illness and attitudes toward seeking professional counseling help) and a need for psychological well-being component (student adjustment college) to understanding Indian citizen students’ use of counseling services. In such, this research provided for a successful replication of Baysden’s (2002) original structural equation model to explaining a specific international student population’s (Indian citizens) use of counseling. Where it differed, however, was in the connection between an individual’s attitudes towards seeking professional counseling help and its impact on their adjustment in college.

For this particular data, a person’s attitudes regarding seeking counseling did not predict their current adjustment in college for either group. Student citizenship also did not directly impact a participant’s adjustment in college. Therefore, when compared with U. S. citizen college students, Indian citizens’ lower use of counseling was influenced by
how well they adapted to college, but more importantly by their attitudes towards seeking counseling help. In fact, these attitudes seemed directly influenced by the prejudicial opinions they had previously developed regarding the mentally ill as measured by the OMI. These perceptions focused on viewing the mentally ill as inferior to others, having a lack of a full understanding of mental illness as a disease, and seeing the mentally ill as threats to society. These views were also commonly found among the literature such that in some cultures negative attitudes tended to be caused by religious beliefs, while in others mental illness was perceived as a weakness or disease (Pescosolido et al., 2000). Additional findings not only gave support to Baysden's (2002) structural equation model, but also supported the past literature on international students underutilizing counseling services on college campuses (Leong & Chou, 2002; Paige, 1990; Pederson, 1991; Porter, 1979; Prieto, 1995), as well as supported the view that international students tended to have more negative views about mental illness (Dubin & Fink, 1992; Fisher & Farina, 1979; Gonzales et al., 2002; Hall & Tucker, 1985; Kizrow, 2003; Lehtinen & Vaisanen, 1978; Wong, 1997). The current study's findings that Indian citizen college students tended to have more difficult experiences in adjusting to college were also supported in the literature (Akpan-Iquot, 1980; Heikenheiro & Shute, 1986; Mncadi, 1993; Schram & Lauver, 1988).

Consistent with past studies, having negative views of the mentally ill were also predictive of one's own attitudes toward seeking professional counseling (Duncan 2003; Duncan & Johnson 2007; Kizrow 2003). Therefore, if a person is afraid of being perceived as mentally ill, they will be highly unlikely to seek help. Understanding this component is essential in making psychological services more available to this underrepresented population on college campuses. If Indian citizen college students are experiencing a
higher difficulty in adapting to college and won’t seek out help because of their personal views of mental illness, then the goal would be to help decrease the stigma associated with these views. One way is to better incorporate psychological well being in the curriculum and to help individuals see the need for optimal mental health while acculturating to a new system. Also increasing an individual’s support system through formal sources such as mentoring would help reduce the stigma of exposing an individual’s need for help as well as increase a differing view of mental health and mental illness.

Interesting in this study was that students indicating more stereotypical opinions about mental illness also reported having more difficulty in adjusting to college. In fact, opinions about mental illness were a much stronger predictor than simply being a U. S. citizen or being an Indian citizen. What was more interesting, however, was that although opinions about mental illness predicted attitudes towards seeking help and their adjustment to college, the attitudes towards seeking help did not really relate to how well they were currently adjusting. Essentially, having negative attitudes toward seeking professional counseling help did not have an impact on whether they would adapt to college or not. For many of the students in this sample, having negative attitudes of the mental health field did not affect how they were adjusting. This demonstrates that for many individuals counseling centers may not be seen as relevant to their success in college, even when they are having difficulty coping and adapting to college life. So not only is their view of mental illness preventing their help-seeking behavior, but it can also be their lack of understanding as to how professional counseling can be relevant in adjusting to college life. These findings lend some support to Matchinky’s (2001) study which indicated that attitudes about mental health and personal adjustment can at times function
independently of each other. Gonzales et al. (2002) also supports the findings that adjustment and attitudes towards help-seeking was unrelated. What is key here is that regardless of how difficult an individual’s adapting to college might be, they were more likely to use professional help only if they had positive views of mental illness and if they had positive views of the mental health field prior to entering college. Both stigma toward mental illness and psychosocial services has been a major barrier to seeking psychological services in several past studies as well (Corrigan et al., 2001; Pescosolido et al., 2000; Rahav et al., 1984; U. S. DHHS, 1999). Even more concerning was how strongly opinions about mental illness seemed connected to an individual’s personal adjustment to college life. This finding elucidates the strong connection between how our personal stereotypic view of mental illness can have a strong negative impact on our everyday functioning, even when we don’t consciously see their inter-relatedness. Little research has focused on this relationship and it merits more study to obtain a better understanding of factors relevant to a student’s academic success and points of intervention when they are not adapting successfully. This is especially important because when an individual is having difficulty adjusting and has little insight into what may be contributing to their difficulty, they may become more susceptible to use ineffective alternative means of coping (i.e., drugs, alcohol, sex, etc.). This finding may also be suggestive of the possibility that traditional western methods of counseling may be unfamiliar, unhelpful, and/or uncomfortable, leading Indian students to be unfamiliar with the services that professional counseling agencies provide. This lack of awareness, perhaps, explains why many international students seek help through friends or other informal means. Therefore, help-seeking behavior increases only as students better understand the problems which are
appropriate for one to seek professional counseling help (Al-Qasam, 1987; Al-Rowaie, 2001; Sharma, 1992).

