2014

Asian Indian College Students: Relationship between Parent–Child Communication Difficulties and Internalization

Sheeba P. Thomas
Antioch University - New England

Asian Indian College Students:

Relationship between Parent–Child Communication Difficulties and Internalization

by

Sheeba P. Thomas

B.A., Clark University, 2000
M.A., Assumption College, 2003
M.S., Antioch University New England, 2010

DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of
Doctor of Psychology in the Department of Clinical Psychology
at Antioch University New England, 2014

Keene, New Hampshire

Department of Clinical Psychology

DISSERTATION COMMITTEE PAGE

The undersigned have examined the dissertation entitled:
ASIAN INDIAN COLLEGE STUDENTS: RELATIONSHIP BETWEEN PARENT-CHILD COMMUNICATION DIFFICULTIES AND INTERNALIZATION

presented on July 7, 2014

by
Sheeba P. Thomas

Candidate for the degree of Doctor of Psychology
and hereby certify that it is accepted*.

Dissertation Committee Chairperson:
Gargi Roysircar-Sodowsky, PhD

Dissertation Committee members:
David Hamolsky, PsyD
William Slammon, PhD

Accepted by the

Department of Clinical Psychology Chairperson

Kathi A. Borden, PhD

on **7/11/14**

***** Signatures are on file with the Registrar's Office at Antioch University New England.

Dedication

To my parents, Rev. Fr. K.G. and Ammini Philipose

Your words to me as a child have stayed with me to this day:
"You are an Indian, and don't forget it."

Papa, I watched you, as a priest, counsel countless parish and community members, serving as a model for me to become a psychologist.

Mama, thank you for your unconditional love and support, above all. Thank you for speaking Malayalam at home consistently with me so that I can speak my mother tongue fluently, unlike many second-generation immigrant children.

For inspiring my commitment to the needs of children of Indian immigrants,
I dedicate my dissertation to you both.

Acknowledgments

First, I consider it a true blessing to have been under the advisement of my dissertation chair, Dr. Gargi Roysircar. As an Asian Indian woman with a distinguished reputation in multicultural psychology research, she has served as an inspiration and role model for me in writing this dissertation. Furthermore, she has always encouraged and supported my clinical interests in working with children of Asian Indian immigrants. Her wealth of knowledge and research experience was invaluable to this dissertation. Words cannot express my gratitude to you, Gargi.

Second, I thank my dissertation committee members, Dr. Bill Slammon and Dr. David Hamolsky. Thank you for each of your separate but equally important contributions to this dissertation. Bill, attending several of your assessment courses, particularly relating to children and adolescents, helped to guide the development and organization of my study's survey. Your thoughtful feedback regarding several aspects of the study was valued. David, your knowledge of and clinical experience with youth and families played an important role in my using a developmental framework to study Asian Indian youth. Furthermore, your feedback forced me to be clear in my writing and in the reasoning behind my study, as well as considerate of how the survey would appear to potential participants. I would especially like to thank AAPA, DoSAA, CHAI, Asian associations in psychology, for their assistance with the recruitment of participants, and Dr. Wei-Chin Hwang for giving me permission to use his measure, the Acculturative Family Distancing Scale.

I thank my peers at Antioch University New England from both dissertation seminar groups: Jennifer Aufiero, Bryan Clarke, Amithea Love, Jessica Mayo, and Nicole Pak. Your feedback from the early stages of my proposal-writing through the finishing touches played an important role in this final product. I also thank my predoctoral internship supervisor, Dr.

Meredith Kassoy, at Comprehensive Outpatient Services, for her moral support towards completing this dissertation. To my former fellow-interns, Jennifer Weinstein, Jennifer Desaulniers, Susan Stucchi, and Katherine Glassford: your support and advice, weekly updates on progress, and contagious excitement about completing your own dissertations kept me motivated and focused on completing my own.

Last but definitely not the least, I express my heartfelt thanks to my large and supportive family. I would not have been able to complete this dissertation or this doctoral degree without your prayers, expressions of care, or words of encouragement. Pa and Ma, I love you and thank you both for all the sacrifices you have made for our family. To my second parents, Mom and Dad, I don't know where to begin in thanking you for all your support since I began my doctoral studies. For the numerous car rides from Montreal, the many home-cooked meals, the precious time and tender care you provide for your granddaughter, and above all, your endless prayers, I am beyond grateful. Sissili, you are my only sister, and I love you and thank you for your strength and endless support and encouragement over the years. Leejo, thanks for always keeping things light and for believing in my study, and for your help with recruiting participants!! To my nephew, Jeremiah, Shama loves you and can't wait to spend more time with you! Jason, my first little brother, thank you for your thoughtfulness, your listening ear, and your encouragement. I'm not able to name all the family members and loved ones who have prayed and supported me over the years, but I want you all to know that I feel your love and it has made a tremendous impact on me.

To my husband: Anish, words cannot express my love and gratitude for you. You were by my side through all the ups and downs of the past seven years. I could not ask for a more loving, patient, selfless, and supportive life partner. Finally, to the love of my life, Olivia, Mama

loves you more than you will ever know! I thank God for you every day and pray that I can nurture your potentials to be who you want to be and can be.

Table of Contents

List of Tables

Abstract

Children of Asian Indian immigrants in the United States vary in their acculturation from their parents to American culture and society. The U.S.-born second-generation and those who immigrate at an early age may be at risk for emotional and behavioral difficulties. The present study investigated whether certain sociocultural factors related to the negative adjustment of second-generation Asian Indian college students. A survey method measured acculturation, acculturative family distancing, perceived prejudice, and internalization difficulties (i.e., depression, trait anxiety, somatic symptoms, and self-critical perfectionism) of second-generation Asian Indian college students ($N = 60$), ages 19–25. The sample was primarily Keralite (64.5%) with cultural roots in Southern India, Christian (64.6%), and from the Northeast region of the US. The online survey consisted of Likert-type measures followed by two open-ended questions. College students reported a bicultural mode of acculturation, being adaptive to both mainstream culture and their family's culture of origin. Parent-child communication difficulties, as reported by the participants, were found to be a significant predictor of internalization problems. Self-critical perfectionism and trait anxiety were the primary problems noted in this particular Asian Indian student sample. The students reported a moderate level of perceived prejudice, which was not related to internalization. From qualitative content analysis, some consistent themes emerged, such as, students' high academic stress, feelings of inability to meet expectations set for oneself, and the need to protect others and self by not discussing emotional difficulties. Participants, nonetheless, acknowledged exaggerating difficulties more than underreporting them. Recommendations are made for prevention and intervention methods to be used by mental health providers, communities, and schools that have Asian Indian children and youth. Future directions in research and the study's limitations are addressed.

Keywords: Acculturation, Internalization, Parent-Child Communication

Asian Indian College Students:

Relationship between Parent–Child Communication Difficulties and Internalization

Chapter 1

Rationale and Conceptual Framework

Children of Asian Indian immigrants in the United States vary in their adjustment to American culture. As a second-generation Asian Indian woman who was born and raised in the United States, I struggled during my adolescence to please my traditional Indian parents and still gain acceptance from my American peers. Unfortunately, balancing both cultures was not simple and I followed the behavioral pattern of those born in India in order to keep peace with my parents and the larger Indian community (Berry, 1997). Someone outside of the Indian culture may conclude that being born and raised in this country would lead one to favor American culture; however, this was not my case. I passed through different stages, where I began by disliking Indian culture, then American culture, and then both cultures (see Berry, Kim, & Boski, 1988).

My move from home to attend college provided me with a level of freedom to explore and learn about the world without being under my parents' watchful eyes. More importantly, I learned about myself and defined my identity through the process of being confronted with new experiences (e.g., a lack of parental supervision, exposure to dating, and drugs/alcohol). By the age 25, I was able to integrate both American and Indian cultures into my identity (see Berry et al., 1988). It was a long struggle that was affected by various factors, such as the difference between my own and my parents' level of acculturation (Hwang, 2006; Roysircar, Carey, & Koroma, 2010), individual factors (e.g., my introverted personality; Mehta, 1998), and the many opportunities for ethnic affiliation in my environment (Choi & Thomas, 2009). However, this is only my particular experience as a U.S.-born child of Indian immigrants. On the other hand,

Mindy Kaling, a U.S.-born daughter of Asian Indian immigrant parents, tells a different story (Kaling, 2011). She experienced satisfaction with life, happiness, and positive relationships with her parents. Kaling's parents were open to American mores and practices, showing a positive orientation to U.S. culture, and they always encouraged Kaling's individuality and creativity since childhood.

American-born children of Indian immigrants are known as the *second generation* (Dasgupta, 1998; Roysircar et al., 2010). It will be necessary for mental health professionals as well as parents/extended family and educators to be aware of the potential struggles that may arise for these children. A number of studies have indicated that Asian American youth have higher levels of depressive symptoms than Caucasian youth (Hwang, 2006; Kuo & Roysircar, 2004). Popular fiction, such as that written by the Asian Indian author Jhumpa Lahiri (e.g., "The Namesake"), has also illustrated examples of problems that second-generation Asian Indian children and adolescents face in balancing Indian and American cultures. According to Dasgupta, new issues arise as important concerns as the second-generation approaches adulthood. These include dating, marriage, and the values and practices of individualism that clash with Indian values of obedience to parents' wishes and responsibility towards the extended family.

The present study used several measures to assess the mental health of second-generation Asian Indian college students. Three measures assessed Asian Indian students' acculturation and related variables, including (a) self-reported individual acculturation, (b) perceived parental acculturation, (c) perceived prejudicial treatment by European Americans, and (d) acculturative family distancing. The mental health concern of internalization was assessed by measures of depression, trait anxiety, self-critical perfectionism, and somatic symptoms.

Developmental Context for Asian Indian Children of Immigrants

The acculturative stress which children of immigrants can experience often intersects with their developmental period. Hwang (2006) notes that during early childhood, the child is culturally insulated by the family and has limited opportunities to be socialized into the host culture. Family values and traditions are retained, and speaking a common language keeps parent–child communication strong. However, when children begin attending school daily, they have more exposure to the English language as well as American mores and practices. Moving through adolescence, peer groups increasingly influence one's choices related to cultural retention, ethnic identity, and social groups. In early adulthood, parent–child acculturation differences impact family relationships and individual life decisions (Hwang & Wood, 2009; Roysircar et al., 2010).

Seiter and Nelson (2011) examined Indian college students and nonstudents ages 18 through 26 and found that the majority perceived themselves to be adults, which stands in contrast to the majority of American college students in this same age bracket who do not yet perceive themselves to be adults (Nelson & Barry, 2005). All Indian study participants emphasized the ability to fulfill family roles as central to reaching adulthood. Arnett (2000) noted the importance of the cultural belief system to the existence of emerging adulthood and one's perception of being an adult. While attending college in the United States allows children of immigrants a prolonged period of time for exploration, the families of these "children" may hold certain expectations for them regarding career goals, marriage, family responsibilities, and even leisure time. The values and beliefs with which one is raised will affect the course they take during emerging adulthood.

History of Asian Indian Immigration and Acculturation in the United States

Asian Indian population statistics. The U.S. Census Bureau estimated that nearly 1.7 million Asian Indians lived in the United States in 2000 and the Asian Indian population increased 133% from 1990 to 2000 (Asian and Pacific Islander American Health Forum, 2006). More recently, Asian Indians have become the third largest Asian group after Chinese and Filipino, according to the Census Bureau's 2010 statistics. Specifically, the Asian Indian population grew 69.4% from 1.7 to 2.8 million from 2000 to 2010. A notable fact is that 87% of adult Indian Americans are foreign-born (U.S. Census Bureau, American Community Survey, 2010). These large numbers of immigrants will likely settle and raise families here, leading to a significant increase in the number.

The 1965 Immigration and Nationality Act opened the doors for Asian Indian migration to the United States. Since that time, the Asian Indian subgroup has "been able to carve a niche for itself as a technical and financial force" (Dasgupta, 1998, p. 954). Furthermore, Asian Indians earn the highest median family income ($69,470) among the six largest Asian American ethnic groups and major racial/ethnic groups in the United States (including Whites; Roysircar et al., 2010).

Asian Indian acculturation. Despite their standing within this country over the past four decades, it has been noted that first-generation foreign-born Asian Indian immigrants "insist on keeping their ties with their heritage vital," both physically and psychologically (Dasgupta, 1998, p. 954). Physically, there are regular trips back to India, "the motherland." Psychologically, "'Indian culture' is reinvented on foreign soil…[through the development of]… a network of religious institutions, cultural associations, and social gatherings" (p. 954). However, as future generations of Asian Indians are born and socialized in the United States—now there is an

elementary and middle school attending third generation (Roysircar, personal communication, July 6th 2012)—there is a general fear in the first generation that Indian culture may eventually "die out." This is likely why many Asian Indian parents go to great lengths to teach their children and even grandchildren various cultural traditions and practices (e.g., language and religious practices). However, there are individual differences within the U.S. Asian Indian population in the level of desire to maintain ethnic identity (Roysircar et al., 2010).

Acculturation was once viewed as "the immersion of immigrants into the new culture" (Thomas & Choi, 2006, p. 124). However, this definition has changed, noting that immigrants do not simply discard their native values for new ones, but instead "select, shift, and modify to adapt to the new environment" (p. 124). Research has established that the process of learning to adapt to a new culture can create significant stress for individuals, families, and immigrant groups, also known as acculturative stress (Berry et al., 1988). The level of stress experienced often depends on various factors such as individual acculturation adaptation, reception of the host culture—the United States—and ethnic affiliations (Berry, 2001).

Berry's Model of Acculturation

Berry's model of acculturation (i.e., Berry et al., 1988) was a major component in the conceptualization of the present study. According to this theory, both immigrants and the host society are confronted with two major issues: (a) maintenance of cultural group characteristics and (b) contact between the two groups (Berry, 2001). See Figure 1 below.

		Maintenance of Cultural Group Characteristics	
		YES	**NO**
Relationship With The Host Society	**YES**	Integration	Assimilation
	NO	Separation	Marginalization

Figure 1. Berry's model of acculturation styles.

Furthermore, there is mutual influence between both parties, which results in changes in both cultural groups (Berry, 2001).

Four major ways immigrants relate to the host culture have been identified: (a) *assimilation*—identifying only with the host culture and rejecting the native identity; (b) *marginalization*—rejecting relationship with the host society and the native identity; (c) *separation*—identifying only with the native identity and rejecting relationship with the host society; and (d) *integration*—becoming bicultural by maintaining traditions of own culture while selectively taking on customs of the host culture (Berry et al., 1988). Each way of relating is generally a choice of individual members of immigrant groups. However, when the host

society restricts the type of relations immigrants can have with the host society, these terms may not be applicable. For instance, integration is only possible when the host society is open to multiculturalism.

Acculturative Family Distancing

Hwang (2006) reviewed the concept of the acculturation gap, defined as the discrepancy in acculturative status between immigrant parents and their children. The acculturation gap has been believed to increase intergenerational family conflict, which is the conflict resulting from the normal generation gap across all families combined with acculturation differences between immigrant parents and children. This conflict would then lead to great distress for children and parents. It is noted, however, that the presence of an acculturation gap in immigrant families alone does not lead to problem development (Fuligni, 1998; Kaling, 2011).

Hwang (2006) proposed the term Acculturative Family Distancing (AFD) to explain the mechanism by which an acculturation gap could lead to intergenerational family conflict. AFD is defined as "the problematic distancing that occurs between immigrant parents and children that is a consequence of differences in acculturative processes and cultural changes that become more salient over time" (Hwang, 2006, p. 398). It consists of two dimensions: (a) a loss or breakdown in communication and (b) contrasting cultural values between parent and child that develop as a result of different rates of acculturation and the formation of an acculturation gap. Larger acculturation gaps increase the risk for problematic cultural differences and language barriers, which can lead to misunderstanding (Hwang, 2006).

Adjustment of Asian Children of Immigrants

Positive adaptation. Concern about the children of immigrants adapting to American society has long been expressed by social scientists, policymakers, and practitioners (Fuligni,

1998). However, systematic studies of non-clinical populations have found that children from immigrant families have shown "a remarkable level of general adjustment" (p. 99). The major finding has been high achievement across many different academic disciplines, including English (Fuligni, 1998). Other findings have included that first-generation and second-generation adolescents are "less likely to engage in delinquent and violent acts, to use drugs and alcohol, and to have had sex" (Fuligni, 1998, p. 99). Comparatively, first-generation youths tend to be less likely to engage in risky behavior than second-generation youths (Fuligni, 1998). There are, however, fewer studies assessing the broader behavioral and psychological adjustment of children of immigrants, which is the focus of the present study.

Negative adaptation. There is limited research on specific mechanisms of problem development in Asian Indian children of immigrants and their families. For example, differences in parent and child acculturation styles may be common (Hwang, 2006; Roysircar et al., 2010), but empirically, it is not known whether this difference leads to negative mental health results in children. Another reasoned argument is that high educational and occupational achievements (as have been associated with Asian Indians) do not equate with positive adjustment (Sodowsky & Lai, 1997).

Asian Indian youth in the United States face particular developmental challenges due to being "confronted with situations that concern their race and skin color, language skills, ethnicity, and identity that may be confirming or disconfirming of the values of their culture of origin" (Farver, Xu, Bhadha, Narang, & Lieber, 2007, p. 186). Second-generation Asian Indian youth, who are born and socialized in this country, can find the acculturation process to be difficult due to the contrast between American (e.g., individualistic orientation) and Indian (e.g.,

collectivist orientation) cultural values. The contrast may not be as significant in future generations (i.e., third and fourth generations in the US).

Tuan (1999) notes that Asian Americans who are not foreign-born may actively struggle with being defined by others as neither *real* Americans nor *real* Asians. They may be described within their ethnic communities as "not Asian enough" because of their lifestyle choices, and may be considered by "non-Asians" as closer to their ethnic roots than their American roots (Tuan, 1999). Such labels can affect an individual Asian-American's mental health. Various personal and systemic factors influence the individual's response.

