

**Acculturation and Perceived Family Support: Influences on Coping Among Asian
American College Students**

by

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Abstract

Acculturation among Asian Americans has become an increasingly important construct for researchers and professionals in psychology, particularly for the college-aged population. Acculturation has been studied extensively and linked to an array of indices, including how acculturation interacts with different coping. This study used Schwartz et al. (2010)'s framework of acculturation consisting of three main domains: cultural practices, cultural values, and cultural identifications and how the domains are related to coping. Among Asian American college students, perceived family support may be a moderator in how such individuals cope with different challenges. Therefore, this study examined how acculturation related to coping and how perceived family support moderated the relationship between acculturation and coping in a sample of 205 Asian American college students. Three hierarchical regressions were run for each domain of acculturation. There was a significant relationship between cultural practices and coping. There was also a significant relationship between horizontal-collectivism and coping. In addition, vertical-individualism and perceived family support significantly interacted in predicting coping, suggesting that the relationship between at least one type of cultural values and coping may differ as a function of family support. For cultural identifications, there were also relationships for cultural identifications and coping. The implications for Asian American college students and areas of further research for the field of counseling, universities, and multicultural psychology are discussed.

Keywords: acculturation, coping, family support

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Chapter I

Introduction

Research Background

America is increasingly becoming racially and ethnically diverse and by the year 2020, Asian Americans will reach approximately 20 million, as Asians are one of the fastest-growing ethnic group in the United States (U.S. Census Bureau, 2012). With the country's increasing diversity and Asian Americans representing over 29 distinct ethnic groups, health care professionals will need to acquire cultural competence to facilitate effective care and researchers will need to study cultural factors to better understand the psychological functioning of diverse individuals (U.S. Department of Health & Human Services, 2001).

There are a number of differences both between and within Asian American ethnic groups, including physical features, language dialects, cultural practices, values, and history of living in the United States. For example, while Chinese and Japanese Americans have typically been members of American society for several decades, Korean and Vietnamese Americans have immigrated more recently (Chang, 2001). As more Asian Americans are immigrating to the U.S. and becoming more diverse, one of the major areas of focus has been studies of acculturation.

Acculturation as a concept and as a phenomenon became an increasingly important construct for researchers in cross-cultural psychology in the early 20th century because social behaviorists began to recognize the significance of cultural contact between different ethnic groups (Trimble, 2003). From the perspective of cross-cultural psychology, acculturation is defined as culture change resulting from continuous, first-hand contact between two distinct cultural groups (Redfield, Linton, & Herskovits, 1936). One of the major goals of acculturation

studies is to seek explanations for the direct or indirect impact of acculturation on the social, cultural, and psychological behaviors of ethnic minority populations.

Acculturation on an individual level is referred to as psychological acculturation and pertains to the changes in attitudes and behaviors in individuals as a result of acculturation (Castillo, Conoley, & Brossart, 2004). How individuals see themselves as “being” in a new culture has been an important component when defining the models of acculturation (Berry, 2003; Padilla, 1980). More recently, research has shifted from acculturation as a linear, unidimensional model to a multidimensional model, in which individuals engage in the acculturation process in different ways (Castillo et al., 2004).

The unidimensional model assumes that change in cultural orientation takes place along a single continuum whereby an individual’s assimilation into the new culture is accompanied by the relinquishment of one’s self-identity with the original culture (Gordon, 1995). In contrast, recent research lends more support to acculturation models with a multidimensional perspective, which views acculturation to involve two independent dimensions: maintenance of the culture of origin and adoption to dominant culture (Chirkov, 2009; Kim & Abreu, 2001; Rudmin, 2009). In other words, the multidimensional approach creates a framework that provide individuals with the option of maintaining or neglecting their culture of origin while participating and acquiring values, attitudes, and behaviors related to the host culture (Cabassa, 2003). The multidimensional model of acculturation has been widely accepted and allows for a variety of cultures to coexist in the same geographical region and maintain their unique ethnic trends while functioning with other cultures within the mainstream society (Hraba, 1979). This view can be applied to the experiences of one of the fastest growing ethnic minority groups in the United States, Asian Americans.

Furthermore, acculturation has been linked to an array of indices and it is important to understand the interactional context in which it occurs, including how different domains of acculturation interact with coping (Crockett, Iturbide, Stone, McGinley, Raffaelli, & Carlo, 2007). Along with acculturation being examined as multidimensional, researchers have expanded on the operationalization of acculturation to include three important domains. These domains of acculturation that were studied in this proposed research are from Schwartz, Unger, Zamboanga, and Szapocznik's (2010) framework that acculturation consists of behavioral, cognitive, and affective domains. More specifically, behavioral acculturation includes cultural practices, cognitive acculturation includes cultural values, and affective acculturation includes cultural identifications. These acculturation domains may interact differently with coping, in particular how active, or not, one is in dealing with challenges in the environment. Relatedly, examining acculturation among ethnic minority groups has also brought forth the opportunities to understand the significance of family context and how family support may influence how individuals function and subsequently how individuals cope with their stressors (Crockett et al., 2007).

Statement of the Problem and Research Questions

The steadily increasing number of Asian American college students has approximately reached 815,000 in 2012 (National Center for Education Statistics, 2013) and continues to rise as immigrants move to the United States. With more Asian Americans entering college campus communities, they may face numerous challenges, including adjusting and transitioning to the new environment away from home, learning to develop relationships, particularly with individuals who are of different ethnic or racial backgrounds, and understanding how to handle stressors.

Contrary to the model minority myth, the idea that Asian Americans are perceived as a more successful racial group compared to other racial minority groups in the United States, Asian Americans experience similar challenges to the ones that their American counterparts experience throughout their undergraduate education, in addition to acculturation factors. Particularly, Asian American college students who are less acculturated to the dominant culture may find themselves isolated. Those who are accustomed to relying on family support may not have it anymore and may start to develop maladaptive forms of handling various situations (Sue & Sue, 2008). Asian students in general may have mental health needs that are not recognized due to existing barriers including underutilizing mental health services (Leong, Kim, & Gupta, 2011). Studies have shown that compared to other ethnic groups, Asians are the least likely to seek professional services; this can be attributed to factors such as the stigma and shame attached to such services (Sue & Sue, 2008), limited financial resources or lack of adequate insurance (Chin, Takeuchi, & Suh, 2008), lack of culturally appropriate services, and differing conceptions of mental health from the mainstream Western culture (Leong et al., 2011).

Despite the prevalence and importance of understanding issues associated with acculturation for Asian Americans college students and their relations to coping, there is a dearth of studies on this specific topic. Coping can be considered active (adaptive behaviors that manage problems) and avoidant (behaviors that ease emotional distress) and individuals may use various coping responses relative to their environment (Gloria, Castellanos, & Orozco, 2005). Mental health professionals and researchers aim to increase awareness of how acculturation interacts with how Asian American students cope when facing challenges; examples of such challenges involve the adaptive process of individuals' need for cultural adjustment and their efforts to resolve or minimize their cultural differences (Mena, Padilla, & Maldonado, 1987).

Other challenges specific to second-generation individuals may include feeling caught between opposing values of their parents and peers or experience conflict between their own values and ways of behaving and those of their less acculturated parents (Crockett et al., 2007).

Acculturation levels among Asians have also predicted differences in severity associated with personal problems (Yeh, 2003), depression, and suicide risk. Specifically, low acculturation to the host culture was associated with more severe, or a greater number of, overall challenges (Lau, Jernewell, Zane, & Meyers, 2002; Leong et al., 2011). Having more awareness may help to create culturally appropriate and effective treatments for Asian American students.

Within acculturation studies, social support is a critical component of how individuals may learn how to cope with their problems (Wong & Ujimoto, 1998); however, there have been opposing arguments acknowledging how acculturation and social support influences coping. For instance, several studies have found that Asian Americans with a high level of acculturation (i.e., acquiring American orientation and losing heritage orientation) are more likely to perceive less family support and be more independent, which may result in the use of active coping mechanisms (Taylor, Sherman, Kim, Jarcho, Takagi, & Dunagan, 2004). However, other studies suggest that Asian Americans with a low level of acculturation may also perceive less family support and may practice avoidant coping due to the concerns about the effect it would have on their relationships (Taylor et al., 2004). To help resolve some of the contradictions in previous research, the current study addressed the following research questions:

- How does acculturation relate to coping among Asian American college students?
- How does perceived family support moderate the relationship between acculturation and coping?

Operational Definitions

Acculturation was defined in the present study as participants' multidimensional experiences of their social and psychological exchanges that take place when there is continuous contact and interaction between different cultures. In this study, acculturation involved three domains (i.e., cultural values, cultural practices, and cultural identifications; Schwartz et al., 2010) and the extent that participants were acculturated was defined by scores on the (a) Stephenson's Multigroup Acculturation Scale (SMAS; Stephenson, 2000), (b) Individualism and Collectivism Scale (ICS; Triandis & Gelfland, 1998), and (c) Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992; Schwartz et al., 2010). The first measure assessed the extent participants participated in heritage and U.S. cultural practices, the second measure examined participants' cultural values, and the third measure assessed the extent that participants identify with heritage and U.S. culture.

Secondly, coping was defined as cognitive or behavioral efforts by individuals to attain control over external and/or internal demands that are evaluated as exceeding their resources (Lazarus & Folkman, 1984). A dimensional model of coping that was examined in this study within one end reflecting active coping and the other the end of the dimensional model reflecting avoidant coping. Active coping encompassed attempts by persons to be proactive in their stressful environment and involved planning and actively handling situations. Avoidant coping included use of strategies that focus away from both the sources of stress and reactions to it (Sheu & Sedlacek, 2004). The extent to which participants cope was defined by scores on the Brief Approach/Avoidance Coping Questionnaire (BACQ; Finset, Steine, Haugli, Steen, & Laerum, 2002), which measured how individual's cope to stressful situations and events.

Lastly, for the current study, support within the family unit served as a buffer against stress by preventing a situation from being appraised as stressful or facilitating healthy behavioral responses (Coehn & Willis, 1985). Perceived family support was defined by participants' self-report on the Perceived Social Support Scale-Family (PSS-Fa; Procidano & Heller, 1983).

Statement of Purpose

As the United States becomes substantially more diverse, the topic of multiculturalism has become as an essential component of counseling psychology practices, and research in understanding diverse ethnic and racial minority groups becomes imperative (Tao, Owen, Pace, & Imel, 2015). Expanding the scope of what we currently know about acculturation and examining variables from fields of social support and how individuals cope will enrich the studies of multiculturalism.

For this purpose, the present research focused on how acculturation, perceived family support, and coping interact with one another for Asian American college students. More specifically this study examined how acculturation related to coping and how perceived family support moderated the relationship between acculturation and coping. The hypotheses for this study are the following:

- There is a relationship between acculturation and coping among Asian American college students.
- For Asian American college students who report high levels of perceived family support, less acculturation to the U.S. culture across the three domains are associated with more avoidant and less active coping.

Significance of the Study

Although past research has made progress on analyzing relationships among variables on acculturation, coping, and family support, several shortcomings within the area of acculturation and influences on how students cope exist. There is a gap in literature investigating the influences of acculturation on coping among Asian Americans. Scholars also have not extensively explored how family support may be one of the processes that may help to facilitate various coping. Most research studies of acculturation, social support, and coping have focused on adolescents, whole families, and older adults (Noh & Kasper, 2003; Wong, Yoo, & Stewart, 2006) Additionally, past studies have mostly examined Latino and Mexican populations when considering the noted variables (Crockett et al., 2007).

Another issue is that existing studies have used older adults, whose acculturation experiences may be different compared to their younger counterparts. Older Asian adults may have limited education, limited English-speaking ability, and little or no work histories in the United States (Treas & Mazumdar, 2002). On the other hand, college age individuals who are in a developmental stage of their lives may face educational stressors, sociocultural challenges, and discrimination by their peers. While all age groups of minority cultures experience acculturation difficulties, these issues may be prominent and problematic for the adjustment of young adults. Another matter is the stigma Asian Americans have about seeking professional help (e.g., counseling services; Sue & Sue, 2008); therefore, it is important to better understand how Asian American college students are coping with stressors they face. This understanding may help counseling psychologists gain insight into how to tailor their therapeutic approaches with Asian American young adults.

Moreover, few studies take into account both acculturation and family support when examining coping, particularly within college aged populations. Therefore, this research contributes to the field of counseling and multicultural psychology by assisting helping professionals (e.g., counselors) who interact with Asian American college students in understanding how family support might moderate coping. The results from this study will shed light on how the value of family support continues to be of importance for Asian American college students. As Asian American students increase in number in the future, it is beneficial to understand the relationship between acculturation, family support, and coping, particularly among college students who are undergoing transitional experiences.

It was also designed to add to the existing body of knowledge regarding what defines acculturation in general, particularly focusing on the three domains that Schwartz et al. (2010) developed and to provide clarity in the conceptualization of acculturation. The study was also developed to offer a fuller picture of how Asian Americans respond to stress, mainly in understanding how acculturation and family support may relate to the way Asian American college students cope. The results will provide psychologists with more comprehensive knowledge about the various components of acculturation, particularly the differing effects cultural values, practices, and identifications had on Asian American college students. More importantly, identifying the significance of family support and potential benefits of the availability of family support for individuals can inform counselors' and psychologists' decisions regarding the types of interventions that may be useful during students' undergraduate career.

The research also has implications for the field of higher education, as there may be benefit in more thoroughly integrating culturally related concerns of Asian American emerging adults into university programs and services. Results also have implications for university

counseling centers and the benefits of training counselors about acculturation and the effects it has on coping, namely for universities with a high percentage of Asian American students.

Chapter II

Literature Review

Conceptualization of Acculturation

Cross-cultural psychology has illustrated connections between individuals' adjustment to new environments and stress and coping, namely in the context of acculturation and adaptation among ethnic minority populations (Berry, 1997). Acculturation is defined as the process of social and psychological exchanges that take place when there is continuous contact and interaction between different cultures (Berry, 1997; Redfield et al., 1936), implying that acculturation is a developmental and multidimensional experience (Cabassa, 2003).

The developmental process of acculturation does not occur at one, exact point in people's lives, rather the process develops across the life span and continues to evolve as individuals experience cultural exchanges. The multidimensional aspect of acculturation involves multiple areas of behavior and psychological experiences, specifically encompassing three acculturation domains (e.g., cultural values, cultural practices, and cultural identifications; Schwartz et al., 2010) that is further explained in this literature review. While acculturation may have a profound effect on a given group, individuals within that group vary in the extent to which they experience and adapt to the range of changes (Cabassa, 2003; Berry, 1997). The variation from individual to individual can be seen through multiple changes related to acculturation, including how such persons respond to stress through their coping and the amount of support they perceive from others.

In understanding the multidimensional approach of acculturation, Berry (1980, 2003) conceptualized four strategies that racial/ethnic minorities use throughout the acculturative process: (a) assimilation, (b) integration, (c) separation, and (d) marginalization. Assimilation

occurs when individuals absorb the culture of the dominant group while rejecting the indigenous culture. Individuals who engage in integration, also known as biculturalism, become proficient in the dominant culture, as well as retaining proficiency in the culture of origin. Separation occurs when individuals maintains the culture of origin and do not learn the culture of the dominant group. Lastly, individuals who engage in marginalization tend to not identify with either the dominant or indigenous cultures (Kim & Omizo, 2006).

However, Berry's acculturation categories model has been criticized because individuals are classified as high or low in categories and the cut point between high and low on each dimension is arbitrary and will differ across samples, making comparisons across studies challenging (Schwartz et al., 2010). Therefore, researchers have examined acculturation on a broad scale and contended that the process consists of three main domains: behavioral, cognitive, and affective. The framework was originally developed by Schwartz et al. (2010) and was used for the purposes of this study.