Recommendations

Continued investigation into theory driven research is essential for continued understanding of this area of study. More specifically, studies need to continue to investigate Wong’s (1997) component model by examining specific attitudes and needs for psychological help on the use of professional help. It would be important to investigate more closely how the opinions about mental illness are a strong barrier not only to use of psychological services but also how they affect overall adjustment. Are there specific areas in which Indian college students are having the most difficulty in adapting to college life and how do opinions of mental illness relate to the specific areas of adapting? For example, are specific stereotypic views of mental illness relevant when individuals are having difficulty with adapting to specific areas in their academic endeavors?

Future research should also focus on looking at gender differences between use of psychological services and overall views of mental health. As research continually indicates that females of all ethnicities are more likely to utilize psychological services than their male counterparts, it could be important to find and address the main reasons for the difference in help-seeking behaviors. Such findings could be utilized to make psychological services more gender-neutral, gender friendly, or less skewed toward female clients. If it is found that males have certain known reasons for not seeking psychological services, equal to females facing the same issues, then it is vital for help centers on college campuses to begin to address these issues and find ways to make psychological services
and help centers more focused on the different needs of males. Gender is shown to
greatly impact the differential power and control that specific students have over their
mental health and their lives, their social position, and their status and position within
society. What attracts females into counseling has been shown to actually keep men from
seeking the same psychological services, despite facing many of the same issues that
require help. Maintaining the status quo, simply not focusing on the gender issue and
looking simply at morbidity, means that male students will continue to avoid or delay
help-seeking behaviors. Find out what male students need and strive to change the centers
to focus on the behaviors and actions that will reduce the feminine stigma associated with
collegiate psychological services.

This is important for all cultures and not just Indians and Americans, as each
culture has separate views and roles for genders that fundamentally challenge not only
help-seeking behaviors but also affect the attitude toward and utilization rates of psycho-
logical services. The more patriarchal the culture of the student, the less likely the current
system will cater to their needs. Simply put, men from cultures that are male-dominated
will not and do not utilize collegiate help centers and do not engage in help-seeking beha-
viors. This means that college counseling centers must adopt an attitude that gender
differences do exist in help-seeking behaviors and adapt to the needs of the underserved
student bodies. Challenging stereotypes and stigmas is a way in which college counseling
centers can redirect the message and focus on simply removing the barriers that are cur-
rently in place that. Findings in the research have shown that the psychological profession
is gender biased and follows many of the stereotypes of society or upholds many of the
traditional gender barriers. Gender stereotyping—such that women are much more likely
to be diagnosed as depressed whereas men are not despite identical symptoms—reinforces social stigma and constrains help-seeking along gender lines. Counseling centers simply find women more accepting of services, thus are more apt to follow the rules drawn up in society. Counseling centers must not only challenge the social or societal stigmas and biases that exist, they must challenge these same issues within the psychology and counseling community. This means creating counseling that is gender sensitive toward men in that counseling recognizes that men and women are different and that identical services simply will not prove effective for both genders. Counselors must learn the reasons that men avoid counseling and help-seeking and must focus on working with men in a way that is related to societal standards and cultural norms that men can relate to and feel more comfortable with.

