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THE EXPERIENCES OF KOREAN EARLY ARRIVED INTERNATIONAL
STUDENTS (EA-I STUDENTS) AND RECENTLY ARRIVED INTERNATIONAL
STUDENTS (RA-I STUDENTS): A COMPARISON OF ATTACHMENT STYLES,
ACCULTURATION, PSYCHOLOGICAL DISTRESS, LONELINESS, AND
RESILIENCE

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ABSTRACT

This quantitative study examined the differences in acculturation, attachment avoidance and attachment anxiety, depressive and anxiety symptoms, loneliness, and resilience among three groups of Korean-born international college students: (a) Early Arrived-International (EA-I) students who had spent most of their adolescence in North America (the U.S. or Canada) without the presence of their parents, (b) EA-I students who lived in North America with a parent during their adolescence, and (c) more Recently Arrived-International (RA-I) students who had left their families to live in North America to attend college. A total of 236 participants completed a Korean version of several instruments in a survey that was distributed in print and via an Internet website.

First, it was hypothesized that Korean EA-I students (both types) would score higher than the RA-I students on identification with the host culture subscale. As expected, the EA-I students had a significantly higher identification with the host culture than the RA-I students. Identification with the host culture was also hypothesized to mediate the link between the type of international student and their level of attachment avoidance. Contrary to the expectation, the relationships between identification with the host culture, the type of international students, and the level of attachment avoidance did not hold. Second, it was hypothesized that EA-Is who had come to the host culture alone would show higher levels of attachment avoidance than the other groups. Contrary to this expectation, there were no significant differences among the three groups. Third, it was hypothesized that the Korean EA-I students who had come to the host culture without a parent would report the most depressive and anxiety symptoms. Contrary to this expectation, no significant differences were found among the three groups. The fourth

hypothesis involved the differences among all three types of Korean students on the level of attachment anxiety. Contrary to this expectation, the results suggested no differences among the three groups. Fifth, it was hypothesized that the EA-I students who came to the host culture without a parent would report a higher score on loneliness than the other two groups. Contrary to this expectation, no significant differences were found among the three groups. Lastly, it was hypothesized that the EA-I students who had come alone to the host culture would report a higher level of resilience than the other two groups. Contrary to this expectation, no significant differences on the level of resilience were found among the three groups. In sum, all the main hypotheses except the one on the difference in identification with the host culture were not supported by the results of the study.

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CHAPTER 1

INTRODUCTION

According to U.S. Immigration and Customs Enforcement (ICE), Korean students were the single largest national group among international college students in 2007 in the United States (U.S. ICE, 2007). Within this group is a unique subgroup that has been known as “parachute kids”, a term that describes mostly foreign-born Asian children who have come to the United States for their education as early as the first grade, though unaccompanied by their parents. Most parachute children are between the ages of 8 and 18 and have been separated from their parents and placed in the home of either a stranger or a relative in the United States (Zhou, 1998). Some are sent to live with their relatives after getting an international student visa; others are sent to the United States as tourists and are left with Americans who are willing to let them stay in their homes. Many of these children have been expected to adjust to American culture without having anyone to talk to about their experiences in the host culture. In 2007, Korea’s Ministry of Education reported that the official number of parachute kids increased from 1,562 in 1998 to 20,400 in 2005. However, the number of parachute kids was expected to be much larger than was reported since many families are suspected of sending their children to foreign countries in ways that are not officially sanctioned.

Purpose of the Study

This study examined the differences in acculturation, psychological distress, loneliness, and resilience among three groups of Korean-born students: (a) “parachute kids” who have spent most of their adolescence in North America without the presence of their parents, (b) Korean international students who came to North America with a parent

(usually the mother) during their adolescence, and (c) more recently arrived Korean international students who have left their families to live in the U.S. at the traditional college age. The unique characteristics of the experiences of Korean college-age international students who left their family during their adolescence have not yet been studied; thus, little is known about their attachment styles. A central concern of the present study was to observe whether students who experienced an early separation from their parents may exhibit differences in attachment styles from other Korean-born student groups. A more exhaustive literature review of each construct is presented in the next chapter to support the hypotheses of the current study. In sum, the goal of this study was to examine any potential differences in how the three groups, who experienced different living environments during their adolescence, differed in attachment, acculturation, psychological distress, loneliness, and resilience.

Background for the Study

International students on North American campuses may experience similar struggles that are common to American and Canadian students during the adjustment period of young adulthood (Sheehan & Pearson, 1995), but, in addition, international students have reported facing problems that are unique to them such as the language barrier, unfamiliar academic systems, racial discrimination, social interaction, and personal adjustment (Abe, Talbot, & Geelhoed, 1998; Parr, Bradley, & Bingi, 1992). Although they can talk on the phone to their parents back in their home country about these new experiences and struggles, many of their parents cannot understand what their children are going through because they may lack personal experience of North America. As a result, these children often give up on talking to their parents about their difficult

acculturation experience and tend to seek others in the host country who can empathize with them (Lee, 2006).

To understand why Korean parents often send their children unaccompanied to North American schools, it is important to understand how these adults view education and how competitive it is for the students to receive a top-tier education in their own country. According to Min's (1996) study of Korean parents, 90% expect their sons to attend four years of college or higher education, and 70% expect the same level of education for their daughters. Despite these high expectations, the possibility of getting accepted by top-tier colleges in Korea is very limited because of the strict quotas that are upheld by Korea's Ministry of Education. Therefore, many parents prefer to send their children to North America where they believe they can get a good education in a less competitive and less stressful environment. It is likely that these parents are financially able to send their children abroad without worrying about their material needs. Another study by Chee, et al. (2001) indicates that sending children abroad can be seen as a "long-term strategy for transnational economic advancement" since these children are expected to establish the networks and knowledge that will facilitate their own immigration to the United States.

