

THESIS

IDENTITY INTEGRATION AND FAMILY ETHNIC SOCIALIZATION AS MODERATORS  
OF ACCULTURATION STRESS AND PSYCHOLOGICAL OUTCOMES

Submitted by

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## ABSTRACT

### IDENTITY INTEGRATION AND FAMILY ETHNIC SOCIALIZATION AS MODERATORS OF ACCULTURATION STRESS AND PSYCHOLOGICAL OUTCOMES

Acculturation stress is the stress associated with navigating between the dominant culture and one's culture of origin. This stress can be particularly daunting for young people as they are also grappling with issues of identity. For some, the stress can pose a risk for poor psychological outcomes such as depression and anxiety (Choi et al., 2008; Suarez-Morales & Lopez, 2009).

As societies like the United States become more ethnically, culturally, and linguistically diverse (American Psychological Association, 2003), multiculturalism and acculturation become increasingly important areas to study. Although it can be straining, research suggests that individuals living among multiple cultures benefit, in terms of positive psychological outcomes, if they are able to develop a bicultural or multicultural identity (Bacallao & Smokowski, 2009; Suarez-Orozco & Suarez-Orozco, 2001). Studies have also highlighted the importance of family factors such as support and solidarity in terms of facilitating positive psychological outcomes (Bacallao & Smokowski, 2005; Choi et al., 2007; Rivera, 2007).

The current study uses an existing multisite data set, the Multiple University Survey on Identity and Culture (MUSIC) data set (2008). The survey targeted all undergraduate students at multiple universities across the United States and included individuals between ages 17-25 ( $N=10,572$ ). For the purpose of this study, only individuals who indicated 1<sup>st</sup> generation or 2<sup>nd</sup> generation immigrant status were included ( $N= 3,654$ ). Multivariate statistical analyses were then conducted in terms of multiple regressions.

An integrated bicultural identity was a significant moderator of acculturation stress and psychological well being, as was family ethnic socialization (FES). This indicates that individuals who have resolved identities and are low on conflict are more likely to have higher levels of psychological well being in the face of acculturation stress. In turn, individuals whose families engage in more FES are more likely to have higher levels of psychological well being in the face of acculturation stress. FES, however did not moderate the relationship between acculturation stress and maladaptive psychological outcomes such as depression and social anxiety. Bicultural identity distance and ethnic identity resolution were significant moderators of depression and social anxiety (respectively) in the face of acculturation stress.

It is becoming clearer, in the field of human development, that addressing youth risk factors and vulnerabilities does not necessarily mean that we are finding ways to promote positive youth outcomes. What this study highlights is the notion that one can still find ways to promote well being in the face of acculturation stress even though vulnerabilities to maladaptive outcomes have not been entirely eliminated.

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## Identity Integration and Family Ethnic Socialization as Moderators of Acculturation Stress and Psychological Outcomes

Acculturation stress is the stress associated with navigating between the dominant culture and one's culture of origin. This stress can be particularly daunting for young people as they are also grappling with issues of identity. For some, the stress can pose a risk for poor psychological outcomes such as depression and anxiety (Choi et al., 2008; Suarez-Morales & Lopez, 2009). In such cases, a bicultural identity, where individuals have integrated two separate cultures as a part of their identity, can be protective against depression (Bacallao & Smokowski, 2009; Suarez-Orozco & Suarez-Orozco, 2001). Family factors, such as family support and solidarity, may also help buffer the negative effects of acculturation stress (Rivera, 2007). This study explores the role of bicultural identity integration, identity resolution, and family ethnic socialization (FES) as moderators of the relationship between acculturation stress and both positive and negative psychological outcomes.

The emergence of globalization has made identity development for young people a more complex task than ever before. Migration patterns across national borders, the increase in international labor, and the frequency of intercultural marriages have led to more people than ever before living among multiple cultures (Song, 2009). As societies like the United States become more ethnically, culturally, and linguistically diverse (American Psychological Association, 2003), multiculturalism and acculturation become increasingly important areas to study.

Acculturation entails the resolution of differences between dominant and non dominant groups that are in direct contact with one another, and the adjustment by the

individuals of the groups involved (Berry, 1990). In some cases, this means resolving or being able to live efficiently with the differences between one's culture of origin and the culture of the receiving society. Unfortunately, not all individuals internalize the skills necessary to perform well among different cultures (Song, 2009), which can lead to experiencing acculturation stress. In fact, many encounter confusion and conflict in their process of navigating between two or more cultures. For example, some individuals may become overwhelmed by trying to fulfill the social expectations of the different cultures they live amongst (Song, 2009), particularly when the cultures differ greatly in their value systems. An example of cultures that differ greatly in value systems is the difference between individualistic and collectivist cultures (e.g., the United States and most Asian cultures; Triandis, 1995). Although living among multiple cultures can be straining, research suggests that it can be beneficial for individuals in terms of psychological well being if they are able to develop a bicultural or multicultural identity (Bacallao & Smokowski, 2009; Suarez-Orozco & Suarez-Orozco, 2001). Having an integrated multicultural identity entails the successful incorporation of two or more cultural identities. Studies have also highlighted the importance of family factors such as support and solidarity in terms facilitating positive psychological outcomes (Bacallao & Smokowski, 2005; Choi et al., 2007; Rivera, 2007), but has not examined whether FES in particular can buffer against acculturation stress.

This study considers the following research questions: Does an integrated identity moderate the relationship between acculturation stress and psychological outcomes? Does family ethnic socialization moderate the relationship between acculturation stress and mental health outcomes? An integrated identity will be explored in terms of



bicultural identity conflict and distance, as described by Benet-Martinez and Haritatos (2005). Bicultural identity conflict (vs. harmony) entails an internal sense that one has resolved the role that the two (or more) cultures present in one's life take with respect to identity. Bicultural identity distance (vs. overlap) entails the notion of how one feels that the two (or more) cultures present in one's life differ or are similar with respect to value systems and customs. Additionally, in order to tap into the importance of identity development among multicultural individuals, ethnic identity resolution will be examined in order to gauge the importance of identity resolution in moderating the relationship between acculturation stress and psychological outcomes. Psychological outcomes will be examined in terms of depression, social anxiety, and psychological well-being. Family ethnic socialization will be investigated in terms of whether or not learning about one's ethnic heritage and understanding one's family's heritage culture, customs, and traditions can promote well being in the face of acculturation stress and can be a buffer against depression and social anxiety. In order to address the stated research questions, it is important to understand what is meant by acculturation stress and how this has been related to psychological health outcomes in previous research.

### **Acculturation**

Acculturation can generally be explained as the process by which individuals come to acquire membership in their various cultural groups. For youth growing up in multicultural environments, acculturation includes the adaptation to, and incorporation of, one or more cultural schemas (cultural frameworks) besides the culture to which they already belong. Bacallao and Smokowski (2005) examined different theories of acculturation and found that the widely accepted theory of acculturation by Berry (1990)

explained acculturation as the resolution of differences between a dominant and non dominant group in direct contact, and the adaptation of one or both groups involved. This study will follow Berry's model of acculturation.

According to Berry (1990), acculturating individuals may assimilate (only identify with the receiving culture), integrate (identify with both the culture of origin and the receiving culture), separate (only identify with the culture of origin), or be marginalized (identify with neither culture). How individuals acculturate is based on the extent to which they are motivated, or allowed (through policy), to maintain their culture of origin (Berry, 1990). Integrated individuals are likely to have multicultural identities (Chen, Benet-Martínez, & Bond, 2008) because they are able to consider the various cultures among which they reside as equally important with respect to their identity. In their review of the literature, Bacallao and Smokowski (2005) found that the assimilation and the alternation (previously described by Berry as integration) processes of acculturation were the most studied and relevant processes among acculturating youth. As such, assimilation results in the loss of identification with one's culture of origin, whereas alternation, much like integration (Chen et al., 2008), results in a positive relationship to both the culture of origin and the receiving culture.

Alternating between cultures is also known as frame-switching, which is defined as having the ability to shift one's socio-cognitive perceptual schemas in order to provide socially competent responses dependent on the cultural context in which one finds one's self (Bacallao & Smokowski, 2005). Socio-cognitive perceptual schemas are how people organize the world around them and, in turn, how one should function in the world based on learned social and cognitive cues. According to Luna, Ringberg and Peracchio (2008),

individuals with a great deal of experience in two or more cultures are better able to access culture-specific frameworks dependent on socio-cultural cues. For example, using an implicit association test (IAT), Devos (2006) examined bicultural identity among Mexican and Asian American college students. He found that both implicitly and explicitly, bicultural students identified with, and responded positively to, depictions of cultural associations for both culture of origin and American culture.

However, in some situations, societal and linguistic pressures may complicate one's ability to successfully frame-switch (Chen et al. 2008). This pressure may come in the form of discrimination and may, in turn, pose extra stressors for individuals integrating a multicultural identity (Gil, Vega, & Dimas, 1994). Integrating two or more cultures into one's socio-cognitive perceptual schema can therefore be a stressful task for many individuals. Stress, regardless of the presence of acculturation, has been found to be related to several maladaptive health outcomes, including maladaptive *mental* health outcomes (e.g., DeLongis, Lazarus, & Folkman, 1988). Some studies have looked at the particular link between *acculturation stress* and mental health outcomes (e.g., Choi et al., 2008; Suarez-Morales & Lopez, 2009). These studies will be discussed in further detail.

### **Acculturation Stress and Psychological Adjustment**

By understanding the process of acculturation, one can better understand the increased stress with respect to identity development among acculturating youth. Acculturation stress entails the struggle to incorporate the different cultures one lives amongst as a part of one's identity. Acculturation stress has been found to be positively related to depression (Choi et al., 2008) and to a lesser extent to anxiety (Suarez-Morales & Lopez, 2009). Iturbide et al. (2009) also showed a negative association between

acculturation stress and self-esteem (one aspect of well being), as well as self-efficacy. Self-efficacy entails one's confidence in one's ability to be successful at the task at hand, which, in turn, is important in terms of successful frame-switching. Thus, self-efficacy in terms of frame-switching may buffer against negative mental health outcomes such as depression and anxiety and promote well being.