In particular, Chirkov (2009), Rudmin (2009), and Schwartz et al. (2010) have added to this framework by suggesting that behavioral acculturation includes cultural practices, cognitive acculturation involves cultural values, and affective acculturation includes cultural identifications. From this point forward, each domain of acculturation is referred to as cultural practices, values, and identifications. Schwartz and colleagues (2010) have recognized that cultural practices primarily focused on language use, media preferences, food preferences, and choice of friends; cultural values involved the individualism and collectivism constructs, in other words prioritizing one's own needs versus the needs of one's family and community; cultural identifications related directly to ethnic identity, or the extent to which one feels a sense of solidarity with the United States and/or one's heritage orientation.

In using this framework, of particular interest for this study, is Asian American college students and how their level of acculturation may affect how they cope throughout the adaptation process by relating acculturation conditions to outcomes. Acculturation conditions can include characteristics of the receiving society (e.g., American food, aiming for independence, and a strong attachment to American identity), characteristics of the society of origin (e.g., heritage foods, values of the specific culture, and a sense of belonging to heritage culture), perceived inter-group relations, and personal characteristics; more importantly, one condition is the family support, which can differ on an individual basis and influence various outcomes. Acculturation outcomes refer to the degree of success of acculturation; such outcomes include how a person copes and sociocultural competence in both heritage culture and American culture (Arends-Toth & van de Vijver, 2006). Therefore, acculturation may involve challenges for Asian Americans college students and family support may be a potential component that affects how individuals cope.

For many college students from immigrant families, acculturation is a central issue (Wang & Mallinckrodt, 2006). Acculturation issues are salient not only for individuals born outside the United States, often referred to as *first-generation immigrants*, but also for U.S. born individuals raised in immigrant households referred to as *second-generation immigrants* (Schwartz et al., 2010). The country of origin culture typically predominates in both the home and the local community for many individuals from immigrant families. Given this, second-generation immigrants, particularly college students are still likely to be socialized toward practices, values, and identifications typical of their heritage culture (Schwartz et al., 2010; Portes & Rumbaut, 2001).

For first-generation individuals, certain problems and issues related to migration such as premigration trauma, being undocumented, and not knowing the receiving country's language may be more of a problem compared to second-generation individuals (Portes & Rumbaut, 2001). However, more than likely, after a certain number of years living in the U.S., there may be similar challenges related to acculturation for both first and second-generation migrants. For visible-minority individuals such as Hispanic or Asian Americans, they may be asked, "Where are you from?" or complimented on their English fluency even if English is their first language, and such statements can be perceived as discriminatory (Schwartz et al., 2010). These minority individuals may therefore be compelled to self-reflect or consider what their ethnicity means to them and develop ways to respond to any type of stressor.

A major facet to the acculturation experience of both first and second-generation Asian American college students is the social support, namely from family members that is received. Social support has been recognized in terms of functional domains (e.g., instrumental and emotional support) and refers to any process through which social relationships might promote health and well-being (Cohen, Gottlieb, & Underwood, 2000). Asian Americans tend to come from a more collectivist view, emphasizing family and work group goals above individual needs or desires (Kim & McKenry, 1998). Individuals within a collectivist culture tend to do what is best for the community or family and work and support each other. Past research has demonstrated the role and importance of social support in facilitating the adjustment and assimilation of ethnic minority groups within the majority culture (Kim & McKenry, 1998).

In examining acculturation and family support within the context of general stress and coping theories, there has been research that coping strategies play a critical role in the stress-adjustment relationship (Crockett et al., 2007). The stress-adjustment relationship is described as

how individuals attempt to identify factors that buffers negative effects of stress once the stress is perceived. Crockett and colleagues (2007) found that among Mexican American college students, active coping was associated with better adjustment or lower levels of depressive symptoms, whereas avoidant coping predicted poorer adjustment or higher levels of depression. Relatedly, the results indicated that parental support and active coping buffered acculturative stress, suggesting that during high periods of stress, students do benefit from the availability of parent support and utilize active coping strategies (Crockett et al., 2007).

Coping, as defined by Lazarus and Folkman (1984), is the cognitive or behavioral effort by persons to exercise control over an external and/or internal demand that is appraised by individuals as taxing or exceeding their resources. Research on stress and coping has shown that one of the most effective means by which individuals cope with stressful events is through social support, namely family support (Taylor et al., 2004). The role of family support and its influences on how individuals cope may vary across cultures. For first and second-generation Asian American college students, the perception of family support may be connected to the recognition of being part of a collective and interdependent community to which they have their own responsibilities and obligations; such views may promote avoidant coping among Asian Americans (Taylor et al., 2004).

Likewise, diverse cultural groups may view coping as a regulatory process that can reduce negative feelings resulting from stressful events, such as learning how to adjust to a new environment and new living. Like other immigrant groups, Asian Americans suffer from acculturative stress, including but not limited to learning a new language, perceived discrimination, and problems seeking employment (Noh & Kasper, 2003); such stressors can be challenging and overwhelming to cope with throughout acculturation. Immigrants are most likely

to experience this form of stress, but it is also seen in later-generation college students (Mena et al., 1987). Children of immigrants acculturate more quickly than their parents and aspects of various stressors salient to college students may involve more of their cultural self-consciousness and the experience of conflicting value systems (Mena et al., 1987); thus, how an individual perceives these situations may affect one's ability to cope (Crockett et al., 2007).

Acculturation and Coping in the College Environment

Acculturation and coping have been found to be closely related, in which the process of acculturation can be broadly viewed as coping with a new and unfamiliar culture (Kosic, 2004). Acculturation changes could be physical, biological, political, economical and cultural, or a combination. The psychological experience of acculturation is an ongoing significant life role that involves numerous life changes; such changes are appraised by the individual and may be viewed as benign or as opportunities or alternatively as challenges (Berry, 2006; Smith & Khawaja, 2011). The aspects of acculturation salient to college students may relate less to English-language proficiency or unfamiliarity with prevailing cultural practices and more to cultural self-consciousness and the experience of conflicting value systems (Mena et al., 1987). Students may experience difficulties when they are caught between opposing values of their parents and peers or conflicts between their own values and those of their less acculturated parents (Crockett et al., 2007). In particular, Asian American students transitioning into college are faced with various changes in their lives in addition to the acculturation experience, including forming new relationships, developing their identity, and handling various stressors away from home. Therefore, coping strategies play a critical role in the stress-adjustment relation through students' college experience.

Theoretical models linking acculturation to coping have been proposed. A stress and coping framework for acculturation was first developed by Berry (1997; 2006) to explain the factors affecting acculturative stress and adaptation, drawing on broad models of stress and coping, such as Lazarus and Folkman's (1984) stress model (Smith & Khawaja, 2011). Another model includes the cultural maintenance hypothesis, which suggests that individuals from collectivistic cultures who adhere to Confucianism (where the family as the core unit of society is a basic tenet) and who fear "loss of face" (avoidance of deep personal disclosure) will be predisposed to use avoidant rather than active-focused coping (Noh, Beiser, Kasper, Hou, & Rummens, 1999). Other coping research has suggested that increased acculturation into the dominant society is related with increased coping competencies and empowerment; in other words, highly acculturated individuals have the psychological, social, and financial resources to cope proficiently (Roesch, Wee, & Vaughn, 2006).

Additionally, studies of college students have related different types of coping responses to academic challenges, interpersonal issues, and adversity-related experiences (Chataway & Berry, 1989; Crockett et al., 2007; Gloria et al., 2005). For this study, coping was examined as a continuum, in which individuals are more or less active/avoidant because individuals are able to have different ways of coping when faced with challenges. Generally, active coping reflects attempts by individuals to engage in an active and ongoing negotiation with the stressful environment (Compas, Connor-Smith, Saltzman, Harding Thomsen, & Wadsworth, 2001) and are expected to be more common in individualistic cultures (Chun, Moos, & Cronkite, 2006). Such coping refers to managing a problem through action and is thought to mitigate the debilitating effects of stress (Crockett et al., 2007). More active coping also tends to involve planning, suppression of competing activities, and being proactive in handling situations and has

predicted good psychological adjustment (Ward & Kennedy, 2001). However, avoidant coping is assumed to be less effective because the problem is ignored or repressed (Crocket et al., 2007) and are expected to be more common in collectivistic cultures (Chun et al., 2006). Avoidant coping encompasses behavioral disengagement, denial, and the inability to see the potentially positive aspects of change and has shown to be inversely related to psychological adjustment (Ward & Kennedy, 2001).

From the viewpoint of individualistic cultures, persons tend to have personality traits that reflect a greater sense of internal locus of control and cognitive ways oriented toward dispositional causal attribution (Chun et al., 2006). Along similar lines, such individuals are expected to use more behavioral and active-focused coping strategies that reflect their desire to influence the external environment. On the other hand, individuals identifying from collectivistic cultures are inclined to have more external locus of control, greater tendencies to attribute stressors to bad luck or fate, and are expected to rely more on avoidance-focused coping strategies that reflect their greater desire to control their internal states. Such individuals will most likely feel helpless and become reliant upon passive or avoidant coping ways (Chun et al., 2006).

Within the realm of acculturation, Asian American college students may experience challenges differently than their peers. For such individuals, avoidant responses may have some utility during primary appraisal of a situation by temporarily distancing themselves from an overwhelming stressor (Chun et al., 2006). However, Asian American college students may be unable to withdraw completely from the dominant culture and the sustained use of avoidant strategies is likely to be maladaptive (Ward & Kennedy, 2001). On a different note, Cross's (1995) research with East Asian students in the United States illustrated how employing

tendencies to practice more active coping facilitated positive psychological outcomes. It has been suggested that suppression of competing activities allows the individual to focus on the stressor, while planning permits one to formulate a strategy to deal with the stressor and active coping involves the implementation of that coping strategy (Ward & Kennedy, 2001).

Empirical research has also demonstrated the link between active coping strategies to better college adjustment in diverse ethnic groups (Zea, Jarama, & Bianchi, 1995) and to better psychological well-being among minority college students (Crockett et al., 2007). Similarly, active coping strategies may serve as a protective factor from the stressors attached to acculturation. Mena et al. (1987) investigated acculturative stress and coping strategies of multicultural undergraduates and found that late second- and third-generation students more often coped by taking action and sought out support by talking with others about the problem.

Effects of the Domains of Acculturation on Coping

Previously described in this study, Schwartz et al. (2010) developed a framework for acculturation, including three domains. Each of the domains are individually focused on behavioral acculturation, cognitive acculturation, and affective acculturation. In this study, behavioral acculturation was referred to as cultural practices, cognitive acculturation noted as cultural values, and affective acculturation as cultural identifications.

Impact of cultural practices on coping. The behavioral dimension of acculturation has been an important area of study and represents activities such as language use, choice of friendships, forms of dress, social interactions, and food preferences (Kim & Omizo, 2006). Most widely used acculturation measures primarily focus on items that assess different behaviors and practices that may have occurred throughout the cultural adaptation. In addition to the previous examples stated, other practices included in acculturation measures are type of music

listened to, ways of celebrating weddings and birthdays, gestures used in talking, and books and newspapers read. This finding may suggest that cultural behaviors or practices have been an important area of study among acculturation scholars (Kim & Abreu, 2001).

Behavioral acculturation, referred to as cultural practices in this study, tends to involve overt social behaviors and is employed to facilitate survival in the host country (Celano & Tyler, 1991). A key factor of acculturation is the adoption and integration into the dominant culture and there are specific American customs, habits, languages, and life styles that Asian Americans may have incorporated to become more acculturated into society. Such adaptations can occur easily, however there can also be culture conflict and stress related to intercultural interactions (Berry, 2006). There are group and individual differences in the ways in which people go about their acculturation, specifically cultural practices and how they achieve satisfactory or effective adaptations. It has been suggested that minority groups who are more acculturated and can comfortably engage or adapt to social behaviors and norms of the U.S. society, may be more able to effectively cope with stressors that they come across (Berry, 2006).

Cultural practices of acculturation can be related to sociocultural adaptation, which refers to how well an acculturating individual is able to manage daily life in the new cultural context. With time, sociocultural adaptation improves because individuals are able to repeatedly engage in the behaviors and practices of the dominant culture, therefore gaining cultural knowledge, being in more contact with persons of the majority culture, and developing positive intergroup attitudes (Berry, 2006). Individuals who tend to engage in the dominant cultural practices of the U.S. or who have acquired American orientations may be pulled to utilize active coping because such coping may be more prevalent or what seems to be the norm in an individualistic society (Yeh, Inman, Kim, & Okubo, 2006).

On the other hand, Asian Americans who tend to engage in cultural practices pertinent to their heritage culture may also tend to cope in ways that fit within their culture. Such individuals may appear to use avoidant coping strategies because their comfort level with dominant cultural practices may be low or they may not be aware of behavioral practices that can be used to cope with various stressors (Chataway & Berry, 1989). In a past study, Rhee, Chang, and Rhee (2003) found that Asian Americans who are less acculturated or who have not acquired American orientations reported engaging in behaviors that facilitated social isolation, social rejection, and poor interpersonal skills. This finding may suggest that Asian Americans who are less acculturated may have an overall lack of social connectedness with others outside of their family, which may be attributable to a cultural emphasis on familial cohesiveness and interdependence specifically within the family unit (Rhee et al., 2003). Rhee and colleagues (2003) suggested that Asian Americans who employ cultural practices that tend to segregate them from the dominant culture may lead them to an internalization of their issues and other avoidant coping.

Impact of cultural values on coping. Cultural beliefs, values, and traditions have the ability to mold the structure and content of oneself, particularly for ethnic minorities. One of the pertinent domains of cognitive acculturation that has been studied across general ethnic groups includes cultural values. Individualism-collectivism has been among the most commonly investigated cultural values. Individualism refers to prioritizing one's needs and desires over those of the groups to which one belongs (e.g., family, religion, community, nation) and collectivism refers to prioritizing the needs of others, such as one's family, over one's own needs (Schwartz et al., 2010). The concept of independent self-construal characterizes individualism and entails an individual's self-perception of independence, or considers oneself to be separate

from others, while interdependence self-construal considers oneself to be connected to others (Singelis, 1994).

Persons in an individualist culture aim to be unique or to “stand out,” to express their abilities or traits, and to resist social pressures; such ways of being in society lend individuals, particularly in the United States, to more than likely construct an independent self-construal (Cross, 1995). From this perspective, individuals are represented as separate from relationships or group memberships and principal components of this self-construal focus on individuals’ important traits, abilities, preferences, or attitudes (Cross, 1995).

On the other hand, members of collectivist societies tend to define the self primarily by referring to aspects of their social roles and memberships and to their relatedness to others (Cross, 1995). Therefore, such individuals are more likely to construct an interdependent self-construal, in which the principal factors are one’s relationships with important others and in-groups (Markus & Kitayama, 1991). The normative tasks of persons with an interdependent self-construal are to fit into relationships and to pursue a sense of belonging with others, namely by attempting to meet the needs of others and to promote group goals. However, it is important to keep in mind that individuals with an interdependent self-construal or collectivistic view do have their own conception of internal traits, characteristics, and preferences unique to them, but such private aspects may not be the driving forces to how they behave in different situations in collectivist cultures (Cross, 1995).

Cultural values have been noted to be challenging constructs to measure, however one way researchers have found to be useful in measuring values is by examining the vertical and horizontal varieties of collectivism and individualism (Triandis & Gelfland, 1998). Some cultures emphasize equality and others focus on hierarchy, therefore there are four broad types of

cultures that have been identified; these include horizontal-individualism, vertical-individualism, horizontal-collectivism, and vertical-collectivism. Triandis and Gelfland (1998) describe horizontal-individualism to include individuals who see themselves as autonomous and believe that equality between individuals is ideal, while vertical-individualism involve people who see themselves as fully autonomous, however recognize and accept that inequality exists. Horizontal-collectivism include individuals who view themselves as part of a group and perceive that all the members of that collective as equal and vertical-collectivism include people who see themselves as part of a collective group and are willing to accept hierarchy and inequality within that group (Triandis & Gelfland, 1998).