Sirowy and Inkeles (1985) argued that the increased number of international students entering schools in more advanced countries is attributable to a myriad of push-and-pull factors of the countries they are from and are going to. Push factors refer to reasons people decide to leave their home country, whereas pull factors are advantages the host culture offers to attract foreigners. According to a study by Ahn (1996), negative opinions in general about the Korean education system influence the decisions of parents

of Early Arrived-International (EA-I) students more compared to the attraction of the host culture. Notably, Ahn indicated that the general reason for sending students abroad was that the pull factors were greater. In fact, 78.8% of Korean parents in the study reported that their country's education system has more problems than strengths, which may prompt more parents to send their children to North American countries.

What is considered a harsh and competitive education system in Korea is also partly responsible for the large number of Korean international students entering universities in North America. In fact, primary and secondary schools in Korea are often regarded as more stressful than college for students since they are often forced to prepare for the final college entrance exam from a very young age (Choe, 2008). In Korea, students are expected to attend school six days a week for more than eight hours a day. The majority of high school students are expected to stay in school as late as 11 p.m. or midnight to study (Min, 1996). Due to this heavy emphasis on the importance of education and the competition in the national college entrance exam, many Korean students and their parents have developed a negative view of their education system and have chosen universities in North America where students can learn in a more relaxed environment (Zhou, 1998). Moreover, many believe that the most important factor that contributes to a student's success is the name of the university, following financial stability, the ability to network, and diligence (Ahn, 2001).

Subjects of The Study

Although the term "parachute kids" has been accepted among researchers to describe this population, it was not used in the present study due to its negative implications. Using this term may exacerbate the students' feelings of abandonment by

their parents because of their unusually early separation, as the term implies. To describe these students using more neutral language, this study referred to them as Early Arrived-International (EA-I) students. There were two groups of Korean EA-I students in the study: those who came to North America by themselves and a second group who came with a parent. The third group consisted of Korean college students who had finished their secondary education in Korea and were only recently arrived in North America. This third group is referred to as Recently Arrived-International (RA-I) students. The RA-I students in this study were included to observe whether there were group differences in their adjustment to life in America between students who spent their adolescence with their parents in Korea and students who had arrived in America at a young age (either with or without their mothers).

Lee (1999) described two types of living situations between EA-I students. The first are sent to live alone in the host culture in order to receive a Western education. Lee depicted the life of these students as very difficult and lonely as these students are forced to separate from their parents and friends. Thus, they are forced to communicate with them mainly over the phone. The second type is those who move to the host culture with a parent, usually their mothers. Some Asian parents are concerned about the loss of connection with their children; thus, their mothers move to the host culture with them until they enter college. Interestingly, some EA-I students are actually citizens of the host country because they were born there when their parents were international students. The experiences of these international student are easily discounted and separated from those of other EA-I students regardless of the absence of their parents, because they do not have as many problems as other international students due to their dual citizenship status.

However, the EA-I students who are citizens may also experience a lifestyle adjustment and challenges similar to those of other young EA-I students in North America. Therefore, EA-I students who are U.S. citizens are also categorized as either EA-I students who came with a parent or EA-I students who were unaccompanied (even if these students are not officially international students). Regardless of their family members' living situations in the host culture, the fathers tend to stay in their home country and continue to provide the family financial support (Onishi, 2008). Many of these fathers are not happy with the separation from their family; however, they believe that their sacrifice to provide their children with a Western education is necessary for their children's success (Choi, 2006). This kind of living situation has been typical of many Korean EA-I students; however, it is not clear how these living arrangements and separations from their parents influence these young persons' psychological development.

The third group in this current study was comprised of Korean recently-arrived international (RA-I) students who had finished their high school education in Korea. This population is viewed as a group that is likely to experience a very difficult adjustment period because of the differences in the language and culture of the host country. However, this population is part of the growing number of Korean international students in North America. Church (1982) identified the major sources of difficulties encountered by these international college students as language, financial problems, homesickness, adjustment to a new educational system, and new social norms in a short time, all of which cause them considerable stress. As discussed below, attachment style, loneliness, psychological distress, and resilience levels among the RA-I students living in North

America to get their college education were hypothesized to be different from those of the two kinds of EA-I students.

Students Between Two Cultures

Regardless of the various living situations of EA-I students, the adjustment of both types (those who came alone or those who came with a parent) to the host culture is likely to be different compared to those of RA-I students. It was found that immigrant children typically experience pressure to acquire language skills in order to follow the American school curricula, to develop social relationships with their American classmates, and to become acculturated as soon as possible (Cheng, 1994).

Simultaneously, these students are expected to develop their Korean language skills within their own community culture. Yet when EA-I students return to their homeland to be with their parents they are often ridiculed by native Koreans for lacking the language skills and discipline expected of Korean children. Therefore, the pressure from both cultures causes many EA-I students to feel marginalized and stressed by being caught between two countries, two educational systems, and two sets of values. Previous studies (e.g., Cheng, 1994; Chung, 1994; Hwang & Wantanabe, 1990) of Chinese EA-I students who lived in the U.S. without their parents have indicated that these adolescents reported having more psychological distress such as depression, anxiety, and paranoid ideation than American-born Chinese and immigrant adolescents. The EA-I students in these studies also reported suffering loneliness, isolation, and struggle with identity issues.