Internalization

Many Asian Indian children's academic achievement may relate to their feeling responsibility to their parents for the sacrifices they made to provide them educational and economic opportunities in the United States (Fuligni, 1998). This outward success may disguise internal psychological conflict over balancing two different cultures as well as the prejudice and discrimination they may experience (Atzaba-Poria, Pike, & Barrett, 2004; Roysircar et al., 2010). Furthermore, Iwamoto, and Liu (2010) noted the shared Asian values of collectivism, conformity to norms, deference to authority, emotional self-control, family recognition through achievement, filial piety, humility, and avoidance of shame. These values lend themselves to internalization (e.g., internal processing of difficulties) rather than externalization (acting out behaviors) of distress. Internalizing problems have been operationalized as three groups of behaviors indicating (a) depression and anxiety, (b) withdrawal, and (c) somatic complaints (Atzaba-Poria et al., 2004).

Depression. The prevalence rate of depression among Asian Americans is reported to at least meet that of White Americans (Lee, Lei, & Sue, 2001). Several studies have actually found

that Asian Americans report higher levels of depressive symptoms than Whites (Aldwin & Greenberger, 1987, as cited by Lee et al., 2001; Okazaki, 1997). However, there is a gap in the literature as many of these studies do not involve Asian Indians or have foreign-born Indian participants. Clinical symptoms of depression can include, foremost, depressed mood and loss of interest or pleasure in life activities, but could also include significant weight loss or gain, insomnia or hypersomnia, diminished ability to think or concentrate, fatigue or loss of energy, agitation or psychomotor retardation, feelings of worthlessness or excessive guilt, and/or recurrent thoughts of death (DSM-IV-TR; American Psychiatric Association, 2000).

Trait anxiety. Similar to depression, cross-cultural studies have found Asian Americans to report higher degrees of anxiety than Caucasian Americans (Xie & Leong, 2008). However, these studies tended to overlook ethnic heterogeneity or specific forms of anxiety. Trait anxiety refers to the relatively stable individual differences in anxiety-proneness as a personality trait (Spielberger, 1985). Xie and Leong further noted that trait anxiety is "the tendency to perceive stressful situations as dangerous or threatening, especially situations that involve being evaluated by other people or threats to one's self-esteem" (p. 54).

Somatization. Somatic symptoms should be given particular attention as research has suggested that Asian Americans have a tendency to manifest their mental health symptoms through physical complaints (Uba, 1994). Conrad and Pacquiao (2005) note that somatization is very common in Asian cultures because of their disapproval of strong expressions of emotion, particularly negative emotions. Such displays of negative emotion are believed to disrupt social and familial harmony and expose personal weakness. As such, Asians are believed to consciously or unconsciously "deny the experience and expression of emotions" (Lee et al., 2001, p. 165; see also, Kuo, Roysircar, & Newby-Clark, 2006). It is also more socially

acceptable to express emotional distress through the body than the mind (Lippincott & Mierzwa, 1995).

Self-critical perfectionism. Self-critical perfectionism can be differentiated from adaptive perfectionism, which consists of high standards achievement motivation. Maladaptive perfectionists rigidly adhere to their standards and engage in "overly critical self-evaluations over a perceived failure to meet these standards" (Wang, Puri, Slaney, Methikalam, & Chadha, 2012, p. 34). Maladaptive perfectionists are reported to have higher levels of depression, anxiety, and interpersonal problems (Wang et al., 2012). Asian American college students have scored significantly higher than Caucasian American college students on measures of perfectionism (Castro & Rice, 2003; Chang, 1998). Furthermore, Asian Americans report extreme concerns about meeting the expectations of their parents (Castro & Rice, 2003).

Research Questions

The research questions of the study were as follows:

1. Are second-generation Asian Indian college students generally well acculturated?
2. Does a significant difference between the acculturation level of second-generation college students and their parents indicate internalization problems in the children?
3. Is there a relationship between perceived prejudice reported by second-generation college students and their internalized symptoms?
4. Does a combination of perceived prejudice and acculturation-related parent–child differences predict internalized problems?

Summary

The psychological effects of acculturation differences of immigrant parents and their children during the college years can help to change positive stereotypes about the good adjustment of Asian Indian children, especially those held by mental health practitioners and

educators (Atzaba-Poria et al., 2004). Such a study is important because Asian Indian youth are usually not referred for mental health services. Thus, one purpose of the study was to contribute to growing research on the mental health of Asian Indian children of immigrants (Farver et al., 2007; Fuligni, 1998). The assessment of internalizing problems (e.g., depression, anxiety, somatic symptoms, self-critical perfectionism) has only recently begun to be recognized and investigated within the Asian Indian population (Atzaba-Poria et al., 2004; Wang et al., 2012).

Beginning in adolescence, it becomes particularly important that psychological problems (e.g., depression and anger) be addressed promptly. Asian Indian immigrant children's communication difficulties and value differences with parents (i.e., acculturative family distancing) might result in children experiencing these differences through internalization rather than externalization because of the Asian value of emotional suppression and avoidance of confrontation (Iwamoto & Liu, 2010; Kuo et al., 2006; Lorenzo, Frost, & Reinherz, 2000). Family conflict may reach peak levels during adolescence, especially owing to the influence of peer groups. Parents may become more restrictive as adolescents start to desire freedom. If preventive measures are not taken with adolescents and their families, there may be serious consequences (e.g., substance abuse, suicide, and health problems) because of inadequate support in their families, communities, and school. These problems may extend to the college years and onward. Teachers, parents, and mental health practitioners should be aware of potential psychological problems for U.S.-born Asian Indian youth. It is important to clarify at this time, however, that there are Asian Indian children of immigrants who are able to manage the acculturation process successfully by integrating both the immigrant and United States cultures and who may, thus, not find cultural adaptation to be a struggle (Kaling, 2011). The present study sought to gain an understanding of the acculturation differences of second-generation

Asian Indian college students from their parents and whether these were related to problems of internalization in the participants.

Chapter 2: A Review of the Literature

The term *acculturation* refers to the process of adaptation to the dominant culture by ethnic minority individuals, and the changes in their beliefs, values, and behavior that result from contact with the new culture (Berry et al., 1988; Farver et al., 2002). The acculturation process has been considered both unidimensionally and bidimensionally. In the unidimensional model, acculturation is viewed as identification with either the native culture or the host culture (Pawliuk et al., 1996). For example, it was once believed that immigrants were immersed into the new culture, with old or native values being simply discarded for new ones. However, current acculturation models note that the experiences of immigrants are selective and multidimensional (Thomas & Choi, 2006). In the bidimensional model, individuals select different components of both the host and native cultures in a way where increasing identification with one culture does not entail decreasing identification with the other (Pawliuk et al., 1996). For example, a second-generation Asian Indian emerging adult living in the United States may enjoy participating in festivals of their heritage culture but may also choose to socialize with peers of diverse ethnic backgrounds.

As previously discussed, the decision to maintain characteristics of the native culture, participate in the host culture, or both can be identified under the four styles of acculturation: (a) assimilation, (b) integration, (c) separation, and (d) marginalization (Berry, 1997). The single-minded desire to succeed in the new culture or simply a preference for the new culture can result in *assimilation*. This can be seen in individuals who have no desire to visit their original home after settling into the host culture. *Integration,* which has been described as the optimal acculturation style, can be viewed as the "best of both worlds." It allows one to selectively participate in aspects of both the dominant and original cultures. There appears to be less conflict when both cultures can be integrated in an individual manner. *Separation* can be a common

response when individuals from a highly contrasting culture (e.g., Asian cultures) migrate to the United States for increased education and financial stability, but are not willing to loosen the rein on their culture of origin in order to improve their adjustment to the new culture. However, this can also result from the response of the host society, namely rejection (Berry, 2001). Finally, *marginalization* has been described as the least adaptive acculturation style due to its rejection of both cultures. This response may result from a feeling of being rejected by both cultures, as well as a felt experience of "not fitting in anywhere."

Researchers have discovered that the process of learning to adapt to a new culture can create immense stress for individuals, families, and groups, also known as *acculturative stress* (Berry et al., 1988; Thomas & Choi, 2006). Factors such as prejudice, discrimination, minority status, and pressure to learn English have been identified as contributing to the perception of stress in immigrant minority groups (Romero, Carvajal, Valle, & Orduna, 2007). Acculturation may be more stressful for some ethnic groups compared to others. Specifically, the greater the difference between the native and host cultures, the higher the level of expected stress (Berry, 1997). In the same respect, there are a greater number of experienced difficulties expected with psychological functioning (Farver et al., 2002). Berry as well as Farver and colleagues (2007) argue that the acculturation style of integration is the most psychologically adaptive pattern.

Furthermore, children of immigrants, particularly those who came to the new country early in their lives or those who were born in the new country, often experience acculturative stress of a different nature. These children often acquire the new language and culture faster than their parents, and may assist parents with writing, translating, or mediating cultures. This may create significant changes in family structure and relationships, leading to potential family conflicts (Choi & Dancy, 2009). Hierarchically, a child may take on a more powerful role

compared to her or his parents because of her or his greater knowledge regarding the host culture. The parents then become dependent on the child due to his or her language fluency and cultural knowledge. The difference in cultural knowledge and perhaps, as a result, in values, can create parent-child conflict.

Second-Generation Ethnic Minority Youth

As previously discussed, immigrants who arrive at a new country often face such challenges as learning a new language and experiencing prejudice and hostility from other ethnic groups for the first time (Abouguendia & Noels, 2001; Lo, 2010). It is often assumed that the children of immigrants experience fewer daily obstacles because they are socialized and educated in the host culture. As a result, they would be expected to be less vulnerable to psychological difficulties than their parents (Abouguendia & Noels, 2001). This may be true for individuals whose families are fairly well-acculturated into the dominant society. However, second-generation youth can face particular challenges, often depending on the family environment and/or the community in which they live. A conflict in values between the child and the family, the environment, or both can become problematic. Two primary sources of stress that youth can experience include (a) the pressure from peers to assimilate to the host culture by rejecting their native culture and values and (b) the pressure from parents and other adults in their ethnic community to follow ethnic norms and traditions (Thomas & Choi, 2006).

According to Willgerodt and Thompson (2006), second-generation youth tend to experience the greatest struggles with reconciling the differences they perceive between the dominant outside culture and their family's cultural values. The point is made that second-generation teens tend to experience the largest culture gap, compared with first- and third-generation youth (Willgerodt & Thompson, 2006). Furthermore, particular ethnic groups of immigrants display distinct patterns of acculturation experiences. Immigrant families from Asia

and Latin America have collectivistic traditions that play a role in their patterns of acculturation. Specifically, there is an emphasis on the responsibilities and obligations family members have towards one another. Children from these families tend to feel a sense of duty to excel academically, obtain respectable and highly paid jobs, and take care of their parents financially and physically when the parents can no longer take care of themselves (Fuligni, 1998; Farver et al., 2007). However, the feeling of obligation does not necessarily translate to the behaviors these youth may hope to achieve.

Developmental Challenges

The challenges which second-generation youth face may first become evident during the adolescent developmental period. In American culture, adolescence is an important period where one attempts to establish his or her own identity and seek autonomy (Hahm, Latiff, & Guterman, 2004; Lorenzo et al., 2000). Adolescents desire to be accepted by their peers, and they are highly influenced by peers' attitudes, behaviors, and styles of dress. The values promoted in American culture, such as individualism and self-expression, are in stark contrast to Asian values of harmony and unity (Hahm et al., 2004). However, Asian American youth are expected to conform to American values in order to function in school and their future life endeavors.

Atzaba-Poria and Pike (2007) note that early adolescence is "a formative period for children's self-identification" (p. 529); in addition, it is when children begin to spend an increasing amount of time outside the family. As such, early adolescence may serve as an optimal entry point for therapeutic interventions. Lorenzo et al., (2000) give attention to ages 18 through 21 as a "key transitional period in which adult roles are developed and tested" (p.289). This is also the period that Arnett (2000) distinguished as emerging adulthood. The college years are often a period when second-generation Asian Indian youth have more freedom to explore the world outside of their families. Emotional and behavioral issues resulting from previous

acculturation-related difficulties can intensify during this period if they are not addressed in earlier years.

Furthermore, new issues such as "dating, marriage, individualism, obedience to parents' wishes, and responsibility toward extended families" arise as important concerns within Asian Indian communities as adulthood is approached (Dasgupta, 1998, p. 954). Atzaba-Poria and colleagues (2004) suggest that there is increasing evidence that Asian Indian children of immigrants are at a high risk for internalized problems such as depression and anxiety. The authors continue by stating that these issues are "a natural expression of identity confusion, contradicting demands, and perhaps the prejudice that ethnic minority children experience" (p. 536). Internalized problems should be understood within one's cultural context.

Acculturative Family Distancing

It has been found that children of immigrants tend to acculturate faster than their parents (Hwang, 2006). Due to being immersed in the school environment, young children particularly are prone to being influenced by the values of the host culture. These are evident in the methods in which they are taught as well as the content of what is being taught. Furthermore, children may be influenced by their peers in the school environment. Peer influence only increases with age as children move through adolescence. As previously discussed, the acculturation gap is the discrepancy in acculturation level between immigrant parents and their children. Arguably, the acculturation gap impacts the normal parent-child generational differences as well as increase problems for immigrant families (Hwang, 2006).

Acculturative family distancing (AFD) is defined as "the problematic distancing that occurs between immigrant parents and children that is a consequence of differences in acculturative processes and cultural changes that become more salient over time" (Hwang, 2006, p. 398). This construct consists of two dimensions: (a) the breakdown in communication, and

(b) the incongruent cultural values. These dimensions develop from different rates of acculturation between family members and the formation of an acculturation gap. AFD dimensions act as the specific mechanisms of the acculturation gap that increase the risk for problem development through emotional, cognitive, and behavioral distancing. Hwang (2006) argues that the level of family conflict mediates the relationship between AFD and individual and family psychopathology and dysfunction.

The loss or breakdown in communication between parents and children is one major dimension of AFD. Hwang (2006) notes that there is some evidence suggesting that Asian American youth have problems communicating effectively with their parents, which contribute to a collapse in family cohesion and greater individual and family dysfunction. Communication problems can be either verbal or nonverbal. Verbally, the loss of a common language (i.e., native language vs. English) creates tension in families because there is a greater chance for misunderstandings and decreased family cohesion. This can result in conflict and more difficulty in developing a positive emotional bond. Problems can develop, however, from culture-related factors or reasons not relating to culture—it is important to assess for both. Hwang (2006) describes various nonverbal communication styles, which include proxemics (the use and perception of interpersonal space), kinesics (bodily movements and facial expressions), paralanguage (vocal cues such as pauses, silences, and inflections), and high-low context communication (the degree to which explicit language is used vs. implied).

Cultures differ in their emphasis on high-context communication (implied through nonverbal means) and low-context communications (more direct and explicit). Differences in acculturation style between parents and children include verbal or nonverbal communication styles. Parents and children can make interpretive errors in understanding the meaning of

different cultural communication styles. For example, a parent may view his or her child's expression of feelings as disrespectful, while a child may view his or her parent's refusal to negotiate as unfair and uncaring. Accumulative experiences of miscommunication often result in a rupture in family cohesion as well as individual and family dysfunction (Hwang, 2006).

As parents and children acculturate at different levels over time, incongruent value systems can arise, resulting in distancing between parents and children. This is the second dimension of AFD. Value discrepancies can occur along the domains of work, school, family, parenting, interpersonal relationships, romantic relationships, religion, and moral character (Hwang, 2006). The degree to which value discrepancies exist depend on various factors such as country of origin, age of immigration, ethnic density of community, and persistence with which the family and community maintain, abandon, or change values (Hwang, 2006). Dimensions along which values can differ include individualism and collectivism and cultural self-concepts.

Asian Americans and the Asian Indian Ethnic Group

Asian immigrants are often categorized as one large ethnic and cultural group. There are values and beliefs which are common to most Asian cultures; these include "collectivism, conformity to norms, deference to authority, emotional self-control, family recognition through achievement, filial piety, humility, hierarchical relationships, and avoidance of shame" (Iwamoto & Liu, 2010, p. 82). However, Asian immigrants are comprised of individuals "from over 20 different nations, many distinct ethnicities, and (who) belong to at least two races" (Nandan, 2005, p. 176).

Within this vast group, Asian Indians are considered the third largest Asian group residing in the United States. Within the Asian Indian subgroup, there is further heterogeneity in socioeconomic status (SES), education levels, diet preferences, and religions (Nandan, 2005). Immigrants from a working class background and without a college education have been

generally found to have fewer skills, less fluency in English, and lower SES than those who come to the United States as professionals. More importantly, the nonprofessional immigrants appear to have more difficulty in adapting to the American culture (Nandan, 2005).

Dasgupta (1998) notes that the Asian Indian subgroup has been "able to carve a niche for itself as a technical and financial force" (p. 954). However successful they may be within American culture, many *first-generation* Asian Indians still prefer to socialize with members of their own ethnic group and maintain regular contact with their homeland and relatives living there (Dasgupta, 1998). Asian Indian immigrants have invested much effort into keeping their culture alive in a foreign land. Nandan (2005) notes these immigrants appear to have only adapted to American culture in the physical dimension. However, Asian Indian immigrants vary in their levels of adaptation due to a range of possible factors. These factors include their reasons for migrating to the United States, the time and age of migration, the area where they settled in the U.S., and physical distance to members of the same ethnic group (Nandan, 2005). Furthermore, members of one family can have different levels of acculturation to the host culture.