Such differences in cultural values may influence how the self-system challenges one's thinking about cognition, emotion, and behavior, particularly the preferred strategies of personal control and coping. Cross (1995) suggests that in an individualist culture, where uniqueness and self-expression are stressed, taking direct action, confronting others, or speaking up in one's own behalf are normative and these are preferred means of addressing a problem or difficulty. Such direct attempts to influence the existing situation through the individual's own efforts can also be viewed as action or active-oriented coping strategies.

As the United States has been repeatedly rated as one of the most individualistic and potentially least collectivistic countries in the world (Rhee et al., 2003), research on acculturation indicates how an individual's self-perception of independence and interdependence is similar to the individualism-collectivism constructs (Schwartz et al., 2010). Across racial/ethnic groups and across many countries of origin, Schwartz, Zamboanga, Rodriguez, and Wang (2007) found that individualism clustered with U. S. cultural practices and that collectivism clustered with heritage-cultural practices and with ethnic identity. Therefore, individualism and independence

might be considered as dimensions of U.S. cultural values, whereas collectivism and interdependence might be considered dimensions of heritage-cultural values (Schwartz et al., 2010).

Individuals from collectivistic backgrounds and with an interdependent self-construal are more inclined to adjust to social situations through strategies that focus on changing the self rather than changing the situation (Cross, 1995). They may prefer close alignment or aim to cultivate harmony with others, therefore such persons may exhibit avoidant coping strategies such as accepting the situation and changing one's own expectations and desires or attempting to reinterpret a situation in order to derive meaning from it. Cross (1995) suggested that collectivistic cultures may view individual wishes and goals as inferior to group goals and active coping strategies may be illustrated as selfish or as a threat to harmony in relationships.

Impact of cultural identifications on coping. There is a large literature base that has developed on ethnic identity (Phinney & Ong, 2007) and its relatedness to numerous psychosocial outcomes among ethnic minority persons. Ethnic identity has been conceptualized as a subjective domain of acculturation and it refers to the extent to which one is attached to one's ethnic group and views that group positively (Phinney & Ong, 2007). Ethnic identity involves an individual's acquisition and retention of cultural characteristics that are integrated into one's self-concept and it develops in the context of the individual belonging to a minority group within the larger society (Yoo & Lee, 2005). The development of ethnic identity also entails exploration of what his or her ethnic group means to the person, followed by affirmation, in which an individual values and feels attached to his or her ethnic group.

Research on Asian Americans has illustrated that ethnic minorities with a strong ethnic identity are more inclined to feel part of the U.S. society, maintain a positive sense of well-being

and high self-esteem, and be resilient to life changes and stressors (Yoo & Lee, 2005; Yip & Fuligni, 2002). Similar connections were demonstrated among samples of Asian American college students, in which ethnic identity is a significant predictor of high self-esteem, social connectedness, and a sense of belonging to the U.S. or dominant community (Yoo & Lee, 2005).

The ways in which individuals identify to their ethnic or racial background may influence their ability to use a variety of coping methods in how they protect themselves; in particular, past studies have illustrated opposing arguments on how effective different coping mechanisms are for Asian Americans with a strong ethnic identity (Noh & Kasper, 2003; Ward & Kennedy, 2001). For the purpose of providing a clear example of such arguments, within the context of effects of racial discrimination, prevailing research has demonstrated that individuals with a strong ethnic identity tend to utilize active coping strategies such as problem solving, cognitive restructuring, and social support (Skinner, Edge, Altman, & Sherwood, 2003). However, Yoo and Lee (2005) found that Asian Americans with stronger ethnic identity who employ active coping strategies, in fact, have a more challenging time when perceiving frequent encounters of racial discrimination. This result suggests that Asian Americans with a strong sense of their ethnicity are better able to externally attribute or directly deal with the discrimination when it occasionally occurs; however they may be overwhelmed when experiencing discrimination becomes a daily task, leaving active-type coping strategies to be not as effective. Therefore, it would be beneficial to examine and provide more clarity on how the ethnic identity factor within acculturation may affect ways in which individuals cope.

Relations between Acculturation and Family Support

The importance of family is a core social value among Asian Americans (Sung, 2000) and family tends to be the central location through which culture is defined and interpreted

(Luborsky & McMullen, 1999), as well as one of the sources of social support. Support may serve as a buffer against stress by preventing a situation from being appraised as stressful or by providing a solution to a stressor, minimizing its perceived importance, or facilitating healthy behavioral responses (Cohen & Willis, 1985).

Within the perspective of family support among the Asian American population, family-related concepts as filial piety and familialism contribute significantly to how individuals acculturate throughout their life. The concept of filial piety may play a critical role in how Asian Americans react to various stressors. Filial piety is a central family value to Chinese and Koreans and can be defined as the expression of responsibility, respect, sacrifice, and family harmony; it helps to regulate children's attitudes and behavior towards family-based support (Sung, 2000). Asian children are raised to respect their parents and elders and socialized to care for them as they age, and adult children are to be considerate and attentive to their parents' desires (Wong et al., 2006). Family support is an ongoing experience for Asian Americans beginning from a young age and this may suggest an increased level of attachment to family members compared to other cultural groups.

Relatedly, the relationship between acculturation and the cultural value of familialism has been known to be significant (Crockett et al., 2007). Familialism involves strong feelings of attachment, shared identity, and loyalty among family members (Crockett et al., 2007). While this concept has not been studied extensively among Asian Americans, there has been a recent study with Mexican Americans, another minority group that has been examined in acculturation literature. Studies on the relationship have illustrated that among Mexican Americans, lower levels of acculturation are associated with increased contact with social network members (e.g., nuclear family members, extended family members, friends and neighbors), more "reciprocal

helping” relationships, and increased dependence on nuclear family members for social support than more acculturated Mexican Americans (Chun & Akutsu, 2003). There may be similarities that exist between both minority groups and is worth further investigating for the Asian American group.

Past literature has also examined acculturation patterns in family socialization and parenting practices. Among immigrant families that undergo stressful processes associated with immigration and acculturation, the family’s ability to protect, guide, and nurture its members may be particularly crucial to an adolescent’s success (Santisteban & Mitrani, 2003). The way in which individuals perceive family support may be related to how a family functions and the different levels of acculturation within a household. Hovey and King (2000) found that adolescents in families showing low levels of family functioning or cohesion demonstrated higher acculturative stress due to family conflict, which resulted in an association with depressive symptoms. Based on how acculturated individuals become, young adults in college may feel that they need different levels of emotional connectedness, help, and support from their family members than prior to entering college (Harris & Molock, 2000). The importance of strong family functioning is evident when considering how complex processes of acculturation are complicated further within a family system (Santisteban & Mitrani, 2003).

Researchers have noted that Asian immigrant parents may maintain “traditional” collectivistic family values in new cultural environments (Shon & Ja, 1982; Chun & Akutsu, 2003). Asian immigrant parents tend to be authoritarian, as indicated by high involvement in their children’s lives and strict regulation of their children’s behaviors. With that, there are ensuing intergenerational differences or conflicts that can develop when Asian American youths adopt a more individualistic social orientation than their parents (Chun & Akutsu, 2003).

While these acculturation patterns within the family dynamic exist, such patterns are not entirely applicable for all Asian American families. For first-generation and older Asian adults, their experience upon immigrating to the United States from their country of origin entail the changed economic and social structures of the different countries, which may force them to integrate their values and expectations of family into the American culture (Wong et al., 2006); therefore the capacity of immigrant parents to develop bicultural competencies (i.e., adaptive skills to American culture while retaining native cultural values) are more prevalent. In understanding these cultural changes and different acculturation patterns among Asian families, seeking help only within the family may be a strong Asian value and can be a major determinant of Asian individuals' lifestyles (Wong et al., 2006).

Family Support and Coping

There is a significant amount of evidence illustrating the benefits of many forms of social support for both mental and physical health, as well as research on how individuals cope with stressful events through their social support; such support is effective in enhancing individuals' health because it acts as coping assistance (O'Brien & DeLongis, 1997). It is also established that social support plays a role in developing effective coping through assisting resiliency, has a buffering effect in dealing with stress, and aids positive mental health (Pinkerton & Dolan, 2007). In other words, global perceptions of support availability and support attempts from close others may influence the use of specific coping strategies, as well as the effectiveness of strategies employed (DeLongis & Holtzman, 2005).

Family support derives from the general model of social support, which proposes that interpersonal relationships enhance adaptation through provision of supportive functions that are of direct or indirect assistance for the coping process (Willis, Blechman, & McNamara, 1996).

Support from family tends to be pertinent for individuals with high levels of life stress and valuable for assisting with coping efforts. Research has shown how support serves as a buffering effect because it may prevent persons from the adverse impact of negative experiences (Willis et al., 1996). Cultures that emphasize close relationships and family bonds may influence how individuals deal with stress, such that the Western tradition of seeking help from others such as a psychologist may be culturally inappropriate from a collectivistic view in that behaviors, emotions, and thoughts of interdependent selves are seen as closely embedded with important others (Yeh & Wang, 2000; Yeh et al., 2006).

Asian American college individuals may also demonstrate their strong interconnectedness with their family by seeking help and support from within the family unit; such individuals may strive to maintain social harmony by meeting the needs and goals of others by adjusting their own behavior to the social context rather than trying to change the current problem (Yeh et al., 2006). More generally, Asian Americans who are less acculturated to the host culture may place cultural priority on close relationships, therefore when they experience stress, they may view the challenges as potentially impacting the system, not just the individual (Yeh et al., 2006). Therefore, Asian Americans may have to consider different interpersonal obligations and relationships when determining coping strategies that fit for them.

There have been both qualitative and quantitative evidence that examines how social support, particularly support from parents, is related specifically to adjustment in college for ethnic minority college students (Hurtado, Carter, & Spuler, 1996; Solberg & Villarreal, 1997; Dennis, Phinney, & Chuateco, 2005). Hurtado and colleagues (1996) found that while peer support was more closely related to social adjustment, parental support was a better predictor of emotional adjustment. Consistent with these findings, Rodriguez, Mira, Myers, Morris, and

Cardoza (2003) demonstrated how a supportive relationship with parents is important for the maintenance of psychological well-being for ethnic minority college students. In addition, researchers have found that aspects of parent relationships (e.g., open communication and unconditional support) are related to positive outcomes among college students, such as a better sense of social identity, social adjustment, personal-emotional adjustment, and goal commitment (Lapsley, Rice, & Fitzgerald, 1990).

Asian American college students who seek comfort from the family may rely more on coping mechanisms that are familial, relational, collectivistic, and intracultural than on individualistic ways of coping because they may view it as the family's responsibility to take care of one another (Yeh et al., 2006 & Yeh & Wang, 2000). Difficulties and problems, experienced by individuals who relate strongly with collectivist cultures, are not solely placed on specific individuals, but shared by the family as a whole due to the interdependent self being a critical part of other important relationships (Markus & Kitayama, 1991). Yeh, Inose, Kobori, and Chang (2001) also found that collective identity was a significant predictor of seeking help from family members for emotional problems. Individuals may feel less reluctant to seek support and guidance from family members who have a shared experience and can validate what they are going through, however Asian Americans may simultaneously choose to keep negative feelings, complaints, or strong emotions to themselves to not burden others (Yet et al., 2006).

Summary

In sum, acculturation appears to be an area of research that is pertinent for various minority populations, including Asian American college students. Though there are a number of factors associated with how individuals acculturate into the dominant society, the key components that Schwartz et al. (2010) recognized include cultural practices, values, and

identifications. Within the experiences of acculturation for Asian American college students, they may face challenges associated with the adjustment of interacting with different cultures and their coping may play a significant part in how they approach each of the new experiences. For the three domains of acculturation, the hypothesis for this study is that there is a relationship between acculturation and coping. Additionally, among Asian American culture, family support is a critical part of how individuals adjust and experience acculturation. Thus, the second hypothesis for this study is that for Asian American college students who report high levels of perceived family support, less acculturation to the U.S. culture across the three domains are associated with more avoidant and less active coping.

An illustration of the potential relationships among the study's variables is shown in Figure 1. The results from the study aimed to facilitate a better understanding of how the interaction among cultures affects Asian American college students, their use of family support, and relationships to coping.

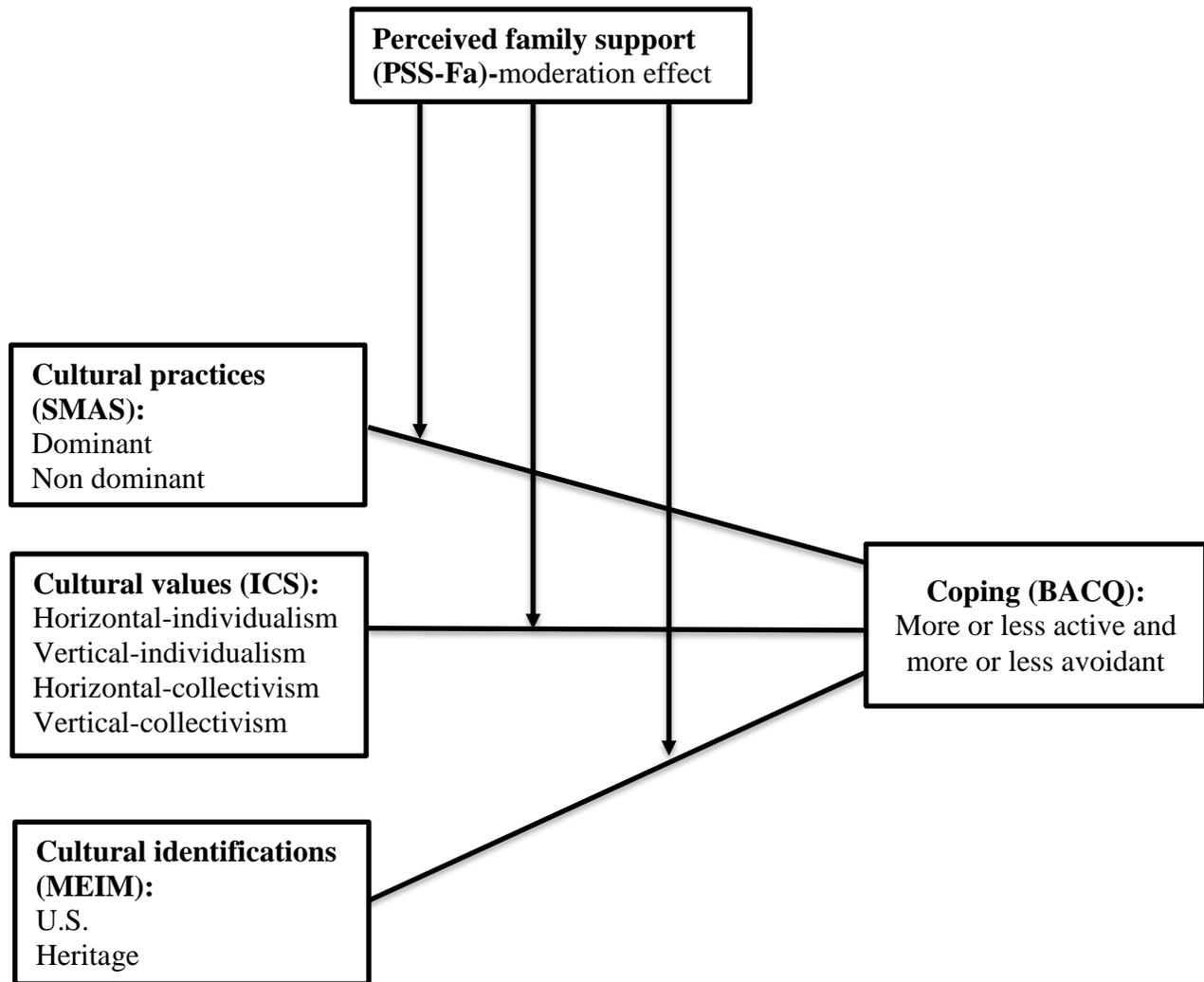


Figure 1. Model of the potential relationships among the study's variables.