According to Social Cognitive Theory (Bandura, 1997), perceived self-efficacy influences psychological well-being. Bandura stated that self-efficacy was related to well being (a) through the need to meet highly valued standards or principles, and (b) through social interaction in order to establish interpersonal relationships. David, Okazaki, and Saw (2009) drew on Bandura's theory and used it to explain the challenges acculturating individuals face. They stated that individuals who do not feel competent, or lack self-efficacy, with respect to meeting two or more relatively contrasting cultural expectations are at greater risk for negative psychological outcomes. This holds consistent with the notion that individuals who feel conflict and distance in their bicultural identities are likely to fare worse with respect to mental health outcomes than those who have a harmonious outlook with respect to their bicultural identities (Benet-Martínez & Haritatos, 2005).

In addition to meeting two separate and often different cultural expectations, acculturating youth are faced with the daily challenge of navigating social interactions among individuals who come from different cultures. In social situations, these individuals may be faced with language barriers and perceived discrimination, which adds to the stress related to acculturation. This particular stress may manifest itself as social anxiety, given its emphasis on social situations. Language barriers, and perceived

discrimination, have the potential of putting acculturating individuals at greater risk for negative psychological outcomes, including anxiety and depression (David et al., 2009). David et al. (2009) presented empirical evidence for the link between bicultural self-efficacy and its relationship to mental health. Specifically, they developed a measure for bicultural self-efficacy (BSES). They found a significant negative relationship between BSES and depression as well as a moderate negative relationship between BSES and anxiety. The research conducted by David and colleagues echoes much of what the literature about acculturation stress states: If a multicultural identity is not achieved, acculturating individuals risk experiencing maladaptive mental health outcomes such as depression and social anxiety.

### **Acculturation and Identity**

A positive sense of ethnic identity has been shown to act as a moderator between acculturative stress and depression (Iturbide et al., 2009), but studies are still limited with respect to how an *integrated bicultural identity* (including identity resolution) may benefit individuals facing acculturation stress in ways that not only decrease maladaptive psychological outcomes, but also promote psychological well-being. A positive identity with respect to membership in one or more cultures may diminish maladaptive outcomes due to stress from acculturation. Because a strong and positive sense of ethnic identity promotes well-being during adolescence (Phinney et al., 2001), bicultural identities are ultimately thought to be desirable among acculturating youth (Bacallao & Smokowski). According to Ponterotto et al. (2007), individuals who have multicultural personalities are culturally empathetic, more open minded, more emotionally stable (able to stay calm in novel situations), more active in approaching social situations, and are more flexible

(able to easily adjust one's behavior). The listed characteristics are essential to well-being in multicultural settings and can be assumed to be protective against acculturation stressors.

As previously stated, important to identity development is how worldviews are passed from generation to generation as well as through daily practice (Arnett, 2003). For youth in multicultural contexts, the development of a multicultural identity occurs through the interactions between family traditions (the generational aspect) as well as through activities with peers and the greater society (daily practices).

Identity development is therefore important to understand when acculturation stress and mental health outcomes are concerned. Identity development, as previously mentioned, does not happen in a vacuum and individuals look to their social environments for clues about what behaviors and attitudes are accepted by specific groups within society. For individuals developing among multiple groups, understanding how to incorporate the different cultural cues into who they perceive themselves to be is important. Identity conflict, with respect to acceptance or lack thereof, of the different cultures that make up one's identity, and the distance that one feels lies between the cultures one lives amongst (i.e., the sense of no common ground between a collectivist and individualist culture; Benet-Martínez & Haritatos, 2005) may increase the likelihood of maladaptive mental health outcomes such as depression and social anxiety and decrease psychological well being. For this reason, it is important to take into account the process of identity development, with respect to the different cultures present in an individual's life.

### **Identity Development**

In order to understand the development of a multicultural identity in youth, it is necessary to understand identity development in general. Identity development is essential to adolescence and emerging adulthood. Adolescence and emerging adulthood are life stages when individuals begin to form their own autonomous sense of *who* they are as autonomous individuals, separate from their parents. Erikson (1950) referred to adolescence as the stage in life when an individual must establish a “sense of personal identity.” Erikson defined adolescence as a time of being engulfed in questions of where they come from, who they are, and what they want to become. Erikson stated that it is important during adolescence to establish a stable identity through a meaningful self-concept in which they must overcome identity confusion and role diffusion. Self-concept is the notion that one has an understanding of oneself as a member of society. Young adults, who emerge out of adolescence with a positive sense of identity, and with a meaningful self-concept, are more likely than their peers, who have not established self-concept, to overcome stressors that accompany the new-found independence typical of this developmental stage in life. In addition to feeling like an autonomous member of greater society, Erickson (1968) asserted that in defining one’s self, young individuals depend on the support they receive from the social groups to which they belong. A collective sense of identity is therefore an important part of identity development.

### **A Collective Sense of Identity**

The achievement of a collective identity among significant social groups, such as one’s cultural group, is an important aspect of identity development. Following social identity theory (Tajfel, 1981), one’s group membership provides an emotional connection to a particular social group which, in turn, provides the knowledge that helps shape one’s

identity. The collective sense of identity is achieved through the same process as individual (or ego) identity development and can be explained by four stages of development: diffusion (the absence of identity exploration and the absence of commitment to one's ethnic or cultural background); foreclosure (accepting the identity passed on through generations); moratorium (the exploration of the different cultural frameworks that occupy the youth's world); and achievement (understanding what one's culture means to them and how they fit in to the groups that make up the youth's world; Erickson, 1968). As society becomes increasingly multicultural, the collective sense of identity becomes increasingly complex as there are more groups that youth must take into account when coming to terms with their identity. Umaña-Taylor, Gonzales-Backen and Guimond (2009a) argued that for some youth, particularly for those whose identities are more salient or different from the mainstream group, a positive sense of one's ethnicity is crucial with respect to a sense of well being.

Furthermore, identity development includes feeling like one takes part in, and can identify with, a supportive group in society (Erickson, 1968). For many youth, this supportive group comes in the form of a particular ethnic or cultural group. Culture, for the purpose of this study, will be defined as a collective identity in which individuals have shared meanings, values, behaviors, and beliefs which, in turn, are transmitted from one generation to the next (McBride Murry, Phillips Smith, & Hill, 2001). For some individuals, such as for multicultural individuals, there is no obvious cultural group to which they subscribe (Phinney & Alipuria, 2006). For instance, youth may have peers from one cultural group, yet their family members subscribe to another, or even two, separate cultural groups (e.g., the paternal family subscribes to a different group than the



maternal family). Multicultural individuals can in turn claim group membership in two or more groups; however, they may not be accepted by other group members as having full membership in any one group (Phinney & Alipuria, 2006). They may therefore always be considered outsiders. As such, Song (2009) suggested that although becoming bicultural is theoretically practical, in reality some individuals may develop a feeling of detachment from one, both, or all cultures to which they theoretically belong. This detachment can ultimately result in anxiety and depression, among other symptoms of stress (Williams & Berry, 1991).

It is therefore important to consider the benefits of a positive ethnic and cultural identity. In the literature reviewed, culture and ethnicity are used interchangeably. However, it may be suggested that the two are related, yet distinct. The literature often mentions ethnic identity and the concept of becoming bicultural within the same paragraph, as can be seen in the work of Phinney and Ong (2007). What can be assumed about the difference between ethnicity and culture is that belonging to an ethnic group is to share not only culture, but to have an understanding of a shared history and ancestry as well. Culture, as previously mentioned, is defined by shared meanings, values, behaviors, and beliefs learned and transmitted across generations (McBride Murry et al., 2001). An individual can become bicultural, for example, due to socialization. Bicultural individuals may adopt and incorporate cultural values into their identities without adopting a new ethnicity (as adopting a new ancestry would be hard to do). Cultural identity is thus more fluid than ethnic identity (Phinney & Alipuria, 2006). One can assume that taking part in, understanding, and adopting daily cultural routines of another culture for longer periods of time results in the internalization of aspects of that particular culture. Although ethnic

identity remains an important part of one's collective sense of identity, it is possible that aspects of another culture can be integrated to make up one's cultural identity without the need for the individual to identify with the shared history of a group of people (which is referred to as ethnicity).

According to Phinney et al. (2001), both social psychology and developmental perspectives support a secure ethnic identity as this positively contributes to an individual's psychological well-being. Particularly for ethnic minority individuals, identity development includes a positive and stable sense of one's ethnic identity (Umaña-Taylor, Gonzales-Backen & Guimond, 2009b).

Ethnic identity development follows many of the same processes as identity development in general. Ethnic identity development includes identity exploration, resolution, and affirmation (Umaña-Taylor et al., 2009b). Ethnic identity exploration entails the notion that youth actively explore the meaning of their ethnicity and what it means to them separate from social perceptions. Ethnic identity resolution includes an integrated understanding of their ethnicity and what it means to them. Ethnic identity affirmation on the other hand includes accepting perceived societal definitions of one's ethnicity as part of one's identity. Umaña-Taylor et al. (2009b) stated that the importance of ethnic exploration is especially true for adolescents whose ethnicities are particularly salient within their particular contexts. Because of this, minority youth tend to engage in ethnic identity exploration more often than do majority youth. As youths' desire for more autonomy increases, they begin to actively explore their ethnic identities and ultimately come to resolve what this means to them (Umaña-Taylor et al., 2009b).

A positive sense of ethnic identity is more important for youth whose ethnicities are more salient within a given context. Umaña-Taylor et al. (2009b) conducted a study in which they found that, among 323 Latino adolescents, the majority of whom were of Mexican origin, the need for a positive sense of ethnic identity increased when their ethnic identity was more prominent. In contexts where there was greater ethnic discord, youth developed more positive feelings toward the group in which they were likely to find self-affirming responses. In other words, when youth felt marginalized by the society in which they lived, they sought to separate (Berry, 1990) themselves from the majority population.

Young people who have developed a strong sense of ethnic identity are more capable of dealing with stressors related to cultural adjustment (acculturation; Iturbide, Rafaelli & Carlo, 2009). Furthermore, individuals have a stronger sense of ethnic identity when they feel strong ties to their culture of origin and when the pluralist perspective is accepted and encouraged by society (Phinney, Horenczyk, Liebkind, & Vedder, 2001). It can therefore be suggested that an integrated multicultural society is beneficial particularly to ethnic minority individuals because this environment is said to be more accepting of a positive sense of ethnic identity. An integrated multicultural environment is also likely to contribute to acceptance of other groups (Verkuyten, 2005) and, in turn, to contribute to positive psychological well-being (Phinney et al., 2001). Phinney et al. (2001) have described ethnic identity to be important with regard to psychological well-being. By definition, cultural identity includes ethnic identity although it focuses on one's perception of one's cultural association.