The children of Asian Indian immigrants who were either born in the United States or arrived at a young age, the *second-generation*, may have more difficulty balancing both cultures compared with the *first-generation*. A cultural value conflict may arise due to the strong differences between both cultures. Indian immigrant parents may experience various concerns for their children, such as the "fear of losing children to the U.S. culture, loss of parental authority over children, and loss of face within the Indian community due to children's violation of Indian cultural norms" (Varghese & Jenkins, 2009, p.238). Furthermore, studies of second-generation adolescent and adult immigrants have found evidence of family conflicts

resulting from clashes over parental control, poor communication, high expectations, and particularly marriage and dating. However, Thomas and Choi (2006) note that social support activities reduce the level of acculturative stress, with parental support being the most important predictive factor in determining the level of acculturative stress. Cultural and organizational activities are other important sources of social support for Indian youth that can moderate their level of acculturative stress (Thomas & Choi, 2006). Thus, the influence of the family environment and community are vital to the adjustment of second-generation Asian Indian youth.

The Model Minority Myth

The United States has long given Asian Americans the label of "model minority" due to the perception of this large group as non-threatening, quiet, well-behaved, hard-working, and successful. Asian Indians, in particular, are reported to have the greatest percentage of individuals who speak English "very well" (76.9%), the highest educational attainment (63.9% of Asian Indians have at least a bachelor's degree), and the highest percentage of employment in management, professional, and related occupations (59.9% according to the 2004 U.S Census Bureau; Kumar & Nevid, 2010). While these are the current statistics, the label of model minority holds all Asian Americans to a high standard of character and behavior. The needs of individuals who may need more support and assistance may be overlooked due to their membership in this model minority group (Saran, 2007).

The development of the term *model minority* has unfortunate roots in its attempts to reduce racial and ethnic tension during the civil rights movement in the 1960s. By using the success of Asian American as an example, it was used as a way to ignore the demands of African Americans and other minority groups for equal rights. It was argued that it was possible for minority groups to succeed without governmental assistance (Saran, 2007).

According to Qin (2008), there is a paradox in that Asian American students often report poor psychological and social adjustment despite their generally high levels of educational achievement. These students are often perceived as well adjusted because of their educational competence. This perception is reinforced by observations of a quiet demeanor, few acting out behaviors, and underutilization of mainstream psychological services. Studies with college students beginning in the 1970s have consistently shown that Asian American students reported higher levels of distress and emotional and social adjustment difficulties than White students (Qin, 2008). Some recent studies are showing similar results when levels of distress of Asian American students are compared with those of non-White students. Increased attention is being given to the psychological well-being of Asian American youth as stories increase of high-achieving, apparently well-adjusted students in these communities committing suicide (Qin, 2008).

Issues such as language barriers, the parent-child acculturation gap, and parent-child conflicts have become prevalent over time in many immigrant families. Qin (2008) noted in their longitudinal study with well-achieving Chinese immigrant adolescents that distressed youth reported discipline to be one of the most common factors leading to conflict at home. Specifically, parents were perceived by their children to be stricter and more controlling than American parents. Conflicts frequently arose around issues such as dating, appearance (mainly for girls), and spending money, particularly as children reached adolescence. Qin (2008) concluded from her study that parenting is a unique challenge in Asian immigrant families, influenced by the stressors parents are undergoing in adjusting to life in a new and different culture. Furthermore, parenting style after migration can contribute to different parent-child dynamics at home, resulting in different levels of psychological adjustment in children.

Specifically, distressed adolescents had parents who were more strict and rigid in their parenting style (namely following traditional Chinese parenting tenets). Such a style often led to high levels of parent-child conflict, poor communication, and distancing in parent-child relations. Non-distressed adolescents had parents with a more flexible and adaptive parenting modality, attending to the developmental needs of children and the new cultural context. This approach allowed parents and children to maintain strong emotional connections after migration (Qin, 2008).

Socio-Environmental Factors of Psychological Distress

Racial and ethnic discrimination is a common stressor for immigrant youth in their adaptation to the majority culture. Such discrimination does not exclude second-generation youth of ethnic minority groups. Increased evidence has been found linking discrimination with negative outcomes in Asian American college students and adults, such as lower social competence and self-esteem, and greater substance abuse, depressive symptoms, and risk for chronic illness (e.g,. heart disease, respiratory illness; Juang & Cookston, 2009).

The limited studies including Asian American adolescents have reported that these youth experienced higher levels of peer discrimination, in comparison with African American and Latino students (Juang & Cookston, 2009). These findings are concerning due to: (a) discrimination being linked to poorer adolescent adjustment, evidenced in lower self-esteem and greater depressive symptoms, (b) adolescents having fewer or less sophisticated skills in dealing with stressors than adults, and (c) personal reflective narratives of Asian American college students showing a lack of discussion about discrimination with parents when they were growing up (Juang & Cookston, 2009). However, despite discrimination occurring in both culturally diverse and homogeneous contexts, the culturally supportive environment may provide youth with the resources and support to develop a strong ethnic identity. This belief is supported

by evidence indicating that positive feelings towards one's ethnic group buffers the negative effects of discrimination (Juang & Cookston, 2009).

Juang and Cookston (2009) also relate the finding that second-generation Chinese American adolescents reported less perceived discrimination than first generation adolescents. However, two years later, the perceptions of the same second-generation adolescents rose to match those of the first generation. It is noted that ethnic minority adolescents born in the United States are often still considered to be foreigners (e.g., it is assumed that they do not speak English). Juang and Cookston describe the phenomenon of being the *perpetual foreigner* as a common source of discrimination for Asian American youth.

Manifestation of Psychological Maladjustment

The internalized symptoms of second-generation Asian Indian youth (i.e., withdrawal, somatic symptoms, anxiety, depression) have been found to be present in Asian Indian children in Britain as young as ages 7 through 9 (Atzaba-Poria et al., 2004). This particular study used the Child Behavior Checklist (CBCL) to identify internalized, externalized, and total problem behavior in children, while also looking at parental Indian language use and parental acculturation style (using the Ghuman's Acculturation Scale). Overall, these Indian children were found to be relatively well adjusted but exhibited significantly higher levels of parent-reported internalizing behaviors when compared to their English peers (Atzaba-Poria et al., 2004)

While these children may have greater mental resources when they reach adolescence, they can become particularly vulnerable to the opinions of their peer group at this point. New developmental experiences such as pubertal changes and exposure to dating, substances (e.g., alcohol, cigarettes), or both can create conflicts within the teen as to how to behave. An interest in forming an individual identity may lead to conflict with parents if there is not an open

relationship. Social support, namely parental but also organizational or cultural, becomes particularly important at this time. Emerging adults have significantly important decisions to make, such as career and marriage aspirations, which can be facilitated or worsened by parents. The level of conflict between parent and child regarding these matters play a crucial role in the mental health adjustment of second-generation Asian American youth.

While Asian Americans have been found to have rates of depression and anxiety comparable to those found among European Americans, it is important to recognize that different cultural groups attribute different meanings to symptoms identified in American assessment instruments. Cultures may perceive these "symptoms" to be functional and a sign of positive social adjustment (Gee, 2004). For example, many Asian cultures socialize children to be attentive to the emotional states of others as well as to harmonious interactions. Gee notes the possibility that socialization practices of Asian Americans increase their vulnerability to certain types of anxiety disorders, such as social anxiety.

In addition to the different perceptions among cultural groups of symptom expression, it is also important to be knowledgeable in the manifestations of psychological distress across different cultures. For example, Gee (2004) notes that the earliest symptoms of anxiety in Asian American adolescents may be somatic complaints and sleep and appetite disturbances. Mental health providers should also be aware of the existence of culture-bound syndromes, as identified in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text revision [DSM-IV-TR], American Psychiatric Association, 2002).

Summary

Berry identified four main styles of acculturation for individuals closely encountering a new culture: assimilation, integration, separation, and marginalization. Integration, or biculturalism, involves the incorporation of personally selected aspects of both cultures into

one's life. This has been regarded as the most psychologically adaptive mode of acculturation. However, the relationship between acculturation and adjustment is not as simple as it may appear. This is especially the case with second-generation Asian American youth, who are either born or being raised in the United States. While these youth are socialized into American culture, their parents have been socialized for the most part in their own cultures of origin. Similarly, there can often be a parent-child acculturation gap, this gap alone cannot predict adjustment problems for the child. Hwang's concept of acculturative family distancing (AFD) has been described as the mechanism which leads to family conflict resulting in mental health problems, such as depression. AFD consists of two dimensions, including the breakdown in communication and the cultural value conflict.

Asian Americans have been described as the "model minority" within the United States, due to their high educational attainment and professional status and limited contribution to societal problems. Among Asian Americans, Asian Indians show the highest percentage in the areas of educational attainment, professional status, and income level. However, the model minority status has resulted in the non-recognition of individual needs, such as mental health problems.

The literature has shown the presence of internalized problems, particularly depressive symptoms and self-critical perfectionism, within the Asian American population. Second-generation Asian Indian youth are at risk for mental health problems, particularly internalized symptoms, if there is familial conflict, a lack of social support, or both. It is highly beneficial to the larger Asian Indian community to know of the relationship between the family and the broader environmental climate. Moreover, it is important to note the mental health adjustment of second-generation Asian Indian youth. This study has contributed to the available

research by recruiting second-generation Asian Indian college students in the United States to complete a survey of psychological measures which assessed acculturation (self-reported and perceived parental) and its variables (i.e., acculturative family distancing and perceived prejudice) as well as internalization problems (i.e., depression, anxiety, self-critical perfectionism, and somatic symptoms). Statistical analyses were conducted to determine the dynamics of the relationship between parent and child as well as with the environmental factors and mental health problems in U.S.-born Asian Indian youth. The next chapter will outline the specific methodological approach that was used to attain the data which informed those findings.

Chapter 3: Method

The study used a survey of several measures to examine the relationship between acculturation, its related variables, and mental health of second-generation Asian Indian college students. Specifically, the author studied the relationships among individual acculturation, perceived parental acculturation, family environment (i.e., cultural value conflicts and communication difficulties), larger societal barriers (i.e., perceived prejudice), and internalized mental health symptoms (i.e., depression, trait anxiety, self-critical perfectionism, and somatic distress).

Participants

The participants ranged from 60 to 81 Asian Indian undergraduate college students, aged 19 to 25, either born in the United States or immigrated to the United States before the age of 5. Regarding the number of participants, 81 college students completed only the VIA and the Perceived Prejudice subscale. 63 participants did not complete measures beyond the Communication Difficulties subscale of the AFD measure and the CES-D. Finally, 60 participants completed all the survey measures. The data from completed measures were used for relevant analyses, and the number of participants varied slightly for different subsamples.

Kuo and Roysircar (2004) found that early immigrants (i.e., children) to Canada had a higher level of acculturation and less acculturative stress compared to those who arrived later (i.e., as adolescents). It is likely that there are similarities in the acculturation experiences of early immigrants and U.S.-born second-generation Asian Indians (Roysircar et al., 2010). The present study paid attention to the second-generation Asian Indian youth because they tend to experience the greatest struggles with reconciling the differences they perceive between the dominant second culture and their family's cultural values (Roysircar, 2011; Willgerodt & Thompson, 2006). They tend to experience the largest culture gap, compared to first- and

third-generation youth (Willgerodt & Thompson, 2006). The college student population was chosen because this age group faces important issues such as "dating, marriage, individualism, obedience to parents' wishes, responsibility toward extended families" within Asian Indian communities as they approach adulthood (Dasgupta, 1998, p. 954; Roysircar, 2011). In addition to the criteria mentioned above for inclusion in the sample, participants' parents were to be born and raised in India.

The participant sample was 40% male and 60% female. For age, 28.75% were 19, 23.75% were 21, and 15% were 20 and 25. Participants identified themselves as primarily Christian (64.6%) or Hindu (31.7%). Previous studies on Asian Indians by Roysircar and colleagues in the last three decades had a majority of Hindu participants.

Regarding regional ethnicity, the participants identified themselves primarily as Keralite (64.5%). The author is a Christian Keralite herself, which may have influenced the participation of respondents with a similar Indian regional heritage. The next largest group was Gujarati (15. 2%). Other identified regional Indian backgrounds included Tamil Nadu, Punjab, Maharashtra, Andhra Pradesh, Bengal, Hyderabad (with spoken language Telugu), as well as certain regional combinations (Kerala/Andhra, Kerala/Tamil, Kerala/Marthomite [a religious subgroup within Indian Orthodox Christianity]). Participants primarily reported living in New York (26%) and Massachusetts (26%), followed by Pennsylvania (10.4%) and Michigan (9.1%). Other states included the Northeastern states of New Jersey, Connecticut, Rhode Island, and New Hampshire; Southern states such as Georgia and Florida; Mid-Western states such as Illinois and Indiana; Southwestern states such as Texas and Oklahoma; and the Western state of California.

Effect Size

A full sample of $N = 150$ would have been needed to detect a medium effect size (Cohen, 1992). While a medium effect size would have been meaningful for the current study, the results

of a smaller sample (N = 61/80) can still provide useful information with a large effect size. Strong data from a small sample can also show medium effect size.

Overview of the Study's Survey

The survey instrument consisted of several demographic questions, four acculturation-related measures, four measures of internalization, and two final open-ended questions. This study was interested in the relationship between environmental variables (i.e., family and larger society) and internalization (i.e., depression, trait anxiety, somatization, and self-critical perfectionism). The ordering of the measures was such that the less sensitive acculturation-related measures were administered first followed by the internalization measures to which more stigma may be attached. Several measures were shortened for the study in consideration of time that would be required for college students to complete the survey.

First, the acculturation-related measures assessed individual acculturation, perceived parental acculturation, perceived prejudice, and acculturative family distancing. While the full 20-item Vancouver Index of Acculturation was used, the other three measures were adapted or shortened from their original construction. The 10 items of the Perceived Parental Acculturation Scale were adapted from the VIA. Select items from the VIA were chosen based on prior research relating to common sources of disagreement between immigrant parents and children (i.e., marriage, values, cultural practices, cultural behaviors, cultural traditions). The language of these items was changed so that participants gave their perceptions about their parents' acculturation. Only 10 items of the 20-item Perceived Prejudice subscale of the American-International Relations Scale were selected based on content perceived to be most relevant to the study. For example, one item selected was "If I did not have some family members, or relatives, or some friends among people from my Asian Indian cultural group living in the USA, I would feel isolated." Finally, the 46-item measure of Acculturative Family

Distancing (AFD-YR) was too lengthy for administration to the participants. It was shortened to 20 items, with 10 items on each subscale (i.e., Communication Difficulties and Incongruent Cultural Values). Items were selected based on most relevance to the present study.

With regard to the internalization measures, each one was administered as originally developed in order to obtain a full picture of this construct. As previously discussed, internalizing problems have been operationalized as three groups of behaviors indicating (a) depression and anxiety, (b) withdrawal, and (c) somatic complaints (Atzaba-Poria et al., 2004). As such, depression, anxiety, and somatic complaints were measured. Trait anxiety was specifically assessed as it is more stable and enduring (Spielberger, 1985). In addition, there is a developing research base for maladaptive perfectionism in Asians, including Asian Indians (Wang et al., 2012). Self-critical perfectionism was assessed as well. Due to the nonexistence of an established measure incorporating all four areas of internalization, the survey combined several reliable and valid measures strongly supported in the cross-cultural research literature.

Acculturation-Related Measures

Vancouver Index of Acculturation (VIA; Ryder, Alden, & Paulhus, 2000). The Vancouver Index of Acculturation (VIA) was utilized in this study. The VIA is a 20-item questionnaire that is theoretically appropriate because it measures bidimensional acculturation. That is, the VAI independently assesses a person's orientation towards the Mainstream culture and the Heritage culture. Heritage culture is described as the "culture that has influenced you the most (other than North American culture)" but this culture can also be one "that may have had impact on previous generations of your family." Examples of Heritage culture items include "I would be willing to marry a person from my heritage culture;" and "I believe in the values of my heritage culture." Mainstream culture is defined as the culture of the host society or second culture in which one is residing. Examples of Mainstream culture items are "I often behave in

ways that are typically American;" and "I am comfortable interacting with typical American people."

The VIA is frequently used to measure individual acculturation. It measures several dimensions of acculturation, including values, social relationships, and adherence to tradition. The VIA asks participants to rate each item according to his or her degree of agreement. Participants select from 9 responses ranging from *strongly disagree* = 1 to *strongly agree* = 9.

Ryder, Alden, and Paulhus's (2000) pilot study on the 20-item VIA yielded Cronbach's alphas ranging from $\alpha = .79$ to $\alpha =. 92$ for the Heritage dimension and $\alpha = .75$ to $\alpha = .89$ for the Mainstream dimension, indicating moderate to strong internal consistency. This measure also demonstrated good concurrent validity with scores on the Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Ahuna, & Khoo, 1992), a commonly used unidimensional measure of acculturation. Factorial validity was established by means of principal-components analysis with promax rotation performed separately on four groups: (a) two Chinese, (b) one East Asian, and (c) one miscellaneous.

In the present study, internal consistency reliability or Cronbach's alpha for the Heritage Culture Scale of the VIA was $\alpha = .86$ and $\alpha = .75$ for the Mainstream Culture Scale, falling within the same range reported by Ryder et al., (2000). As such, these reliability values for the Heritage Culture Scale and the Mainstream Culture Scale are good.

Parents' perceived acculturation. The survey then inquired about parental acculturation level. Due to the difficulty in gathering parental self-reports (which, however, were obtained by the Roysircar et al., 2010 study), items were adapted from the VIA. These were 10 items, examples of which included "My parents believe in mainstream American values" and "My parents often participate in their heritage cultural traditions." However, the internal consistency

reliability for this adaptation was α = .56. Due to its poor reliability, probably because of the use of adapted items and the ratings were done by children about their parents, the decision was made to remove this scale from further study.