In contrast to their actual experiences in their host culture, EA-I students have been portrayed by the media as individuals who are sent to the United States for their education, with plenty of money and primary responsibility for their daily lives

(Hamilton, 1993). Despite having financial security, growing up mostly on their own in North America can be very difficult and lonely for Korean EA-I students because their experiences may differ from those of first-generation immigrants who have entered the host culture during their adulthood, and American-born, second-generation Korean Americans. According to the U.S. Citizenship and Immigration Services guideline (www.Uscis.gov) and Canadian Immigration (www.cic.gc.ca), EA-I students cannot be referred to as first-generation immigrants because they have an F-1 visa which restricts them from obtaining jobs in the United States/Canada and from freely leaving and entering the country without obtaining full-time student status. Therefore, it can be difficult for them to find people who can understand their unique experience of being neither first-generation Koreans who spent most of their lives in Korea nor second-generation Korean Americans who identify themselves as more American than Korean. Some media articles have reported EA-I students as having their own houses and cash to spend on whatever they wish, but having to live without their parents or adults who can fulfill their emotional needs as adolescents (Hamilton).

Despite the media's overly simplified image of EA-I students, it is reasonable to assume that those who enter the new culture alone in their adolescence or earlier are likely to experience a distinctly different adolescence compared to mainstream Korean adolescents who typically remain in close contact with their parents and their culture until they enter college abroad. The separation from their parents and the move to a culture that has different family characteristics may affect EA-I students' daily lives, their personal characteristics, and their well-being. It is reasonable to assume that such an abrupt change for these students may affect how they relate to others since they are

forced to develop a new way of connecting with people in a new culture, but with very little social support. Not having the presence of their parents in their daily lives in the years before college also implies that EA-I students may be forced to experience adolescence without being with someone they can trust. Therefore, it is possible that this disruption in the attachment relationship prior to adulthood may decrease their attachment security.

Adjustments to Another Culture

To understand the possible effects of the abrupt shift that EA-I students experience when moving to North America without their parents, it is necessary to investigate the possible influence the sudden absence of their parents has on these young people. Bowlby (1969) and Ainsworth (1973) theorized that there can be significant long-term implications of separations, such as a break in the parent-child relationship, an individual's intimate relationships, and self-understanding. Bowlby's (1964) attachment theory is conceptualized as being culturally universal, although different attachment behaviors are influenced by specific cultural practices. Bowlby (1973) also theorized, with empirical evidence, that separation causes substantial anxiety in an adolescent and that the adolescent needs to reestablish contact with the absent attachment figure. If this absence lasts for a longer period of time, however, detachment may be used as a defense by the young person, and further psychopathology can develop. Thus, an examination of Korean EA-I students' attachment style may help shed light on these students' experiences, particularly if differences among the three student groups emerge.

The acculturation process should also be investigated in the description of Korean international students' experience in their host culture. In addition to the abrupt

separation from their family members, friends, and cultural practices, these Korean students are forced to acclimate to a new culture and its practices fairly quickly. This acculturation is known to have a considerable influence on one's psychological, social, and cultural changes (Grave, 1967). Thus, it is necessary to observe how the various levels of acculturation are related to differences between Korean international students' attachment style and other personal experiences such as loneliness. Past studies indicate that the acculturation process can result in loneliness and psychological distress among individuals who have emigrated to a different culture (e.g., Ward & Rana-Dueba, 1999). A person going through acculturation has been viewed as having two conflicting needs: to stay close to their own cultural identity and to adjust to the new culture. These two needs of a person in a new culture have been observed in order to assess their acculturation level (Berry, Kim, & Young, 1989). This study focused on their theory of acculturation.

Considering the abrupt changes Korean international students experience by leaving their family culture and support system, loneliness may be salient in their lives. Loneliness has been defined as a distressing and unpleasant state that individuals may experience due to their belief that there is a lack of social interaction in their lives (Peplau & Perlman, 1982). It has been argued by some scholars (e.g., Levin & Strokes, 1986) that a sense of loneliness has been formed by one's cognitive bias. They argue that one's sense of loneliness is mostly due to one's negative expectations of their understanding of their relations with others. However, others have argued that personal factors are the reasons for one's sense of loneliness. For example, an individual's sense of loneliness may be viewed as the result of their own inappropriate behavior or shyness. Thus, it is

reasonable to assume that the loneliness of EA-I students who come to North America without their parents may be the result of both their own negative expectations of the host culture and their personal behaviors, since they are left without their loved ones, and their behaviors are often expected to be different from those of the host culture. The socially alienating values of the host culture may also cause both types of Korean EA-I students to feel more isolated and lonely. Studies have found evidence that higher levels of loneliness are associated with cultures that are characterized by individualism (Bhogle, 1991; Rokach & Neto, 2000), which particularly characterizes the culture of the U.S.

Korean international students living in North America are expected to be strong and independent from their family members and to adjust well to their new culture. They may exhibit a certain resilience in this process. Resilience has been predicated on exposure to a significant threat and then experiencing good outcomes regardless of the exposure (Luthar, Cicchetti, & Becker, 2000). Resilient individuals are optimistic (Block & Kremen, 1996), proactively elicit positive emotions (Werner & Smith, 1992), are conscientious (Campbell-Sills, Cohen, & Stein, 2006), and have greater perceived social support (Werner & Smith). Thus, EA-I students may feel overwhelmed to be in the new culture, but because of their level of resilience may be able to adjust and do well in their school work. It may be reasonable to assume that the Korean EA-I students who came to this country without their parents are more likely to exhibit a higher level of resilience than the other two Korean groups because of their struggle to be independent and strong without the presence of their parents during their adolescence.