Following social identity theory (Tajfel, 1982; Tajfel & Turner, 1986), a sense of belonging (to a particular cultural group) is central to both ethnic and cultural identity. In a study of Russian and Ukrainian youth immigrating to Israel, Tartakovsky (2009) hypothesized that youth would decrease in positive feelings towards the receiving culture before increasing again as they became better adjusted to their receiving culture. This study did not support the linear assimilation model stating that immigrant youth eventually detach from their culture of origin. Instead, what Tartakovsky found was that youth tended to consider the values of each culture independently, and most developed a sense of belonging to both cultures. Tartakovsky's findings suggest a process with regards to acquiring a multicultural identity. In other words, living among different cultures prompts the acquisition of a multicultural identity by means of adjustment and incorporation of differing cultural values. Although literature on multicultural identity in particular is sparse, literature on biculturalism is much more comprehensive and may shed light on the multicultural identity development process.

### **Multicultural and Bicultural Identity Development and Integration**

A well-integrated multicultural context is one that fosters flexibility and openness toward others, which are important identity characteristics when living among multiple cultures (Fowers & Davidov, 2006). The previously described process of ethnic and cultural identity development is important to understand with respect to identity integration as it is equally important for individuals in multicultural contexts to achieve a sense of group membership and acceptance among the multiple groups that make up their daily cultural experiences.

One's cultural identity includes the formation of a particular worldview (Arnett, 2003). One's worldview includes one's concept of human nature, how one relates to others in society, and the moral and religious ideals one adopts. A worldview is passed on from generation to generation as well as through one's daily practices (Arnett, 2003). These worldviews are dependent on the cultural group to which one belongs. Group membership is therefore influential with respect to identity formation.

How one relates to others in society is linked to one's sense of group membership. Phinney and Alipuria (2006) stated that a secure and positive sense of one's own group membership leads to openness to other groups of people; a highly desirable quality in a multicultural society. Additionally, multicultural individuals are said to possess desirable personality characteristics. These characteristics include open-mindedness, flexibility, and emotional stability, all of which are associated with psychological well-being (Ponterotto et al., 2007).

Arnett (2003) suggested that multicultural identity development occurs through continuous first-hand contact or everyday close interactions with several different groups. With more literature available on bicultural identity development than on multicultural identity development, there is evidence to suggest that the process of bicultural identity development occurs in much the same way (everyday close interactions), but rather than with several groups, two main groups are involved.

Bicultural individuals retain a strong identification with their culture of origin while also identifying with the new society. Bicultural individuals integrate the two cultures (culture of origin and receiving culture) into their identity and are able to alternate between the two. Becoming bicultural has been described as being desirable for

acculturating youth (Bacallao & Smokowski, 2005). Biculturalism allows youth to be better able to successfully navigate the two dominant cultures present in their lives. If youth are not successful in responding to the different cultural cues, they may experience greater stress – acculturation stress.

Chen et al. (2008) explained that different sets of cultural cues evoke different responses. Being able to provide these responses is to have the ability to frame-switch. Frame-switching can also be understood in terms of bicultural identity integration (BII). It can be assumed from the work of Mok and Morris (2009) as well as from the work of Chen et al. (2009), that bicultural individuals lower on BII go through more stress with regards to frame-switching than do individuals high on BII. According to Chen et al. (2008), BII can be understood as the extent to which individuals feel the two cultures they possess are integrated rather than conflicting. Bicultural individuals vary on this; those who feel a positive integration of the two cultures are more likely to have an open attitude to their daily experience as bicultural individuals. Mok and Morris (2009) carried out two studies with East Asian American bicultural individuals in order to test the notion of BII. They used visual and implicit cultural primes to provoke reactions such as seeking uniqueness, and testing for extraversion respectively. In their two studies they found that bicultural individuals with integrated cultural identities reacted to cultural cues in an assimilative fashion for both cultures equally.

Those who had not integrated the two cultures reacted in a fashion that favored the one with which they identified the most. Individuals who had integrated two cultures therefore scored higher in BII and had a higher sense of confidence in navigating the cultures that made up their identity (Mok & Morris, 2009). Individuals who score higher

on BII are thus better able to frame-switch. One might speculate that BII has allowed youth to integrate two separate worldviews and cultural responses which make it easier to navigate their complex world successfully.

As previously stated, worldviews are often passed on from one generation to the next. Worldviews are also acquired based on the environment and culture one is surrounded by. This highlights the importance of family socialization in the process of integrating different cultures as part of one's identity.

### **Family Socialization as Protective against Maladaptive Outcomes**

#### **Family Support**

Family solidarity and support have often been found to mediate the negative outcome of depression due to acculturation (Bacallao & Smokowski, 2009; Merz et al., 2009; Rivera, 2007). These studies mention, to varying degrees, the importance of family cohesion in buffering against stress due to acculturation as well as the different pathways youth and their parents take with regard to acculturation. In addition to the development of a bicultural identity, a supportive family system during acculturation is central to the well-being of youth living cross-culturally (Bacallao & Smokowski, 2005; Choi et al., 2007; Rivera, 2007).

One of the stressors related to family acculturation is intergenerational cultural dissonance (ICD; Choi et al., 2007). ICD is thought to result from youth acculturating more quickly than their parents or older generations within the family (Portes, 1997). ICD can be referred to as the different rates by which family members acculturate to the receiving culture. Choi et al. (2007) found that the difference in acculturation between parents and adolescents happens so often that it may almost be considered normal. For

those who experience greater instances of ICD, there is greater risk for maladaptive outcomes such as depression and delinquency (Choi et al. 2007). The study carried out by Choi and colleagues leads to the assumption that positive family socialization, with respect to bicultural identity development, may be beneficial in terms of psychological well-being because youth are better able to alternate between the culture endorsed by the family and that of the mainstream thus minimizing familial conflict. In turn, as is the case for some Hispanic adolescents and their parents, biculturalism is positively related to family cohesion, adaptability, and familism (Smokowski & Rose, 2008).

One study in particular found significant results with respect to family *support* acting as a mediator between acculturation and depression, particularly among Hispanic populations (Rivera, 2007). Rivera (2007) found that family social support was significantly negatively related to depression; these results portray the importance of family support with respect to well-being in late adolescence and emerging adulthood. Interestingly, Merz, Özeke-Kocabas, Oort and Schuengel (2009), in a study with Caribbean and Mediterranean immigrants in the Netherlands, found that first-generation immigrants rely more heavily on family solidarity and support than do their children (second generation immigrants). This may be due to the particular difficulties of the process of immigration and leaving one's country of origin. Biculturalism may in such cases help balance the familial strains, or ICD, that may occur if second-generation immigrant youth lose sight of the culture of their parents.

Family strain and dissonance is not uncommon among acculturating families. A qualitative study by Bacallao and Smokowski (2009) highlights the process of the dissonance that can accompany acculturation. In a study with 12 undocumented Mexican



adolescents residing in the United States, and 14 of their parents, they found that parents often feared that their children would forget their cultural heritage and become “too American.” This is an example of one of the acculturation stressors among families and also illustrates the cultural expectations within interpersonal relationships. These expectations can be the cause for stress as well as a reason for interpersonal conflict (Song, 2009).

In the aforementioned studies, family solidarity and support are established mediating factors between acculturation and psychological health outcomes. This study will focus on family ethnic socialization as a moderating factor between acculturation stress and maladaptive outcomes, particularly depression and social anxiety as well as between acculturation stress and psychological well-being. Although there is some literature on family *support* as a mediating factor, there is limited research on how family *socialization* may act as a moderating factor among acculturating youth.

### **Family Ethnic Socialization**

Family ethnic socialization (FES) entails the way in which parents and other family members teach youth about their ethnic and cultural background through traditions, through talking about their family history, and in some cases, through teaching them the language associated with their particular ethnic group. FES may thus help individuals gain a sense of where they come from and may give youth a sense of belonging. As the literature shows, a sense of belonging during adolescence can be protective against several maladaptive outcomes including anxiety and depression (Anderman, 2002; Iturbide, Raffaelli & Carlo, 2009).

Ethnic identity is first cultivated in childhood and adolescence through parental and familial socialization (Knight, Bernal, Cota, Garza, & Ocampo, 1993; Padilla, 2006). According to Knight et al. (1993), parents have primary influence on the development of cultural beliefs associated with ethnic identity. Several studies highlight how FES influences youths' beliefs about one's ethnic and cultural identity (Umaña-Taylor, Alfaro, Bàmaca & Guimond, 2009a). These studies considered the family as one of the central environmental contexts in shaping youth's cultural experiences. Particularly for the Hispanic population within the United States, youth whose families were engaged in FES engaged in more ethnic identity exploration than those who did not engage in FES (Umaña-Taylor et al., 2009a).

One might suggest that families who continue to cultivate ethnic identity during adolescence are able to hold on to some of the family traditions that the parents value. Youth from families with stronger FES practices have a better sense of what their ethnic identity means to them than youth from families with weaker FES practices (e.g., Umaña-Taylor, Bhanot, & Shin, 2006). The literature on FES is sparse; however, the available literature suggests that FES is highly influential with respect to youth identity development.