Perceived Prejudice Subscale of American-International Relations Scale (AIRS; Sodowsky & Plake, 1991). A subset of items from the Perceived Prejudice subscale of Sodowsky and Plake's (1991) American-International Relations Scale (AIRS) was utilized. The AIRS is a multidimensional instrument "designed to measure international people's perception of their relationship with white Americans and their adjustments to the dominant society in values, behaviors, cultural practices, and language usage and proficiency" (Sodowsky & Plake, 1991, p. 208). While the participants were not international people with temporary residence status, particular items within the subscale of Perceived Prejudice were applicable to North American-raised Asian Indian young adults who may still experience prejudicial attitudes. In fact, the Perceived Prejudice scale has been used with second-generation and first-generation Asian Indians in the United States (as well as with other immigrant groups, ethnic minority groups, and international students) in several studies (select citations: Frey & Roysircar, 2006; Kuo et al., 2006; Roysircar et al., 2010; Sodowsky & Lai, 1997; Sodowsky, Lai, & Plake, 1991) that indicate strong concurrent and predictive validity in relationship with other measures and criterion variables.

Items within the Perceived Prejudice subscale include experiences of stereotypes, discrimination, and isolation in relation to the dominant group. Examples of items include: "No matter how adjusted to American ways I may be, I will be seen as a 'foreigner' by Americans" and "I resent that I am overlooked for recognition, special projects, hiring, or promotion." Each item is rated on a 6-point Likert-type scale from "*disagree strongly*" (1) to "*agree strongly* (6),

with higher scores indicating more perceived prejudice.

Sodowsky and Plake's (1991) instrument development study reported a Cronbach's alpha of α = .88 for the Perceived Prejudice subscale with 20 items. The factor loadings of items on this subscale ranged between .33 and .63, and their item-to-total subscale correlations ranged between .31 and .62.

In the present study, internal consistency reliability or Cronbach's alpha for the 10-item Perceived Prejudice Subscale of the AIRS was α = .79. This reliability value is lower than that reported by Sodowsky and Plake (1991) because it is 50% shorter, but this internal consistency level is acceptable.

AFD Youth Report (AFD-YR; Hwang, 2006). The AFD Youth Report (AFD-YR), which measures the Acculturative Family Distancing construct, consists of two dimensions, the Communication Difficulties (CD) and Incongruent Cultural Values (ICV) subscales. The original measure consists of 46 items, but only a subset of items was used for the proposed study.

Items within the CD subscale include: "My parent(s) can communicate basic or concrete needs to me, but they have a hard time communicating feelings and emotional needs" and "I feel like there is a communication barrier between me and my parent(s)." Items within the ICV subscale include: "My parent(s) and I disagree on what is important in life" and "My parent(s) and I disagree on the importance of having a social life." Each item on both subscales is rated from *strongly disagree* = 1 to *strongly agree* = 7 by the respondent.

The AFD measure has demonstrated strong reliability and validity (concurrent and predictive) in two studies (Hwang & Wood, 2009; Hwang & Wood, 2010). Both dimensions have also shown strong internal consistency with both Asian and Latino Americans (α. = 90 – α

= .95 for ICV and α = .90 – α = .94 for CD). In addition, evidence of moderate parent-child agreement on the subscales has been found, indicating that the measure shows inter-rater parent-child agreements.

In order to validate the theory and construct of AFD, Hwang and Wood (2009) used structural equation modeling to measure the effects of AFD on Asian and Latino American college students. Depression was found to be a prevalent problem for these groups, with 14% of the Asian Americans in the sample meeting criteria for major depression. Also, AFD was found to be related to higher psychological distress and greater risk for clinical depression.

For the present study, the 46-item instrument was shortened to 20 items, with 10 items from each of the two subscales: ICV and CD. The subscales were shortened for two reasons. First, the study aimed to assess several factors related to acculturation as well as mental health concerns. Due to the breadth of information investigated, it was first necessary to streamline the questionnaire package to fit all necessary elements. Second, the study sought the participation of undergraduate college students who have limited free time to volunteer for research.

In the present study, internal consistency reliability or Cronbach's alpha for the Incongruent Cultural Values scale was α = .58. Due to the poor reliability value of this subscale, it was removed from further study. However, the internal consistency reliability of the Communication Difficulties (CD) scale was α = .83. Although this reliability value was less than that reported by Hwang (2006) for the complete subscale (20 items), it was still good for the reduced 10-item CD subscale.

Measures of Internalization

Center for Epidemiological Studies–Depression Scale (CES-D; Radloff, 1977). The CES-D is a 20-item scale measuring depressive symptoms. This instrument has been used successfully with Asian American college students in past studies (e.g., Ying & Han, 2007). The

CES-D has shown good internal consistency reliability across diverse populations and fairly good test-retest reliability (Aneshensel, Clark, & Frerichs, 1983; Fava, 1983; Radloff, 1977; Ross & Mirowsky, 1984, as cited by Orme, Reis, & Herz, 1986). Also, the CES-D differentiates fairly well between clinical and non-clinical populations, particularly with respect to depression. The CES-D also shows concurrent validity, due to its correlation with other scales designed to measure depression (Radloff, 1977; Weissman et al., 1977, as cited by Orme, Reis, & Herz, 1986).

The CES-D has also demonstrated predictive validity, as evidenced by the correlation between the CES-D items and the total scores for self-esteem (moderate amount of discriminant validity) and trait anxiety (high convergent validity) (Orme et al., 1986).

The CES-D includes items relating to negative affect, positive affect, somatic complaints, and interpersonal difficulty. A 4-point Likert scale is used to rate items, ranging from *rarely or none of the time, less than 1 day/week* to *most or all of the time, 5-7 days/week*. Examples of items include "I felt lonely" and "I did not feel like eating; my appetite was poor".

For the present study, the full 20-item instrument was given to participants. The internal consistency reliability or Cronbach's alpha for the CES-D in the study was $\alpha = .92$, which is excellent.

State-Trait Anxiety Inventory, Form Y (STAI; Spielberger, Gorsuch, Lushene, Vagg, & Jacob, 1983). The STAI is a commonly used measure of state and trait anxiety. Form Y of the STAI has 20 items each for both state and trait anxiety. The present study only measured trait anxiety in participants, as it is more enduring. Trait anxiety items include: "I am content; I am a steady person" and "I worry too much over something that really doesn't matter." Each item is rated on a 4-point scale, from *almost never* to *almost always*.

Spielberger et al. (1983) reported internal consistency coefficients for the STAI ranging from α = .86 to α = .95 and test-retest reliability coefficients ranging from α =.65 to α =.75 over a 2-month interval. The scale also is reported to have good construct and concurrent validity (Spielberger, 1989). The STAI has been found to correlate significantly with other measures of psychological states and psychopathology (Endler, Magnusson, Ekehammar, & Okada, 1976; Gotlib, 1984; Knight, Waal-Manning, & Spears, 1983). Regarding discriminant validity, Martuza and Kallstrom (1974) found that the STAI was able to differentiate between state anxiety and trait anxiety among graduate students in education under various levels of stress. Metzger (1976) found similar results with another student population in high stress versus nonstressful situations.

In the present study, internal consistency reliability or Cronbach's alpha was α = .92. This is an excellent reliability value, falling within the range reported by Spielberger et al. (1983).

Discrepancy Subscale of the Almost Perfect Scale-Revised (APS-R; Slaney, Rice, Mobley, Trippi, & Ashby, 2001). Along the lines of anxiety symptoms, it was considered useful for this study to measure attitudes Asian Indian young adults have regarding themselves, their performance, and in relation to others. Research has found that perfectionism is common in Asian youth (Rice, Choi, Zhang, Morero, & Anderson, 2012). The APS-R is used to measure self-critical perfectionism, and it is a good indicator of this problem. The Discrepancy subscale measures the extent to which participants view themselves as falling behind their personal performance expectations. Each item is rated on a 7-point scale from *strongly disagree* to *strongly agree*. Examples of items include: "Doing my best never seems to be enough" and "I often feel disappointment after completing a task because I know I could have done better."

The internal consistency coefficients for the Discrepancy subscale ranged from α =.91 to α = .92, indicating strong reliability. The Discrepancy subscale was significantly correlated with

the Self-Oriented and Socially Prescribed Perfectionism subscales on the Multidimensional Perfectionism Scale (Hewitt & Flett, 1991) as well as with the Concern over Mistakes and Doubt About Actions subscales on a different Multidimensional Perfectionism Scale (Frost, Marten, Lahart, & Rosenblate, 1990). The Discrepancy subscale of the APS-R appears to indicate convergent validity.

In the present study, internal consistency reliability or Cronbach's alpha was $\alpha = .94$. This reliability value is excellent and higher than that reported by Slaney et al. (2001).

Somatic Distress Subscale of the Hopkins Symptom Checklist – 21 (HSCL-21; Green, Walker, McCormik, & Taylor, 1988). Because people from some Eastern cultures tend to show their emotional and psychological distress through somatic symptoms (Lippincott & Mierzwa, 1995), the survey included items from the Somatic Distress subscale of the Hopkins Symptom Checklist -21 (HSCL-21). This instrument is often used with diverse populations and is short with strong psychometric properties.

The instructions of the HSCL-21 are as follows: "How have you felt in the previous 7 days including today? Use the following scale to describe how distressing you have found these things over this time (1 = *not at all*; 2 = *a little*; 3 = *quite a bit*; 4 = *extremely*)." There are 7 items in the Somatic Distress subscale, including "weakness in parts of your body" and "hot or cold spells."

Walkey, Aghanwa, and Taylor (2002) reported an internal consistency coefficient of $\alpha = .84$ for the Somatic Distress (SDS) subscale. The SDS scale has also demonstrated convergent and divergent validity with various measures of psychological and physical health in clinical and normative sample (Cepeda-Benito & Gleaves, 2000; Deane, Leathem, & Spicer, 1992; Green et al., 1988, as cited by Lee, Su, & Yoshida, 2005).

In the present study, internal consistency reliability or Cronbach's alpha was $\alpha = .82$. Although this reliability value was slightly less than that reported by Walker et al. (2002), it was still good and its data were utilized for the study.

Open-ended Questions.

At the end of the survey, there were 2 optional open-ended questions for participants to complete. They were as follows:

1. Overall, do you think you have exaggerated your difficulties and to what extent? Why?
2. Overall, do you think you're downplaying your difficulties and to what extent? Why?

Procedures

Participants for the study were recruited through cultural organizations of colleges within the New England area. The author used the internet to identify representatives of South Asian/Indian student organizations who could forward information about the study to their members. The New England area was targeted due to the dense Asian Indian population within this region. However, there was minimal response from these college/university South Asian/Indian organizations. The social networking website Facebook was also utilized to obtain a broader sample of Asian Indian students within the United States, and this ended up being the primary source of participant recruitment. In addition, psychology-oriented cultural organizations were contacted by the researcher, including the Asian American Psychological Association (AAPA), the AAPA Division on South Asian Americans (DoSAA), and Counselors Helping (South) Asians/Indians, Inc. (CHAI). A small advertisement was also placed in the India Abroad national newspaper for U.S.-residing Asian Indians. A recruitment message was sent to each organization as well as placed on Facebook explaining the goals of the study, potential

advantages, and participant inclusion criteria. This recruitment message provided a link to the online survey site (PsychData.com). See Appendix B for the recruitment message.

The survey was accessed through the Psychdata.com website for 24 weeks. Once participants reached the survey, they first read an Informed Consent Statement, which provided details regarding the study, including its purpose, the types of questions they would be answering, and the benefits and risks of participation in the study. Participants were made aware that electronic submission of their completed surveys would serve as implied informed consent. See Appendix B for the Informed Consent Statement.

Before beginning the survey, participants answered several demographic questions. Afterwards, participants continued to answer the acculturation-related measures (assessing individual acculturation, perceived parental acculturation, perceived prejudice, and acculturative family distancing), the internalization measures (assessing depression, trait anxiety, somatic symptoms, and self-critical perfectionism), and the final open-ended questions.

Ethics and Informed consent

Recruitment began upon receiving approval from Antioch University New England's Institutional Review Board (IRB) on January 10, 2013. The hosting website, Psychdata.com, has the capacity to securely store data (i.e., maintaining confidentiality) and exclude IP addresses of participants (i.e., maintaining anonymity). Furthermore, the website has the ability to have participants taken to a separate and unlinked webpage at the end of the study where email addresses can be entered by participants who would like to enter the drawing for a gift card. The website can automatically download the email addresses separately to ensure the anonymity of participants who request a gift card. As such, there was no way to link participants' email addresses to their "yes" responses for a gift card. Those participants who won one of the six $25 gift cards were sent the card electronically via email. The data set collected was transferred to the

researcher's personal computer that is password protected. Member surveys and data were deleted by the account owner (PsychData.com) at the termination of the service contract, which occurred on July 1, 2013.

All research was conducted in accordance with the ethical guidelines set forth by the American Psychological Association. A summary of the study's results will be made available to participants upon request.

Research Hypotheses

The following research hypotheses were tested:

1. A majority of the college students will be well acculturated, according to their responses on a scale of 1–9 on the Vancouver Index of Acculturation (VIA; i.e., above a mean item score of 5).
2. Discrepancy scores between a college student's acculturation and perceived parental acculturation will correlate with acculturative family distancing (AFD). This hypothesis could not be tested. See the previous section on Acculturation-Related Measures that reports the poor internal consistency reliability of the Perceived Parental Acculturation Scale. See also Chapter 4.
3. AFD will correlate significantly with internalization measures (i.e., depression, trait anxiety, self- critical perfectionism, and somatic symptoms). Only the Communication Difficulties subscale of AFD was utilized. See the previous section on Acculturation-Related Measures that reports the poor internal consistency reliability of the Incongruent Cultural Values subscale of AFD. See also Chapter 4.
4. Participants who report low perceived prejudice will be different from participants who report high perceived prejudice on depression, trait anxiety, self-critical perfectionism, and somatic symptoms; that is, their internalization scores will be

lower with lower perceived prejudice. This hypothesis was modified with regard to participants' levels of perceived prejudice. See also Chapter 4.

5. Student-parent acculturation discrepancy, perceived prejudice, and AFD combined will predict internalization (i.e., depression, anxiety, self-critical perfectionism, and/or somatic symptoms). This hypothesis was modified because the Parents' Perceived Acculturation Scale and the Incongruent Cultural Values (ICV) subscale of AFD were not utilized in the study. See also Chapter 4.

Data Analyses

Hypothesis 1. Descriptive statistics including measures of central tendency on the dimensions of Heritage culture and Mainstream culture were examined to verify whether they were similar, suggesting biculturalism in the college students, or whether they were inverse, high in one dimension and low in the other dimension, suggesting assimilation or separation. Low scores on both dimensions would suggest marginalization.

Hypothesis 2. This analysis would aim to examine each child-parent pair. The score of perceived parental acculturation was to be subtracted from the score of the student's self-reported acculturation. The obtained difference scores from child-parent pairs were then to be correlated with students' acculturative family distancing (AFD) scores. Significant positive correlation scores at $p < .05$ would indicate that discrepancy between student acculturation and perceived parental acculturation was related to college students' AFD. However, this analysis could not be carried out. See explanation in the previous section. See also Chapter 4. **Hypothesis 3.** Pearson Product Moment Correlations studied the relationship between the Communication Difficulties subscale of AFD and Depression, Trait Anxiety, Somatic Symptoms, and Self-Critical Perfectionism.

Hypothesis 4. A Multiple Analysis of Variance (MANOVA) was performed to compare two levels of perceived prejudice groups on their overall internalization scores of depression, trait anxiety, somatic symptoms, and self-critical perfectionism. If the MANOVA were to show significant difference, univariate ANOVA tests would be performed to find out which particular internalization measures were the sources of significant difference.

Hypothesis 5. A simultaneous multiple regression analysis was to be performed with Individual Acculturation scores, Perceived Parental Acculturation Scale scores, Perceived Prejudice scores, and the AFD subscales' scores as predictor variables. The criterion variable was the students' internalization scores (the combined scores on depression, trait anxiety, somatic symptoms, and self-critical perfectionism). A significant full model with medium effect size was expected. No prediction was offered for the individual contributions of each predictor.

Qualitative Data Analysis

Thematic analysis was used to develop themes that occurred in the open-ended survey questions. Braun and Clarke (2006) outlined the six phases of thematic analysis, which were used to develop the themes in the study. These phases are "phase 1: familiarizing yourself with your data" (p. 87), "phase 2: generating initial codes" (p. 88), "phase 3: searching for themes" (p. 89), "phase 4: reviewing themes" (p. 91), "phase 5: defining and naming themes" (p. 92), and "phase 6: producing the report" (p. 93).

Because only two open-ended questions inquired about basic opinions and reactions to participating in this survey, such an extensive analysis was not required. As such, only three out of the six phases were followed. Phase 1, familiarizing yourself with the data, was completed by thoroughly reading over the qualitative responses to each question in the survey. This was followed by the completion of Phase 2, generating initial codes. After becoming familiarized with the responses, it became possible to identify the pertinent content in the responses and

develop codes to help organize and group the data together. These codes were then organized and combined to create themes in the data for each of the open-ended questions. The creation of themes completed the end of Phase 3 for thematic analysis. The sixth and final phase, producing the report, was completed to support the presence of each theme. The frequency of the themes was calculated, followed by the percentage of data supporting the themes in relation to the overall total of the themes. These themes were then listed in tables with the most frequently occurring themes appearing first, and the least frequently appearing themes occurring at the bottom of the table.

Summary

The study was of an exploratory nature and used a survey method consisting of established quantitative measures, which have been previously used in cross-cultural studies. The survey also included certain mental health items developed or adapted by the present author (i.e., Perceived Parental Acculturation Scale). In addition, there were two qualitative open-ended questions developed by the author. Although the research on internalized mental health issues in Asian Indians is in its early stages, there is sufficient evidence to warrant research into this mental health area for Asian Indians (Atzaba-Poria et al., 2004), as well as research into sociocultural factors, such as acculturation (Berry, 2001; Kuo & Roysircar, 2004; Frey & Roysircar, 2006; Roysircar et al., 2010; Roysircar & Pignatiello, 2011), perceived prejudice (Juang & Cookston, 2009; Sodowsky et al., 1991), and acculturative family distancing (Hwang, 2006), which may contribute to mental health problems. A mixed methods design was utilized to identify important contributing factors through quantitative and qualitative analyses. The study may inform future studies exploring acculturation-related factors and mental health problems.