Are Indian women or men more susceptible to difficulties in adapting to college life, and what may be their specific biases towards seeking psychological help? In addition, instead of looking at overall opinions regarding mental health, look into how specific views may affect an individual’s adjustment to college life. For example, the OMI has specific subscales that may help provide additional awareness into the types of opinions that may be having the most impact on adjustment. The type of adjustment is also essential in tailoring counseling assistance and awareness to this population. For example, which types of adapting (i.e., academic adjustment, social adjustment, personal emotional adjustment, attachment) are most impacted by opinions about mental illness? A better understanding of how these factors play out in the individual are essential for ways of increasing awareness and use of counseling services on college campuses for this population. Once these are better understood by the counseling community, work must focus on developing
psychological services that address specific issues, such as social adjustment, and make the student body more aware of the center’s ability to address more specific issues. If a student associates psychological services only with more focused mental health problems, such as depression and substance abuse, they are not likely to seek out help with adjustment issues. Many students feel that certain issues are common and may simply associate personal problems with a normal college experience, thus never understanding that help is available or that many adaptation issues have roots in other areas. To address this, counselors have a duty and obligation to become more proactive in seeking out clients and making students aware of the help that is available to address their specific areas of interest.

Future directions should also look into incorporating not only attitudes towards seeking professional counseling help but to also assess an individual’s working knowledge and awareness of the mental health field which may interact with use of counseling services. The research has shown that students who are more aware of psychology or have completed psychology classes, have a much higher rate of help-seeking behaviors and a more positive association of psychology, counseling, and seeking help. This would indicate that placing psychology, human development, or even lifestyle courses early in a student’s curriculum would lower negative attitudes toward mental health and would increase the help-seeking behaviors of students. More focus on mental health and psychology early in the student’s college experience would increase utilization of mental health services. Additionally, the school must focus counseling curriculum for the counseling psychology program to reinforce proper mental health by introducing students to
the benefits of psychology, the common areas of adaptation, the attitudes that place barriers, and reducing the social stigmas surrounding the idea of psychological services.

Focusing on level of acculturation can also have a major impact on how well an individual is coping in college and their likelihood of seeking psychological services. Many symptoms of maladjustment may only become more salient in the individual as he/she becomes more acculturated into American society and a better understanding of how these factors interplay may be impacted. Therefore comparing freshman students with seniors in college may play a major factor in how their views may change over time and whether it affects their use of help-seeking behaviors and their use of counseling. This is where cultural sensitivity of counselors becomes essential, because counselors must understand the culture of others and how this culture determines their attitudes, beliefs, biases, and behaviors.

Cultural competence and cultural sensitivity can only be achieved through focused programs aimed at psychology and counseling students that require all counseling and psychology students to train and learn how to work with clients from different cultures, races, and ethnicities. Because of a perceived lack of understanding of cultural competency and managing of diversity by counselors, diverse clients and students feel they will not receive the same quality or access to services as other groups, which simply decreases help-seeking and increases bias. Research on cultural competency in mental health services finds that clients of color are disadvantaged by the lack of language-proficient service providers for non-English fluent students and practices that ignore or misinterpret culturally-specific strengths, weaknesses, or issues. In addition, research finds that poverty or lack of resources, spatial location, discrimination, and racial bias also play a role in
racial/ethnic disparities in services. All of these findings show that international students find it difficult to associate positively with psychological services and thus a lack of cultural competency lends to negative attitudes toward mental health by international students. If college counseling programs aim to achieve equality in services or aim to reduce disparities in help-seeking behaviors between American and International students, then counselors must be specifically trained in cultural competence and cultural sensitivity.