### **The Current Study**

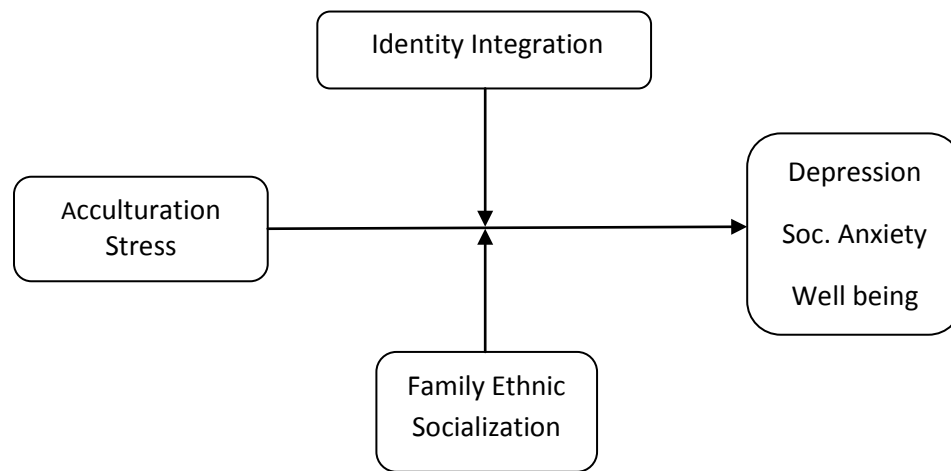
The goal of this study is to extend prior research on acculturation stress and its relation to mental health outcomes by focusing on identity integration (in terms of levels of bicultural identity conflict and distance, and ethnic identity resolution) and family ethnic socialization. Prior research has shown bicultural identities to protect youth at risk for maladaptive outcomes such as depression (Bacallao & Smokowski, 2009; Choi et al,

2007). Although we do not have an exact measure of bicultural identity integration (BII), BII will be assessed via the proxy indicators of bicultural identity conflict and distance (Benet-Martínez & Haritatos, 2005). Those who are lower in bicultural identity distance and conflict are proposed to have higher level of bicultural identity harmony (vs. conflict) and overlap (vs. distance; Benet-Martínez & Haritatos, 2005). In other words, lower scores on these designated scales will indicate greater bicultural identity integration. Additionally, a measure of ethnic identity resolution will be used in order to gauge whether or not individuals have resolved their sense of ethnicity and arguably culture.

Although family support has been shown to be protective in some aspects of acculturation (Rivera, 2007), FES, in particular, has not been looked at as a protective factor against depression and anxiety in the presence of acculturation stress. Furthermore, FES has not been looked at in terms of psychological well being in the face of acculturation stress. Essentially, this study aims to examine whether an integrated identity and positive family ethnic socialization among first-generation and second-generation Americans act as possible buffers, or moderators, against depression and social anxiety in the presence of acculturation stress. It is worth noting that social anxiety in particular will be examined in lieu of general anxiety. This is because anxiety and depression were too highly correlated ( $r=.82$ ), indicating that the two scales were measuring similar constructs. Social anxiety, on the other hand, was not highly correlated with depression. This indicated that depression and social anxiety were measuring different constructs and would therefore avoid the issue of multicollinearity. Additionally, one might assume that for individuals dealing with issues of social identity, acculturation stress may be highly

related to a sense of social anxiety as individuals attempt to take part in different social groups.

Furthermore this study aims to look at whether these moderators can be promotive of well-being in the presence of acculturation stress. This relationship will be examined because maladaptive mental health outcomes are not necessarily opposites of well being and absence of depression and anxiety does not necessarily indicate psychological well being. These ideas are illustrated conceptually in Figure 1.



**Figure 1. Conceptual Model for the Associations among Acculturation Stress, Two Psychological Outcomes, Identity Integration and Family Ethnic Socialization**

These relationships will be tested in the following six hypotheses:

*Hypothesis 1:* Acculturation stress is positively related to depression and social anxiety.

*Hypothesis 2:* Acculturation stress is negatively related to psychological well-being.

*Hypothesis 3:* Identity integration moderates the association between acculturation stress and depression and social anxiety. Having a strong sense of identity (ethnic identity resolution) and having incorporated the various cultures present in one's life (lower levels

of bicultural identity conflict and distance) diminishes levels of depression and social anxiety in the presence of acculturation stress.

*Hypothesis 4:* Family ethnic socialization (FES) moderates the association between acculturation stress and depression and social anxiety. Higher levels of FES protects against depression and social anxiety that may occur with acculturation stress.

*Hypothesis 5:* Identity integration moderates the association between acculturation stress and psychological well being. Having a strong sense of identity (ethnic identity resolution) and having incorporated the various cultures present in one's life (lower levels of bicultural identity conflict and distance) are associated with higher psychological well being in the presence of acculturation stress.

*Hypothesis 6:* FES moderates the association between acculturation stress and psychological well being.

## **Method**

### **Participants**

The current study used an existing multisite data set, the Multiple University Survey on Identity and Culture (MUSIC) data set (2008). The data for this study were collected through an internet survey that was sent out to more than 20 universities across the United States. The survey targeted all undergraduate students and included individuals between ages 17-25 ( $N=10,572$ ). Professors and instructors could choose whether or not they wanted to administer the test in their classes. The survey took about one hour to complete. Students were offered extra credit if they participated. The amount of extra credit was left to the discretion of the course instructor. Those who did not

participate did not receive extra credit and were not penalized in any way, but were provided with an alternative extra credit assignment.

For the purpose of this study, only individuals who identified at least one parent who was born outside the United States, or if they themselves were not born in the United States were included ( $N= 3,654$ ). This narrowed the sample to first-generation and second-generation immigrants to the United States as well as potential international students and students who experienced more than one culture on a regular basis. Limiting the sample to this population allowed me to look at a population who is likely to be more vulnerable to acculturation stress due to the salience of two or more cultures in their daily lives. It is important to note that generational status of participants was controlled for in order to examine whether or not there are significant differences between the two groups with respect to the acculturation stress they may experience, and whether or not one group benefits from the particular moderators more than the other.

Table 1 illustrates the demographics of the study's sample. As shown, the mean age of the participants was 20 years old (range 16 to 63). The majority of participants ranged between the ages of 18-25 (mode = 18). The sample was predominately female, with about two-thirds who were second generation (i.e. were born in the US but had at least one parent born outside of the US). In terms of ethnicity, more than 50% of 1st and 2<sup>nd</sup> generation participants were Hispanic and East Asian.

## **Measures**

**Acculturation stress.** Acculturation stress was measured using the Multidimensional Acculturative Stress Inventory (MASI), developed by Rodriguez et al. (2002). This scale included 25 items and included items such as: "Since I don't speak my

family's heritage language well, people have treated me rudely or unfairly;" "I don't speak English or I don't speak it well;" "I feel pressure to learn English;" "It bothers me when people don't respect my family's cultural values." In a study of 436 Hispanic college students in Miami, Schwartz and Zamboanga (2008) reported alphas between .79 and .85 for all items included in the MASI. Cronbach's alpha for the MASI with this study's population was .94. Furthermore, in assessing construct validity of the scale, factor analysis was carried out on MASI variables and various acculturation and psychological well-being indicators. Exploratory factor analysis indicated that the pressure to acculturate loaded on the same factor with psychological distress (cf. Rodriguez et al., 2002). Additionally, language pressures had the highest loading on the acculturation stress factor.

**Depression.** Young adult's depression levels were measured using the Center for Epidemiologic Studies Depression (CES-D) Scale (Radloff, 1977). The 20 items on this scale are measured using a 5-point Likert-scale (where *1=strongly disagree* and *5=strongly agree*) and includes items such as: "This week I did not feel like eating;" "this week my friends tried to cheer me up but I didn't feel happy;" "I have felt down and unhappy this week;" and "This week, I have felt too tired to do many things." Radloff (1977) found an internal consistency range of .85-.91. Cronbach's alpha for the CES-D scale with respect to this study's population was .92. The CES-D was moderately correlated with clinician ratings, namely the Hamilton Clinician's Rating scale and the Raskin Rating scale, of depression ( $r = .44$  to  $.54$ ; Radloff, 1977).

**Social anxiety.** Social anxiety was measured using the Social Interaction Anxiety Scale (SIAS) (Mattick & Clarke, 1998). This scale includes 19 items measured on a 5-

point Likert-scale (where 1=*strongly disagree* and 5=*strongly agree*). The Social Interaction Anxiety Scale includes items such as: “When mixing socially, I am uncomfortable;” “I feel tense if I am alone with just one other person;” “I am at ease meeting people at parties;” and “I have difficulty talking with other people.” Cronbach’s alpha was .88 for a sample of 482 undergraduate students. Cronbach’s alpha for the social anxiety scale with respect to this study’s population was .82. Mattick and Clarke (1998) report high correlations among the SIAS and theoretically related scales. For example, the correlation coefficient between the SIAS and a social phobia scale was .66.

**Psychological well-being.** Psychological well-being was measured using the Scales of Psychological well-being (Ryff, 1989). This 23-item scale was measured on a 6-point Likert-scale (where 1=*strongly disagree* and 6=*strongly agree*) and included items such as: “When I look at the story of my life, I am pleased with how things have turned out;” “The demands of everyday life often get me down;” “Maintaining close relationships has been difficult and frustrating for me;” and “I live one day at a time and don’t really think about the future.” Ryff (1989) identified six subscales using factor analysis. The subscales and their test-retest reliability coefficients are as follows: self-acceptance, .85; positive relations with others, .83; autonomy, .88; environmental mastery, .81; purpose in life, .82; and personal growth, .81. This study uses the combined scale in order to measure overall psychological well-being. Cronbach’s alpha for the total psychological well-being scale for this particular population was .75. In determining validity of the psychological well-being scale, Ryff (1989) found that 51.1% of the variance in psychological well-being was accounted for by items tapping into sense of life satisfaction, balance, morale, self-esteem and sense of control. Eight point five



percent of variance in psychological well-being can be accounted for by items such as personal growth, life purpose and relationships with others. Finally, the items tapping into sense of autonomy accounted for 7.3% of the variance in psychological well-being.