Chapter 4: Results

The purpose of the study was to assess the presence of internalized symptoms (i.e., depression, trait anxiety, self-critical perfectionism, and somatic distress) in U.S-born second-generation Asian Indian college students (ages 19 to 25) as affected by familial (i.e., parent-child communication difficulties) and sociocultural variables (i.e., individual acculturation and perceived prejudice). Both quantitative and qualitative data were collected to gain a broad picture of college students' perceptions about their mental health. Data were obtained through an online survey hosted by the secure website Psychdata.com. Participants were recruited through online announcements (e.g., Facebook, New England college/university listservs, national culturally focused psychological organization listservs).

The results are presented in three separate sections. First, internal consistency reliabilities for the acculturation-related and internalization measures are reported to evaluate acceptable levels of reliability, as well as interscale correlations to assess the magnitude and directionality of relationships between and among the measures. Second, descriptive statistics and multivariate analysis of variance (MANOVA) are provided to show differences and similarities between participant groups on the measures. Third, a multiple regression analysis provides a model of prediction for internalized symptoms.

Five research questions guided the data analyses:

1. "Are second-generation Asian Indian college students generally well-acculturated?"

2. "Does a significant difference between the acculturation level of second-generation college students and their parents indicate parent-child relationship problems?"

3. "Is there a relationship between parent-child relationship problems and internalized symptoms?"

4. "Is there a relationship between perceived prejudice by second-generation college

students and internalized symptoms?"

5. "Does a combination of perceived prejudice and acculturation-related parent-child relationship problems predict internalized problems?"

From the above research questions the following research hypotheses were proposed. Hypotheses numbers 2, 3, 4, and 5 were modified on the basis of reliability indices and initial statistics.

Hypothesis 1: A majority of the college students will be well acculturated, according to their responses on a scale of 1–9 on the Vancouver Index of Acculturation (i.e., above a mean item score of 5).

Hypothesis 2: Discrepancy scores between a college student's acculturation level and perceived parental acculturation level will correlate with acculturative family distancing (AFD) level.

Hypothesis 3: Participants who report high AFD will report high internalization (i.e., depression, trait anxiety, somatic complaints, and self-critical perfectionism).

Hypothesis 4: Participants who report low perceived prejudice will report lower internalization than those who report moderate to high perceived prejudice.

Hypothesis 5: Student-parent acculturation discrepancy, perceived prejudice, and AFD combined will predict internalization.

Quantitative Analyses

Internal consistency reliability. Cronbach's alpha was calculated to evaluate the reliability of the measures used. Internal consistency reliability indicates how well the items in a measure or in a subscale of a measure correlate with one another, providing empirical evidence for the definition of a construct (Roysircar, 2004). Two measures were removed due to their low reliability values, the Perceived Parental Acculturation Scale (PPAS; α =.56) and the Cultural

Values subscale (α = .58) that is a part of the Acculturative Family Distancing (AFD) scale. Because the PPAS was removed from further analyses, Hypothesis 2 was not tested. The reliability of the three acculturation-related measures and the four internalization measures are provided below.

Vancouver Index of Acculturation (VIA; Ryder, Alden, & Paulhus, 2000). Cronbach's alpha for VIA was α = .83. An analysis of item-to-total scale correlations found that the Cronbach's alpha for the present study would be improved if one item was reversed "I would be willing to marry a White American person." The said item was reversed because higher scores in this measure indicate lower acculturation, thus resulting in the final Cronbach's alpha of α = .85.

Perceived Prejudice Subscale of American-International Relations Scale (AIRS, Sodowsky & Plake, 1991). Cronbach's alpha for this subscale of the AIRS was α = .79. An analysis of item-to-total scale correlations found that the Cronbach's alpha for the present study would not have been improved had any of the items been removed.

Communication Difficulties Subscale of the Acculturative Family Distancing Youth Report (AFD-YR, Hwang, 2006). Cronbach's alpha for this subscale of the AFD-YR was α = .83. An analysis of item-to-total scale correlations found that the Cronbach's alpha for the present study would not have been improved had any of the items been removed.

Center for Epidemiological Studies–Depression Scale (CES-D, Radloff, 1977). Cronbach's alpha for CES-D was α = .92. An analysis of item-to-total scale correlations found that the Cronbach's alpha for the present study would not have been improved had any of the items been removed.

State-Trait Anxiety Inventory, Form Y (STAI, Spielberger, Gorsuch, Lushene, Vagg, &

Jacob, 1983). Cronbach's alpha for STAI's Trait anxiety scale was α = .90. An analysis of item-to-total scale correlations found that the Cronbach's alpha for the present study would be improved if one item was reversed ("I am a steady person") because higher scores indicate more trait anxiety. The said item was reversed, resulting in the final Cronbach's alpha of α = .92.

Somatic Distress Subscale of the Hopkins Symptom Checklist – 21 (HSCL-21, Green, Walker, McCormik, & Taylor, 1988). Cronbach's alpha for this subscale of the HSCL-21 was α =.82. An analysis of item-to-total scale correlations found that the Cronbach's alpha for the present study would not have been improved had any of the items been removed.

Discrepancy Subscale of the Almost Perfect Scale – Revised (APS-R, Slaney, Rice, Mobley, Trippi, & Ashby, 2001). Cronbach's alpha for this subscale of the APS-R was α = .94. An analysis of item-to-total scale correlations found that the Cronbach's alpha for the present study would not have been improved had any of the items been removed.

Interscale correlations. Table 1 shows the Pearson *r* correlations of all the variables measured. Depression, Trait Anxiety, Somatic Distress, and Self-Critical Perfectionism were positively correlated at significant levels. Communication Difficulties, Trait Anxiety, and Self-Critical Perfectionism had the most significant correlations with the other scales. The Communication Difficulties scale has a scoring system where lower scores indicate more communication difficulties, and had significant negative correlations with Depression, $p < .01$, Trait Anxiety, $p < .01$, and Self-Critical Perfectionism, $p < .05$. That is, the more the communication difficulties (as indicated by lower scores), the higher were the scores on the internalization measures. Communication Difficulties had a significant positive correlation with Heritage Culture (low score meaning more affiliation with one's heritage), $p < .05$. Hypothesis 3 was supported that participants who report high AFD (as indicated by Communication

Difficulties) will report high internalization (i.e., depression, trait anxiety, somatic complaints, and self-critical perfectionism).

Table 1

Pearson Correlations Among Mainstream Culture, Heritage Culture, Perceived Prejudice, Communication Difficulties, Depression, Trait Anxiety, Somatic Distress, and Self-Critical Perfectionism

	MC	HC	PPrej	CD	Dep	TrAnx	SD	Disc
MC	1.00							
HC	.32**	1.00						
PPrej	.16	.08	1.00					
CD	.06	.27*	.15	1.00				
Dep	-.14	-.21	.00	-.33**	1.00			
TrAnx	-.25*	-.29*	-.15	-.36**	.73*	1.00		
SD	-.08	.10	-.18	-.07	.51*	.39**	1.00	
Disc	-.19	-.04	-.02	-.30*	.58**	.63**	.40**	1.00

Note. *$p < .05$. **$p < .01$

MC = Mainstream Culture items of the Vancouver Index of Acculturation (VIA) ($n = 81$); HC = Heritage Culture items of the VIA ($n = 81$); PPrej = Perceived Prejudice subscale of the American-International Relations Scale (AIRS) ($n = 81$); CD = Communication Difficulties subscale of the Acculturative Family Distancing Scale–Youth Report (AFD-YR) ($n = 63$); Dep = Center for Epidemiological Studies-Depression Scale (CES-D) ($n = 63$); TrAnx= Trait Anxiety subscale of the State-Trait Anxiety Inventory, Form Y (STAI) ($n = 60$); SD = Somatic Distress subscale of the Hopkins Symptom Checklist-21 (HSCL-21) ($n = 60$); Disc = Discrepancy subscale of the Almost Perfect Scale –Revised (APS-R) ($n = 60$). Communication Difficulties' Likert scoring system was inverse to that of Dep, TrAnx, SD, and Disc; that is, more communication difficulties were indicated by lower scores; whereas more mental health problems were indicated by higher scores on Dep, TrAnx, SD, and Disc. On the other hand, higher Perceived Prejudice scores indicated stronger perception of prejudice.

Descriptive Statistics

Vancouver Index of Acculturation (VIA). The 20 items are scored on a Likert scale ranging from 1 to 9, with a minimum possible score of 20 and a maximum possible score of 180. The scale measures one's orientation towards both the mainstream and heritage cultures, each being scored independently of the other. Higher scores indicate a higher level of orientation towards both cultures. On the Heritage Culture dimension (n= 81), the mean was 7.09 (SD = 1.17). On the Mainstream Culture dimension (n = 81), the mean was 6.95 (SD = .91). The sample on average had equally high scores on Heritage Culture and Mainstream Culture, showing an above medium level of biculturalism. Hypothesis 1 was supported because while the second-generation, U.S.-born Asian Indian students were acculturated to the U.S. society, they also retained their enculturation in their parental culture.

Perceived Prejudice Subscale of American-International Relations Scale (AIRS). This subscale's 10 items (the original subscale has 20 items) were scored on a 6 through 1 Likert-type format. The maximum possible score on this subscale was 60, while the minimum possible score was 10. For n = 81, the mean was 3.71 (SD = .88). The sample indicated a medium level of perception of prejudice.

Communication Difficulties Subscale of the Acculturative Family Distancing Youth Report (AFD-YR). The 10 items of this subscale, four of which are reverse scored, are scored on a 1 through 7 Likert-type format, with a minimum possible score of 10 and a maximum possible score of 70. For n = 63, the mean was 4.89 (SD = 1.23). The sample indicated a medium level of communication difficulties.

Center for Epidemiological Studies–Depression Scale (CES-D). The 20 items of the CES-D are scored on a 1 through 4 Likert-type format, with a minimum possible score of 20 and

a maximum possible score of 80. For *n* = 63, the mean was 1.78 (SD = .59). The sample on average showed low depression, indicating their well-functioning status as college students.

State-Trait Anxiety Inventory, Form Y (STAI). The 20 items of the STAI, Form Y, are scored on a 1 through 4 Likert-type format, with a minimum possible score of 20 and a maximum possible score of 80. For *n* = 60, the mean was 2.20 (*SD* = .57). The sample showed on average a medium level of trait anxiety, indicating an area of challenge as college students.

Somatic Distress Subscale of the Hopkins Symptom Checklist – 21 (HSCL-21). The 7 items of the HSCL-21 are scored on a 1 through 4 Likert-type format, with a minimum possible score of 7 and a maximum possible score of 28. For *n* = 60, the mean was 1.59 (*SD* = .59). The sample on average showed a low level of somatic symptoms, indicating their well-functioning status as college students.

Discrepancy Subscale of the Almost Perfect Scale-Revised (APS-R). The 12 items of this subscale are scored on a 1 through 7 Likert-type format, with a minimum possible score of 12 and a maximum possible score of 84. For *n* = 60, the mean was 3.95 (*SD* = 1.45). The sample on average showed a medium level of self-critical perfectionism, indicating an area of challenge as college students. See Table 2 for descriptive statistics for measures used with the second-generation Asian Indian college student participants.

Table 2

Means and Standard Deviations of Second-Generation College Students on Measures Used

HC			MC			PPrej			CD			Dep			TrAnx			SD			Disc		
n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
81	7.09	1.17	81	6.95	.91	81	3.71	.88	63	4.89	1.23	63	1.78	.59	60	2.20	.57	60	1.59	.59	60	3.95	1.45

Note. HC = Heritage Culture items of the Vancouver Index of Acculturation; MC = Mainstream Culture items of the Vancouver Index of Acculturation; PPrej = Perceived Prejudice subscale of the American-International Relations Scale; CD = Communication Difficulties subscale of the Acculturative Family Distancing Scale – Youth Report; Dep = Center for Epidemiological Studies- Depression Scale; TrAnx = Trait Anxiety subscale of the State-Trait Anxiety Inventory, Form Y; SD = Somatic Distress subscale of the Hopkins Symptom Checklist-21; Disc = Discrepancy subscale of the Almost Perfect Scale–Revised.

MANOVA Findings

Hypothesis 4, Participants who report low perceived prejudice will report lower internalization than those who report moderate to high perceived prejudice, was modified as there was not a low scoring group but rather only a few low scoring participants. The modified hypothesis was: Participants who report moderate perceived prejudice will report lower internalization than those who report moderately high perceived prejudice. Low scoring participants were added to the moderate perceived prejudice group. A one-way between-groups multivariate analysis of variance (MANOVA) was performed to investigate perceived prejudice differences in internalization. The four dependent variables were depression, trait anxiety, somatic symptoms, and self-critical perfectionism. The independent variables were a moderate scoring perceived prejudice group ($n = 31$) and a moderately high scoring perceived prejudice group ($n = 29$). There was no significant difference between both groups overall on the dependent variables, Pillais $F(4.00, 55.00) = .38$, $p > .05$. The modified Hypothesis 4 was not supported. While perceived prejudice has played an important role in the acculturation process of

immigrants and their children, it does not appear to play such a role in internalized mental health problems in second-generation Asian Indians.

Multiple Regression Findings

Hypothesis 5, Student-parent acculturation discrepancy, perceived prejudice, and AFD combined will predict internalization, was modified. Student-parent acculturation discrepancy scores were not entered because the perceived parent acculturation subscale was not utilized in the study. Instead, only students' acculturation scores for Heritage Culture and Mainstream Culture were included. The AFD combined scores were not utilized in the study, and, instead, only the Communication Difficulties subscale scores of the AFD were included. So the modified Hypothesis 5 was: Individual acculturation, perceived prejudice, and parent-child communication difficulties will predict internalization.

A hierarchical multiple regression was performed with Internalized Symptoms as the criterion variable (see Table 3). The hierarchical regression was chosen for the regression analysis as it is most fitting when there is a theoretical or research-based rationale for entering variables in a specific predetermined order (Roysircar et al., 2010). The rationale behind this specific order of entry is discussed below.

Internalized symptoms (the criterion variable) has been an area of growing interest within the acculturation literature relating to Asian Americans (Abougendia & Noels, 2001; Hwang & Wood, 2009; Juang & Cookston, 2009; Kim, Chen, Li, Huang, & Jeong Moon, 2009), as opposed to externalized symptoms. Internalized symptoms tend to be more prevalent in Asian Americans than externalized symptoms and include withdrawal, anxiety, depression, and somatic symptoms (Atzaba-Poria et al., 2004). Depression, trait anxiety, somatic symptoms, and self-critical perfectionism were chosen specifically as the internalized symptoms to be assessed for

this study.

In this specific hierarchical multiple regression, external factors relating to the host society were initially entered as predictor variables, followed by more internal factors relating to participants' heritage culture, and their communication difficulties. The rationale for this entry was to control for external factors as significant predictors of internalized problems. Perceived prejudice was entered as the first predictor, at Step 1, to verify whether this factor would contribute significant variance to internalized symptoms. The perception of being unaccepted by the White dominant society has been linked to poorer mental health in Asian Indian immigrants (Mehta, 1998, as cited by Roysircar et al., 2010).

Participants' decisions to engage completely in the mainstream culture (assimilation), to engage solely in the heritage culture (separation), to selectively take on customs of the host culture (integration), or to not participate in either culture (marginalization) can have both advantages and disadvantages with regard to immigrant mental health (Kim & Omizo, 2006). As such, participants' relationship to the host or mainstream culture was entered at the second step. At Step 3, there is a movement from outwards to inwards, with heritage culture entered as the next predictor variable.

At Step 4, there is a focus on communication difficulties within parent-child dyad interactions, entered as the last predictor variable. A significant relationship has been found between intergenerational family conflict and psychopathology (Hwang, 2006).

For $n = 63$, the overall regression model was significant, and accounted for 17% of the variability in internalization scores, $R^2 = .17$, a medium effect size, with $F\ (4, 58) = 3.03$, $p < .05$. However, it should be noted that Perceived Prejudice, Mainstream Culture acculturation, & Heritage Culture enculturation were not significant predictors. It was only at Step 4, when

Communication Difficulties was entered as a predictor variable, that the model became significant. There was a negative t value (t = -2.88) because of the inverse scoring of the Communications Difficulties subscale. See Table 3 for a summary of the multiple hierarchical regression analysis at the 4th step for the prediction of Internalization.

The modified Hypothesis 5 was partially supported. The perception of prejudice, which is a common experience of ethnic minorities, and while stressful, was not related to mental health problems like depression, somatization, or self-critical perfectionism. In addition, individual acculturation level alone did not appear to be related to internalized mental health issues.