Research shows that minority populations face many of the same discrimination factors in society, in that society has certain stereotypes of each population and societal norms that each person within the racial or cultural group is expected to adhere to. Often a person’s social class is in part determined by their racial or cultural classification, which may place them into a defined class of people in society based upon nothing more than their race or ethnicity. One thing that happens to all of these distinct racial groups is the grouping of all into one common heading, despite the very distinct differences that are contained within the group, such that all people of Hispanic or Latino backgrounds are grouped into one sub-heading of the population and viewed as one racial group. This happens on college campuses and in counseling centers where non-American students are simply labeled and defined as international students. Being grouped together as one racial group takes away from each distinct culture’s identity, language, and racial identity and makes an international student feel isolated from the college community. As shown in the research, international students—regardless of nation of origin—hold different views and values when it comes to mental health attitudes and help-seeking behaviors. These are multiplied and become more problematic when combined with attitudes that counselors
and help centers do not have appropriate cultural training and that psychological services are aimed at American or English-proficient clients.

Even when an international student understands the need for psychological services, they are shown to avoid seeking out services they feel are not understanding of their needs, their race, their beliefs, or their culture. Psychology and counseling students must understand the group for its unique qualities and culture and must understand the difference between a Latino from Guatemala and a Latino from Mexico or must differentiate an Indian student from an Asian student. The preconceived notions of what makes a person Asian on Hispanic must be dropped and counselors must understand that like African Americans and Caucasians, there are distinct cultural and racial differences apparent within these distinct classifications. No racial group can be painted with one brush, nor can the cultural group be placed into a single heading. This can only be achieved through directed and mandatory cultural competency programs aimed at increasing the cultural awareness and cultural sensitivity of counselors and psychologists. For counselors to be culturally competent they must have knowledge and understanding about the history, traditions, values, and family systems of major client groups that they serve and understand the need to become aware that viewing all clients through one scope is a sign of cultural insensitivity. All psychology and counseling students require directed coursework and training on diversity and cultural differences, including understanding the history, traditions, values, and family systems and recognizing, respecting, and understanding other cultures.

In addition to directly instituting cultural training and classes for counselors and psychologists, universities and counseling centers must increase cultural and ethnic diversity
within the psychology community, which means attracting more diverse students into counseling and psychology majors or lines of study and recruiting more diverse instructors within these academic fields. Association with psychology is shown to be a direct predictor of utilization of counseling centers, so that an increase in cultural diversity within the academic psychology community would lead to increased international enrollment within psychology classes and majors. Promoting ethnic diversity within the field, meaning more diverse counselors, students, and professors, would directly increase not only cultural sensitivity and knowledge, but would reduce stigma associated with psychology that is directly related to low levels of psychology service utilization among international students. Clients who can directly relate to counselors based on shared cultural aspects are more likely to seek psychological services and to adapt a more positive association with counseling centers. Increasing cultural diversity would directly reduce stigma and would increase student attitudes toward help-seeking.

While all students experience academic and personal pressures, international students face particular academic and social challenges that increase their potential for stress. As noted in the literature review, international students in the United States tend to be among the top students in their countries of origin, yet if English is not their native language they may have unanticipated academic difficulty (Mori, 2000). They may experience isolation, being far removed from their traditional social supports including friends and family—possibly for the first time. From a practical perspective there are several ways counseling centers and universities as a whole can tailor their services to facilitate international students’ transition and provide necessary assistance to promote their academic success. Early intervention offers an opportunity to improve mental health outcomes,
including the shaping of more positive attitudes to mental health. Universities should build on the multitude of practices that are already in place to promote international college students’ wellbeing and to strengthen schools’ role in the building of a sense of community for all involved and to foster a sense of belonging. This means directly increasing awareness of the services available to students through social media, through university communications, and through directed in-class training sessions that raise awareness of help. The research does find that a portion of students who do not seek help, state that they were unaware of services available on campus or through the counseling centers.