Chapter III

Methods

This study was designed to collect survey data pertaining to acculturation and coping among Asian American college students, as well as to examine the extent to which perceived family support may affect the relationship. Data were collected regarding the three domains of acculturation on both U.S. and heritage culture, level of perceived family support, and coping. The population of interest, measures used, and study design and procedures are further discussed.

The present study aimed to address the following two research questions: How does acculturation relate to coping among Asian American college students? How does perceived family support moderate the relationship between acculturation and coping? For the investigation, multiple measures of acculturation levels across the three domains of affective, cognitive, and behavioral acculturation served as independent variables. There was one moderator variable: perceived family support. The dependent variable is coping. The instruments were in random order and administered through Qualtrics on the computer screen to prevent order effects: Demographics Questionnaire, Stephenson's Multigroup Acculturation Scale, Individualism and Collectivism Scale, Multigroup Ethnic Identity Measure, Brief Approach/Avoidance Coping Questionnaire, and the Perceived Social Support of Family scale.

Participants

After gaining approval from the Institutional Review Board, participants were solicited through a recruitment email to leaders of Asian American student organizations and group leaders of ethnic churches. The contact persons were asked to distribute the survey link to the undergraduate students in the organization, as well as any other individuals the leaders may know that would qualify to participate in the study. The email stated that the study will examine

the relationship between acculturation level, level of perceived family support, and coping in college students. The study asked for individuals who were at least 18 years of age, attaining an undergraduate degree, and identified as Asian American; this study excluded international students.

A total of 205 participants responded to all measures and were included in the analysis. A total of 73 participants dropped out of the study and were not included in the analysis. An a priori power analysis revealed that a sample size of a minimum of 150 participants was needed to achieve 80% power for finding a medium effect size when using an alpha level of .05. The current study sought to achieve a sample representative of the Asian American population among undergraduate universities across the U.S. In terms of age, majority of participants (90.2%, $n = 185$) reported being between the ages of 18 and 21, whereas 9.8% ($n = 20$) reported being 22 and older. In terms of gender, 75.1% ($n = 154$) were female, while 22.9% ($n = 47$) were male.

When asked their identified ethnicity, 31.7% ($n = 65$) identified as Chinese-American, 15.6% ($n = 32$) as Asian-American, 10.7% ($n = 22$) as Vietnamese-American, 9.3% ($n = 19$) as Korean-American, and 7.8% ($n = 16$) as Filipino-American. The remaining participants identified as various ethnicities, including Japanese-American, Indian-American, Taiwanese, biracial or multiracial, and other specific subgroups of previously mentioned ethnicities. When asked their school-year classification, 28% ($n = 57$) identified as first-year, 22% ($n = 45$) as second-year, 26% ($n = 53$) as third-year, and 24% ($n = 49$) as a fourth-year. Demographic characteristics of participants are further delineated in Table 1.

Table 1

Demographic Characteristics of Participants

Variable	Sample <i>n</i>	%
Age		
18	42	20.5
19	50	24.4
20	55	26.8
21	38	18.5
22	13	6.3
23	4	2.0
24	1	.5
25	1	.5
34	1	.5
Ethnicity		
Chinese-American	65	31.7
Asian-American	32	15.6
Vietnamese-American	22	10.7
Korean-American	19	9.3
Filipino-American	16	7.8
Other	12	5.9
Taiwanese	10	4.9
Biracial or Multiracial	10	4.9
Multi-Asian	9	4.4
Indian-American	5	2.5
Japanese-American	3	1.5
Did not respond	2	1.0
Gender		
Female	154	75.1
Male	47	22.9
Other	2	1.0
Did not respond	2	1.0
School year		
First year	57	28
Second year	45	22
Third year	53	26
Fourth year	49	24

Information on generation status of participants and their parents living in the U.S. was gathered, as well as language spoken at home. In terms of participants' generation status, majority of participants (75.1%, $n = 154$) identified being second-generation, followed by 21%

($n = 43$) as first-generation. Participants mostly identified their parents as first-generation (91.2%, $n = 187$), followed by second-generation (3.4%, $n = 7$) and each parent from different generations (2.4%, $n = 5$). The identified languages spoken at home were the highest for multiple languages (35.1%, $n = 72$) and such languages were typically both English and an Asian dialect. Other languages spoken at home included English (26.8%, $n = 55$), Chinese (17.6%, $n = 36$), Korean (9.3%, $n = 19$), and Vietnamese (5.4%, $n = 11$). Generation status of participants and their parents and language spoken at home are presented in Table 2.

Table 2

Generation Status and Language at Home

Variable	Sample n	%
Generation of Participant		
First	43	21.0
Second	154	75.1
Third	3	1.5
Fourth	2	1.0
Fifth	1	0.5
Generation of Parents		
First	187	91.2
Second	7	3.4
Third	2	1.0
Fourth	1	.5
Fifth	1	.5
Different generation	5	2.4
Did not to respond	2	1.0
Language Spoken at Home		
Multiple Languages	72	35.1
English	55	26.8
Chinese	36	17.6
Korean	19	9.3
Vietnamese	11	5.4
Tagalog	4	2.0
Other	5	2.4
Japanese	1	0.5
Did not to respond	2	1.0

For the 73 participants that were not included in the analysis, 31 identified as international students, therefore they were directed to the end of the study and were given the opportunity to enter the drawing for one of three \$15 Amazon gift cards. The remaining 42 participants dropped out of the study and did not complete the Qualtrics survey. Demographic information (i.e., age, gender, ethnicity, school year, generation of the participant, generation of participants' parents, language spoken at home) was gathered on the 42 participants.

Demographic information of participants not included are presented in Table 3.

Table 3

Demographic Characteristics of Participants Not Included

Variable	Sample <i>n</i>	%
Age		
18	11	26.2
19	15	35.7
20	8	19.0
21	6	14.3
22	2	4.8
Gender		
Female	27	64.3
Male	13	31.0
Did not respond	2	4.7
Ethnicity		
Asian-American	6	14.3
Biracial or Multiracial	1	2.4
Chinese-American	14	33.3
Filipino-American	4	9.5
Indian-American	2	4.8
Korean-American	3	7.1
Multi-Asian	4	9.5
Other	2	4.8
Taiwanese	2	4.8
Vietnamese-American	2	4.8
Did not respond	2	4.8

Table 3 (continued)

Demographic Characteristics of Participants Not Included

Variable	Sample <i>n</i>	%
School Year		
First	7	16.7
Second	28	66.6
Third	2	4.8
Fourth	5	11.9
Generation of Participant		
First	7	16.7
Second	28	66.6
Third	7	16.7
Generation of Parents		
First	36	85.7
Second	4	9.5
Different generations	2	4.8
Language Spoken at Home		
Chinese	8	19.0
English	11	26.2
Korean	2	4.8
Multiple Languages	16	38.0
Other	1	2.4
Vietnamese	2	4.8
Did not respond	2	4.8

Measures

Demographic Questionnaire. The demographics questionnaire asked participants to fill out the following information about themselves (see Appendix A): age, gender, identified ethnicity, language spoken at home, school-year classification, generation of participant living in the U.S., number of years participant has resided in the U.S., and generation of parents living in the U.S.

Stephenson's Multigroup Acculturation Scale. Stephenson's Multigroup Acculturation Scale (SMAS; Stephenson, 2000) was used to assess heritage and U.S. cultural practices (see

Appendix B). The 32-item measure consisted of two subscales: Heritage-Culture Practices (17 items) and U.S. Culture Practices (15 items). Heritage-Culture Practices included use of one's heritage language and association with heritage-culture friends and romantic partners. Sample items included "I listen to music of my ethnic group." U.S. Culture Practices included use of English and association with U.S. friends and romantic partners. Sample items included "I speak English at home." The SMAS items were rated on a 4-point Likert scale, ranging from 1 (*false*) to 4 (*true*).

Based on a large sample of both student and nonstudent individuals, Stephenson (2000) found that the SMAS has high reliability with coefficient alpha of .86 and item total correlations ranged from .51 to .87. From another sample of undergraduate students, Stephenson (2000) found that through correlational studies that the SMAS demonstrated high convergent and discriminant validity in relation to two other acculturation instruments, the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuéllar, Arnold, & Maldonado, 1995) and the Bidimensional Acculturation Scale for Hispanics (BAS; Marín & Gamba, 1996).

Individualism and Collectivism Scale. The Individualism and Collectivism Scale (ICS; Triandis & Gelfland, 1998) was used to assess cultural values (see Appendix C). Individualism and collectivism are subdivided into horizontal and vertical variants, such that there are four types of cultural values as outcomes: horizontal individualism-collectivism and vertical individualism-collectivism. *Horizontal individualism* refers to competing against friends and coworkers; *vertical individualism* refers to feeling separate from, and not required to defer to, parents or authority figures; *horizontal collectivism* refers to feeling connected to, and responsible for the well-being of, one's friends and coworkers; and *vertical collectivism* includes having respect for hierarchical relationships, such as parent-child or teacher-student (Schwartz et

al., 2010; Triandis & Gelfland, 1998). Horizontal and vertical individualism and collectivism was measured using the 16-item ICS that was divided into four-item scales. Responses were rated on a 9-point Likert scale, ranging from 1 = *never or definitely no* to 9 = *always or definitely yes*. Sample items included “I rely on myself most of the time,” “I rarely rely on others,” and “competition is the law of nature.” From a sample of undergraduate students, Schwartz et al. (2010) found internal consistency coefficients of the four scales to range from .74 to .78.

However, the vertical-collectivism scale was not included in this study due to an error in that the scale was not inputted into Qualtrics. The original version of ICS included a total of 16 questions, however the modified version of ICS for this current study did not include the four questions that measured the vertical-collectivism subscale. Examples of these questions were: “Parents and children must stay together as much as possible;” and “It is my duty to take care of my family, even when I have to sacrifice what I want.”

In addition, the Likert-type scale that was on the original ICS was a 9-point scale, ranging from 1 = *never* to 9 = *always or definitely*. However, the Likert-type scale used for the current study was a 4-point scale, ranging from 1 = *never* to 4 = *almost always*. Due to the similarities of the original and modified scales in that both Likert-type scales included the range of options from *never to always* or *almost always*, these analyses included the ICS.

Multigroup Ethnic Identity Measure. Versions of the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992; Schwartz et al., 2010) were used to assess both heritage and U.S. cultural identifications (see Appendix D). To assess heritage-culture identifications, the original 12-item version of MEIM was used. It was designed to assess three components of ethnic identity: (a) affirmation and belonging (5 items), (b) ethnic identity achievement (7 items), and (c) ethnic behaviors (2 items). Items were rated on a four-point scale ranging from 1 =

strongly disagree through 4 = *strongly agree*, so that high scores indicate strong ethnic identity. Sample items include “I think a lot about how my life will be affected by my ethnic group membership” and “I am happy that I am a member of the ethnic group I belong to.”

In order to assess U.S. cultural identification, the MEIM was adapted so that “the U.S.” or “American” was inserted into each item in place of “my ethnic group” (Schwartz et al., 2010; see Appendix E). Participants were asked to respond to the same MEIM items, this time referring to the United States (Schwartz et al., 2010). The scores on both the original and modified version indicated high reliability of .90 with college students (Phinney, 1992, Schwartz et al., 2010). The measure also yielded moderately strong construct validity for both versions with significant intercorrelations among the three sub-scales with a 0.56 to 0.48 range at the $p < 0.01$ level (Lee & Yoo, 2004).

Brief Approach/Avoidance Coping Questionnaire. The Brief Approach/Avoidance Coping Questionnaire (BACQ; Finset et al., 2002) was a 12-item measure that provides a general measure of the individual’s approach to stressful situations and events (see Appendix F). Items consisted of statements such as, “I say so if I am angry or sad” and “I put my problems behind me by concentrating on something else.” Items are rated on a 5-point scale ranging from 1 = *disagree completely* through 5 = *agree completely*. The BACQ score was calculated by summing all the items, with reverse scoring of the six avoidance items and the range score is from 12 (low approach/high avoidance) to 60 (high approach/low avoidance). The internal consistency of the 12-item BACQ was assessed in 299 primary care patients with a satisfactory Cronbach’s alpha of 0.68. The measure also yielded adequate concurrent validity with significant correlations between BACQ indexes to corresponding COPE (Carver, Scheier, & Weintraub, 1989) sub-scales with a 0.34 to 0.57 range at the $p < 0.001$ level.

Perceived Social Support of Family Scale. The Perceived Social Support Scale-Family (PSS-Fa; Procidano & Heller, 1983) was a 20-item self-report checklist that measured perceived support from family (see Appendix G). Items consisted of statements such as, “My family is sensitive to my personal needs” and scores ranged from 0 to 20. Higher scores indicated perceptions of more social support, whereas lower scores indicated perceptions of less social support (Castillo et al., 2004; Procidano & Heller, 1983). Based on four samples, including college students, high school girls, and male multiple sclerosis patients, PSS-Fa demonstrated high internal consistency with Cronbach alphas ranging from .88 to .91 (Procidano & Heller, 1983; Procidano, Guinta, & Buglione, 1988; Castillo et al., 2004). The measure also yielded a high test-retest reliability of $r = .83$ after 1 month for a normative sample of college students (Procidano & Heller, 1983). A summary of each of the measures used in this study is presented in Table 4.

Table 4

Summary of Each Measure

<i>Measure</i>	<i>Subscales</i>	<i>Number of items</i>	<i>Description</i>
Demographic Questionnaire		8	Information pertaining to each participant
Stephenson’s Multigroup Acculturation Scale	Dominant cultural practices Non-dominant cultural practices	32	Cultural practices (e.g., language, music friends)
Individualism and Collectivism Scale	Horizontal-individualism Vertical-individualism Horizontal-collectivism Vertical-collectivism	16	Cultural values and divided into four types
Multigroup Ethnic Identity Measure-U.S.	Cultural identity-U.S.	12	Cultural identifications to U.S. culture
Multigroup Ethnic Identity Measure-Heritage	Cultural identity-heritage	12	Cultural identifications to heritage culture

Table 4 (continued)

Summary of Each Measure

<i>Measure</i>	<i>Subscales</i>	<i>Number of items</i>	<i>Description</i>
Brief Approach/Avoidance Coping Questionnaire		12	Coping
Perceived Social Support of Family Scale		20	Perceived family support

Procedures

After the study was approved by the Institutional Review Board, approximately 316 emails were sent to leaders of Asian American student organizations from universities across the U.S. and leaders of ethnic churches. The groups were identified through searches on the universities' web page, specifically looking for cultural organizations (e.g., Asian American Student Union, Chinese-American Student Association, Vietnamese-American Student Organization) and the contact information for the president, chairs, and other leadership-related positions for the organization.

Individuals who agreed to participate proceeded to click on the survey link in the email (see Appendix H for email invitation). Participants learned basic information about the study including, potential risks, that participation is voluntary and that no negative consequences would be incurred if they declined to participate, and that no identifying information would be collected (see Appendix I for information letter). Participants also had the opportunity to enter a drawing for one of three \$15 Amazon gift cards. They were then asked to provide online informed consent.

After providing consent, all participants were administered a set of online questionnaires that included the following instruments: Demographics Questionnaire, Stephenson's Multigroup

Acculturation Scale, Individualism and Collectivism Scale, Multigroup Ethnic Identity Measure, Brief Approach/Avoidance Coping Questionnaire, and the Perceived Social Support of Family Scale. The measures were administered in a randomized order to prevent order effects, however all participants received the demographic questionnaire first. These online versions were generated by the investigator using Qualtrics. The total time spent by each participant was expected to be 5-10 minutes. Actual durations recorded by Qualtrics ranged from 20 seconds to 10 minutes to more than a day, given that participants who identified as international students were led directly to the end of the survey or participants could leave the survey on their browser and work on it intermittently.