Table 3

Summary of the Hierarchical Multiple Regression Analysis for Variables Predicting Internalization

	R^2	Adjusted R^2	F ratio	β	*B*	*SEB*	*t*
Internalization Combined							
Step 1	.01	-.01	.61				
Perceived Prejudice				-.10	-.07	.09	-.78
Step 2	.04	.01	1.54				
Perceived Prejudice				-.06	-.05	.09	-.51
Mainstream Culture				-.20	-.14	.09	-1.56
Step 3	.05	.01	1.14				
Perceived Prejudice				-.06	-.04	.09	-.46
Mainstream Culture				-.17	-.12	.09	-1.33
Heritage Culture				-.08	-.04	.07	-.60
Step 4	.17	.12	3.03*				
(Intercept)					4.18	.73	5.73
Perceived Prejudice				.01	.01	.10	.08
Mainstream Culture				-.18	-.13	.09	-1.42
Heritage Culture				.02	.01	.07	.18
Communication Difficulties				-.37	-.22	.08	-2.88**

*p <.05 **p <.01

Qualitative Analysis

Insights into participants' reactions to taking this survey can be found when looking at the responses to the two optional open-ended questions following the survey. While only 39 out of the 60 participants chose to respond to the open-ended questions, the resulting responses could be categorized into several rich themes. When asked whether they thought they had exaggerated their difficulties, there were several types of responses (See Table 4.).The most frequent response to this question was "I do not believe I exaggerated my difficulties" (n = 23, 59%) followed by "I believe I did exaggerate my difficulties" (n = 13, 33%). A few participants endorsed "At times I believe I exaggerated my difficulties" (n = 3, 8%)

Table 4

Participants' Self-Reported Exaggeration of Difficulties

Code	Number of Responses That Include This Code	% of Respondents Who Endorsed This Response
I do not believe I exaggerated my difficulties.	23	59%
I believe I did exaggerate my difficulties.	13	33%
At times I believe I exaggerated my difficulties	3	8%

In response to the second question about whether participants thought they had downplayed their difficulties while taking this survey, several types of responses were given (See Table 5.) The most common response given was "I do not believe I downplayed my difficulties" (*n* = 26, 67%), followed by "I believe I downplayed my difficulties" *(n* = 6, 15%). Other responses included "At times I believe I downplayed my difficulties" (*n* = 4, 10%) or choosing to not answer the question at all (*n* = 3, 8%). Approximately ½ to 2/3 of the sample stated that they neither exaggerated nor downplayed their difficulties.

Table 5

Participants' Self-Reported Downplay of Difficulties

Code	Number of Responses That Include This Code	% of Respondents Who Endorsed This Response
I do not believe I downplayed my difficulties	26	67%
I believe I downplayed my difficulties	6	15%
At times I believe I downplayed my difficulties	4	10%
Did not answer	3	8%

Within each of the two open-ended questions, there were several reasons participants provided for each given response (See Table 6). One reason participants believed they did not exaggerate their difficulties was a "high level of academic stress" (n = 4, 40%), followed by "not meeting high expectations for self" (n = 2, 20%), and "choosing to downplay difficulties instead" (n = 2, 20%). Other relevant reasons were "expectations from parents/a feeling of duty" (n = 1, 10%) and "no need to amplify small issues" (n = 1, 10%).

Table 6

Reasons Given For Not Exaggerating Difficulties

Code	Number of Responses That Include This Code	% of Respondents Who Endorsed This Response
High level of academic stress	4	40%
Not meeting high expectations	2	20%
Choosing to downplay difficulties instead	2	20%
Expectations from parents/feeling of duty	1	10%
"No need to amplify small issues"	1	10%

The most common reason (See Table 7) why participants believed they did exaggerate their difficulties was "being their own worst critic" (*n* = 5, 38%), followed by "living a privileged life" (*n* = 4, 30%). Other varied but pertinent reasons, each given equal weight, included "displacement of insecurities onto 'easy' targets" (e.g., "being Indian"; *n* = 1, 8%), "personal needs and frustrations" (i.e., "loneliness, dissatisfaction, desire to be accepted and loved"; *n* = 1, 8%), "initial intensity of feelings" (which eventually subside), (*n* = 1, 8%), and "focusing on difficulties magnifies them" (*n* = 1, 8%).

Table 7

Reasons Given for Exaggeration of Difficulties

Code	Number of Responses That Include This Code	% of Respondents Who Endorsed This Response
Being their own worst critic	5	38%
Living a privileged life	4	30%
Displacement of insecurities onto "easy" targets	1	8%
Personal needs and frustrations	1	8%
Initial intensity of feelings	1	8%
"Focusing on difficulties magnifies them"	1	8%

When participants were asked for reasons why they thought they had downplayed their difficulties or not, reasons were more varied and rich for those who felt they *had* downplayed their responses when taking the survey. However, first, for the participants who reported not downplaying their difficulties, 13 out of 26 gave no reason (See Table 8). This was the most frequent response (50%). The second most frequent response given was "Personal Characteristics/Reasons" (e.g., being "dramatic," "setting unattainable goals for self," "hard worker"; $n = 4$; 15%). Similar to the most frequent response, the third most common was "Not really/Not always" with again no reason given ($n = 3$; 11%). Of the participants who did give reasons for not downplaying their difficulties, relevant themes included "Gave an honest report" ($n = 2$; 8%), "But maybe subconsciously I did" ($n = 2$; 8%), "Exaggerated instead" ($n = 1$; 4%), and "Possibly indirectly affected by race" ($n = 1$; 4%).

Table 8

Reasons Given for Not Downplaying Difficulties

Code	Number of Responses That Include This Code	% of Respondents Who Endorsed This Response
No reason given	13	50%
Personal Characteristics/Reasons	4	15%
"Not really/Not always" with no reason given	3	11%
Gave an honest report	2	8%
May have subconsciously done so	2	8%
Exaggerated instead	1	4%
Possibly unknowingly affected by race	1	4%

Of the 10 participants that reported downplaying their difficulties when answering the survey, the most frequent response given was "Yes" with no reason given (n = 3, 30%). However, the 7 remaining participants gave different reasons or expanded further regarding their downplaying, including "Prefer to not talk about difficulties" (n = 1; 10%), "Will seek out help if necessary" (n = 1; 10%), "The internal aspect of personality" (n = 1; 10%), "When looking at long-term goals" (n = 1; 10%), "Raised with the belief that real difficulties are tangible" (n = 1; 10%), "For my personal state and others in my world" (n = 1; 10%), and "'Difficulties' are sometimes not really difficulties" (n = 1; 10%). See Table 9 below.

Table 9

Reasons Given for Downplaying Difficulties

Code	Number of Responses That Include This Code	% of Respondents Who Endorsed This Response
"Yes" with no reason given	3	30%
Prefer to Not Talk About Difficulties	1	10%
Will Seek Out Help if Necessary	1	10%
The "Internal Aspect of Personality"	1	10%
Regarding Long-Term Goals	1	10%
Raised with the Belief That Real Difficulties are Tangible	1	10%
For my Personal State and Those In My World	1	10%
"Difficulties" Are Sometimes Not Really Difficulties	1	10%

Summary

Hypothesis 1, *a majority of the college students will be well acculturated*, according to their responses on a scale of 1-9 on the Vancouver Index of Acculturation (i.e., above a mean item score of 5), was retained.

Hypothesis 2 was not investigated due to the removal of the Perceived Parental Acculturation Scale from the study based on its low reliability value. In addition, the complete AFD scale could not be used as a dependent variable due to the low reliability of one of its subscales, the Cultural Values scale.

Hypothesis 3 was modified to *Participants who report high parent-child communication difficulties will report high internalization* (i.e., depression, trait anxiety, somatic complaints, and self-critical perfectionism). Hypothesis 3 was retained.

Hypothesis 4 was modified to *Participants who report moderate perceived prejudice will report lower internalization than those who report moderately high perceived prejudice*. While there was a moderate to moderately high level of perceived prejudice reported, there was no significant difference between the two reported levels of perceived prejudice with regard to internalization. Hypothesis 4 was rejected.

Hypothesis 5 was modified to *Individual acculturation level, perceived prejudice, and parent-child communication difficulties will predict internalization*. The full model was significant, but Communication Difficulties was the only significant contributor at the last step. Hypothesis 5 was retained.

Qualitative data added some richness and depth to the study's results. Responses were collected from 2 optional open-ended questions. Of the 60 participants who completed the survey, 39 participants completed this section. Thematic analysis of this qualitative data yielded several topics, including high levels of academic stress, feeling unable to meet high expectations held for oneself, feeling indebted to parents for sacrifices they made, the importance of hard work, gratefulness for living a "privileged" life, and protecting others and self by not discussing internal difficulties. Several participants were able to expand on these topics including making statements, such as being raised with the belief that real problems are "tangible" and "difficulties" not always being real when taken into perspective (thus, not worth worrying or discussing about). There was a suggestion of displacement of insecurities onto "being Indian."

Conclusion

The study attempted to examine several hypotheses in order to expand on the limited literature on internalized mental health issues in second-generation Asian Indians. This topic was studied from both quantitative and qualitative methods, showing some significant results. Chapter 5 discusses these findings, their implications for second-generation Asian Indian youth and their families, and connects the findings to the relevant literature currently available. The limitations of the study are also discussed in Chapter 5, along with suggestions for possible directions in future research in the growing interest in immigrant mental health.

Chapter 5: Discussion

This survey study explored acculturation-related factors and their contributions to inner emotional difficulties in second-generation Asian Indian college students. Quantitative data and answers to two open-ended questions were collected through an online survey. The data of three acculturation-related measures and four internalization measures showed good to excellent internal consistency reliability, and participants provided informative responses to two open-ended questions regarding their survey-taking experience. Quantitative findings appeared to be supported by qualitative data. This chapter discusses the significant findings within the context of the literature reviewed in Chapter 2, as well as additional literature that helped to better understand the findings. The study's limitations are noted, followed by recommendations for prevention and treatment of mental health concerns for second-generation Asian Indian youth, as well as suggestions for future research.

Participant Demographics

A young adult Asian Indian sample was studied because they face such issues as dating, marriage, individualism, and obedience to parents' wishes (Dasgupta, 1998). The participants were college students between ages 19 to 25. The literature notes that academic achievement does not equate with positive mental health adjustment in Asian Americans (Qin, 2008). Therefore, an undergraduate college student population was specifically chosen to study whether they would report, for example, difficult emotional experiences. They were also chosen to control for extraneous factors in sampling as might have been the case in a mixed sample of college students and community individuals. The latter type of sample would require comparisons between college students and community people, which was not the purpose of the study.

The main source of recruitment appeared to be the social networking website Facebook, which may show a bias towards individuals who are socially connected. College students who seek and provide social support may be less likely to engage in the isolation and withdrawal often manifested in internalized difficulties, such as depression (American Psychiatric Association, 2000).

Significant Findings

The purpose of the study was to explore factors that may affect the mental health of second-generation Asian Indian college students. There has been significant scholarly contributions since the 1980s on the acculturation, acculturative stress, and ethnic identity of Asian and Hispanic immigrants in the United States (e.g., Sodowsky et al., 1991); however, there are only a few studies on the effects of acculturation-related factors on the mental health of Asian Americans (Juang & Cookston, 2009; Qin, 2008), particularly Asian Indians (Atzaba-Poria et al., 2004; Mehta, 1998; Wang et al., 2012). The author utilized this limited literature to understand the results of the study and suggests that the findings may serve as stepping stones for further research on Asian Indian mental health.

Bicultural college student sample. The study supported the author's hypothesis that a majority of the college students would be well acculturated. With the exception of one participant, all were acculturated as well as supportive of their heritage culture (i.e., enculturated). Kim and Abreu (2001) describe enculturation as the process where individuals retain the norms of their heritage culture. The relatively acculturated sample was not surprising as all participants were either born in the United States or immigrated by the age of 5. However, it is notable that they also had a strong orientation towards their heritage culture. This adaptation mode is described by Berry (1997) as *integration*, by which personally selected aspects of both cultures are incorporated into one's life. Past research has found that those with a marginalized

acculturation style have psychological distress (Berry, 2001; Farver et al., 2002; Kim & Omizo, 2010). The participants of the present study, however, were integrated in their cultural adaptation. Therefore, their balanced cultural approach may have been protected from mental health problems.

Multidimensional models of acculturation (Berry, 1995; Roysircar, 2004) posit that positive mental health outcomes are correlated with bicultural adaptation, wherein individuals are competent in both the host culture and their culture of origin. Bi-dimensional acculturation has been defined as the process of maintaining an identity with one's culture of origin while adapting to the host culture, and also as the process by which individuals understand and incorporate values, beliefs, and behaviors of the host culture in the context of the culture of origin (Roysircar, 2004). LaFramboise, Coleman, and Gerton (1993) discuss the Alternation model, in which a person can alternate between each of two cultures depending on the context and not give one more preference over the other. It is notable that LaFramboise et al. believe that this model provides the individual with the highest chances for mental health well-being. The Alternation model's dimensions of bicultural competence include (a) knowledge of cultural beliefs and values, (b) positive attitudes toward both majority and minority groups, (c) bicultural efficacy, (d) communication ability, (e) role repertoire, and (f) a sense of being grounded. The alternation model of biculturalism presents a picture of a highly adaptable and cognitively flexible racial and ethnic minority individual. On the other hand, academic pressure and high expectations seemed to have been stressful for all students in the study.

Moderate levels of perceived prejudice. Participants indicated a moderate level of perceived prejudice. The mean score for 81 participants was 3.71 (on a 6-point Likert scale). Between two identified groups, one group scored low to moderate, and another group scored

moderately high. However, there was no significant difference for internalized mental health problems between these two groups. This finding of a non-significant relationship between perceived prejudice and internalized mental health problems for Asian Indian college students differs from those of studies on African Americans, whose experiences of racism have been related to both mental health and cardiac problems (Wyatt et al., 2003). Perception of prejudice is related to discrimination experience, a less negative experience than the impact of racism. While participants of the study faced challenges of prejudicial treatment, these did not manifest in self-reported negative emotional outcomes. In light of participants' reported positive orientation towards their heritage culture, it is possible that a culturally supportive environment, whether within the family, community, place of worship, or ethnic association, may have provided them with a sense of resilience and communalism and encouragement to move forward. The benefits of a culturally supportive environment where young people are given resources and support to develop a strong ethnic identity have been noted (Thomas & Choi, 2006). In the same respect, there is evidence that positive feelings towards one's ethnic group can buffer the negative effects of discrimination (Juang & Cookston, 2009). In addition, an *integrated* acculturation adaptation mode has been argued to be the most psychologically adaptive (Berry, 1997). The low rates of depression and somatization reported by the present study's Asian Indian college student sample do not support previous findings that matched if not surpassed, the rates seen in European Americans (Herzig, Roysircar, Kosyluk, & Corrigan, 2013 [American Muslim second-generation immigrant college students]; Lee, Lei, & Sue, 2001[Chinese and Korean]; Young, Fang, & Zisook, 2010 [Korean]).

Parent-child communication difficulties and internalization. While the hypothesis that a combination of several factors (i.e., individual acculturation level, perceived prejudice, and

parent-child communication difficulties) would contribute to internalization was supported by a significant full regression model, the only individual significant contributor was parent-child communication difficulties. The survey's Communication Difficulties items were a subset from the CD (Communication Difficulties) subscale of the AFD-YR (AFD-Youth Report) (Hwang, 2006). This subscale assesses a loss or breakdown in communication between a parent and a child verbally and/or nonverbally. An accumulation of poor parent-child communications results in family rupture as well as individual dysfunction (Hwang, 2006). Communication problems affect the parent-child relationship, as well as the individual child in the area of internalization. Considering the collectivist worldview and practices of Asian Indian immigrant culture, it can be understood why a family communication breakdown would negatively impact a young adult's well-being while he or she is still dependent on the family of origin. Hwang (2006) stated that communication difficulties with parents emerge in early adolescence and become worse in late adolescence.

Qualitative data from a participant provided a small window into the origins of emotional difficulties. This participant said, "I grew up with the belief that real difficulties are tangible. A lot of my struggles happen inwardly…and those struggles were not seen as important." This statement suggests that this particular participant may not have disclosed or discussed emotional difficulties with his or her parents. A potential breakdown in the parent-child bond could occur when the child feels that inner experience is invalidated by parents.

Trait anxiety and self-critical perfectionism. Four dimensions of internalization were assessed in participants: depression, trait anxiety, somatization, and self-critical perfectionism. While depression and somatization were minimally reported, trait anxiety and self-critical

perfectionism were far more present. Scores on trait anxiety ranged from minimal to moderately high, while scores on self-critical perfectionism ranged from minimal to extremely high.

These findings were supported by participants' responses to follow-up, open-ended questions at the end of the survey. Examples of such responses included: "I'm my own worst critic," "I feel as though I have not done well enough, even though most of my peers would say I exceeded expectations," and "I used to think of myself as a smart person, but that is not the case anymore." These findings support the growing literature on the maladaptive perfectionism in Asian Indians (Slaney et al., 2000; Wang et al., 2012).

It is notable that these second-generation college students, despite their reported academic pressures and high self-expectations, are coping relatively well. This adjustment may be understood through a lens of collective versus individualistic coping. The stress and coping research has emphasized a Western, individualistic worldview where methods of coping are intrapersonal and involve individual action (Kuo, 2013). However, for culturally diverse groups and individuals, there is growing evidence of collective coping, which has been defined as coping behaviors derived from collectivistic values or orientation (Yeh, Arora, & Wu, 2006). Collectivists have been found to generally hold "secondary-controlled coping goals" (Kuo, 2013, p. 382) consisting of efforts to change oneself while also using coping methods that involve ingroups for support, resources, reference points, emotion-focused coping, and avoidance coping. These methods lie in contrast to "primary-controlled coping goals" (seen in individualistic coping, p.382) involving attempts to modify the external stressor while also using individual-based, active, problem-solving strategies (Kuo, 2013). While this study did not specifically assess coping methods in the study's bicultural student sample, responses to the open-ended questions suggested attitudes of collective coping. For example, one participant

stated that he or she downplayed difficulties to protect one's personal state and that of others in one's network, and another stated that personal difficulties were nothing compared to what others went through in the world.

Dropout of participants. It seems noteworthy that there were 81 participants who began the survey, but only 60 actually completed it in full. Furthermore, it appears significant that 18 participants dropped out of the survey at one particular question: "I feel like there is a communication barrier between me and my parent(s)." Perhaps this discontinuance happened by chance, but in light of the finding that parent–child communication difficulties contributed significantly to inner emotional difficulties, this CD item may have evoked discomfort in the participants. In addition, several participants reported feeling that they may have minimized their difficulties while taking the survey. While these participants may have completed the survey, they may have underreported.

It is possible that cultural values of a collectivistic orientation contributed to the downplaying of difficulties reported by participants as well as the dropout of participants at a questionnaire item that referred to the parent-child relationship. For example, values such as deference to authority, filial piety, and avoidance of shame may have caused some participants to feel internalized conflict regarding reporting on the parent-child relationship (Iwamoto & Liu, 2010). Some participants may have felt that they would be betraying or disrespecting their parents by sharing particular personal and private information.