In beginning to address the unique needs of international students, it is important that universities as a whole create an environment conducive to promoting psychosocial competence and wellbeing by encouraging partnerships between school and communities. Strengthening the school’s role in promoting mental health involves supporting staff to feel confident of their own areas of professional practice in assisting them to identify the specific areas where specialized professional support from mental health professionals is needed. These can break down the social stigma attached to psychological services and can indeed promote a positive association between achievement and mental health. Understanding the outcomes of mental health promotion through schools involves recognition that colleges are only one part of students’ lives and that school achievement and achievement in life is based upon mental health and positive help-seeking. Although schools provide an attractive setting for health promotion and for health intervention, it is simplistic to ignore the role of other areas of life in which young college students’ mental health and wellbeing is being shaped.
Addressing specific needs of international students can begin with universities creating an environment in which health is promoted for all participants. For example, most college students have used the Internet to seek information about mental health (Chang & Chang, 2002); thus, providing college students with online information about psychological problems, including symptoms, etiology, prevention, and treatment would be one avenue of promoting overall wellbeing. University counseling centers could promote services within the virtual world that could help students to learn about issues and be directed for one-on-one help from a counselor at the counseling center. Alternatively, mental health information could be provided more interactively, such as in online question-and-answer forums. Mutual help and support resources could include online mutual help groups, where students could be connected to culturally sensitive groups or groups geared toward gender, race, or other cultural areas where they could interact and meet with peers. Given the pervasiveness of the Internet and its potential for providing mental health information and services, it behooves college counseling professionals to explore ways to enhance positive attitudes toward online services, particularly if counselors want to increase access and reach underserved populations such as international students of Indian descent.

Effective mental health promotion involves not only attending to the needs of those with mental health difficulties, but also promoting the general mental wellbeing of all staff and students, which will in itself bring significant benefits to the institution. In looking to promote overall wellbeing, universities can also offer training for faculty, staff, and student staff regarding early recognition of student distress and making referrals to appropriate services. These faculty members, who have a more positive association with psychological services, thus will better promote and recommend services to their students.
This promotion would go a long way in reducing the social stigma attached to mental health help-seeking, especially for international and male students.

In clinical practice settings, particularly college and university counseling centers, mental health counselors could be provided with information about how international students cope with various types of problems they experience. Mental health counselors on college campuses can also provide vital and culturally relevant developmental programming and outreach to these students and encourage the use of culturally congruent means to address their concerns. For example, for an American student, the methods and presentation styles of classroom lectures are very familiar. For international students, classroom lectures may be quite confusing based upon their timings and different venues. Students may find addressing the faculty and interacting with them quite stressful. They may not understand clearly what the professors tell them to do, but the fear of sounding ignorant could be a deterrent to asking for further directions. Having advisors prepare students for classroom structure and lectures may help decrease stress in the classroom setting by restructuring the classroom perspective. Students also need to have a support system in place as they arrive. Lack of support groups and the absence of easily accessible help-lines may pose problems. This can be addressed by having pre-counseling programs and mentoring during orientation sessions. Having former international first-year students address new students and share their experience may provide an avenue for support upon arrival. For those students who travel abroad for the first time, homesickness may hit them during the first few weeks to a few months later. Educational institutions should let them know of the international call facilities that are available to them, so they can contact home with greater ease. Educational institutions can also offer venues where international
students can mingle freely with the other students. During those events a cultural exchange can strengthen the understanding between American and international students. Finally, by assessing the existing hurdles and finding solutions, international students can have a better experience in the college campus of their choice. Creating awareness of this problem of international students among faculty members and American students is crucial in breaking down barriers in isolation.

This study has made it clear that associations and even strong associations between variables and within subscales result in complex relationships. The variables in question operationally defining the theory and model being replicated is much more complex and may have additional variables such as time in country or specific types of adjustment that may be mediating many of the outcomes in the tested model, which were not accounted for. Future research should focus on evaluating the segments of the theory and accounting for more cultural and environmental factors which may determine the directionality and specificity of the paths in question.
Appendix A

WMU Human Subjects Institutional Review Board Approval Letters
Date: July 21, 2009

To: Joseph Morris, Principal Investigator
    Margaret Ajayi, Student Investigator

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 09-07-02

This letter will serve as confirmation that your research project entitled "Indian Students' and United States Citizen Students' Adaptation to College, Opinions about Mental Illness and Attitudes towards Seeking Professional Counseling Help" has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: July 21, 2010
Date July 28, 2009

To Joseph Morris, Principal Investigator
Margaret Ajayi, Student Investigator for dissertation