**Bicultural identity.** Bicultural identity was measured using the Bicultural Identity Integration scale (BII; Benet-Martínez & Haritatos, 2005). The eight items were measured using a 5-point Likert-scale (where 1 = *strongly disagree* and 5 = *strongly agree*), and included items such as: “I feel that I am a member both of my heritage culture and an American;” “I am simply a member of my heritage culture living in the United States;” “I feel part of a combined culture including my heritage culture and American culture;” and “I am conflicted between American ways of doing things and my heritage culture’s ways of doing things.” Benet-Martínez and Haritatos (2005), in a study of first-generation Chinese Americans, found the BII to be reliable ( $\alpha = .72$ ). Benet-Martínez and Haritatos (2005) found that based on factor analysis, this scale was best split into two different scales: Bicultural identity conflict (higher scores depicting a sense of internal conflict with respect to how one identifies with the two different cultures present in one’s life) and bicultural identity distance (higher scores depicting a sense that the two cultures present in one’s life do not share the same values). The two scales did not yield high reliability coefficients ( $\alpha = .48$  for bicultural identity distance, and  $\alpha = .49$  for bicultural identity conflict). The low reliability is due to the fact that the two scales only had four items each. However, judging by the nature of the items, the scales have high face validity. Additionally, in conducting factor analysis of the scale items, the scales had high inter-item correlation scores with values between .58 and .79 for cultural distance items, and .64 and .78 for cultural conflict items. In order to tap into a sense of a

resolved identity (as described by Umaña-Taylor et al., 2009b), a measure of ethnic identity resolution was used (Umaña-Taylor et al., 2009b). This measure included four items measured on a 4-point Likert-scale (*1=does not describe me at all* and *4 = describes me very well*). This scale includes items such as: “I have a clear sense of what my ethnicity means to me.” Ethnic identity resolution is one of the subscales of ethnic identity along with ethnic identity exploration and affirmation, which were not used in this study because I was interested in the sense of resolution. Umaña-Taylor et al. (2009b) reported alpha coefficients ranging from .84 to .98 for the subscale among a group of ethnically diverse youth. In this particular study, Cronbach’s alpha of .89 was obtained for the four items of ethnic identity resolution.

**Family ethnic socialization.** This was measured using the Familial Ethnic Socialization Measure (Umaña-Taylor et al., 2004) The 12 items were measured using a 5-point Likert-scale (where *1=strongly disagree* and *5=strongly agree*) and included items such as: “My family teaches me about the values and beliefs of our ethnic/cultural background;” “my family talks about how important it is to know about my ethnic/cultural background;” “my family celebrates holidays that are specific to my ethnic/cultural background;” and “my family teaches me about the history of my ethnic/cultural background.” With a group of ethnically diverse university students, this measure obtained Cronbach’s alpha of .94. The Cronbach’s alpha specific to this sample was .93. In order to assess construct validity, the familial ethnic socialization measure was correlated with a measure of ethnic identity. Umaña-Taylor et al. (2004) found a correlation of .58 between these measures for a group of Latino adolescents.

### **Plan of Analysis**

Prior to testing the hypotheses, the data were filtered to include participants who were defined as being first-generation or second-generation Americans. These groups were defined as those who were born outside of the US, and now residing in the US (first generation;  $N=1191$ ), and those who were born in the US but who had at least one parent who was born outside of the US (second generation;  $N=2463$ ). The two groups together make up the total sample for this study. Preliminary data analyses included generating correlation tables among all the measures. Means and SDs were also examined to test for skewness and kurtosis. Statistical analyses were then conducted in terms of multiple regressions. In order to test moderation, interaction terms were created by centering the measure for acculturation stress and each moderating measure, and by multiplying acculturation stress with each moderating variable.

## **Results**

Preliminary data analyses were carried out in order to establish whether or not further analyses would be carried out with the total population or with each group separately. Table 2 shows the means and standard deviations of all the measures for the total sample as well as for each generational group separately. Parametric and nonparametric tests were conducted to examine potential differences between 1<sup>st</sup> vs. 2<sup>nd</sup> generation on all measures. When the measure did not violate assumptions of normal distribution, *t*-tests were performed. In cases of skewed distribution, the nonparametric Mann-Whitney *U* test was performed.

As illustrated by Table 2, first-generation participants were significantly different from second generation participants with respect to acculturation stress, bicultural identity conflict, bicultural identity distance, and family ethnic socialization. Because the

distribution of acculturation stress was skewed, the nonparametric Mann-Whitney *U* test was performed. Inspection of the two group means indicates that the average acculturation stress score for first generation participants was significantly higher than for second generation participants. The effect size  $d = .11$ , however, is small (Cohen, 1988).

Bicultural identity conflict and bicultural identity resolution did not violate the assumptions of normal distribution; therefore *t*-tests were performed. The average bicultural identity conflict score for first-generation participants was significantly higher than for second-generation participants. The effect size  $d$  is approximately .2, which is a small effect size (Cohen, 1988). The average bicultural identity distance score for first-generation participants is significantly higher than the score for second-generation participants. The effect size  $d$  is approximately .33, which is a small to medium effect size according to Cohen (1988).

Family ethnic socialization violated terms of normal distribution; therefore the Mann-Whitney *U* test was performed. The average score for family ethnic socialization for first-generation participants was significantly greater than the score for second-generation participants. The effect size  $d$  at .09 is a small effect size (Cohen, 1988). For all other variables presented in table 1 (ethnic identity resolution, depression, anxiety, and psychological well being), there are no significant differences between the means for the two groups.

Next, to investigate if there were statistically significant associations among the measures, correlations were computed. Spearman's Rho was used (except in specific cases marked by <sup>a</sup>) because the majority of cases violated assumptions of normal

distribution. Table 3 shows the correlations among the measures for the total sample population (first-generation and second-generation participants combined).

The correlations reveal that acculturation stress was significantly associated with the outcome variables: depression, social anxiety and psychological well-being. Acculturation stress was positively related to depression and social anxiety and negatively related to psychological well-being. All three correlation coefficients, within the range of .33-.34, represent medium effect sizes (Cohen, 1988).

Correlations were also generated for the two groups (1<sup>st</sup> vs. 2<sup>nd</sup> generation) separately, with z-tests conducted to examine whether there were any significant differences between the two groups with respect to the correlations observed. Although a difference between the two groups was not stated in the hypotheses, these separate correlations were calculated in preliminary data analyses to determine whether or not generational status moderated the associations among variables. Therefore, correlations for each group were compared in order to determine if multiple regressions should be carried out for each group independently or if it would be sufficient to carry out the analyses for the combined total sample alone. The difference between first generation participants and second generation participants was significant only with respect to acculturation stress as it related to depression,  $z = 2.86, p < .01$ . Because of this observation, group membership became another moderator in the subsequent multiple regression analyses, but with depression only. The results revealed group membership and group membership interaction to be not statistically significant, perhaps because the z-test for correlational differences between 1<sup>st</sup> and 2<sup>nd</sup> generation showed the effect size to be small,  $r = .06$  (Cohen, 1988).

## Tests of Moderators

**Acculturation stress and depression.** In the first model, the positive relationship between acculturation stress and depression is hypothesized to be moderated by bicultural identity conflict, bicultural identity distance and ethnic identity resolution as well as by FES. Multiple regressions were carried out for each potential moderating variable. Each predicting variable was centered, as advised by Baron and Kenney (1986) in conducting moderation analyses. Variables were entered into the multiple regressions in two steps: the predictor variable and the moderator variable were entered in step one and the interaction term was entered in step two. Multiple regression results revealed that bicultural identity distance was the only significant moderator in this model,  $F(3,2411) = 126.24, p < .001$ .

Table 4 illustrates how bicultural identity distance significantly moderated the relationship between acculturation stress and depression. Figure 2 shows that the more bicultural identity distance one feels in the face of acculturation stress, the higher one scores with respect to depression. This relationship is particularly salient for individuals who have high bicultural identity distance in situations of high acculturation stress. The figure suggests that individuals with more acculturation stress are likely to benefit from lower levels of bicultural identity distance. Each level of bicultural identity distance yielded  $p$  values of  $p < .001$ , indicating that the moderating variable was statistically significant at each level. In order to determine whether or not there were measurable differences between the group with high levels of bicultural identity distance and the group with low levels of bicultural identity distance with respect to levels of depression in the face of acculturation stress, Cohen's  $d$  was calculated. Cohen's  $d$  was used to

compare the means of the high and low bicultural identity distance groups. This resulted in a relative effect size of .64, which is a large effect size according to Cohen (1988).

**Acculturation stress and social anxiety.** In the second model, the positive relationship between acculturation stress and social anxiety was hypothesized to be moderated by bicultural identity conflict, bicultural identity distance, ethnic identity resolution, as well as by FES. Multiple regressions were carried out for each potential moderating variable. Again, each predicting variable was centered, as advised by Baron and Kenney (1986). In this case, ethnic identity resolution was the only significant moderator between acculturation stress and social anxiety,  $F(3,2387) = 120.78, p < .001$ .

As shown in Table 5, ethnic identity resolution significantly moderated the relationship between acculturation stress and social anxiety. Figure 3 illustrates that those who have resolved their ethnic identity and what it means to them are likely to experience lower levels of social anxiety in the presence of acculturation stress. This relationship is particularly salient for those who have high levels of ethnic identity resolution and lower levels of acculturation stress. Each level of ethnic identity resolution yielded significant  $p$  values ( $p < .001$ ). In order to determine whether or not there were measureable differences between those who exhibited low levels of ethnic identity resolution versus those who exhibited high levels of ethnic identity resolution with respect to levels of social anxiety in the face of acculturation stress, Cohen's  $d$  was calculated. Cohen's  $d$  was used to compare the means of the group with high ethnic identity resolution and the group with low ethnic identity resolution. Cohen's  $d$  was -1.39. According to Cohen (1988), this is a large effect size.

**Acculturation stress and well being.** In the third model, the negative relationship between acculturation stress and psychological well being was hypothesized to be moderated by bicultural identity conflict, bicultural identity distance, ethnic identity resolution, as well as by FES. Multiple regressions were carried out for each potential moderating variable. Again, each predicting variable was centered, as advised by Baron and Kenney (1986). All of the hypothesized moderating variables, except bicultural identity distance, revealed statistically significant effects with respect to psychological well being.

Bicultural identity conflict significantly moderated the relationship between acculturation stress and psychological well being. Figure 4 indicates the way in which bicultural identity conflict moderates the relationship between acculturation stress and psychological well being. What Figure 2.3 portrays is that individuals who feel more conflicted with respect to how to identify with the different cultures present in their lives also experience lower levels of psychological well being, in the face of acculturation stress. This relationship is particularly salient in higher levels of acculturation stress. Each level of bicultural identity conflict as a moderating variable yielded significant  $p$  values ( $p < .001$ ). In order to determine whether or not there were significant differences between the group with high v. low levels of bicultural identity conflict with respect to psychological well-being in the face of acculturation stress, Cohen's  $d$  was calculated. Cohen's  $d$  was used to compare the means of the high and low groups, which resulted in a relative effect size of -1.69. According to Cohen (1988), this is a large effect size.



Ethnic identity resolution was also found to be a significant moderator with respect to the relationship between acculturation stress and psychological well-being,  $F(3,2411) = 302.01, p < .001$ .