Qualitative Findings

Two open-ended questions at the end of the survey gained an understanding of participants' experience of answering the survey. There were common themes that emerged from the qualitative responses. These themes are framed with the available literature.

Exaggeration or downplaying of difficulties. Several reasons were given for exaggerating or downplaying difficulties (or neither). The majority of participants reported not downplaying their difficulties (67%) or exaggerating their difficulties (59%); However, more participants reported exaggerating their difficulties (41%) than downplaying them (25%), which contradicts findings on Asian people's tendency to minimize or deny difficulties so as not to be a burden on others (Kumar & Nevid, 2010). Perhaps the opportunity to explore anonymously and confidentially their inner experience was a welcome and unusual opportunity for U.S.-born second-generation Asian Indian youth. This finding suggests that perhaps second-generation Asian Indian college students may seek support, help, or psychological resources to address their particular difficulties, which was also the finding for immigrant second-generation Muslim college students, provided they found their therapists to be multiculturally competent (Herzig et al., 2013).

Reasons given for exaggerating difficulties. Various reasons were given by college student participants for the exaggeration of their difficulties. The most common reason was "being their own worst critic" (38%). This theme supported quantitative data on self-critical perfectionism in participants, the highest mean score among all forms of internalization. One participant acknowledged likely exaggeration of difficulties, however, with a qualifying statement: "But I guess compared to what people go through in the world, my difficulties are nothing." This comparative attitude about the relativity of difficulties can be a "pull yourself up by your bootstraps" philosophy that parents may have taught children. In the same vein, the second most frequent participant perspective was "living a privileged life" (30%), which is assumed to prevent difficulties. While it is important to look at the full picture of protective and risk factors, a lack of attention to personal emotional problems may leave Asian Indian children

feeling invalidated, while their parents may have felt this stoicism was necessary to stay focused on survival goals (e.g., academic and financial success) when immigrating to the United States (Fuligni, 1998; Nandan, 2005).

Other similar but less frequent themes, which seemed cultural in nature, included 'being Indian' and "Thinking about difficulties magnifies them; when I focus on them I can feel worse about them." These statements seem to make an argument for not giving thought to difficulties, which was also found by Kuo, Roysircar, and Newby-Clark (2006) in their study on cross-cultural coping, which showed that avoidance coping was a significant factor in the coping of international students from Asian countries. While rumination can be a negative thought process, the practice of denying one's difficulties likely provides temporary relief in the immediacy of a crisis situation.

Reasons given for not exaggerating difficulties. Participants gave several reasons for not exaggerating their difficulties. The dominant theme was high academic stress (40%). This theme was consistent with the literature on second-generation Asian Americans and the pressure they feel for high academic achievement (Farver et al., 2002; Fuligni, 1998; Roysircar et al., 2010). One college student stated, "I go to an academically challenging institution where everyone struggles to perform and 'beat the curve.'" The second most common theme was the inability to meet the high expectations that participants held for themselves (20%). This theme supports the self-critical perfectionism in participants. One participant lamented, "I try so hard to make things happen immediately even though I know they [positive outcomes] won't and then I get upset and disheartened when I shouldn't." With an equal percentage of responses (20%) as the high self-expectations theme, the participants chose to downplay difficulties. This theme will be described further in the next section. Other less common themes included expectations from

parents/feelings of duty (10%) and "No need to amplify small issues" (10%). It is interesting that the expectations participants held for themselves were cited more frequently than parental expectations in contributing to emotional difficulties. While the previous literature discussed the high expectations Asian parents hold for their children, the present study suggests that Asian Indian children internalize their parents' expectations to measure their achievements. Self-expectations are contextualized within the family and the collectivism of one's ethnic immigrant group. Asian Indian youth may feel a strong sense of obligation towards their parents and set high goals for themselves.

Reasons given for downplaying difficulties. There was no common theme among reasons for downplaying difficulties. Of the 10 participants who gave this response, 3 participants gave no reason. Other reasons included preferring not to talk about their difficulties, seeking help if necessary, and being raised with the belief that "real difficulties are tangible." In describing why they chose to downplay their difficulties, participants gave reasons such as "for my personal state and those in my world;" "I do not like talking about all the difficulties I face so if even I am not fine, I tell others I am;" and "sometimes those 'difficulties' aren't really difficulties." Repeating themes that were previously discussed, several participants used minimization as a way of protecting themselves and their loved ones, supporting the author's suggestion that difficult inner experiences are not deemed important in the contexts in which the participants live.

Reasons given for not downplaying their difficulties. There was no dominant theme for not downplaying difficulties. Of the 26 participants, 13 gave no reason. Themes among the responses included personal characteristics/reasons (15%), response "not really/not always" (i.e., downplaying; 11%), honest report given (8%), may have subconsciously downplayed (8%),

exaggerated instead (1%), and possibly unknowingly affected by race (1%). The fact that some participants were not able to clearly say that they did not downplay their difficulties perhaps suggested more downplaying than acknowledgment of difficulties.

Less common but noteworthy themes. Several participants addressed topics that were not covered by the most frequent themes but fit the literature on second-generation Asian Indians. These themes included feeling indebted to parents for the sacrifices that they made and the importance of hard work. One participant stated, "I understand why they have expectations and truly believe that it is my duty to fulfill them as a means of thanking them for all they have done for me." Roysircar et al. (2010) noted that Asian Indian college students expressed fear and shame regarding failing grades or not being able to graduate due to poor performance.

Limitations of the Study

Design. There were several limitations to the study. One limitation was the length of the survey for the targeted sample: undergraduate college students. Among eligible participants, 134 eligible students began the survey but only 81 continued after meeting the eligibility criteria. In addition, there was a selection bias as only undergraduate college students were eligible participants. There are second-generation Asian Indians who may not have chosen to go college or who were not able to gain admission. Thus, the results of the study cannot be generalized to all second-generation Asian Indians. There may have been another source of sampling bias. The social networking website, Facebook, was a primary source of recruitment, which may have excluded potential participants who are not on Facebook.

Problems with adapted measures. The original hypotheses could not be fully addressed because of the poor reliability of the Perceived Parental Acculturation Scale (PPAS) and the Cultural Values subscale (a subset of items) from the AFD-Youth Report. The parent–child acculturation gap was an important construct of the study, which could not be assessed. In

addition, children's perception of their parental acculturation pattern has been found to be influential (Ying & Han, 2007). As such, the PPAS consisted of 10 items that were adapted from the Vancouver Index of Acculturation (VIA). Participants were asked to report on their parents' acculturation patterns. However, the internal consistency reliability was unacceptable, and the measure was removed from the study. The adaptation of items from the VIA may have been poor. While children's perceptions of their parents are believed to impact their mental health, future studies should seek to directly obtain information about parental acculturation level from parents themselves (Ying & Han, 2007), as was done by Roysircar et al. (2009). In addition, the Incongruent Cultural Values (ICV) subscale is one of the two subscales (the other being Communication Difficulties [CD]) making up another essential construct to the study: acculturative family distancing (AFD; Hwang, 2006). A subset of items from the ICV scale was used for the study, but, again, the internal consistency reliability of the adapted ICV unacceptable and the measure was removed from the study. The adaptation of the ICV may have been poor. As such, the contribution of parent–child acculturation gap and the full AFD construct towards internalization could not be assessed.

Prevention and Treatment Recommendations

The results from this study add to the limited but growing research on the mental health issues of second-generation Asian Indian college students and the acculturation-related factors that may affect adjustment. Recommendations for both primary (global) and secondary (targeting an at-risk group) prevention and treatment are suggested.

Primary prevention. One area of primary preventative intervention is to provide educational and open discussion groups within cultural organizations, religious institutions, and colleges and universities. Education on issues that children of immigrants face can be provided to parents by trusted leaders, who have received training on the topic, or by care providers in the

community. Within colleges and universities, support groups facilitated by multiculturally competent practitioners in counseling centers can be held for students who are struggling with pressures from the expectations of their families and cultural communities. While many colleges and universities have South Asian/Indian organizations, these organizations often emphasize social activities such as dances, cultural festivals, fashion shows, and dinners. The international student and minority/multicultural student offices hold groups and student gatherings for orientation, leadership activities, and professional training for teaching and research assistantships. These meetings are not psychological in nature, as would be in the case of counseling outreach. As such, it is important for counseling centers to hold and advertise support groups throughout campuses. The language of the fliers and announcement must be carefully articulated so as to avoid suggestions of psychopathology. Also these prevention groups should be held outside of the counseling center, such as, in the campus union, classrooms, and residential halls, to prevent the stigmatization of psychologically-oriented conversations. Ethnic group peers, family, and relatives would not know that one is seeking counseling help because the person is not seen entering the counseling center. As much as it is possible, the groups held in public locations can be educated on confidentiality. However, it is also possible that some of the group members may know each other; thus, anonymity and public loss of face may be at risk. Confidential individual counseling can be offered as an alternative, and this option can be discussed in group as well as announced through the internet and on bulletin boards. Whether it is prevention outreach, secondary prevention for those who report difficulties, or individual counseling, practitioners conducting these services need to be educated on immigrant mental health and trained in multicultural competencies.

Open discussion groups can be held separately for parents and children, addressing

various topics, such as raising children in the United States, conflicts that children feel in balancing two cultures, cultural differences between parents and children, and communication difficulties between the two generations. These open forums could be videotaped, with parents viewing the children's videotapes and the children viewing the parents' videotapes. Cultural empathy might thus develop between parents and children. When such empathy is articulated by parents and children, then multiculturally competent mental health professionals could hold joint parent and children groups with the goal to increase family cohesion. These groups should be made available to those who are not actively involved in cultural or religious institutions; so educational institutions could offer these groups through their counseling services on campus or through outreach in community centers, such as the YMCA. It should be noted, however, that while children-specific, parent-specific, and parent–child groups could be beneficial, these public discussions may be perceived as going against the cultural value of keeping problems within the family or because of the stigma of mental health problems in Asian ethnic communities.

Information about the symptoms of mental health conditions, such as depression and anxiety, should be shared amongst parents and adolescents. Furthermore, this information can be shared by trusted physicians as well as school professionals. Asian Indian mental health professionals, such as the present author, can provide training or consultation to these professionals regarding immigrant issues. As was discussed in the literature, Asian Americans are often viewed as the "model minority" and internalized problems often do not come to the attention of teachers, especially if the students are performing well academically. While a significant level of internalization was not reported by study's sample, it appears that anxiety and self-critical perfectionism may be areas to give attention when working with Asian Indian youth (Castro & Rice, 2003; Wang et al., 2012; Yoon & Lau, 2008).

In addition, it would be beneficial for practitioners to work with a national organization for Asian American mental health (e.g., National Asian American Pacific Islander Mental Health Association) to draw attention to the mental health concerns of this population at a systemic level. As the fastest-growing ethnic group in the United States, with 74% of adults being foreign-born, there is a need to address Asian-American immigrant mental health concerns. The perception of Asian Americans as a model minority needs elaboration with the fact that hard-working achievement-oriented immigrants and their children experience difficulties too.

Secondary prevention. While a significant level of internalization was not reported by study's sample, it appears that anxiety and self-critical perfectionism may be areas to give attention when working with Asian Indian youth (Castro & Rice, 2003; Wang et al., 2012; Yoon & Lau, 2008). The high level of academic pressure reported by the Asian Indian college students in the present study and others (e.g., Sodowsky, 1991) should be known to college and university campus counseling services. Colleges with a high percentage of Asian Indian students, as in New England, may benefit from consultation with culturally competent mental health professionals in order to provide culturally sensitive treatment. This would hopefully prevent premature dropout and maximize therapeutic gain to students.

Future Research

Future research needs to investigate the mental health of second-generation Asian Indians, as related to family problems, mismatch between personal capacity and self-expectations, and self-stigmatization. Despite residence in the individualist culture of the United States, the Indian culture is collectivist and the individual needs to be understood within the context of his or her family and community. Studies that involve both parents and their young adult children would be optimal (as was done by Roysircar et al., 2010), but recruitment may pose difficulty. A study incorporating a short survey, followed by a focus group or an

interview with those who meet certain criteria of the study may allow particular individuals/families of clinical interest to receive further attention. A more general clinical measure may be helpful as well. While this study focused on internalized problems, there was no assessment of substance abuse and other externalized problems or of psychosis. In addition, because anxiety and self-critical perfectionism seem to show a presence, further assessment of different forms of anxiety (i.e., social anxiety, panic disorder, obsessive-compulsive disorder) would also be useful. In light of the significance of parent–child communication problems, specific areas of communication should be investigated in future studies. Due to the study's interest in several acculturation-related factors, parent-child communication was not studied in depth.

In addition, it is important to conduct research on the factors that contribute to positive adjustment. For example, participants reported a moderate level of perceived in the study. There should be an exploration of the factors that contribute to the resilience and perseverance of Asian Indian youth in the face of prejudice and other adversities.

Summary

The study explored the relationships of family and larger societal systems with the internalized mental health problems of second-generation Asian Indian college students. Parent–child communication difficulties were found to have a significant relationship with internalization problems. Moderate levels of perceived prejudice did not appear to have a relationship with assessed mental health problems. The Asian Indian youth reported an integrated mode of cultural adaptation, which may have equipped them with positive coping for both cultures in which they live. The full construct of AFD was not utilized; therefore, AFD relationship to family conflict and subsequent mental health problems for Asian Indian youth should be studied in future research.

The study revealed a primarily bicultural sample, with a positive orientation towards both heritage and mainstream cultures. This level of individual acculturation level was not found to have any relationship with internalization. An integrated acculturation style has been associated with positive adjustment in past studies (Berry, 1997; Farver et al., 2002; Kim & Omizo, 2010; Lafromboise et al., 1993; Roysircar, 2004). With regard to internalization problems, trait anxiety and self-critical perfectionism were present in the sample while somatization and depression were minimal. The low rates of depression do not match previous studies showing that depression is at a fairly significant level in second-generation Asian American young adults (Gee, 2004) and immigrant Muslim college students (Herzig, 2011).

Participants reported having high expectations for themselves for their academic achievement. While one participant reported feeling parental pressure, others did not state this reason specifically. Future studies should further explore both anxiety and self-critical perfectionism in second-generation Asian Indians. Furthermore, studies should make all attempts to recruit young adults who are not college students because these individuals should not be excluded from such mental health research on immigrants.

References

Abouguendia, M., & Noels, K.A. (2001). General and acculturation-related daily hassles and psychological adjustment in first- and second-generation South Asian immigrants to Canada. *International Journal of Psychology, 36*(3), 163–173.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480.

Asian Pacific Islander American Health Forum (APIAHF) (2006, August). *South Asians in the United States.* Retrieved 2008, October 22 from Web Site: www.apiahf.org/resources/pdf/South_Asians_in_the_United_States.pdf

Atzaba-Poria, N., Pike, A., & Barrett, M. (2004). Internalising and externalizing problems in middle childhood: a study of Indian (ethnic minority) and English (ethnic majority) children living in Britain. *International Journal of Behavioral Development, 38*(5), 449–460.

Atzaba-Poria, N., & Pike, A. (2007). Are ethnic minority adolescents at risk for problem behavior? Acculturation and intergenerational discrepancies in early adolescence. *British Journal of Developmental Psychology, 25,* 527–541.

Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, *46,* 5–34.

Berry, J. W. (2001). A psychology of immigration. *Journal of Social Issues, 57*(3), 615–631.

Berry, J. W., Kim, U., & Boski, M. (1988). Acculturation and mental health: A review. In P. Dasen, J. W. Berry, & N.Sartorius (Eds.), *Cross-cultural psychology and health.* Newbury Park, CA: Sage.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.

Castro, J. R., & Rice, K. G. (2003). Perfectionism and ethnicity: Implications for depressive symptoms and self-reported academic achievement. Cultural Diversity and Ethnic Minority Psychology, 9(1), 64–78.

Chang, E. C. (1998). Cultural differences, perfectionism, and suicidal risk in a college population: Does social problem solving still matter? Cognitive Therapy and Research, 22(3), 237–254.

Choi, H., & Dancy, B. L. (2009). Korean American adolescents' and their parents' perceptions of acculturative stress. *Journal of Child and Adolescent Psychiatric Nursing, 22*(4), 203–210.

Choi, J. B., & Thomas, M. (2009). Predictive factors of acculturation attitudes and social support among Asian immigrants in the USA. *International Journal of Social Welfare, 18*, 76–84.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159.

Conrad, M. M., & Pacquiao, D. F. (2005). Manifestation, attribution, and coping with depression among Asian Indians from the perspectives of health care practitioners. *Journal of Transcultural Nursing, 16*(1), 32–40.

Dasgupta, S. D. (1998). Gender roles and cultural continuity in the Asian Indian immigrant community in the U.S. *Sex Roles, 38*(11/12), 953–974.

Endler, N. S., Magnusson, D., Ekehammar, B., & Okada, M. (1976). The multi-dimensionality of state and trait anxiety. *Scandinavian Journal of Psychology, 17,* 81–96.

Farver, J. M., Bhadha, B. R., & Narang, S. K. (2002). Acculturation and psychological functioning in Asian Indian adolescents. *Social Development, 11*(1), 11–29.

Farver, J., Narang, S. K., & Bhadha, B. R. (2002). East meets west: ethnic identity, acculturation, and conflict in Asian Indian families. *Journal of Family Psychology*, *16*(3), 338–350.

Farver, J. M., Xu, Y., Bhadha, B. R., Narang, S., & Lieber, E. (2007). Ethnic identity, acculturation, parenting beliefs, and adolescent adjustment. *Merrill-Palmer Quarterly, 53*(2), 184–215.

Frey, M., & Roysircar, G. (2006). South and East Asian international students' perceived prejudice, acculturation, and frequency of help resource utilization. *Journal of Multicultural Counseling and Development, 34*, 208–222.

Frost, R., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*, 449–468.