From Amy Naugle, Ph.D., Chair

Re. HSIRB Project Number 09-07-02

This letter will serve as confirmation that the change to your research project entitled “Indian Students’ and United States Citizen Students’ Adaptation to College, Opinions about Mental Illness, and Attitudes Towards Seeking Professional Counseling Help” requested in your memo dated 07/27/2009 (use of secure website for data collection; changes to written and face-to-face recruitment such that potential participants are directed to website) has been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination July 21, 2010
Date: February 2, 2010

To: Joseph Morris, Principal Investigator
    Margaret Ajayi, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number: 09-07-02

This letter will serve as confirmation that the change to your research project entitled "Indian Students' and United States Citizen Students' Adaptation to College, Opinions about Mental Illness, and Attitudes Towards Seeking Professional Counseling Help" requested in your memo dated 2/2/2010 (increase total subjects to 800—400 US citizens and 400 Indian citizens) has been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: July 21, 2010
Appendix B

Informed Consent
CONSENT TO PARTICIPATE VOLUNTARILY IN A RESEARCH INVESTIGATION
PROJECT TITLE: Students’ adaptation to college, opinions about mental illness and attitudes towards seeking professional psychological help

You are asked to participate in a research investigation as described in this form below. All such investigational reports carried out within this department are governed by both Federal Government and Western Michigan University. These regulations require that the investigator obtain from you a signed agreement (consent) to participate in this project. The investigator will explain the purpose and the procedure of the project. A basic explanation of the project is given below. If, after this, you decide to agree to participate in the project, please sign this form on the line indicated below.

The purpose of this research project is to understand college students’ attitudes towards seeking professional counseling help. The approximate number of participants involved in this project is 300, 150 Indian students and 150 US citizen students. Your participation in this study will require completing 4 questionnaires. The procedure includes reading the questions provided on the questionnaires and indicating your response in the spaces provided on the questionnaires. The information obtained from you will be kept confidential.

The information obtained may be used for scientific purposes without identifying you. Any significant new findings will be provided to you following the course of the study upon request.
You are free to withdraw from the project anytime without penalty. We do not expect any unusual risks as a direct result of this project. Should unforeseen physical injury occur, first aid will be provided, but no financial compensation will be provided.

If you have any questions, you may contact me. I shall provide my contact number.

I CERTIFY THAT I HAVE READ AND FULLY UNDERSTAND THE ABOVE PROJECT. I WILLINGLY CONSENT TO PARTICIPATE

_________________________    ________________________
Signature of Witness              Signature of participant

Date:       Time:

I CERTIFY THAT I HAVE EXPLAINED FULLY THE ABOVE SUBJECT,

THE NATURE AND PROCESS, THE POTENTIAL BENEFIT AND THE POSSIBLE RISKS OF THE INDICATED PROCEDURES.

_________________________
Signature of Investigator.
Appendix C

Briefing Instructions for Participants
BRIEFING INSTRUCTIONS FOR PARTICIPANTS

The purpose of this study will be to assess cross-cultural aspects of college students' opinions and experiences about seeking professional psychological help. The questionnaires should take approximately 20-30 minutes to complete. Once you have agreed to participate, implied by signing the informed consent form, please read each question carefully and respond to all questions by indicating the answer that most applies to you. It is extremely important to this study that you answer all questions and you try to be 100% honest with your responses. Please remember to answer all the questions; Some of the questionnaires have questions on both sides. The information obtained will be kept in confidence and your name should not appear on the questionnaires. Thank you for the assistance.
Appendix D

Histograms of Variable Distribution
ATSPCH: Stigma Tolerance

Mean = 13.34
Std Dev = 3.483
N = 594

ATSPCH: Interpersonal Openness

Mean = 17.78
Std Dev = 4.301
N = 594
ATSPCH: Confidence in Mental Health Practitioner

OMI: AUTHORITARIANISM
OMI: BENEVOLENCE

Mean = 47.16
Std Dev = 8.935
N = 566

OMI: SOCIAL RESTRICTIVENESS

Mean = 31.51
Std Dev = 7.052
N = 566
OMI: INTERPERSONAL ETIOLOGY

Mean = 26.59
Std Dev = 8.606
N = 566

SACQ: FULL SCALE

Mean = 497.43
Std Dev = 94.616
N = 555
REFERENCES