Ethnic identity resolution significantly moderated the relationship between acculturation stress and psychological well being. Figure 5 indicates the way in which ethnic identity resolution moderates the relationship between acculturation stress and psychological well being. What Figure 5 portrays is that individuals who explored and resolved their ethnic identity in the face of acculturation stress experience higher levels of psychological well being. This relationship is particularly salient in situations of higher levels of acculturation stress. Each level of ethnic identity resolution as a moderating variable yielded significant  $p$  values ( $p < .001$ ). Cohen's  $d$  was used to compare the means of the group with high levels of ethnic identity resolution to the group with low levels of ethnic identity resolution, which resulted in a relative effect size of 1.56. According to Cohen (1988), this is a large effect size.

Finally, family ethnic socialization (FES), although it did not yield significance as a moderator with respect to depression and social anxiety, is a significant moderator with respect to psychological well-being,  $F(3,2291) = 164.69, p < .001$ .

Figure 6 indicates the way in which FES moderates the relationship between acculturation stress and psychological well-being, and shows that individuals who experience greater FES in the face of acculturation stress experience higher levels of psychological well being. This relationship is particularly salient in high levels of acculturation stress, as is illustrated by Figure 6. Each level of FES yielded a significance of  $p < .001$ . Cohen's  $d$  was used to compare the means of the group with high FES to the

group with low FES, which resulted in a relative effect size of 3.21. According to Cohen (1988), this is a large effect size.

### **Discussion**

The purpose of this study was to examine whether an integrated identity and family ethnic socialization moderated the relationship between acculturation stress and three psychological outcomes: depression; social anxiety and psychological well being. In support of hypotheses one and two, significant positive correlations between acculturation stress and depression, as well as a significant negative correlation between acculturation stress and psychological well being were observed. In reference to hypothesis three, there was support for the notion that when individuals felt that the cultures present in their life were less distant (there was more overlap) with respect to the values held by each culture, individuals experienced lower levels of depression in the face of acculturation stress. Similarly, ethnic identity resolution was a significant moderator with respect to social anxiety. Those who had explored and resolved what their ethnic identities meant to them in the face of acculturation stress were likely to experience lower levels of social anxiety than their peers who had not resolved what their ethnic identity meant to them. On the other hand, family ethnic socialization was not found to be a significant moderator in the relationship between acculturation stress and depression and social anxiety. Hypothesis four was therefore rejected.

However, both hypotheses five and six were supported. Bicultural identity conflict and ethnic identity resolution significantly moderated the relationship between acculturation stress and psychological well being. Bicultural identity distance, however, was not found to be a significant moderator in the relationship between acculturation

stress and psychological well being. Those who felt less conflicted with respect to identifying with the different cultures in their lives (lower bicultural identity conflict) and felt resolved with respect to ethnic identity were also more likely to show higher levels of well being, particularly in the face of acculturation stress. Interestingly, FES was also a significant moderator in the relationship between acculturation stress and well being. In other words, individuals whose families engaged in more FES were more likely to score higher on psychological well being than individuals whose families did not engage in FES as much.

It has been suggested that it is important not only to focus on addressing the risks concerning mental health in youth, but also to foster factors that promote psychological well being (National Academy of Sciences, 2009). Fostering factors promoting psychological health is a main preventative measure in addressing risk outcomes. Although this study focused on depression and social anxiety, psychological well being was also included for this very reason. It is becoming clearer, in the field of human development, that addressing youth risk factors and vulnerabilities does not necessarily mean that we are finding ways to promote positive youth outcomes. What I intend to do with this study is to highlight the notion that one can still find ways to promote well being in the face of acculturation stress even though vulnerabilities to maladaptive outcomes have not been entirely eliminated.

This study suggests that finding an overlap between cultures can be beneficial for multicultural individuals with respect to decreasing vulnerability to depression, and that ethnic identity resolution can aid in lowering social anxiety as a result of acculturation stress. These results seem to be consistent with respect to the work on bicultural identity

integration (BII) by Chen et al. (2008) and Mok and Morris (2009). Chen and colleagues state that bicultural individuals who feel a positive integration of the two cultures are more likely to have an open attitude to their daily experience living between cultures. Mok and Morris additionally found that individuals who had an integrated bicultural identity (scored higher on BII) were more likely to feel confident with respect to frame-switching. This confidence can be translated to self-efficacy which has previously been described as one requirement for psychological well being. Bicultural identity integration, as measured by bicultural identity conflict and ethnic identity resolution, were similarly found to be significant moderators in the relationship between acculturation stress and well being in this study.

Although there is much literature highlighting the importance of an integrated identity, there is a paucity of literature that examines *how* one might foster an integrated multicultural identity. Multicultural environments are supportive of positive ethnic identity (Hudley & Taylor, 2006) and can assumed therefore to be positive environments for the development of integrated multicultural identities where individuals feel “safe” exploring the different cultures present in their lives. Identity development, however, is a process that individuals must go through, and besides supporting exploration and positive attitudes with respect to multicultural environments and identities, identity development is a difficult variable to manipulate. Besides advocating support for increased multicultural environments and school contexts which promote positive ethnic identity (Phinney et al., 2001), encouraging families to teach their youth about their ethnic and cultural heritage can be essential in promoting psychological well being amongst acculturating youth.

Family ethnic socialization (FES) does not necessarily decrease vulnerabilities to depression and social anxiety in the face of acculturation stress. However, it was a significant moderator in the relationship between acculturation stress and psychological well being. As described by Figure 6, in higher levels of acculturation stress, individuals who receive higher levels of FES fare significantly better than those who receive medium and low levels of FES. Therefore, although it does not address the risk, it addresses the possibility of positive youth outcomes by promoting psychological well being. As previously noted, the family is an important protective factor for acculturating youth. Family support has been found to be a significant mediator of positive outcomes in the presence of acculturation stress (Merz, Özeke-Kocabas, Oort, & Schuengel, 2009; Rivera, 2007). In this study, it is noted that families who engage in higher levels of FES, namely create a more consistent dialogue with their youth about their ethnic heritage, culture, customs, traditions, and in some cases language, are more likely than their peers who do not receive this dialogue, to score higher on measures of psychological well being. Furthermore, although the following relationship was not explored in this study (but did yield a strong positive correlation coefficient), previous research has indicated that youth whose families were engaged in FES fostered ethnic identity exploration more than those who did not engage in FES. This was particularly true for Hispanic youth in the United States (Umaña-Taylor et al., 2009a). In turn, youth who are engaged in active identity exploration are likely to reach identity resolution. Ethnic identity resolution has been highlighted in the current study to be a significant protective factor with respect to social anxiety, as well as a significant promotive factor of psychological well being.

### **Limitations**

Despite these interesting findings, there are several limitations that need to be discussed. First, the study uses a secondary data set which limits the ability to gauge and assess certain constructs, specifically bicultural identity integration. Bicultural identity integration was measured using scales assessing bicultural identity distance and bicultural identity conflict. Some assumptions were made with respect to indicating that those who scored lower on bicultural identity distance and conflict were more likely to have integrated bicultural identities. These two scales also revealed low reliability with the population represented in this study. However, it is important to note that although the two scales revealed low reliability scores, the items do have adequate face validity. The scale for bicultural identity distance was composed of four items that tapped into the sentiment of how overlapping, or how distant, one felt with respect to how the two cultures present in one's life fit into one's life with respect to identity. The particular items included in the measure to depict bicultural identity distance were as follows: I feel I am both a member of my heritage culture and an American; I am simply a member of my heritage culture living in the United States; I keep my American and heritage cultures separate; I feel part of a combined culture including both my heritage culture and American culture. The scale for bicultural identity conflict was composed of four items that tapped into the sentiments of how conflicted one felt with respect to how the two cultures fit into one's life and identity. The particular items included in the measure to depict bicultural identity conflict were as follows: I am conflicted between American ways of doing things and my heritage culture's way of doing things; I don't feel trapped between my heritage and American cultures; I feel like someone moving between two cultures – my heritage culture and American culture; I feel caught between my heritage

and American cultures. The two four-item scales were constructed based on a factor analysis performed by Benet-Martínez and Haritatos (2005). The items were grouped into the two separate scales (bicultural identity distance and bicultural identity conflict) based on how the items were related to one another. This indicates that the two scales are based on sound conceptual and theoretical reasoning. The two scales have also shown to be previously reliable measures of bicultural identity distance and conflict (Benet-Martínez & Haritatos, 2005). Furthermore, the two scales yielded significant results when multiple regressions were performed which leads one to assume that the two scales are portraying an important construct with respect to acculturation stress and psychological outcomes. Though based on sound conceptual reasoning and though possessing adequate face validity, low reliability scores may be an indication that a better measure of bicultural identity integration with respect to this population is needed. One measure for bicultural identity integration that might have been ideal for this study is the bicultural self-efficacy scale (BSES) used by David et al. (2009). This measure provides information on how confident one feels with respect to navigating the cultures present in one's life. It would also have been interesting to examine the level of acculturation that individuals indicated (i.e. do individuals who assimilate differ with respect to acculturation stress and mental health outcomes, from individuals who alternate; Berry, 1990). Unfortunately this measure was not available.

Second, because this study is cross-sectional, directionality cannot be determined. Being cross-sectional in nature, it cannot be determined whether the reported psychological outcomes were situational or whether the individual experience the outcome across a longer period of time. It is also important to note that this study only

examined effects for first and second generation American College Students and that the majority of participants were female (70%). This may limit the generalizability of the findings to this particular population and may not yield the same results among other populations experiencing acculturation stress.

### **Future Directions**

I understand that it is not only first and second generation immigrants to the United States who must deal with the potential stress of acculturation, and that often individuals who identify as bi/multicultural, bi/multi-ethnic, bi/multi-racial due to different circumstances, other than the circumstance of immigration, face difficulties navigating multiple cultures. Unfortunately, in an attempt to keep this study as focused as possible, these other multicultural populations were not considered in the analyses, and only first and second generation American immigrant youth were considered for analysis. This particular population was selected because having been born outside of the country or having one parent born outside the country allowed us to isolate individuals who were sure to experience a culture from outside the United States on a daily basis. Having said this, in the future, this study should be considered with respect to the different multicultural populations previously mentioned in order to understand the importance of context and family socialization for any individual dealing with complex questions of collective identity development in an increasingly global society. Furthermore, future examination of group differences (e.g., differences between Hispanic and Asian groups) may be of interest to family researchers as the role of the family may have different meaning among different ethnic and/or cultural groups.