Fuligni, A. J. (1998). The adjustment of children from immigrant families. *Current Directions in Psychological Science, 7*(4), 99–103.

Gee, C. B. (2004). Assessment of anxiety and depression in Asian American youth. *Journal of Clinical Child and Adolescent Psychology, 32*(2), 269–271.

Gotlib, I. H. (1984). Depression and general psychopathology in university students. *Journal of Abnormal Psychology, 93*(1), 19–30.

Green, D. E., Walkey, F. H., McCormick, I. A., & Taylor, A. J. W. (1988). Development and evaluation of the Hopkins Symptom Checklist with New Zealand and United States respondents. *Australian Journal of Psychology, 40*, 6–70.

Hahm, H. C., Lahiff, M., & Guterman, N. B. (2004). Asian American adolescents' acculturation, binge drinking, and alcohol- and tobacco-using peers. *Journal of Community Psychology, 32*(3), 295–308.

Herzig, B. A. (2011). *An examination of American-born Muslim college students' attitudes toward mental health.* (Doctoral dissertation). Retrieved from ProQuest, UMI Dissertations and Publishing. (Accession Order No. 3467009)

Herzig, B. A., Roysircar, G., Kosyluk, K. A., & Corrigan, P. W. (2013). American Muslim college students: The Impact of religiousness and stigma on active coping. *Journal of Muslim Mental Health*, *7*(1), 33–42.

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualisation, assessment and association with psychopathology. *Journal of Personality and Social Psychology, 60*, 456–470.

Hwang, W. (2006). Acculturative family distancing: Theory, research, and clinical practice. *Psychotherapy: Theory, Research, Practice, Training, 43*(4), 397–409.

Hwang, W., & Wood, J. J. (2009). Acculturative family distancing: Links with self-reported symptomatology among Asian Americans and Latinos. *Child Psychiatry Human Development, 40,* 123-138.

Hwang, W., & Wood, J. J. (2010). Acculturative family distancing (AFD) and depression in Chinese American families. *Journal of Consulting and Clinical Psychology, 78*(5), 655–667.

Iwamoto, D. K., & Liu, W. M. (2010). The impact of racial identity, ethnic identity, Asian values and race-related stress on Asian Americans well being. *Journal of Counseling Psychology*, *57,* 79–91.

Juang, L. P., & Cookston, J. T. (2009). A longitudinal study of family obligation and depressive symptoms among Chinese American adolescents. *Journal of Family Psychology, 23*(3), 369–404.

Kaling, M. (2011). *Is everyone hanging out without me? (and other concerns).* New York, NY: Crown Publishing.

Kim, B. S. K., & Abreu, J. M. (2001). Acculturation measurement: Theory, current instruments, and future directions. In J. G. Ponterotto, J. M. Casa, L. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 394–424). Thousand Oaks, CA: Sage.

Kim, B. S. K.**,** & Omizo, M. M. (2006). Behavioral acculturation and enculturation and psychological functioning among Asian American college students. *Cultural Diversity and Ethnic Minority Psychology, 12,* 245–258.

Kim, B. S. K.**,** & Omizo, M. M. (2010). Behavioral enculturation and acculturation, psychological functioning, and help-seeking attitudes among Asian American adolescents. *Asian American Journal of Psychology, 1,* 175–185.

Kim, S. Y., Chen, Q., Li, J., Huang, X., & Moon, U. J. (2009). Parent-child acculturation, parenting, and adolescent depressive symptoms in Chinese immigrant families. *Journal of Family Psychology, 23*(3), 426–437.

Knight, R., Waal-Manning, H., & Spears, G. (1983). Some norms and reliability data for the state-trait anxiety inventory and the Zung self-rating depression scale. *British Journal of Clinical Psychology, 22,* 245–249.

Kumar, A., & Nevid, J. S. (2010). Acculturation, enculturation, and perceptions of mental disorders in Asian Indian immigrants. *Cultural Diversity and Ethnic Minority Psychology, 16*(2), 274–283.

Kuo, B. C. H. (2013). Collectivism and coping: Current theories, evidence, and measurements of collective coping. *International Journal of Psychology, 48,* 374-388.

Kuo, B. C. H., & Roysircar, G. (2004). Predictors of acculturation for Chinese adolescents in Canada: Age of arrival, length of stay, social class, and English reading ability. *Journal of Multicultural Counseling and Development*, *32*(3), 143–154.

Kuo, B. C. H., Roysircar, G., & Newby-Clark, I. R. (2006). Development of the Cross-cultural Coping Scale: Collective, avoidance, and engagement coping. *Measurement and Evaluation in Counseling and Development*, *39*, 161–181.

LaFromboise, T., Coleman, H. L. K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin, 114*, 395–412.

Lee, J., Lei, A., & Sue, S. (2001). The current state of mental health research on Asian Americans. In N.Choi (Ed.), *Psychosocial aspects of the Asian-American experience* (pp. 159–178). New York, NY: The Haworth Press.

Lee, R. M., Su, J., & Yoshida, E. (2005). Coping with intergenerational family conflict among Asian American college students. *Journal of Counseling Psychology, 52*(3), 389–399.

Lippincott, J. A., & Mierzwa, J. A. (1995). Propensity for seeking counseling services: A comparison of Asian and American undergraduates. *Journal of American College Health*, *43*, 201–204.

Lo, Y. (2010). The impact of the acculturation process on Asian American youth's psychological well-being. *Journal of Child and Adolescent Psychiatric Nursing, 23*(2), 84–91.

Lorenzo, M. K., Frost, A. K., & Reinherz, H. Z. (2000). Social and emotional functioning of older Asian American adolescents. *Child and Adolescent Social Work Journal, 17*(4), 289–304.

Martuza, V. R., & Kallstrom, P. W. (1974). Validity of the State-Trait Anxiety Inventory in an academic setting. *Psychological Reports, 35*, 363–366.

Mehta, S. (1998). Relations between acculturation and mental health for Asian Indian immigrants in the United States. *Genetic, Social, and General Psychology Monographs, 124,* 61–78.

Metzger, R. L. (1976). A reliability and validity study of the State-Trait Anxiety Inventory. *Journal of Clinical Psychology, 32*(2), 276–278.

Nandan, M. (2005). Adaptation to American culture: Voices of Asian Indian immigrants. *Journal of Gerontological Social Work, 44*(3/4), 175–202.

Nelson, L. J., & Barry, C. M. (2005). Distinguishing features of emerging adulthood: The role of self-classification as an adult. *Journal of Adolescent Research, 20*(2), 242–262.

Okazaki, S. (1997). Sources of ethnic differences between Asian American and White American college students on measures of depression and social anxiety. *Journal of Abnormal Psychology, 106*(1), 52–60.

Orme, J. G., Reis, J., & Herz, E. (1986). Factorial and discriminate validity of the Center for Epidemiological Studies Depression scale (CES-D). *Journal of Clinical Psychology, 42*, 28–33.

Pawliuk, N., Grizenko, N., Chan-Yip, A., Gantous, P., Mathew, J., & Nguyen, D. (1996). Acculturation style and psychological functioning in children of immigrants. *American Journal of Orthopsychiatry, 66,* 111–121.

Qin, D. B. (2008). Doing well vs. feeling well: Understanding family dynamics and the psychological adjustment of Chinese immigrant adolescents. *Journal of Youth and Adolescence, 37*, 22–35.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385–401.

Rice, K. G., Choi, C., Zhang, Y., Morero, Y. I., & Anderson, D. (2012). Self-critical perfectionism, acculturative stress, and depression among international students. *The Counseling Psychologist, 40*(4), 575–600.

Romero, A. J., Carvajal, S. C., Valle, F., & Orduna, M. (2007). Adolescent bicultural stress and its impact on mental well-being among Latinos, Asian Americans, and European Americans. *Journal of Community Psychology, 35*(4), 519–534.

Roysircar, G. (2004). Counseling and psychotherapy for acculturation and ethnic identity concerns with immigrants and international student clients. In T. B. Smith, (Ed.), *Practicing multiculturalism: Affirming diversity in counseling and psychology* (pp. 248–268). Boston, MA: Allyn & Bacon.

Roysircar, G., Carey, J., & Koroma, S. (2010). Asian Indian college students' science and math preferences: Influences of cultural contexts. *Journal of Career Development, 36*(4), 324–347.

Roysircar, G., & Pignatiello, V. (2011). A multicultural-ecological tool: Conceptualization and practice with an Indian immigrant woman. *Journal of Multicultural Counseling and Development, 39*(3), 167–179.

Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology, 79*, 49–65.

Saran, R. (2007). Model minority imaging in New York: The situation with second generation Asian Indian learners in middle and secondary schools. *Anthropologist (Special Issue), 2*, 67–79.

Seiter, L. N., & Nelson, L. J. (2011). An examination of emerging adulthood in college students and nonstudents in India. *Journal of Adolescent Research, 26*(4), 506–536.

Slaney, R. B., Chadha, N., Mobley, M., & Kennedy, S. (2000). Perfectionism in Asian Indians: Exploring the meaning of the construct in India. *The Counseling Psychologist, 28,* 10-31.Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The Revised Almost Perfect Scale. *Measurement and Evaluation in Counseling and Development, 34,* 130–145.

Sodowsky, G. R., & Lai, E. W. (1997). Asian immigrant variables and structural models of cross-cultural distress. In A. Booth (Ed.), *International migration and family change: The experience of U.S. immigrants* (pp. 221–234). Hillsdale, NJ: Erlbaum.

Sodowsky, G. R., Lai, E. W. M., & Plake, B. (1991). Moderating effects of sociocultural variables on acculturation attitudes of Hispanics and Asian Americans. *Journal of Counseling and Development, 70*, 194–204.

Sodowsky, G. R., & Plake, B. (1991). Psychometric properties of the American-International Relations Scale. *Educational and Psychological Measurement, 51*, 207–216.

Spielberger, C. D. (1985). Assessment of state and trait anxiety: Conceptual and methodological issues. *The Southern Psychologist, 2*, 6–16.

Spielberger, C. D. (1989). *State-Trait Anxiety Inventory: Bibliography* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.

Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Suinn, R. M., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Asian Self-Identity Acculturation Scale: Concurrent and factorial validation. *Educational and Psychological Measurement,*

52, 1041–1046.

Thomas, M., & Choi, J. B. (2006). Acculturative stress and social support among Korean and Indian immigrant adolescents in the United States. *Journal of Sociology and Social Welfare, 33*(2), 123–143.

Tuan, M. (1999). Neither real Americans nor real Asians? Multigenerational Asian ethnics navigating the terrain of authenticity. *Qualitative Sociology, 22*(2), 105–125.

Uba, L. (1994). *Asian Americans: Personality patterns, identity, and mental health.* New York, NY: Guilford Press.

Varghese, A., & Jenkins, S. R. (2009). Parental overprotection, cultural value conflict, and psychological adaptation among Asian Indian women in America. *Sex Roles, 61*, 235–251.

Walkey, F. H., Aghanwa, H. S., & Taylor, A. J. W. (2002). The psychometric cross-cultural validation of the 21 item Hopkins Symptom Checklist. Pacific Health Dialogue, *9*, 214–218.

Wang, K. T., Puri, R., Slaney, R. B., Methikalam, B., & Chadha, N. (2012). Cultural validity of perfectionism among Indian students: Examining personal and family aspects through a collectivistic perspective. *Measurement and Evaluation in Counseling and Development*, *45*, 32–48.

Willgerodt, M. A., & Thompson, E. A. (2006). Ethnic and generational influences on emotional distress and risk behaviors among Chinese and Filipino American adolescents. *Research in Nursing and Health, 29*, 311–324.

Wyatt, S. B., Williams, D. R., Calvin, R., Henderson, F., Walker, E., & Winters, K. (2003) Racism and cardiovascular disease in African Americans: Evidence and

implications for the Jackson Heart Study. *American Journal of Medical Sciences 325*(6), 315–331.

Xie, D., & Leong, F. T. L. (2008). A cross-cultural study of anxiety among Chinese and Caucasian American university students. *Journal of Multicultural Counseling and Development, 36*(1), 52–63.

Yeh, C.J., Arora, A.K., & Wu, K. (2006). A new theoretical model of collectivistic coping. In P.T.P. Wong & C.J. Wong (Eds.), *Handbook of multicultural perspectives on stress and coping* (pp. 55-72). New York: Springer.

Ying, Y., & Han, M. (2007). The longitudinal effect of intergenerational gap in acculturation on conflict and mental health in Southeast Asian American adolescents. *American Journal of Orthopsychiatry*, *77*(1), 61–65.

Yoon, J., & Lau, A. S. (2008). Maladaptive perfectionism and depressive symptoms among Asian American college students: contributions of interdependence and parental relations. *Cultural Diversity and Ethnic Minority Psychology, 14*(2), 92–101.

Young, C. B., Fang, D. Z., & Zisook, S. (2010). Depression in Asian American and Caucasian undergraduate students. *Journal of Affective Disorders, 125*, 379–382.

Appendix A

A Survey for Asian Indian College Students

Note. The names of scales and item collections will not appear in the questionnaire that will be administered to participants. Copyrighted measures are not able to be included in this study.

Participants who complete this survey will have the option of entering themselves in a drawing to win a gift card from Amazon.com.

Please answer the following questions:

Are you an Asian Indian undergraduate college student who was either born or immigrated to the United States by age 5, lives in the United States, whose parents were both born in India, and who is between 19 and 25 years old?

If so, please continue with this survey. If not, you are not eligible to take this survey.

1. What is your gender?

Male Female

2. What is your age?

19 20 21 22 23 24 25

3. What religion do you follow, if any? (Please select one)

Hinduism Islam Christianity Sikhism Buddhism Jainism Zoroastrianism Judaism

4. What is your state of residence within the United States?

_____

5. What is the Indian regional background of your family? (e.g., Kerala, Gujarat, Bengal)

_____

Regarding INDIVIDUAL ACCULTURATION:

The Vancouver Index of Acculturation (VIA: Ryder, Alden, & Paulhus, 2000) is not able to be published in this study.

Regarding PERCEIVED PARENTAL ACCULTURATION:

The Perceived Parental Acculturation Scale, adapted from the Vancouver Index of Acculturation (VIA) is not able to be published in this study.

REGARDING PERCEIVED PREJUDICE:

The Perceived Prejudice Subscale (AIRS; Sodowsky & Plake, 1991) is not able to be published in this study.

REGARDING ACCULTURATIVE FAMILY DISTANCING:

The AFD Youth Report (AFD-YR; Hwang, 2006) is not able be published in this study.

Regarding DEPRESSION (i.e., significant sadness that impairs one's daily functioning):

The Center for Epidemiological Studies – Depression Scale (CES-D; Radloff, 1977) is not able to be published in this study.

Regarding TRAIT ANXIETY:

The State-Trait Anxiety Inventory, Form Y (STAI; Spielberger, Gorsuch, Lushene, Vagg, & Jacob, 1983) is not able to be published in this study.

Regarding SOMATIZATION:

The Somatic Distress Subscale of the Hopkins Symptom Checklist – 21 (HSCL-21; Green, Walker, McCormik, & Taylor, 1988) is not able to be published in this study.

Regarding SELF-CRITICAL PERFECTIONISM:

The Discrepancy Subscale of the Almost Perfect Scale-Revised (APS-R; Slaney, Rice, Mobley, Trippi, & Ashby, 2001).

FINAL OPEN-ENDED QUESTIONS:

125. Overall, do you think you have exaggerated your difficulties and to what extent? Why?

_____

_____

_____

_____

126. Overall, do you think you're downplaying your difficulties and to what extent? Why?

_____

_____

Appendix B

Informed Consent Document

Project Title:

Second-Generation Asian Indian College Students: A Family-Mediated Relationship Between Acculturation Adaptation and Mental Health

Principal Investigator:

Sheeba Thomas, M.A., M.S., LMHC, Psy.D Candidate

Address:

Antioch University New England
40 Avon Street
Keene, NH 03431

Phone:

603-283-2186

Email:

sthomas@antioch.edu

Faculty Advisor:

Gargi Roysircar, Ph.D.

Address:

Same as above

Phone:

Same as above

Email:

groysircar@antioch.edu

A Survey for Asian Indian College Students

My name is Sheeba Thomas and I am a doctoral candidate in the Department of Clinical Psychology at Antioch University New England. As a second-generation Asian Indian woman with a special interest in American-born Asian Indian youth, I hope to expand on the growing research regarding the mental health of Asian Indian children of immigrants. Thank you for your willingness to participate in this survey. Please read this form carefully as it relates to your rights as a research participant.

Purpose of this study.
The purpose of this study is to gain a better understanding of the influence of family and the larger societal environment on the mental health of second-generation Asian Indian college students.

How you will be asked to help.
You will be requested to answer questions (through an online survey) about how you relate to mainstream American culture, how you believe your parents relate to American culture, your perception of society's reactions towards you as an Asian Indian, and about your recent patterns of thinking, feeling, and behaving. This survey should take approximately 30 minutes, although some participants may find it will take either less time or more than 30 minutes.

Benefits of participation in this study.
Participating in this study has potential benefits. Participants may enter themselves in a drawing for a gift card from Amazon.com. Participants will be taken to a separate and unlinked webpage at the end of the study where identifying information can be entered for the purpose of obtaining the card, which will be automatically downloaded separately to ensure your responses are confidential.

Risks of participation in this study.
Your participation in this study involves minimal risk to you. Your privacy will be completely respected; you will not be asked to provide your name or contact information on the survey and your IP address will not be collected. Your participation in this study is completely voluntary and you may stop at any time you like.

It is not anticipated that participating in this survey will cause any stress. If you have concerns about your rights as a participant, you may contact Dr. Kevin P. Lyness, Chair of the Human Research Committee at 603-283-2149, or Dr. Katherine Clarke, Vice President of Academic Affairs, 603-283-2416. If you have any questions about this survey, please contact me at sthomas@antioch.edu.

Once again, your participation is greatly appreciated.

Sheeba Thomas