Hypotheses

In the present study, it was hypothesized that the Korean EA-I students (both types) would report a higher identification with the host culture than the RA-I students. In terms of attachment, it was hypothesized that the attachment avoidance and attachment anxiety levels of the Korean EA-I students who had come to North America by themselves would be the highest compared to the other two groups, accompanied EA-I students and RA-I students. It was also hypothesized that the EA-I students who had come by themselves would be more likely to report a higher score on loneliness than the other two groups, partly due to their high levels of both attachment anxiety and avoidance. A difference between the types of students and their level of psychological distress was also expected, with the EA-I students who had come to the host culture by themselves expressing greater distress. Lastly, the EA-I students who had come to North America without a parent were expected to report a higher level of resilience than the other two groups due to their efforts to cope with difficult developmental stages in the host culture.

CHAPTER 2

LITERATURE REVIEW

The purpose of the present study was to examine the differences among three groups of Korean international students on attachment, acculturation, psychological distress, loneliness, and resilience. The three groups included (a) college students who were Early Arrived-International (EA-I) students and had lived in North America by themselves, (b) college students who were EA-Is who had come to North America with a parent, and (c) Recently Arrived-International (RA-I) students who had come to North America for their college education after finishing their high school education in Korea.

In this chapter, each construct (EA-I/RA-I students) is briefly described, including the relevant literature on EA-Is, in order to present the connections between the variables found in previous research and to lay the foundation for the rationale for the present study. Following this description of the Korean international students, a discussion of attachment theory and the empirical work it has inspired is presented. Attachment is first defined; then aspects of attachment theory are presented, including the development of attachment, separation, stability of attachment, and the various conceptualizations of attachment. Due to the expected impact of the acculturation process on EA-I students and the potential differences between them and RA-I students in acculturation, the literature on acculturation is thoroughly discussed. The most prominent theory on acculturation is presented, and theories on possible influences, types of acculturation process, and possible areas of its impact are also presented. Lastly, psychological distress, loneliness, and resilience are described, and the connections between attachment and each of these

variables are also addressed. This chapter concludes with a detailed description of all the hypotheses.

Early Arrived-International Students

As mentioned earlier, “parachute kids” is a term that has been used to refer to Asian children who are sent to live in the United States prior to college age. However, the term Early Arrived-International (EA-I) students was used in this study to avoid the derogatory implications of the term “parachute kids.” Some of these young persons come to North America by themselves, whereas other EA-I students come with their mothers. An understanding of EA-I students is still very limited because this population has not been studied extensively (Lee, 2006). Because of this lack of research, the EA-I students’ motives for leaving their families and cultures have not been well documented. Also, little is known about where they typically settle. Thus far, the few empirical studies and media reports regarding EA-I students have focused on Chinese “parachute kids” (Hamilton, 1993; Hom, 2002). For most of the 1990s, the term “parachute kids” was used exclusively to refer to Taiwanese and Chinese students who were sent alone to the U.S. by their parents. The focus on these students was likely due to the visibility of these groups in California where there was a regional concentration of them (Zhou, 1998). Thus, it would not be sound to assume that the results of these few studies can be used to describe Korean EA-I students.

In this study, college-age EA-I students were divided into two groups according to their living situation in America during their adolescence in order to investigate possible differences between the two groups based on the presence or absence of the students’ mothers. First, it seems reasonable to assume that EA-I students who enter the

new culture alone are likely to experience a different adolescence than mainstream adolescents in Korea who typically remain in close contact with their parents and their culture until they enter college. Furthermore, one might hypothesize that the experience of EA-I students who came by themselves is likely to be different from that of EA-I students who came with their mothers. It is important to note that the EA-I students who came to the new culture by themselves are forced to experience adolescence without being with someone they can trust, because their parents are not present in their daily lives in the years before college. Therefore, it is possible that this disruption in the parent-child relationship prior to adulthood may have important sequelae that need to be investigated. However, it is unclear what impact the separation of Korean children from their parents in their daily lives, by moving to North America, has had on their personal characteristics or well-being. It is reasonable to assume that such an abrupt change experienced by these EA-I students may affect how they relate to others since they are forced to develop a new way of connecting with people in a new culture, often having very little social support. The third group, Recently Arrived-International (RA-I) students, was included in the present study to observe whether those who had spent their adolescence with their parents in Korea are different in regard to their relationships, attachment, and sense of loneliness than EA-I students who had spent their adolescence abroad, separated from their parents.

Attachment Theory

This section reviews the literature on attachment in children and adolescents, attachment styles in adulthood, attachment and separation, the stability of attachment styles, and attachment and culture.

Attachment in Children and Adolescents

In order to understand and explain the possible links between Korean EA-I students' life experiences and their interpersonal relationships, a thorough explanation of attachment theory is necessary, because it can shed light on the effects of separation from important caregivers (Bowlby, 1980). Bowlby (1988) and Ainsworth (1989) theorized that attachment relationships are characterized by the presence of a secure base, which has been characterized as a safe haven to which one can return in times of need. A parent or parental figure is usually understood as providing a secure base for a child, but Bowlby (1969) also theorized that a secure base is important throughout the lifespan. It is to this secure base that the individual, both as a child and as an adult, can return in times of distress. Children, however, learn what to expect in relationships from early foundational experiences with important caregivers, and these representations of relationships or "inner working models," are carried forward into later relationships (Bowlby, 1973, 1980).