Data Analysis

After collecting data from the study, the investigator downloaded the raw data directly from Qualtrics into the Statistical Package for the Social Sciences (SPSS). To start with, a descriptive analysis was run for the responses given for the demographic information. Reliability coefficients of each measure used were also examined.

As discussed earlier in the literature, acculturation is multidimensional, where cultural practices, values, and identifications represent separate but related components of acculturation. Therefore, three separate hierarchical regressions were conducted to analyze the data. These analyses explored whether each of the three components were related to coping, as well as if perceived family support moderated the relationship between acculturation and coping.

Chapter IV

Results

Research Questions

The present study aimed to address the following research questions: How does acculturation relate to coping among Asian American college students? How does perceived family support moderate the relationship between acculturation and coping? Three domains of acculturation were measured by using Stephenson's Multigroup Acculturation Scale (SMAS), Individualism and Collectivism Scale (ICS), and the Multigroup Ethnic Identity Measure (MEIM), for each domain of cultural practices, cultural values, and cultural identifications, respectively.

Reliability

Cronbach's alpha was used to examine the internal consistency reliability of each of the measures administered. For the SMAS, Cronbach's alpha was estimated to be .77 compared to the .86 previously reported by Stephenson (2000) and this is adequate. Cronbach's alpha on each of the two subscales of the SMAS was also computed: .77 on dominant culture and .87 on non-dominant culture. The dominant subscale alpha was lower than the .97 on dominant culture and comparable to the .90 on non-dominant culture previously reported by Stephenson (2000), however both are still acceptable.

The ICS had a Cronbach's alpha of .67 and this is lower than what is typically acceptable. Cronbach's alpha was also examined on each of the three out of the four subscales: .80 on horizontal-individualism, .70 on vertical-individualism, and .63 on horizontal-collectivism. This range of reliabilities is lower to those reported by Schwartz et al. (2010) of .74 to .78. The Cronbach alpha of the fourth scale, vertical-collectivism, could not be computed due to an error

in that the scale was not inputted into Qualtrics. The Cronbach's alpha of the entire scale of the ICS is lower than the accepted minimum of .70 and this may be due to the low alpha of the horizontal-collectivism subscale.

The MEIM-heritage version had a Cronbach's alpha of .92 and the MEIM-U.S. version had a Cronbach's alpha of .88. These reliabilities were comparable to those reported by Phinney (1992) and Schwartz et al. (2010), who found a high reliability of .90 with college students. The BACQ had a Cronbach's alpha of .69 and this was slightly higher than Carver et al.'s (1989) previously reported Cronbach's alpha of .68, however is lower than the accepted minimum of .70. Lastly, the Cronbach's alpha of PSS-Fa was .74; this is lower than those reported by Procidano and Heller (1983), Procidano et al. (1988), and Castillo et al. (2004), who found Cronbach alphas ranging from .88 to .91. However, for this study, this coefficient was adequate.

Descriptive Statistics for each Hierarchical Regression

Descriptive statistics including means and standard deviations and intercorrelations using Pearson's correlations of the main study variables are presented in Table 5. More active coping was positively associated with individuals who engaged in cultural practices of the U.S. culture, identified with U.S. culture or their own heritage, have values within the horizontal-collectivistic domain, and perceived high levels of family support. Individuals with greater identification with vertical-individualistic cultural values reported less family support. In contrast, those who reported more engagement in non-dominant cultural practices also tended to report receiving higher levels of family support.

Table 5

Descriptive Statistics and Intercorrelations for Study Variables

Variables	1	2	3	4	5	6	7	8	9
1. Cultural practices-dominant	—								
2. Cultural practices-non dominant	-.21**	—							
3. Horizontal-individualism	.07	.04	—						
4. Vertical-individualism	.04	-.06	.14*	—					
5. Horizontal-collectivism	.11	.14*	.25**	-.17*	—				
6. Cultural identifications-U.S.	.25**	-.05	.12	.08	.36**	—			
7. Cultural identification-Heritage	.08	.24**	.23**	.05	.38**	.26**	—		
8. Perceived family support	.12	.18*	.07	-.14*	.09	.08	.04	—	
9. Coping	.15*	.03	.00	-.05	.17*	.19**	.23**	.24**	—
<i>M</i>	48.80	41.71	12.61	9.51	12.74	2.93	3.11	47.07	39.37
<i>SD</i>	5.84	9.71	2.71	2.50	2.28	.58	.52	5.73	6.28

Note. $N = 205$; * $p < .05$, ** $p < .01$

Analyses and Data by Each Domain of Acculturation

Cultural practices. For the first hierarchical regression, cultural practices were examined. Tests for multicollinearity indicated that a very low level of multicollinearity was present ($VIF = 1.08$ for cultural practices-dominant culture, 1.10 for cultural practices-non-dominant culture, 1.07 for family support, 1.09 for interaction term of cultural practices-dominant culture and family support, and 1.08 for interaction term of cultural practices-non-dominant culture and family support).

Cultural practices for both dominant and non-dominant culture were the first variables entered, followed by the moderating variable of perceived family support, and then the

interaction terms. The hierarchical regression revealed that at step one, the two subscales of cultural practices did not significantly contribute to the regression model, $F(2, 202) = 2.93, p = .056$ and accounted for 2.8% of the variation in coping. Introducing the moderator family support explained an additional 4.4% variation in coping and this ΔR^2 was significant, $F(1, 201) = 9.48, p = .002$. Adding the two interaction terms to the regression model explained an additional 0.3% of the variation in coping and this change in R^2 was not significant, $F(2, 199) = .35, p = .706$. Based on these results, the variability in coping cannot be accounted for by all the predictors together.

Regression coefficients results indicated that higher levels of acculturation to the dominant culture had a positive relationship with coping, meaning higher levels of active coping/less avoidant coping ($\beta = .17, t = 2.37, sr = .16, p < .019$). Additionally, none of the interaction terms had a significant relationship with coping. A summary of the hierarchical regression analysis for cultural practices and perceived family support predicting coping are presented in Table 6.

Table 6

Summary of Hierarchical Regression Analysis for Cultural Practices

Variable	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE B</i>	β	<i>sr</i>	<i>B</i>	<i>SE B</i>	β	<i>sr</i>	<i>B</i>	<i>SE B</i>	β	<i>sr</i>
Cultural practices-dominant	.18	.08	.17*	.16	.14	.08	.13	.13	.15	.08	.14	.13
Cultural practices-non dominant	.04	.05	.07	.07	.01	.05	.02	.02	.01	.05	.02	.02
Perceived family support					.24	.08	.22	.21	.24	.08	.22	.21
Interaction term a									.01	.01	.06	.06
Interaction term b									.00	.01	.03	.03
R^2			.03				.07*				.08	
ΔR^2			.02				.06				.05	

Note. $N = 205$; * $p < .05$, ** $p < .01$, *** $p < .001$; Interaction term a: Cultural practices-dominant and perceived family support, Interaction term b: Cultural practices-non-dominant and perceived family support

Cultural values. The second hierarchical regression included cultural values as predictors and perceived family support as a moderator. Tests for multicollinearity indicated that a very low level of multicollinearity was present ($VIF = 1.12$ for horizontal-individualism, 1.10 for vertical-individualism, 1.13 for horizontal-collectivism, 1.13 for family support, 1.36 for interaction term of horizontal-verticalism and family support, 1.20 for interaction term of vertical-individualism and family support, and 1.27 for interaction term of horizontal-collectivism and family support).

Cultural values for horizontal-individualism, vertical-individualism, and horizontal-collectivism were the first variables entered, followed by the moderating variable of perceived family support, and then the interaction terms. The hierarchical regression revealed that at step

one, the three subscales of cultural values did not significantly contribute to the regression model, $F(3, 201) = 2.12, p = .099$ and accounted for 3.1% of the variation in coping. Introducing the moderator family support explained an additional 5.0% variation in coping and this change in R^2 was significant, $F(1, 200) = 10.79, p = .001$. Adding the three interaction terms to the regression model explained an additional 5.8% of the variation in coping and this change in R^2 was also significant, $F(3, 197) = 4.44, p = .005$, therefore the moderator perceived family support accounted for a significant portion of the coping variance and interacted with at least one type of cultural values to account for a significant portion of the coping variance.

Regression coefficients showed that higher levels of acculturation within the horizontal-collectivism value indicated a positive relationship with more active coping/less avoidant coping ($\beta = .18, t = 2.43, sr = .17, p = .016$). In step three of the regression model, horizontal-collectivism ($\beta = .18, t = 2.61, sr = .17, p = .010$) remained positively associated with coping and was not affected by the level of family support. The interaction term involving vertical-individualism and perceived family support was significant ($\beta = -.25, t = -3.47, sr = -.23, p = .001$), likely explaining the significant increase in variance explained in Step 3. To further examine this interaction, a simple-slope analysis indicated that, among Asian American students who reported high levels of perceived family support, higher levels of vertical-individualism was associated with less active/more avoidant coping. However, high levels of vertical-individualism was associated with more active/less avoidant coping among Asian American students who reported low levels of perceived family support. A summary of the hierarchical regression analysis for cultural values and moderation of perceived family support predicting coping is presented in Table 7. The interaction and regression lines for vertical-individualism and perceived family support are shown in Figure 2.

Table 7

Summary of Hierarchical Regression Analysis for Cultural Values

Variable	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE B</i>	β	<i>sr</i>	<i>B</i>	<i>SE B</i>	β	<i>sr</i>	<i>B</i>	<i>SE B</i>	β	<i>sr</i>
Horizontal-individualism	-.09	.17	-.04	-.04	-.13	.17	-.06	-.05	-.11	.16	-.05	-.05
Vertical-individualism	-.03	.18	-.01	-.01	.05	.18	.02	.02	.01	.17	.00	.00
Horizontal-collectivism	.49	.20	.18	.17	.46	.20	.17	.16	.50	.19	.18	.17
Perceived family support					.25	.08	.23	.22	.32	.08	.29	.27
Interaction term a									.05	.03	.12	.11
Interaction term b									-.11	.03	-.25	-.23
Interaction term c									.01	.03	.02	.02
R^2			.03				.08*				.14	
ΔR^2			.02				.06				.11	

Note. $N = 205$; * $p < .05$, ** $p < .01$, *** $p < .001$; Interaction term a: Horizontal-individualism and perceived family support, Interaction term b: Vertical-individualism and perceived family support, Interaction term c: Horizontal-collectivism and perceived family support

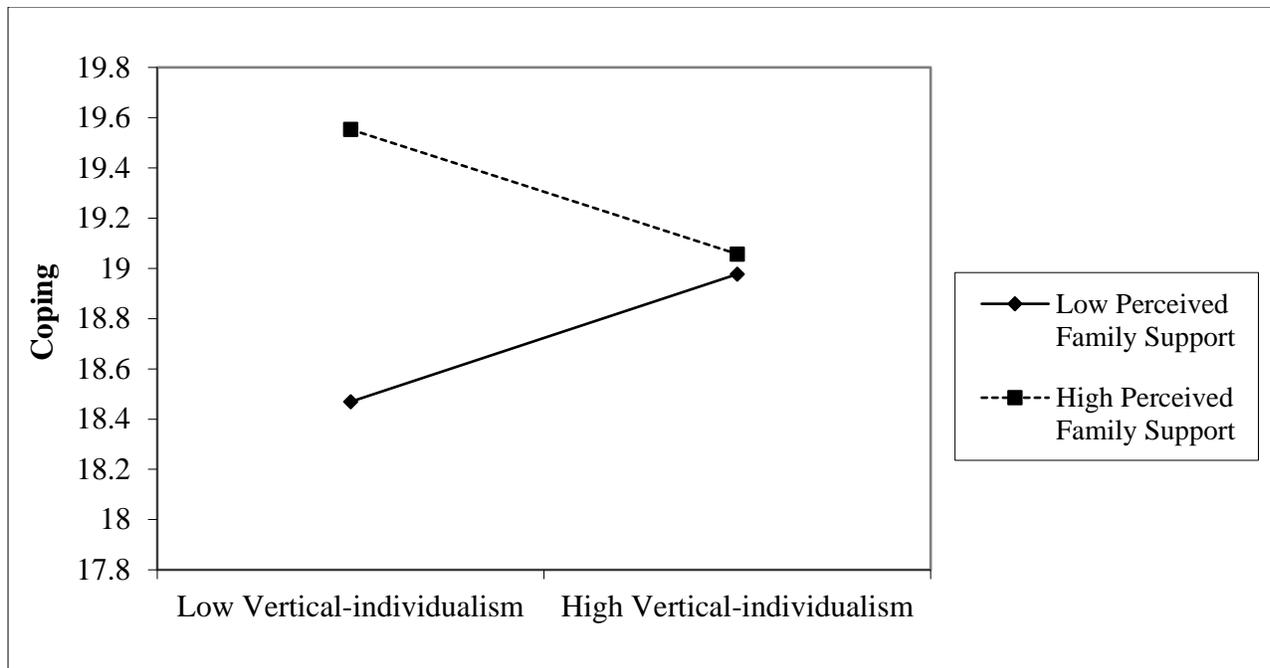


Figure 2. Moderating effect of perceived family support on the relationship between vertical-individualism and coping.

Cultural identifications. Finally, the third hierarchical regression included cultural identifications as predictors and perceived family support as a moderator. Tests for multicollinearity indicated that a very low level of multicollinearity was present ($VIF = 1.07$ for both heritage and U.S. cultural identifications, 1.01 for perceived family support, and 1.07 for both the interaction terms). Cultural identifications for both dominant and non-dominant culture was the first variable entered, followed by the moderating variable of perceived family support, and then the interaction terms of cultural identifications-heritage and perceived family support and cultural identifications-U.S. and perceived family support.

The hierarchical regression revealed that at step one, cultural identifications of both US and heritage orientations significantly contributed to the regression model, $F(2, 202) = 8.02, p < .001$ and accounted for 7.4% of the variation in coping. Introducing the moderator family support explained an additional 4.7% variation in coping and this change in R^2 was significant, $F(1, 201)$

= 10.67, $p = .001$. Adding the two interaction terms to the regression model explained an additional 0.1% of the variation in coping and this change in R^2 was not significant, $F(2, 199) = 0.12, p = .891$.

Regression results indicated that higher levels of acculturation to both U.S. ($\beta = .14, t = 2.05, sr = .19, p = .006$) and heritage culture ($\beta = .20, t = 2.80, sr = .14, p = .041$) were associated with more active/less avoidant coping. In step three of the model, cultural identifications to heritage culture. ($\beta = .19, t = 2.77, sr = .18, p = .006$) was also related to more active/less avoidant coping. However, the two interaction terms of cultural identification to U.S. culture and perceived family support and cultural identification to heritage culture and perceived family support did not suggest a significant relationship. A summary of the hierarchical regression analysis for cultural identifications and moderation of perceived family support predicting coping is presented in Table 8.

Table 8

Summary of Hierarchical Regression Analysis for Cultural Identifications

Variable	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE B</i>	β	<i>sr</i>	<i>B</i>	<i>SE B</i>	β	<i>sr</i>	<i>B</i>	<i>SE B</i>	β	<i>sr</i>
Cultural identifications-U.S.	1.73	.84	.14*	.19	1.54	.83	.13*	.19	1.52	.83	.13*	.18
Cultural identifications-heritage	2.13	.76	.20	.14	2.08	.75	.19	.12	2.08	.75	.19*	.12
Perceived family support					.24	.07	.22	.22	.24	.07	.22	.22
Interaction term a									.01	.01	.03	.00
Interaction term b									-.00	.01	-.01	.93
R^2			.07***				.12**				.12	
ΔR^2			.06				.11				.10	

Note. $N = 205$; * $p < .05$, ** $p < .01$, *** $p < .001$; Interaction term a: Cultural id-U.S. and perceived family support, Interaction term b: Cultural id-heritage and perceived family support

Summary

Results from the first hierarchical regression examining cultural practices (based on the Stephenson's Multigroup Acculturation Scale) indicated that dominant or non-dominant cultural practices did not account for variation in coping. The interactions also did not account for variation in coping. However, cultural practices of the dominant culture related to more active/less avoidant coping.