As Song (2009) stated, migration patterns across national borders, the increase in international labor, and the frequency of intercultural marriages (and observably partnerships) result in more people than ever before living among multiple cultures. Multicultural contexts that promote positive identity development (Phinney, 2001), particularly for multicultural youth, and family ethnic socialization that promotes psychological well-being in situations of acculturation stress is important to recognize. Furthermore, not only is promoting bicultural and multicultural identity integration promotive of psychological well-being (as highlighted by the current study), it also promotes multicultural personalities that are culturally empathetic, more open minded, more emotionally stable (able to stay calm in novel situations), more active in approaching social situations, and are more flexible (able to easily adjust one's behavior; Ponterotto et al., 2007). This is particularly important to recognize as societies like the United States become more ethnically, culturally and linguistically diverse (American Psychological Association, 2003).

## Appendix

**Table 1: Total Population: Frequency of Age, Gender, Ethnicity and Generational Status (N=3654)**

Mean Age	Gender	Ethnicity	Generational Status
20.14	Male = 30%	Hispanic = 32.8%	1 <sup>st</sup> Generation = 32.6%
	Female = 70%	East Asian = 27.4%	2 <sup>nd</sup> Generation = 67.4%
		White = 17.3%	
		Black = 10.2%	
		South Asian = 8.7%	
		Middle Eastern = 3.5%	

**Table 2: Means (Standard Deviations) for Acculturation Stress, Psychological Outcomes, and Moderating Variables for Total Sample, 1<sup>st</sup> Generation, and 2<sup>nd</sup> Generation Participants**

Variable	Total		1 <sup>st</sup> Generation		2 <sup>nd</sup> Generation		Analytical test
	M	SD	M	SD	M	SD	
Acculturation Stress	50.16	18.82	51.56	19.62	49.48	18.38	$U=921059.50$ , $p<.05$
Bicultural Id Conflict	12.75	3.06	13.09	3.11	12.58	3.02	$t(3071)=4.31$ , $p<.001$
Bicultural Id Distance	9.53	3.01	10.29	2.99	9.16	2.95	$t(3088)=9.964$ , $p<.001$
Ethnic Id Resolution	11.67	3.22	11.79	3.30	11.61	3.18	$U=992058$ , n.s.
Family Ethnic Soc	45.98	10.12	46.57	9.60	45.70	10.36	$U=1052609.50$ , $p<.05$
Depression	54.42	12.79	54.01	13.02	54.62	12.67	$t(2934)=-1.20$ , n.s.
Social Anxiety	50.71	14.49	50.22	14.76	50.94	14.36	$U=897393.50$ , n.s.
Well being	91.69	13.93	91.27	15.03	91.89	13.36	$t(1655) = -1.06$ , n.s.

**Table 3: Total Sample Population Correlations**

	1	2	3	4	5	6	7	8
1. Acculturation Stress	—							
2. Depression	.34**	—						
3. Social Anxiety	.33**	.46**	—					
4. Well being	-.33**	-.26** <sup>a</sup>	-.32**	—				
5. Bicultural ID distance	.31**	.18** <sup>a</sup>	.22**	-.28** <sup>a</sup>	—			
6. Bicultural ID conflict	.41**	.22** <sup>a</sup>	.24**	-.32** <sup>a</sup>	.37** <sup>a</sup>	—		
7. Ethnic ID resolution	-.29**	-.17**	-.26**	.41**	-.25**	-.24**	—	
8. Fam. Ethnic Soc	-.06**	.02	-.10**	.19**	-.10**	.01	.41**	—

Note. \*\* $p < .01$ , <sup>a</sup> values that are indicated by the Pearson correlation.

**Table 4: Multiple Regression Analysis Summary for the Moderating effect of Bicultural Identity Distance between Acculturation Stress and Depression (N=2415)**

Variable	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
(Constant)	54.338	.242	
Acculturation Stress	.229	.014	.331***
Bicultural ID Distance	.378	.085	.088***
Step 2			
AccStress x Bicult ID distance	.010	.005	.040*

Note.  $R^2 = .134$ ;  $F(2, 2412) = 187.12$ ,  $p < .001$  for step 1.  $\Delta R^2 = .001$ ;  $F(3, 2411) = 126.24$ ,  $p < .001$  for step 2.  $p < .001$ \*\*\*,  $p < .05$ \*.

**Table 5: Multiple Regression Analysis Summary for the Moderating Effect of Ethnic Identity Resolution in the Relationship between Acculturation Stress and Social Anxiety (N=2391)**

	<i>b</i>	<i>SE b</i>	<i>B</i>
Step 1			
(Constant)	50.518	.278	
Acculturation Stress	.217	.016	.276***
Ethnic ID Resolution	-.727	.091	-.160***
Step 2			
EthnIDResolution*AccStress	.017	.005	.076***

Note.  $R^2=.126$ ;  $F(2, 2388) = 172.88$ ,  $p<.001$  for step 1.  $\Delta R^2 = .005$ ;  $F(3, 2387) = 120.78$ ,  $p < .001$  for step 2.  $p < .001$ \*\*\*

**Table 6: Multiple Regression Analysis Summary for the Moderating Effect of Bicultural Identity Conflict in the Relationship between Acculturation Stress and Psychological Well-being (N=2443)**

	<i>B</i>	<i>SE b</i>	$\beta$
Step 1			
(Constant)	91.551	.260	
Acculturation Stress	-.223	.015	-.292***
Bicultural ID Conflict	-.954	.094	-.204***
Step 2			
AccStress x BicultIDConf	-.012	.005	-.046**

Note.  $R^2=.172$ ;  $F(2, 2412) = 251.17$ ,  $p<.001$  for step 1.  $\Delta R^2 = .002$ ;  $F(3, 2411) = 169.68$ ,  $p < .001$  for step 2.  $p < .001$ \*\*\*,  $p < .01$ \*\*

**Table 7: Multiple Regression Analysis Summary for the Moderating Effect of Ethnic Identity Resolution in the Relationship between Acculturation Stress and Psychological Well-being (N=2444)**

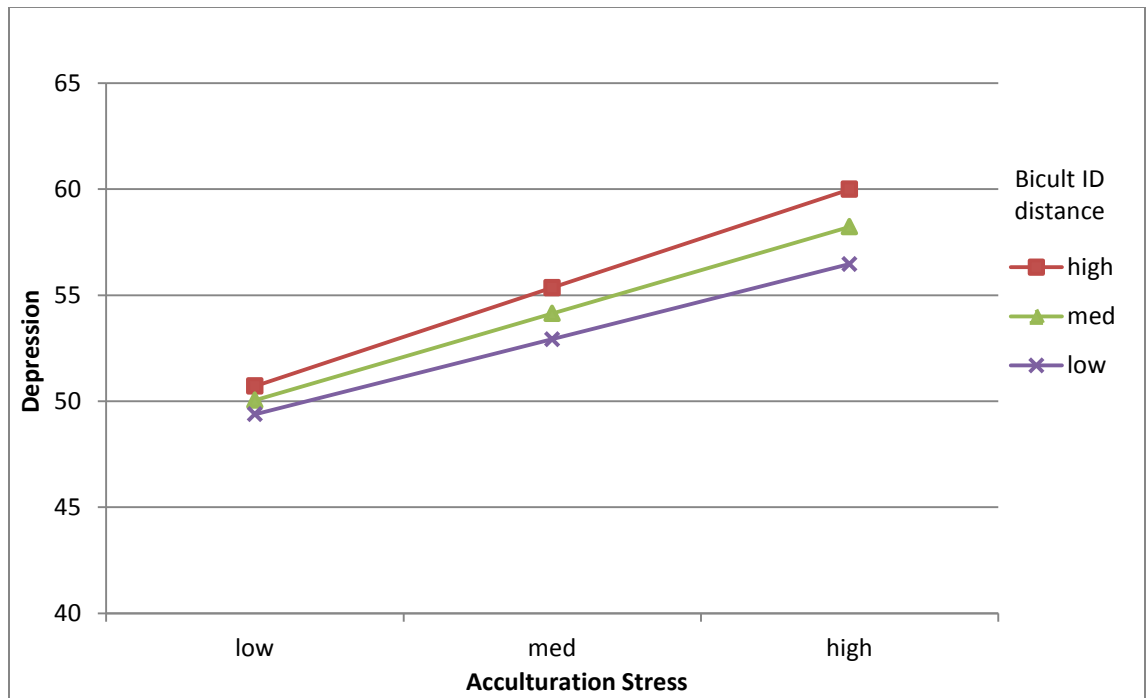
	<i>b</i>	<i>SE b</i>	$\beta$
Step 1			
(Constant)	91.501	.246	
Acculturation Stress	-.201	.014	-.263***
Ethnic ID Resolution	1.649	.082	.369***
Step 2			
EthnIDRes x AccStress	.025	.004	.110***

Note.  $R^2=.261$ ;  $F(2, 2412) = 427.909$ ,  $p < .001$  for step 1.  $\Delta R^2=.011$ ;  $F(3, 2411) = 302.01$ ,  $p < .001$  for step 2.  $p < .001$ \*\*\*