Bowlby (1973, 1980) also theorized that the inner working model is a key concept in understanding attachment theory. As an infant learns how much he or she can rely on the parent for the fulfillment of basic needs, the working model develops. This model reflects what the infant has learned to expect from the parent in terms of whether the parent is able to provide a secure base. Bowlby also postulated that the attachment-related working model provides an understanding of the self as a person and enables the individual to anticipate the kind of care and affection that others are likely to give. The working model that children develop by interacting with their parents from infancy on becomes a guide for all relationships and influences their expectations, strategies, and

behaviors in later interpersonal relationships. Thus, children who can rely on their parents as a secure base in their daily lives, in both ordinary and extraordinary circumstances, are likely to develop a secure attachment working model. However, children who do not experience a secure base are likely to develop insecure working models. Their future relationships and beliefs about love are likely to be viewed as less positive than those of individuals with a secure working model (Collins & Read, 1990).

Bowlby (1969) theorized that the understanding of self and others established in infancy and childhood will likely be relatively stable, though it can change if circumstances change; it will play a role in other relationships as individuals mature although the individual will not necessarily be consciously aware of the process of the application of these inner working models. Bowlby indicated that for a secure attachment relationship to develop, the secure base must be in proximity to the child in times of distress and need so that the child can seek help when comfort or other support is most needed. In addition to proximity, the secure-base figure should convey that he or she is a safe haven for the individual to come to and stay close to until the child gains the confidence to go out and explore again. Children should also feel confident that their attachment figure is committed and available to provide support when it is needed. Children tend to resist separation from the figure who provides a secure base and safe haven. Bowlby suggested that children are organized to maintain closeness to their secure base so that the child tends to experience a desire to keep their proximity to the attachment figure in order to feel safe in times of trouble or distress. Staying close to their attachment figure implies that they will be protected in times of need, thus enhancing the likelihood of survival in times of danger. This also increases the likelihood of survival of

the child. Thus, separation from the secure base is expected to create anxiety and protest, because it would mean to the children that they would not have protection from potentially threatening situations (Bowlby).

The infant-parent attachment relationship tends to alter as children become adolescents. Attachment security is still manifested in the mother-adolescent relationship, which is analogous to the secure-base phenomenon observed in a secure infant-parent relationship (Allen, et al., 2003). However, adolescents' exploration focuses on relationships and asserting emotional and cognitive independence from their parents (Allen, Hauser, Bell, & O'Connor, 1994) rather than on the physical environment as in infancy. Bowlby (1973) theorized that establishing close relationships with both parents is an important factor in the growth of adolescent self-reliance and for individuation. In addition to the need to have a secure base, Brannen and DiTommaso (2001) indicated that adolescence is understood as a period when individuals are exhibiting autonomy-seeking behaviors by developing other attachment relationships with friends and romantic partners. However, a study by Allen, et al. (1994) found that this exploration can be facilitated in a healthy manner when adolescents know that they can turn to their parents in cases of real need. Their study examined 140 American adolescents for two years.

Other studies also support the theory that adolescent attachment security is linked to secure-base relationships with both parents (e.g., Cassidy, Ziv, Mehta, & Feeney, 2003; Feeney & Cassidy, 2003). Feeney and Cassidy indicated that adolescents tend to rate their perception of their interactions with others according to their attachment-related representations of their parents. This conclusion was projected after seeing the

participants rate their perception of their interactions with others differently when it was measured six weeks after the incident. Therefore, it is possible that EA-I students' interactions with others can be influenced by their perception of their relationships with their parents.

It is clear that child-parent or adolescent-parent attachment relationships play a crucial role in an individual's lifespan attachment style according to the aforementioned studies. There is also evidence that attachment styles can change, particularly when relational circumstances change (Sroufe, Egeland, Carson, & Collins, 2005). Waters and colleagues (2000) found that negative life events are associated with changes from security to insecurity. They conducted a 20-year longitudinal study to investigate how the attachment style changes over the life span. The study reported that of 60 participants, 44% were found to have changed from a secure classification in childhood to an insecure classification in young adulthood subsequent to negative life events. The negative events identified in their study included loss of a parent, parental divorce, the life-threatening illness of a parent or child, a parental psychiatric disorder, and physical or sexual abuse by a family member. Experience of any of these negative events was identified as an important factor in effecting a change from a secure to an insecure attachment.

Attachment Styles in Adulthood

Before discussing what attachment theory says about separation experiences, it would be helpful to first consider basic concepts in attachment theory in adulthood and consider how the experiences of different Korean international student groups may differ quite a bit in adolescence. Attachment styles that are developed throughout one's childhood and adolescence are theorized to impact one's adult attachment styles

(Bowlby, 1961). As stated earlier, young adults who grew up as unaccompanied EA-I students are expected to have different attachment styles compared to those who did not experience disruption in attachment during adolescence; these EA-I students are likely to have learned that they don't have anyone to rely on in their daily lives. This parental absence may encourage EA-I students who came to the U.S. without a parent to be more self-reliant as a reaction to the lack of constant interaction with their parents, compared to students who spent their adolescence with their parents. Most of these unaccompanied EA-I students spent their adolescence without being able to seek help from their parents in person in times of need. At times, the parents expect them to be the experts on the new culture. Considering that many of these EA-I students are left with relatives or strangers, it is likely that they will spend most of their adolescent period without a secure base. (An extensive explanation of how separation from parents during adolescence can influence one's attachment style is provided in the next section.) Perhaps, therefore, a feeling of safety may be a rare experience for these students. This lack may predispose them to being more "needy" in regard to and more anxious about their close personal relationships. However, EA-I students who came with their mothers are more likely to develop a more secure attachment style than EA-I students who came by themselves, as the former are more likely to retain a secure base to return to during times of distress.