Another hierarchical regression examined cultural values (based on the Individualism and Collectivism Scale). Results indicated that the model between cultural values and coping, with perceived family support as a moderator was significant and accounted for 13.9% of the variance in coping. However, it is important to note that with this measure, of the four subscales, vertical-

collectivism was not included in Qualtrics. Therefore, findings are not complete for this model and does not include a measure of how closely participants' values aligned with vertical-collectivism (this involves participants seeing themselves as part of a collective culture and being willing to accept hierarchy and inequality within that collective group). The interaction term of perceived family support and vertical-individualism was significant, in that Asian American college students who reported high levels of perceived family support, higher levels of vertical-individualism was associated with less active and more avoidant coping, but when family support was low those Asian American students who had higher levels of vertical-individualism reported more active and less avoidant coping. The findings also showed a relationship between horizontal-collectivism and more active/less avoidant coping.

Finally, a third hierarchical regression was conducted to examine cultural identifications (based on the Multigroup Ethnic Identity Measure). Results indicated that cultural identifications of U.S. and heritage culture helped to account for variance in coping. However, the interaction terms of both cultural identifications and perceived family support did not account for variance in coping. Lastly, there were relationships between cultural identifications of U.S. and heritage culture and more active/less avoidant coping.

Chapter V

Discussion

Summary of the Present Study and Discussion

The current dissertation study was intended to provide a better understanding and conceptualization of acculturation, in particular by studying three main domains (i.e., cultural practices, values, and identifications) and how such aspects of acculturation relate to coping. It was also meant to describe how family support moderated the relationship between acculturation and coping. Knowledge of how acculturation and perceived family support relate to coping may help inform the field of higher education and university counseling centers to explore when college students use more/less active/avoidant attempts to cope and therapists can explore how culture may relate to their experiences. The present study examined the following research questions:

1. How does acculturation relate to coping among Asian American college students?
2. How does perceived family support moderate the relationship between acculturation and coping?

Three separate hierarchical regressions were conducted to illustrate the potential relationship between each of the acculturation domains and coping and to examine how perceived family support moderated each of these relationships.

Cultural practices. In viewing how cultural practices related to coping, results showed that cultural practices of either dominant or non-dominant culture did not account for variation in coping. This suggest that cultural practices involving understanding and speaking English or a specific Asian dialect, listening to music of a specific ethnic group or mainstream culture, eating specific foods, and feeling accepted by others are areas that may not directly relate to how

individuals cope. This finding also suggests that how individuals adjust to their surroundings through behaviors and engagement in various cultural practices may not be the only reasons for the different coping used by Asian American college students.

Additionally, cultural practices specific to the dominant culture related to the use of more active/less avoidant coping, and supported this study's hypothesis for this domain. However, a significant relationship did not emerge for cultural practices to the non-dominant culture and coping. This may suggest that Asian American college students may be able to recognize explicit American practices that they partake in and this may contribute to individuals to feel more inclined to respond to issues in a way similar to their American peers. Based on these results, perceived family support did not moderate the relationship between either of the cultural practices and coping. This may suggest that perceived family support does not influence the relationship between cultural practices and coping, or that there may be other aspects of family support that were not assessed in this study.

Cultural values. In viewing how cultural values related to coping, results showed that the three predictors, horizontal-individualism, vertical-individualism, and horizontal-collectivism, along with the interaction terms helped to account for variance in coping. These results suggest that cultural values of individualism and collectivism and the different construals of the self, of others, and of the interdependence of the two play a role in how individuals deal with challenges. The three types of construals that were included in this study were horizontal-collectivism, vertical-individualism, and horizontal-individualism and these may be a core part that affects individuals' experiences, their worldview, and how they connect with others. This may also suggest that Asian American college students may continue to be at a stage in their life

in which their cultural values may be one of the driving forces to how they approach stressors throughout college.

Additionally, perceived family support appeared to affect the relationship between vertical-individualism and coping. More specifically, Asian American college students who reported high levels of perceived family support, higher levels of vertical-individualism were associated with less active/more avoidant coping, but for those who reported low levels of perceived family support, higher levels of vertical-individualism was associated with more active and less avoidant coping. This may suggest that those who exercise independence or self-sufficiency in their values may not work well if an individual has more family support, perhaps due to potential conflict within the family or intergenerational interdependence by family members for the individual to contribute to the family and not look after his or her own self-interest (Kagitcibasi, 2005). As Asian American college students experience their transition throughout college, such values may be conflicting with their peers and Western's individualistic worldview and this may lead such individuals to withdrawal or avoid throughout their challenges. In contrast, when perceived family support is low, those with more of hierarchical individual values thrive relative to those who do not have it (Kagitcibasi, 2005).

When considering the main effects of each of the three cultural values, there was a positive relationship between horizontal-collectivism and coping. In other words, the more that individuals saw themselves as part of a collective group, were dependent within the group, and perceived others of that group to be equal tended to use more active/less avoidant coping. This is a contrast to what previous literature has discussed in that individuals who tend to see themselves as an aspect of an in-group and value equality among members may be more reluctant in using active coping for fear of losing face for bringing up their own issues that are different from the

group's concerns (Yeh et al., 2006). Recognizing that context has a strong effect on which cultural value orientation is tapped, perhaps the transitional stage of adjusting to the college lifestyle that Asian American students experience during college contribute to more planning and being proactive in dealing with challenges, even for those who are dependent on their cultural group.

Cultural identifications. In examining how cultural identifications related to coping, results showed that cultural identifications for both orientations accounted for the differences in coping, as did perceived family support. However, family support did not moderate the relationship between cultural identifications and coping. These results suggest that individuals who define themselves through acquiring and retaining either or both heritage and U.S. cultural characteristics and incorporate such characteristics into their self-concept may tend to be more active in dealing with challenges throughout college. This also appears to fit with the idea that cultural factors may contribute to how Asian American college students individuate and form their identity and relate to how they deal with stressors (Yeh et al., 2001).

The significant positive relationships between cultural identifications of both U.S. and heritage culture and coping suggests that individuals who tend to feel more of a sense of belonging with a cultural group (e.g., United States, one's heritage country, or both) may be more likely to use more active/less avoidant coping. This finding supports previous research that identifying with a cultural group(s) may help first-generation and second-generation ethnic minority students with the confidence and self-direction that they need to cope and function proactively on a day-to-day basis (Schwartz et al., 2011).

Because perceived family support did not moderate the relationship between cultural identifications of either culture and coping, there may be some aspects of identity that are

important for coping among Asian American emerging adults regardless of what the family-of-origin offers. It may be important to belong to some group while in college even if one has a family offering great support. At the same time, this is not meant to imply that family support is irrelevant to coping. After all, greater family support was related to more active coping. Thus, these results suggest that Asian American college students may be closely connected with important others such as family members and they may use such relationships during challenging times (Yeh et al., 2001). The two constructs of family support and cultural identifications simply appear to operate on coping independently of one another among Asian American emerging adults.

Implications

The present study has some implications for educators within the university settings and professionals working at college counseling centers. As Asian American students experience their college years, as well as deal with both implicit and explicit cultural differences, acculturation is a process that entails a multitude of aspects and may have implications that call for support and effective coping. Based on the results, Asian American college students may benefit from exploring their ethnic background within the realms of cultural practices, values, and identifications to better understand how their culture may affect areas of their life throughout college. More specifically, such individuals may want to better understand how their adjustment to their surroundings (e.g., cultural environments) in what they do or how they behave in situations affect how they deal with their difficulties; it may be helpful for Asian American college students to explore different coping strategies that reflect their cultural practices, values, and identifications.

Additionally, it may be beneficial for Asian American college students to recognize how their individualistic and collectivistic cultural values may play a role in their sense of self, which may in turn shape their methods of coping. While it may be tempting for counselors to suggest active/avoidant coping strategies among individuals who relate to individualistic and collectivistic cultures, respectively, the results from this study imply that such assumptions should not be made. Rather, counselors may want to consider discussing with Asian American students how they conceptualize their self-construal and how their values may affect their locus of control and what they attribute their stressors to. College counselors may also want to be cognizant of how Western mental health services focus on the individual, autonomy, and personal privacy and this may conflict with Asian values (Yeh et al., 2001).

For Asian American college students, it may be important for them to understand their own identity and how it may affect critical decisions that they make throughout college, such as choosing an academic major and career and developing relationships with friends and significant others (Yeh et al., 2001). It may be helpful for Asian American college students to explore their identity, evaluate salient factors of their identity, and understand how identity development can be an ongoing process that may affect how they react to challenges.

It also seems that Asian American individuals may want to explore the advantages and disadvantages of different coping mechanisms. Noh and Kasper (2003) indicated that the ability to cope in healthy ways is determined by factors such as the nature of the stressor, personal resources, culture, and social contexts. Therefore, what is deemed as an effective or healthy way of coping, whether it is more or less active/avoidant, may depend on each person. For instance, Asian American college students may use less active coping such as not seeking support from counselors because several general counseling techniques (e.g., reflection of feelings, promoting

self-disclosure, and obtaining insights) might be considered disrespectful to their privacy (Sue & Sue, 2008).

While the role of family support moderated one variable for one aspect of acculturation, perceived family support was also consistently associated with active coping, thus it may be important for individuals to assess in what specific ways their families provide support and the potential effects of other forms of support (i.e., friends and peers). Asian American students may want to strengthen their close family relationships throughout college or stay in contact with their families if students cannot readily access the support during college.

In such settings, it may also be helpful to provide services and information for parents, such as during freshman orientation about the importance of parent relationships and support and how it has been shown to be a predictor of college and emotional adjustment for ethnic minority college students (Hurtado et al., 1996). Families may also want to be informed about how students who are experiencing academic and adjustment issues tend to feel the need for someone to provide help, guidance, or emotional support (Dennis et al., 2005). It might also be beneficial to teach parents in a workshop or seminar about the importance of coping with stressors throughout college and how different aspects related to acculturation experiences may relate to how their daughter or son handle difficulties. Therefore, families may want to encourage their students about the value of programs that promote study groups, peer mentoring, or similar services that help students find the support they need to deal with the pressures of college (Dennis et al., 2005). College settings may vary in the amount of involvement between students and their parent(s); these implications may be particularly relevant for primarily parents who are active in students' lives.

Furthermore, it may be beneficial for institutions to promote multicultural and diversity-related services, as well as counseling services. This could involve encouraging students to participate in diverse on-campus activities, engage in ongoing, multicultural conversations with peers and family members, and evaluate the potential effects of their ethnic background in both their lives and broader society. There may also be stress related to acculturation and academic and psychological concerns experienced by Asian Americans and the expectations of themselves and their families, therefore information on resources available could be implemented online and through academic advisors. Relatedly, counselors working directly with Asian American students may want to consider using culturally appropriate interventions and keeping in mind that the acculturation process is unique to each person.

Limitations

Sampling bias. Recruitment was from students involved in Asian American organizations and this may imply that such individuals are comfortable with their ethnicity and adjustment of different cultures; therefore, this might not capture those individuals who are less acculturated or not as comfortable with their ethnicity within the dominant culture. Additionally, being involved in Asian American organizations may be a form of active coping given that there are individuals who have strong identities to their culture and are not as involved, therefore the sample may be skewed in terms of higher active coping due to how participants were recruited.

Cross-cultural relevance. Additionally, the current study did not analyze any relationships across ethnic minority groups. While it would be beneficial for research in this area to examine potential differences in acculturation, perceived family support, and coping, such research questions were outside of the scope of the present study due to having limited funding and resources. Instead, the present study used a sample from one main ethnic minority group.

However, there may be differences between diverse groups in how acculturation experiences and family support relate to coping. For example, studies of Latino college students found that emotional support from peers, but not family, was related to better social adjustment and more active coping (Schneider & Ward, 2003; Crocket et al., 2007). Thus, if there were ethnic minority groups that considered other aspects of their culture to be important or to affect their coping, the results may have different implications across groups. It should not be assumed that these results will generalize across cultural groups. Future research might attend to these issues in order to provide a more complete picture of how acculturation and perceived family support may relate to coping of individuals from diverse populations.

Measures. Another limitation was the modified Individualism Collectivism Scale (ICS) used for this study. During the transferring of the measure into Qualtrics, the questions pertaining to vertical-collectivism were not included, along with the full range of the Likert-type scale. The psychometric data for vertical-collectivism was also not computed. As noted earlier, vertical-collectivism is a cultural pattern in which individuals are different within an in-group and inequality is accepted, as people do not see each other as the same. Vertical-collectivism also involves communal sharing and authority ranking, along with low equality, low freedom, and typically abide by a communalism type of political system (Singelis et al., 1995). Extreme vertical-collectivism is the case of Nazi German, whereas moderate vertical-collectivism can be found in traditional villages (Singelis et al., 1995). An assessment of the strength of adherence to this value set was not included in this study, which meant that those who most strongly identify with these values were not given the opportunity to demonstrate through the ICS that they identified in such a way.

The full range of the original 1 through 9 Likert-type scale was modified to be 1 through 4. Therefore, it may possible that results are skewed or participants marked responses that were not true of themselves because they were not given the complete range of choices. Additionally, psychometric data were internal consistency estimates and were low on the overall scale (.67), as well as on one of the subscales (i.e., horizontal-collectivism, $\alpha = .63$). It is important to note that the results from this sample, particularly with this scale, cannot be generalized across other groups.

Another limitation to this study was the overall Cronbach alpha of the Stephenson's Multigroup Acculturation Scale (.77) measuring cultural practices was estimated to be quite a bit lower than what was previously reported (.86). With such a discrepancy, this could imply that there may be poor inter-relatedness between items or heterogeneous constructs. Participants in this study may have also interpreted the items of the measure differently or how they engage in their cultural practices may not have been fully captured by the SMAS. Therefore, it is important to recognize that there may other aspects of cultural practices for Asian American college students that were pertinent or related to coping and was not assessed in this study.

Recommendations for Future Research

Further research continues to be needed to better understand acculturation including the process and the effects the experience has on college students. As there are numerous models and conceptualizations of acculturation, it is important to consider how acculturation is an ongoing life process and may involve ongoing developments with each generation of minority groups. This current study focused on three main domains of acculturation and there may be other domains and/or specific factors of acculturation that should be accounted for. Also with acculturation being multifaceted, how to measure the experience has also been an ongoing

challenge. In order to better understand it, more time should be spent establishing quality (i.e., reliability and validity) measures of the construct that cover the diverse aspects of acculturation. As the United States becomes a more diverse nation and different cultures come into continuous contact with each other, being able to measure and specify cultural components that are affected by acculturation can provide clarity to how individuals adapt and the association that acculturation may have with other constructs such as mental and physical health, academic achievement, and relationship with others (Cabassa, 2003).

In the future, researchers may want to consider the different family dynamics that exist across Asian American subgroups. Family support may differ in terms of individuals being raised in households including but not limited to single-parent, siblings, and extended family including grandparents and other relatives. It may also be of interest to consider how acculturation and family support may be affected by differences between parents, in which one parent may come from a more individualistic background and the other a more collectivistic. Somewhat related to this is the possible generational difference between parents and how level of support provided to individuals may differ based on this factor, as well as the differences in what constitutes support for both the family and the individual. Another aspect of family support of possible interest is the individual's comfort level with asking for support from his/her family members or to what extent s/he is willing to seek support.