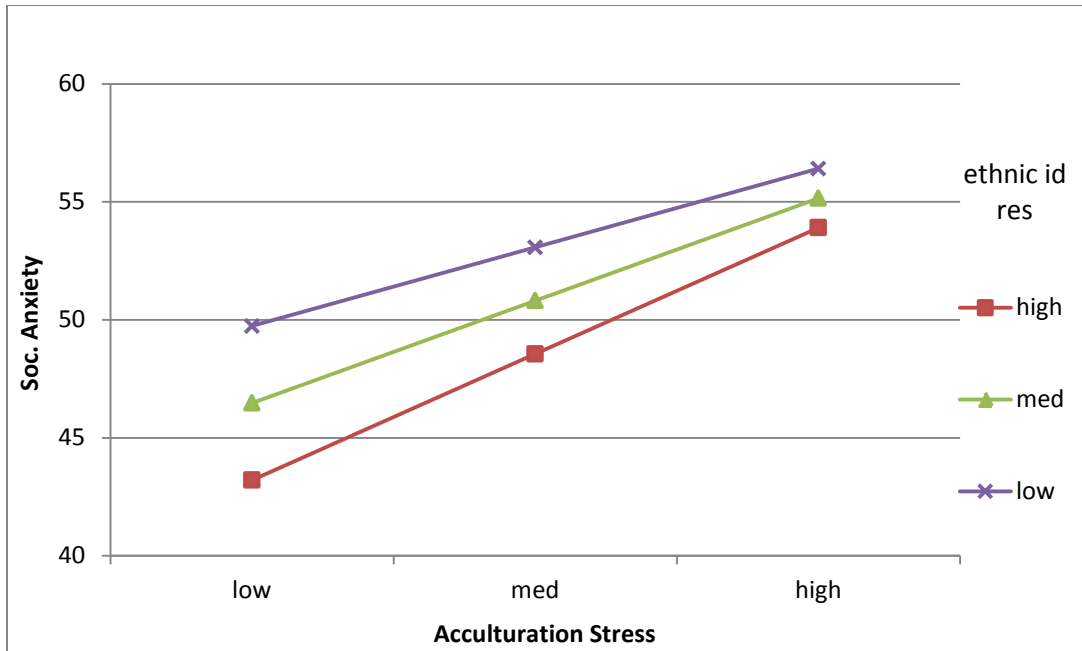
**Table 8: Multiple Regression Analysis Summary for the Moderating Effect of FES in the Relationship between Acculturation Stress and Psychological Well-being (N=2323)**

	<i>b</i>	<i>SE b</i>	$\beta$
Step 1			
(Constant)	91.422	.268	
Acculturation Stress	-.281	.015	-.367***
FES	.275	.027	.195***
Step 2			
AccStress x FES	.006	.001	.084***

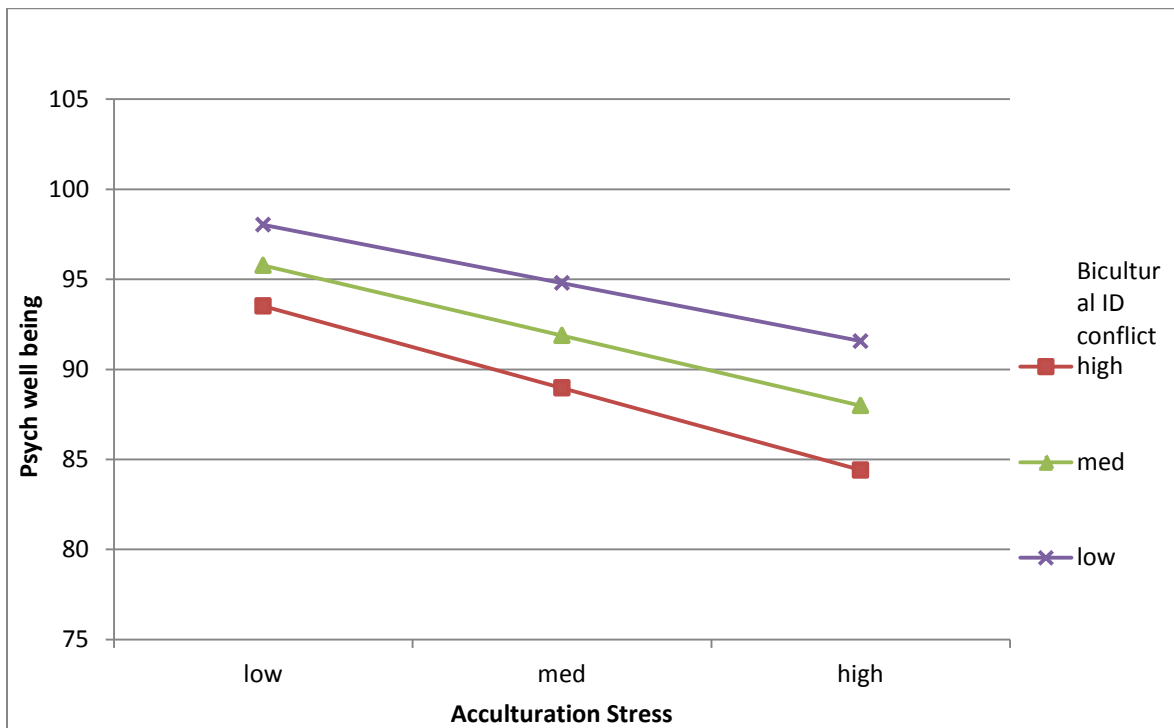
Note.  $R^2=.170$ ;  $F(2, 2292) = 236.01$ ,  $p < .001$  for step 1.  $\Delta R^2=.007$ ;  $F(3, 2291) = 164.69$ ,  $p < .001$  for step 2.  $p < .001$ .  $p < .001$ \*\*\*



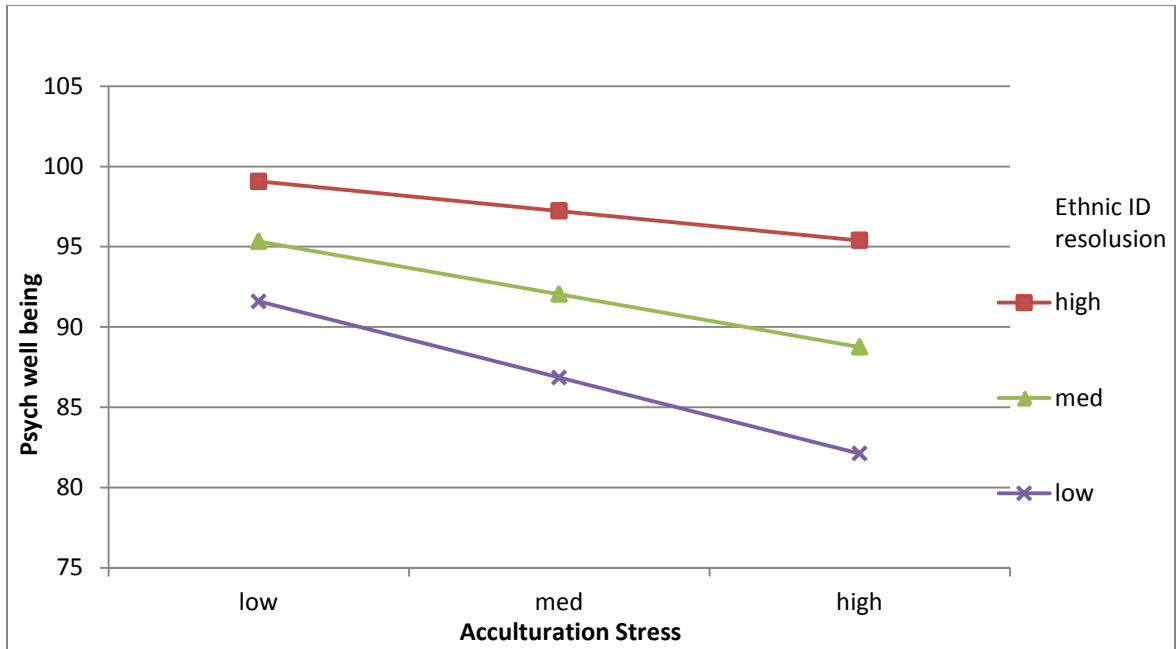
***Figure 2: Moderating Effect of Bicultural Identity Distance with Respect to Depression in the Presence of Acculturation Stress***



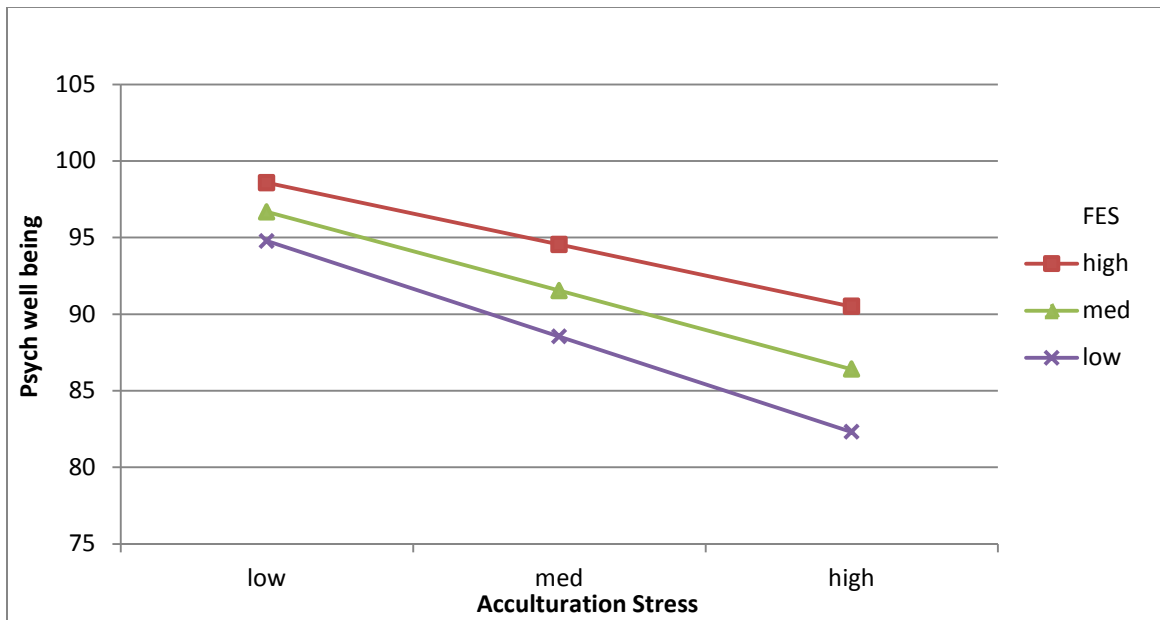
**Figure 3: The Moderating Effect of Ethnic Identity Resolution with Respect to Social Anxiety in the Presence of Acculturation Stress**



**Figure 4: The Moderating Effect of Bicultural Identity Conflict with Respect to Psychological Well Being in the Presence of Acculturation Stress**



***Figure 5: The Moderating Effect of Ethnic Identity Resolution with Respect to Psychological Well Being in the Presence of Acculturation Stress***



***Figure 6: The Moderating Effect of FES with Respect to Psychological Well Being in the Presence of Acculturation Stress***



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