In order to explore attachment differences between groups of international students who are young adults, it is important to understand the conceptualizations of attachment in adulthood. Adult attachment was initially conceptualized in terms of categories of attachment that mirrored categories of infant attachment (e.g., Hazan & Shaver, 1987), but more recently adult attachment has been conceptualized in terms of

attachment dimensions (Brennan, Clark, & Shaver, 1998). Because much of the research on adult attachment has used older conceptualizations of it, an understanding of the history of the thinking on adult attachment may be helpful.

Hazan and Shaver (1987) offered a theory of adult attachment that mirrored the three infant attachment styles posited by Ainsworth, Blehar, Waters, and Wall (1978). According to Hazan and Shaver, individuals who are securely attached are comfortable with intimacy and autonomy; individuals who are avoidant tend not to develop close relationships; and anxious-resistant individuals show ambivalent behavior toward caregivers and reunion. Later, Bartholomew and Horowitz (1991) created a four-category attachment model that included the three attachment styles of Hazan and Shaver's model, but added a fourth. First, "secure" individuals are persons who are more likely to provide care and support to others, and to express their anxiety and seek comfort from their attachment figures (Fraley & Shaver, 1998). These individuals were found to exercise healthy conflict resolution strategies such as compromise and integration (Gaines, et al., 1997). Individuals who are described as "preoccupied" are usually overly concerned with interpersonal relationships. These individuals are found to have a propensity to be hypervigilant to distress and to express heightened emotions, as Fraley and Shaver found in their study. Kobak and Hazan (1991) also found that individuals who fell into the "preoccupied" category tend to use passive thought processes in conflictual situations. On the other hand, individuals who tend to dismiss intimacy and prefer independence were referred to as "dismissing-avoidant." These individuals are in the same category as the avoidant category in Hazan and Shaver's three-category model. To their three categories, a "fearful-avoidant" category was added to describe individuals who are both very

avoidant of intimacy and preoccupied with attachment relationships. These individuals are fearful of intimacy, yet long for it, and socially avoidant due to a fear of rejection and separation.

The understanding of attachment styles shifted when Brennan, et al. (1998) created their two-dimensional model based on a factor analysis of all the extant measures of adult attachment. The two dimensions of attachment include avoidance and anxiety. Avoidance is defined as a tendency to avoid interpersonal closeness and to deny distress. High levels of attachment avoidance are associated with an underestimation of the value of the secure base. Individuals with high levels of attachment avoidance are also likely to be more emotionally distant so that they do not have to worry about others' responses to them. On the other hand, the anxiety dimension reflects the tendency to experience worry that the secure base may not be available to them in times of need. These individuals are theorized to be more anxious about the availability of their secure base; thus they appeared to be very "needy" and anxious about their relationships. Fraley and Waller (1998) provided empirical evidence that the two-dimensional conceptualization of attachment was a better fit to describe attachment than were the earlier categorical models. Attachment in adults is currently conceptualized in terms of this two-dimensional model. However, some researchers often communicate using the terminology of the older categorical approaches, despite the current emphasis on a two-dimensional conceptualization of attachment.

These diverse views of adult attachment can be challenging and difficult to understand. It might therefore be of great service to translate the older categorical terminology into terms of a dimensional model. Hence, the current study could use the

dimensional model and reference older studies that were conducted using a categorical approach in terms of the more current dimensional terminology. Accordingly, Mikulincer, Shaver, and Pereg (2003) suggested a method for translating between the categorical and the more up-to-date dimensional model. The “secure” category from the categorical model is translated to mean low anxiety and low avoidance. People who are assigned to the preoccupied category are individuals who scored high on anxiety and low on avoidance. Fearful-avoidant individuals are people who score high on anxiety and high on avoidance. Lastly, the dismissing-avoidant category refers to individuals who score low on anxiety and high on the avoidance dimension.

Individuals who score on the low end of both attachment anxiety and avoidance dimensions are considered to be more secure in their perceptions of interpersonal relationships, whereas high scores on either or both dimensions may indicate attachment insecurity. Some studies have indicated that adults with insecure attachment dimensions are likely to engage in less adaptive interpersonal behavior across a variety of domains such as social support and caregiving (e.g., Feeney & Collins, 2001). Certainly, there is empirical evidence that insecure adults are prone to maladaptive patterns of social perception and emotion regulation when they reach adulthood (e.g., Collins, 1996; Davila, Bradbury, & Fincham, 1998; Feeney, 1999; also see Mikulincer & Shaver, 2005, for a review).

Overall, an individual’s attachment style not only affects his or her relationships with a few attachment figures in their life, but it is also related to several aspects of interpersonal relationships across contexts (Mikulincer & Shaver, 2005). Bowlby (1980) theorized that a person’s fully developed working models of self and others may have a

direct influence on their relationship outcomes by influencing social perceptions, shaping affective response patterns, and directing interpersonal behavior, a theory supported by a study conducted by Sroufe and Fleeson (1986). Therefore, it is reasonable to assume that if there is a shift in the attachment style of EA-I students, their social perceptions, affective response patterns, and interpersonal behaviors will show an associated shift.