Additionally, research within the general stress and coping literature could be studied with various types of stressors related to acculturation or other culturally sensitive issues. In particular, it might be useful to examine how effective such active/avoidant coping is in reducing different types of psychological distress. Future researchers may want to provide participants

with several stressful scenarios that would facilitate a clearer picture of how they would react, rather than imagining or recalling how they would respond or have responded to challenges.

Another area related to coping that may be of interest is to explore how acceptable psychological interventions designed to increase active coping really are, given that this study produced results that contrasted with prior research when examining cultural values and coping. Such interventions that promote active coping may not fit for Asian American students whose values tend to align with collectivistic characteristics and vice versa. Future researchers may also want to investigate how active/avoidant coping may serve as protective factors for both the individual and within the family unit.

Future studies might also explore gender differences in acculturation and coping. More specifically, it may be worthwhile to further examine acculturative stress and gender differences in how it is perceived and dealt with in college. Similarly, comparisons between generations and even among international students deserve more discussion; for instance, it might be useful to look at how acculturation differs among those who identify as Asian American compared to international.

Moreover, research in this area should also make efforts to include individuals from diverse backgrounds, to compare participants from differing racial or ethnic groups, education levels, or socioeconomic statuses. Although some attention has been given to this in the past, the relationship among such variables still needs to be better understood. Research needs to assess the extent to which the acculturation process varies across groups and how it may affect various areas of individuals' lives. This is suggested to be accomplished before results can be generalized with other cultures and provide a better understanding of the acculturation phenomenon and the complex nature in which it occurs.

References

- Arends-Toth, J., & van de Vijver, F. J. R. (2006). Assessment of psychological acculturation. In D. L. Sam, & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 142-160). Cambridge, MA: Cambridge University Press.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. M. Padilla (Ed.), *Acculturation: Theory, model, and some new findings* (pp. 9-25). Albany, NY: State University of New York Press.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology, 46*, 5-68. doi: 10.1111/j.1464-0597.1997.tb01087.x
- Berry, J. W. (2006). Stress perspectives on acculturation. In D. L. Sam, & J. W. Berry (Eds.), *The Cambridge handbook of acculturation psychology* (pp. 43-57). Cambridge, MA: Cambridge University Press.
- Berry, J. W. (2003). Conceptual approaches to acculturation. In K. M. Chun, P. B. Organista, & G. Marín. (Eds.). *Acculturation: Advances in theory, measurement, and applied research* (pp. 17-37). Washington, DC: American Psychological Association.
- Cabassa, L.J. (2003). Measuring acculturation: Where we are and where we need to go. *Hispanic Journal of Behavioral Sciences, 25*, 127-146. doi: 10.1177/0739986303253626
- Carver, C., Scheier, M., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*, 267-283. doi: 10.1037/0022-3514.56.2.267
- Castillo, L. G., Conoley, C. W., & Brossart, D. F. (2004). Acculturation, white marginalization, and family support as predictors of perceived distress in Mexican American female college students. *Journal of Counseling Psychology, 51*, 151-157. doi: 10.1037/0022-

0167.51.2.151

- Celano, M. P., & Tyler, F. B. (1991). Behavioral acculturation among Vietnamese refugees in the United States. *Journal of Social Psychology, 131*, 373-385. doi: 10.1080/00224545.1991.9713864
- Chang, E. C. (2001). A look at the coping strategies and styles of Asian Americans: Similar and Different? In C. R. Snyder (Ed.), *Coping with stress: Effective people and processes* (pp. 222-239). New York, NY: Oxford University Press.
- Chataway, C. J., & Berry, J. W. (1989). Acculturation experiences, appraisal, coping, and adaptation: A comparison of Hong Kong Chinese, French, and English students in Canada. *Canadian Journal of Behavioral Science, 21*(3), 295-309. doi: 10.1037/h0079820
- Chin, D., Takeuchi, D. T., & Suh, D. (2000). Access to health care among Chinese, Korean, and Vietnamese Americans. In C. Hogue, M. A. Hargraves, & K. S. Collins (Eds.), *Minority health in America* (pp. 77-98). Baltimore, MD: John Hopkins University Press.
- Chirkov, V. (2009). Summary of the criticisms and of the potential ways to improve acculturation psychology. *International Journal of Intercultural Relations, 33*, 177-180. doi: 10.1016/j.ijintrel.2009.03.005
- Chun, K. M., & Akutsu, P. D. (2003). Acculturation among ethnic minority families. In K. M. Chun, P. B. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 95-119). Washington D. C.: American Psychological Association.
- Chun, C. A., Moos, R. H., & Cronkite, R. C. (2006). Culture: A fundamental context for stress and coping paradigm. In *Handbook of multicultural perspectives on stress and coping*

- (pp. 29-53). Dallas, TX: Spring Publications.
- Cohen, S., Gottlieb, B., & Underwood, L. (2000). Social relationships and health. In S. Cohen, L. Underwood, & B. Gottlieb (Eds.), *Social support measurement and intervention* (pp. 3-28). New York, NY: Oxford University Press.
- Cohen, W., & Willis, T. A. (1985). Social support and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Harding Thomsen, A., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127, 87-127. doi: 10.1037//0033-2909.127.1.87
- Crockett, L. J., Iturbide, M. I., Torres Stone, R. A., McGinley, M., Raffaelli, M., & Carlo, G. (2007). Acculturative stress, social support, and coping: Relations to psychological adjustment among Mexican American college students. *Cultural Diversity and Ethnic Minority Psychology*, 13, 347-355. doi: 10.1037/1099-9809.13.4.347
- Cross, S. E. (1995). Self-construals, coping, and stress in cross-cultural adaptation. *Journal of Cross-Cultural Psychology*, 26, 673-697. doi: 10.1177/002202219502600610
- Cuéllar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARMSA scale. *Hispanic Journal of Behavioral Sciences*, 17(3), 275-304. doi: 10.1177/07399863950173001
- DeLongis, A., & Holtzman, S. (2005). Coping in context: The role of stress, social support, and personality in coping. *Journal of Personality*, 73, 1-24. doi: 10.1111/j.1467-6494.2005.00361.x
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support,

- and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46, 223-236. doi: 10.1353/csd.2005.0023
- Finset, A., Steine, S., Haugli, L., Steen, E., & Laerum, E. (2002). The brief approach/avoidance coping questionnaire: Development and validation. *Psychology, Health & Medicine*, 7(1), 75-85. doi: 10.1080/13548500120101577
- Gordon, M. (1995). Assimilation in America: Theory and reality. In A. Aguire & E. Baker (Eds.), *Notable selections in race and ethnicity* (pp. 91-101). Guilford, CT: Dushkin.
- Gloria, A. M., Castellanos, J., & Orozco, V. (2005). Perceived educational barriers, cultural fit, coping responses, psychological well-being of Latina undergraduates. *Hispanic Journal of Behavioral Sciences*, 27(2), 161-183. doi: 10.1177/07399863052755097
- Harris, T. L., & Molock, S. D. (2000). Cultural orientation, family cohesion, and family support in suicide ideation and depression among African American college students. *Suicide and Life-Threatening Behavior*, 30, 341-353. doi: 10.1111/j.1943-278X.2000.tb01100.x
- Hovey, J. D., & King, C. A. (2000). Acculturative stress, depression, and suicidal ideation in Mexican immigrants. *Cultural Diversity & Ethnic Minority Psychology*, 6, 134-151. doi: 10.1037//1099-9809.6.2.1134
- Hraba, J. (1979). *American ethnicity*. Itasca, IL: F. E. Peacock.
- Hurtado, S., Carter, D. F., & Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research in Higher Education*, 37, 135-157. doi: 10.1007/BF01730113
- Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context: Implications for self and family. *Journal of Cross-Cultural Psychology*, 36(4), 403-422. doi:

10.1177/0022022105275959

- Kim, B. S. K., & Abreu, J. M. (2001). Acculturation measurement: Theory, current instruments, and future directions. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 394 – 424). Thousand Oaks, CA: Sage.
- Kim, H. K., & McKenry, P. C. (1998). Social networks and support: A comparison of African Americans, Asian Americans, Caucasians, and Hispanics. *Journal of Comparative Family Studies*, 29, 313-334.
- Kim, B. S., & 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. doi: 10.1037/1099-9809.12.2.245
- Kosic, A. (2004). Acculturation strategies, coping process and acculturative stress. *Scandinavian Journal of Psychology*, 45, 269-278. doi: 10.1111/j.1467-9450.2004.00405.x
- Lapsley, D. K., Rice, K. G., & Fitzgerald, D. P. (1990). Adolescent attachment, identity, and adjustment to college: Implications for the continuity of adaptation hypothesis. *Journal of Counseling and Development*, 68, 562-565. doi: 10.1002/j.1556-6676.1990.tb01411.x
- Lau, A. S., Jernewall, N. M., Zane, N., & Meyers, H. F. (2002). Correlates of suicidal behaviors among Asian American outpatient youths. *Cultural Diversity & Ethnic Minority Psychology*, 8, 199-213. doi: 10.1037//1099-9809.8.3.199
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lee, R. M., & Yoo, H. C. (2004). Structure and measurement of ethnic identity for Asian American college students. *Journal of Counseling Psychology*, 51(2), 263-269. doi: 10.1037/0022-0167.51.2.263

- Leong, F. T. L., Kim, H. H. W., & Gupta, A. (2011). Attitudes toward professional counseling among Asian-American college students: Acculturation, conceptions of mental illness, and loss of face. *Asian American Journal of Psychology, 2*, 140-153. doi: 10.1037/a0024172
- Luborsky, M. R., & McMullen, C. K. (1999). Culture and aging. In J. C. Cavanaugh & S. K. Whitbourne (Eds.), *Gerontology: An interdisciplinary perspective* (pp. 65-90). New York, NY: Oxford University Press.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and behavior. *Psychological Review, 98*, 224-251. doi: 0033-295X/91
- Marín, G. S., & Gamba, R. J. (1996). A new measurement of acculturation for Hispanics: The bidimensional acculturation scale for Hispanics (BAS). *Hispanic Journal of Behavioral Sciences, 18*(3), 297-316. doi: 10.1177/07399863960183002
- Mena, F. J., Padilla, A. M., & Maldonado, M. (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. *Hispanic Journal of Behavioral Sciences, 9*, 207-225. doi: 10.1177/07399863870092006
- National Center for Education Statistics. (2013). *Total fall enrollment in degree-granting post-secondary institutions, by level of enrollment, sex, attendance status, and race/ethnicity of student: Selected years, 1976 through 2012*. [Data file]. Retrieved from http://nces.ed.gov/programs/digest/d13/tables/dt13_306.10.asp
- Noh, S., Beiser, M., Kaspar, V., Hou, F., & Rummens, A. (1999). Perceived racial discrimination, coping, and depression among Asian refugees in Canada. *Journal of Health and Social Behavior, 40*, 193-207.
- Noh, S. & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of

- coping, acculturation, and ethnic support. *American Journal of Public Health*, 93(2), 232-238. doi: 10.2105/AJPH.93.2.232
- O'Brien, T. B., & DeLongis, A. (1997). Coping with chronic stress: An interpersonal perspective. In B. H. Gottlieb (Ed.), *Coping with chronic stress* (pp. 161-190). New York, NY: Plenum Publishing Corporation.
- Padilla, A. M. (1980). Introduction. In A. M. Padilla (Ed.). *Acculturation: Theory, models and some new findings* (pp. 1-8). Boulder, CO: Westview.
- Phinney, J. S. (1992) The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156-176. doi: 10.1177/074355489272003
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, 54, 271-281. doi: 10.1037/0022-0167.54.3.271
- Pinkerton, J., & Dolan, P. (2007). Family support, social capital, resilience and adolescent coping. *Child & Family Social Work*, 12, 219-228. doi: 10.1111/j.1365-2206.2007.00497.x
- Portes, A., & Rumbaut, R. G. (2001). *Legacies: The story of the immigrant second generation*. Berkeley, CA: University of California Press.
- Procidano, M. E., Guinta, D. M., & Buglione, S. A. (1988, August). *Perceived social support and subjective states in urban, adolescent girls*. Paper presented at the annual meeting of the American Psychological Association, Atlanta, GA.
- Procidano, M. E., & Heller, K. (1983). Measure of perceived social support from friends and family: Three validation studies. *American Journal of Community Psychology*, 11, 1-24.
- Redfield, R., Linton, R., & Herskovits, M.J. (1936). Memorandum for the study of acculturation.

- American Anthropologist*, 38, 149-152. doi: 10.1525/aa.1936.38.1.02a00330
- Rhee, S., Chang, J., & Rhee, J. (2003). Acculturation, communication patterns, and self-esteem among Asian and Caucasian American Adolescents. *Adolescence*, 38, 749-768. Retrieved from <http://eds.a.ebscohost.com.spot.lib.auburn.edu/ehost/pdfviewer/pdfviewer?vid=8&sid=b2>
- Rodriguez, N., Mira, C. B., Myers, H. F., Morris, J. K., & Cardoza, D. (2003). Family or friends: Who plays a greater supportive role for Latino college students. *Cultural Diversity and Ethnic Minority Psychology*, 9, 236-250. doi: 10.1037/1099-9809.9.3.236
- Roesch, S. C., Wee, C., & Vaughn, A. A. (2006). Relations between the Big Five personality traits and dispositional coping in Korean Americans: Acculturation as a moderating factor. *International Journal of Psychology*, 41, 85-96. doi: 10.1080/00207590544000112
- Rudmin, F. W. (2009). Constructs, measurements, and models of acculturation and acculturative stress. *International Journal of Intercultural Relations*, 33, 106-123. doi: 10.1016/j.ijintrel.2008.12.001
- Santisteban, D. A., & Mitrani, V. B. (2003). The influence of acculturation processes on the family. In K. M. Chun, P. B. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 121-135). Washington D. C.: American Psychological Association.
- Schneider, M. E., & Ward, D. J. (2003). The role of ethnic identification and perceived family social support in Latinos' adjustment to college. *Hispanic Journal of Behavioral Sciences*, 25, 539-554. doi: 10.1177/0739986303259306
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept

- of acculturation: Implications for theory and research. *American Psychologist*, 65, 237-251. doi: 10.1037/a0019330
- Schwartz, S. J., Weisskirch, R. S., Zamboanga, B. L., Castillo, L. G., Ham, L. S., Huynh, Q. L., ... Cano, M. A. (2011). Dimensions of acculturation: Associations with health risk behaviors among college students from immigrant families. *Journal of Counseling Psychology*, 58, 1-15. doi: 10.1037/a0021356
- Schwartz, S. J., Zamboanga, B. L., Rodriguez, L., & Wang, S. C. (2007). The structure of cultural identity in an ethnically diverse sample of emerging. *Basic and Applied Social Psychology*, 29, 159-173. doi: 10.1080/01973530701332229
- Sheu, H. & Sedlacek, W. E. (2004). An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. *Measurement & Evaluation in Counseling & Development*, 37(3), 130-143.
- Shon, S., & Ja, D. (1982). Asian families. In M. McGoldrick, J. K. Pearce, & J. Giordano (Eds.), *Ethnicity and family therapy* (pp. 208-228). New York, NY: Guilford Press.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20(5), 580-591. doi: 10.1177/0146167294205014
- Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-cultural Research*, 29 (3), 240-275. doi:10.1177/106939719502900302
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129, 216-269. doi: 10.1037/0033-2909.129.2.216

- Smith, R., & Khawaja, N. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations, 35*, 699-713. doi: 10.1016/j.ijintrel.2011.08.004
- Solberg, V. S., & Villarreal, P. (1997). Examination of self-efficacy, social support, and stress as predictors of psychological and physical distress among Hispanic college students. *Hispanic Journal of Behavioral Sciences, 19*, 182-201. doi: 10.1177/07399863970192006
- Stephenson, M. (2000). Development and validation of the Stephenson Multigroup Acculturation Scale (SMAS). *Psychological Assessment, 12*, 77-88. doi: 10.1037//1040-3590.12.1.77
- Sue, D. W., & Sue, D. (2008). *Counseling the culturally different* (5th ed.). New York, NY: Wiley.
- Sung, K. (2000). An Asian perspective on aging east and west: Filial piety and changing families. In V. Bengston, K. Kim, G. Myers, & K. Eun (Eds.), *Aging in east and west: Families, states, and the elderly*. New York, NY: Springer Publishing Company.
- Tao, K. W., Owen, J., Pace, B. T., & Imel, Z. E. (2015). A meta-analysis of multicultural competencies and psychotherapy process and outcome. *Journal of Counseling Psychology, 62*(3), 337-350. doi: 10.1037/cou0000086
- Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology, 87*, 354-362. doi: 10.1037/0022-3514.87.3.354
- Treas, J., & Mazumdar, S. (2002). Older people in America's immigrant families: Dilemmas of dependence, integration, and isolation. *Journal of Aging Studies, 16*, 243-258. doi: 10.1016/S0890-4065(02)00048-8

- Triandis, H. C. & Gelfland, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, 74, 118-128. <http://psycnet.apa.org/doi/10.1037/0022-3514.74.1.118>
- Trimble, J. E. (2003). Introduction: Social change and acculturation In K. M. Chun, P. B. Organista, & G. Marin. (Eds.). *Acculturation: Advances in theory, measurement, and applied research* (pp. 3-13). Washington, DC: American Psychological Association.
- U.S. Census Bureau. (2013, June 13). *Asians fastest-growing race or ethnic group in 2012*, *Census Bureau reports*. Retrieved from <http://www.census.gov/newsroom/press-releases/2013/cb13-112.html>
- U.S. Department of Health and Human Services (2001). *Mental health: Culture, race and ethnicity – A supplement to mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Mental Health Services.
- Wang, C., & Mallinckrodt, B. (2006). Acculturation, attachment, and psychosocial adjustment of Chinese/Taiwanese international students. *Journal of Counseling Psychology*, 53(4), 422-433. doi: 10.1037/0022-0167.53.4.422
- Ward, C., & Kennedy, A. (2001). Coping with cross-cultural transition. *Journal of Cross-Cultural Psychology*, 32, 636-642. doi: 10.1177/0022022101032005007
- Willis, T. A., Blechman, E. A., & McNamara, G. (1996). Family support, coping, and competence. In E. M. Hetherington & E. A. Blechman (Ed.), *Stress, coping, and resiliency in children and families*, (pp. 107-133). New York, NY: Psychology Press.
- Wong, P. T. P., & Ujimoto, K. V. (1998). The elderly: Their stress, coping, and mental health. In N. W. S. Zane (Ed.), *Handbook of Asian American psychology* (pp. 165-209). Thousand

Oaks, CA: Sage Publications, Inc.

- Wong, S. T., Yoo, G. J., & Stewart, A. L. (2006). The changing meaning of family support among older Chinese and Korean immigrants. *Journal of Gerontology: Social Sciences B*, *61*, S4-S9. Retrieved from <https://psychsocgerontology.oxfordjournals.org/content/61/1/S4.full>
- Yeh, C. (2003). Age, acculturation, cultural adjustment, and mental health symptoms of Chinese, Korean, and Japanese immigrant youths. *Cultural Diversity & Ethnic Minority Psychology*, *9*, 34-48. doi: 10.1037/1099-9809.9.1.34
- Yeh, C. J., Inman, A. G., Kim, A. B., & Okubo, Y. (2006). Asian American families' collectivistic coping strategies in response to 9/11. *Cultural Diversity and Ethnic Minority Psychology*, *12*(1), 134-148. doi: 10.1037/1099-9809.12.1.134
- Yeh, C. J., Inose, M., Kobori, A., & Chang, T. (2001). Self and coping among college students in Japan. *Journal of College Student Development*, *42*, 242-256. Retrieved from http://repository.usfca.edu/cgi/viewcontent.cgi?article=1006&context=soe_fac
- Yeh, C., & Wang, Y-W. (2000). Asian American coping attitudes, sources, and practices: Implications for indigenous counseling strategies. *Journal of College Student Development*, *41*, 94-103.
- Yip, T., & Fuligni, A. J. (2002). Daily variation in ethnic identity, ethnic behaviors, and psychological well-being among American adolescents of Chinese descent. *Child Development*, *73*, 1557-1572. doi: 10.1111/1467-8624.00490
- Yoo, H. C., & Lee, R. M. (2005). Ethnic identity and approach-type coping as moderators of the racial discrimination/well-being relation in Asian Americans. *Journal of Counseling Psychology*, *52*, 497-506. doi: 10.1037/0022-0167.52.4.497

Zea, M. C., Jarama, L., & Bianchi, F. T. (1995). Social support and psychosocial competence: Explaining the adaptation to college in ethnically diverse students. *American Journal of Community Psychology*, 23, 509–531. doi: 10.1007/BF02506966

Appendix A

Demographic Questionnaire

1. Age:
2. Gender:
3. Identified ethnicity:
4. Language spoken at home:
5. School-year classification:
6. Generation of participant living in the U.S.:
7. Number of years participant has resided in the U.S.:
8. Generation of parents living in the U.S.:

Appendix B

Stephenson's Multigroup Acculturation Scale

Circle the answer that best matches your response to each statement

(1) False (2)Partly false (3)Partly true (4)True

1. I understand English, but I am not fluent in English.
2. I am informed about current affairs in the United States.
3. I speak my native language with my friends and acquaintances from my country of origin.
4. I have never learned to speak the language of my native country.
5. I feel totally comfortable with (Anglo) American people.
6. I eat traditional foods from my native culture.
7. I have many (Anglo) American acquaintances.
8. I feel comfortable speaking my native language.
9. I am informed about current affairs in my native country.
10. I know how to read and write in my native language.
11. I feel at home in the United States.
12. I attend social functions with people from my native country.
13. I feel accepted by (Anglo) Americans.
14. I speak my native language at home.
15. I regularly read magazines of my ethnic group.
16. I know how to speak my native language.
17. I know how to prepare (Anglo) American foods.
18. I am familiar with the history of my native country.
19. I regularly read an American newspaper.

20. I like to listen to music of my ethnic group.
21. I like to speak my native language.
22. I feel comfortable speaking English.
23. I speak English at home.
24. I speak my native language with my spouse or partner.
25. When I pray, I use my native language.
26. I attend social functions with (Anglo) American people.
27. I think in my native language.
28. I stay in close contact with family members and relatives in my native country.
29. I am familiar with important people in American history.
30. I think in English.
31. I speak English with my spouse or partner.
32. I like to eat American foods.

Appendix C

Individualism and Collectivism Scale

All items are answered on a 9-point scale, ranging from 1= never or definitely no and 9 = always or definitely yes.

1. I'd rather depend on myself than others.
2. I rely on myself most of the time; I rarely rely on others.
3. I often do "my own thing."
4. My personal identity, independent of others, is very important to me.
5. It is important that I do my job better than others.
6. Winning is everything.
7. Competition is the law of nature.
8. When another person does better than I do, I get tense and aroused.
9. If a coworker gets a prize, I would feel proud.
10. The well-being of my coworkers is important to me.
11. To me, pleasure is spending time with others.
12. I feel good when I cooperate with others.
13. Parents and children must stay together as much as possible.
14. It is my duty to take care of my family, even when I have to sacrifice what I want.
15. Family members should stick together, no matter what sacrifices are required.
16. It is important to me that I respect the decisions made by my groups.

Appendix D

Multigroup Ethnic Identity Measure

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree (3) Agree (2) Disagree (1) Strongly disagree

1- I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

2- I am active in organizations or social groups that include mostly members of my own ethnic group.

3- I have a clear sense of my ethnic background and what it means for me.

4- I think a lot about how my life will be affected by my ethnic group membership.

5- I am happy that I am a member of the group I belong to.

6- I have a strong sense of belonging to my own ethnic group.

7- I understand pretty well what my ethnic group membership means to me.

8- In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.

9- I have a lot of pride in my ethnic group.

10- I participate in cultural practices of my own group, such as special food, music, or customs.

11- I feel a strong attachment towards my own ethnic group.

12- I feel good about my cultural or ethnic background.

Appendix E

Multigroup Ethnic Identity Measure-Modified for U.S. orientation

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree (3) Agree (2) Disagree (1) Strongly disagree

1- I have spent time trying to find out more about the U.S., such as its history, traditions, and customs.

2- I am active in organizations or social groups that include mostly members of the U.S.

3- I have a clear sense of my American background and what it means for me.

4- I think a lot about how my life will be affected by my American membership.

5- I am happy that I am a member of the group I belong to.

6- I have a strong sense of belonging to the American group.

7- I understand pretty well what my American membership means to me.

8- In order to learn more about my American background, I have often talked to other people about the U.S.

9- I have a lot of pride in the U.S.

10- I participate in cultural practices of my American group, such as special food, music, or customs.

11- I feel a strong attachment towards my American group.

12- I feel good about my American background.

Appendix F

Brief Approach/Avoidance Coping Questionnaire

How do you usually cope with problems and illness?

The questions on this page deal with how you usually act in relation to problems and disease. For each item, place a tick in the box that fits best with what you think about yourself just now. The questions are written in 'I' form, and you place your tick depending on how much you agree/disagree. The purpose of the questions is to make you think about whether or not you are satisfied with the way you react to problems and illness.

Response categories:

Agree completely 5

Tend to agree 4

Yes and no 3

Tend to disagree 2

Disagree completely 1

1. I say so if I am angry or sad.
2. I like to talk with a few chosen people when things get too much for me.
3. I make an active effort to find a solution to my problems.
4. Physical exercise is important to me.
5. I think something positive could come out of my complaints/problems.
6. I firmly believe that my problems will decrease (and my situation improve).
7. I try to forget my problems.
8. I put my problems behind me by concentrating on something else.
9. I bury myself in work to keep my problems at a distance.
10. I often find it difficult to do something new.
11. I am well on the way towards feeling I have given up.
12. I withdraw from other people when things get difficult.

Appendix G

Perceived Social Support of Family Scale

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationship with their *families*. For each statement there are three possible answers: Yes, No, Don't know. Please circle the answer you choose for each item.

- | | | | |
|-----|----|------------|--|
| Yes | No | Don't know | 1. My family gives me the moral support I need. |
| Yes | No | Don't know | 2. I get good ideas about how to do things or make things from my family. |
| Yes | No | Don't know | 3. Most other people are closer to their family than I am. |
| Yes | No | Don't know | 4. When I confide in the member of my family who are closest to me, I get the idea that it makes them uncomfortable. |
| Yes | No | Don't know | 5. My family enjoy hearing about what I think. |
| Yes | No | Don't know | 6. Members of my family share many of my interests. |
| Yes | No | Don't know | 7. Certain members of my family come to me when they have problems or need advice. |
| Yes | No | Don't know | 8. I rely on my family for emotional support. |
| Yes | No | Don't know | 9. There is a member of my family I could go to if I were just feeling down, without feeling funny about it later. |
| Yes | No | Don't know | 10. My family and I are very open about what we think about things. |
| Yes | No | Don't know | 11. My family is sensitive to my personal needs. |
| Yes | No | Don't know | 12. Members of my family come to me for emotional support. |
| Yes | No | Don't know | 13. Member of my family are good at helping me solve problems. |
| Yes | No | Don't know | 14. I have a deep sharing relationship with a number of members |

of my family.

- | | | | |
|-----|----|------------|---|
| Yes | No | Don't know | 15. Members of my family get good ideas about how to do things or make things from me. |
| Yes | No | Don't know | 16. When I confide in members of my family, it makes me feel uncomfortable. |
| Yes | No | Don't know | 17. Members of my family seek me out for companionship. |
| Yes | No | Don't know | 18. I think that members of my family feel that I'm good at helping them solve problems. |
| Yes | No | Don't know | 19. I don't have a relationship with a member of my family that is as intimate as other people's relationships with family members. |
| Yes | No | Don't know | 20. I wish my family were much different. |

Appendix H

Recruitment Letter

Dear Student,

I am a doctoral student in the Department of Special Education, Rehabilitation, and Counseling at Auburn University. I would like to invite you to participate in my research study to investigate acculturation, perceived family support, and coping styles among Asian Americans. You may participate if you are currently an undergraduate student, identify as Asian American, and are age 18 or older.

Participants will be asked to indicate some demographic information and responses to acculturation experiences, how they cope, and perceived family support. Participant total time commitment will be approximately 5 to 10 minutes. At the end of the survey, participants will have the chance to enter a drawing to win one of three \$15 Amazon gift cards.

The risks associated with participating in this study are that you may find yourself self-reflecting on your culture and identity. To minimize these risks, we will ask questions that are sufficiently general and we would be unable to identify who you are. There are no direct benefits to you for participating. There are also no costs or compensation for your participation.

If you would like to know more information about this study, an information letter can be obtained by sending me an e-mail at tzc0018@auburn.edu. If you decide to participate after reading the letter, you can access the survey from the link at the end of this letter.

If you have any questions, please contact me at tzc0018@auburn.edu or my advisor, Dr. Suhyun Suh, at suhsuhy@auburn.edu. The Auburn University Institutional Review Board has approved this document for use from September 22, 2015 to September 21, 2018. Protocol #15-373 EX1509

Thank you for your time and consideration,

Theresa Chan

Link to Survey Below

https://auburn.qualtrics.com/SE/?SID=SV_eVgTc8ejZtsJxGI

Appendix I

Information Letter

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

The Auburn University Institutional Review Board has approved this document for use from September 22, 2015 to September 21, 2018. Protocol #15-373 EX1509

INFORMATION LETTER for a Research Study entitled

“Acculturation and Perceived Family Support: Influences on Coping Styles Among Asian American College Students ”

You are invited to participate in a research study to investigate how acculturation, perceived family support, and coping styles interact with one another. The study is being conducted by Theresa Chan, a doctoral candidate in Counseling Psychology under the direction of Dr. Suhyun Suh, Associate Professor in the Auburn University Department of Special Education, Rehabilitation, and Counseling. You are invited to participate because you are currently an undergraduate student, identify as Asian American, and are age 18 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to indicate some of your demographic information and responses to acculturation experiences, coping, and perceived family support. Your total time commitment will be approximately 5 to 10 minutes.

Are there any risks or discomforts? The risks associated with participating in this study are that you may find yourself self-reflecting on your culture and identity. To minimize these risks, we will ask questions that are sufficiently general and we would be unable to identify who you are. In addition, in most cases we have made it possible for you to skip an item which you do not wish to answer. You will be solely responsible for any medical costs resulting from your participation in the study.

Are there any benefits to yourself or others? There are no direct benefits to you for participating.

Will you receive compensation for participating? You will have the chance to enter a drawing to win one of three \$15 Amazon giftcards.

Are there any costs? There are no costs for you to participate in this study.

If you change your mind about participating, you can withdraw at any time by closing your browser window. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Special Education, Rehabilitation, and Counseling, the College of Education, Theresa Chan, or Dr. Suhyun Suh.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by not collecting IP addresses. You will not be asked to provide your name or identifying information within this study. If you choose to enter the drawing, the email address you provide will not be linked to your survey responses and will be deleted after the drawing has occurred. Information collected through your participation may be published in a professional journal and/or presented at a professional meeting.

If you have questions about this study, please contact Theresa Chan at tzc0018@auburn.edu or Dr. Suhyun Suh at suhsuhy@auburn.edu.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at IRBAdmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. PLEASE CLICK ON THE LINK BELOW. YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

Theresa Chan

Investigator _____ Date _____

Dr. Suhyun Suh

Faculty Advisor _____ Date _____

The Auburn University Institutional Review Board has approved this document for use from November 30, 2015 to September 21, 2015. Protocol #15-373 EX 1509

Link to Survey Below

https://auburn.qualtrics.com/SE/?SID=SV_eVgTc8ejZtsJxGI