Attachment and Separation

Considering the fact that many EA-I students are separated from their parents at a young age, it is helpful to understand the role of separation in the development of an individual's working models of attachment. Infants were found to cry and actively search for their attachment figure when they were separated from that figure. Babies separated from their parents are likely to show substantial anxiety and manifest responses such as crying and searching to find the attachment figure (Ainsworth, 1967; Bowlby, 1969, 1982; Vormbrock, 1993). However, if their needs for proximity are often unmet, they learn to show less visible distress and actively avoid the attachment figure when they are reunited with their secure base (Bowlby, 1977).

In general, past research has found that separation from attachment figures exacerbates feelings of loneliness (Cutrona, 1982), negatively impacts the quality of social relationships (Shaver, Furman, & Buhrmester, 1985), and impedes academic adjustment (Rice, 1991). Concomitant with their separation from their parents, EA-I students enter a new culture and environment, which they may experience as very stressful. Bowlby (1973) asserted that stressful social and environmental conditions are likely to activate attachment needs. When these needs are activated, individuals often seek to reestablish contact with their attachment figure in order receive comfort (Bowlby

1969, 1982). Separation may result in adolescents retreating by avoiding or withdrawing, the way infants behave when they are separated from their parents. Studies on adolescents' separation from parents view it as an important development stage for individuation and separation (e.g., Kroger, 1985).

In times of separation, individuals react with different behaviors according their attachment styles. Therefore, identifying a person's attachment style can predict their behaviors when they are placed in an unfamiliar environment that would activate their attachment system. An empirical study conducted by Fraley and Shaver (1997) suggested that individuals who are more avoidant have a proclivity to express relatively limited levels of attachment behavior following separation or loss. Their study found that individuals were less willing to seek out their romantic partner than others when they were facing extended separation. Fraley and Shaver also found that people with high levels of attachment anxiety tend to worry about the possibility of separation or rejection. At such times, these individuals were likely to have strong emotional and behavioral reactions. Unlike avoidant individuals, those who reported being highly anxious in their attachment style were more likely than others to seek emotional support and contact from their partners when they anticipated any form of separation.

In understanding the individual's reaction to separation, it would also be sensible to study the influence of the father as well as the mother in the person's attachment development. Schwartz and Bulbaltz (2004) found that fathers play an important role in teaching children how to balance attachment to and separation from the family. Their study indicated that adolescents learn to assert their independence and explore their own values when they feel secure through maintaining positive communication with their

fathers. This study suggested that the father plays a unique role in an individual's attachment development. Other empirical research has demonstrated the indirect role the father plays in affecting the mother-child attachment (Das Eiden & Leonard, 1996), and in the coping styles of adolescents (Zimmermann & Grossmann, 1997). Based on what is known about how individuals experience separations from attachment figures, it was reasonable to hypothesize that EA-I students unaccompanied by a parent, or adolescents who cannot maintain a close relationship with their parents because of immigration, would be likely to experience stress in reaction to the separation from their parents.

Stability of Attachment Styles

The results of a longitudinal study conducted by Sroufe, Egeland, Carson, and Collins (2005) also indicated that the participants who changed from a secure to an insecure base had lower family support scores than those who were secure as infants and remained secure as adults. It is noteworthy that many EA-I students often get separated from both parents at a young age. Thus, for these children, family support was likely to be minimal during the separation because their physical distance may have hindered them from receiving adequate emotional support, especially in times of need. Previous studies have shown that going away to college has been conceptualized as a strange situation for students (Kenny, 1987; Klasner & Pistole, 2003), and a study conducted by Lopez and Gormley (2002) suggests that this move can be viewed as a stressful life event that would likely influence and be influenced by one's attachment style.

In sum, attachment theory provides a basis for theorizing about the relative instability of attachment styles manifested by those who experience changes in the secure base available to them during their adolescence. Therefore, it was reasonable to speculate

that the social perception and interpersonal behavior of EA-I students would show differences from other students who were nurtured by parents who were readily available in adolescence. Moreover, it was reasonable to theorize that many EA-I students would be less secure as adults than other individuals, and that the lower levels of security would be associated with different patterns in personal relationships—patterns that might show a greater likelihood of being maladaptive.

Attachment and Culture

In considering attachment and separation, it may be helpful to explore the cultural relevance of attachment constructs for Korean young people. Specific studies comparing levels of attachment constructs between Koreans and Westerners were not found, but a very limited number of studies have investigated the possible moderating effects of collectivistic culture on individuals' attachment anxiety and avoidance. Wei, Russell, Mallinckrodt, and Zakalik (2004) reported that Asians or Asian Americans exhibited higher attachment anxiety and avoidance than Caucasians. These researchers theorized that this tendency towards having higher attachment anxiety might be due to the need for social approval among collectivistic cultures, which accentuates a negative model of self and a positive model of others (Wei, et al., 2004). Wang and Mallinckrodt (2006) speculated that high attachment avoidance scores in this group might be the result of the behavioral norm against emotional disclosure in collectivistic culture.

Attachment researchers have theorized that the core components of attachment theory are culturally universal (Cassidy & Shaver, 1999; Main, 1990; van Ijzendoorn & Sagi, 1999), even though the ways that specific attachment behaviors are manifested can be influenced by different cultures (Grossmann, Grossmann, & Kepler, 2005). Previous

studies have investigated the role of attachment styles within the Korean population and evidence shows that attachment constructs are relevant for this population (Park, 2001; Yoo, 2004). For the purposes of the present study, the consideration of the meaning of separation from one or both parents may be informed by the Korean collectivistic culture, in which parent-child relationships are often emphasized. Therefore, it is possible that Korean individuals view separation from either parent as detrimental. For this reason, it is important to explore group differences in students who as adolescents were separated from both parents, from only one parent, or from neither parent.

Considering how early EA-I students tend to leave their parents to procure their education in another country, it is reasonable to expect that their adolescent experiences are likely to influence their attachment style. As suggested by Schwartz and Buboltz's study (2004), it would seem that Korean college students who come to North America as EA-I students without parents may struggle to balance attachment to and separation from the family since they cannot readily access parental support. Moreover, they must face the transition from high school to college by themselves. As noted earlier, the transition from high school to college is expected to be difficult, yet EA-I students without their parents are usually left to adjust to the new environment without having a secure base from which to receive comfort. It is possible that feelings of loneliness and related symptoms would be exacerbated by such conditions. Thus, in the present study, due to their unusually early separation from their parents, Korean international students who came to the United States during their adolescence without their parents are theorized to be less likely to be securely attached than the other two groups. Interestingly, the close connection of acculturation to the attachment system has been recognized by both

attachment and acculturation researchers (Oudenhoven & Hofstra, 2006; Wang & Mallinckrodt, 2006) because individuals are likely to feel threatened by their exploration of a new culture during their acculturation process, and as a result, feel the need to seek safe haven after their exploration.

Acculturation

All international students undergo acculturation, although acculturation processes may be different for Korean EA-I students who came by themselves, because they are separated from their family and forced to adjust to a new culture on their own by exploring unknown territory. Considering this unique change of environment, it is also reasonable to assume that acculturation is part of the method of survival for Korean EA-I students in their new country.

Acculturation was originally defined as a cultural change that results from a continuous first-hand contact between two distinct cultural groups (Redfield, Linton, & Herskovits, 1936). However, continuous direct contact with a foreign culture was later understood as having psychological effects on individuals who are going through this process of getting to know their new culture. Such psychological changes would then impact one's behaviors and internal characteristics (Grave, 1967).

Despite a common assumption that acculturation often hinders individuals from advancing their life quality, the process was found to sometimes enhance one's life chances and mental health (Berry, Kim, Minde, & Mok, 1987). A study by Berry, et al. suggested that psychological problems are not inevitable and that the eventual outcome of acculturation for any particular individual depends on other variables such as the psychological characteristics of the individual and type of acculturation group, which

refers to groups that are currently adjusting to the new culture. These include immigrants, refugees, native peoples, ethnic groups, and sojourners such as students and visiting scholars. Other researchers found that the possible effects of acculturation on an individual can be predicted only when possible environmental and individual variables are studied (Kim & Abreu, 2001; Ward & Kennedy, 1996). In other words, the possible influences of acculturation on an individual cannot be understood without studying the differences between home and host cultures and how the individual is personally experiencing acculturation.

Influences on Acculturation

Aside from viewing acculturation as linked to attachment style, it is important to understand what changes take place in the process itself. Grave (1967) theorized that individuals experience changes in five areas. First, they are in a different environmental setting. People who have moved to another country are surrounded by a different environmental setting. Second, this change in surroundings causes physiological changes. Because of the limited availability of their culture in the new setting, their nutritional status often changes, and they are often exposed to diseases that they did not have any contact with in their home country. In addition to physical and biological changes, cultural and social changes are recognized as the third and fourth changes that may engender shifts in people's psychological status. Individuals discover new political, economical, religious, and social institutions, and find themselves in these new cultural settings. Being in different cultural settings helps them to make new social relationships. However, they may find themselves in the dynamic of dominant-subordinate or in group-out group-in in some situations. These changes encourage individuals to change their

behaviors in order to fit into their new milieu, which is likely to alter their mental health status.

However, these changes in surroundings do not have the sole impact on an individual's acculturation process. Berry, Kim, Power, and Young (1989) argued that there are five important influences on the acculturation process: the nature of the larger society, the type of acculturation group, demographic and social characteristics of the individual, psychological characteristics of the individual, and one's modes of acculturation. Overall, these five influences are assumed to be intricately related, and together are theorized to greatly influence a person's acculturation process. According to Berry, et al., an individual's acculturation experience cannot be thoroughly assessed without having sufficient information about these five influences. To understand how these influences can affect the acculturation process of EA-I students, each influence will be defined and explained below to emphasize the importance of each construct.

The first noteworthy influence is identified as the nature of the host society. Some have argued (e.g., Murphy, 1965) that the mental health problems of immigrants are more likely to be observed in assimilationist countries compared to in pluralistic societies. For example, if the host society is supportive of cultural pluralism (encouraging positive multicultural ideology and identity), it would more likely encourage acculturating individuals to discover their own appropriate acculturation position.

The second identified influence is the nature of the acculturating group. Individuals who are voluntarily involved in the acculturation process, such as immigrants, are likely to have less difficult experiences than individuals who did not have much choice in their emigration. Berry and Kim (1988) posited that there are five

different acculturation groups (immigrants, refugees, native peoples, ethnic groups, and sojourners such as students and visiting scholars) and that their acculturation process depends on their status in their new country. Those who voluntarily get involved in the acculturation process (e.g., immigrants) are less likely to experience difficulty than those with little choice in their situations (e.g., refugees and native peoples). However, those who plan to reside in a country temporarily for specific reasons and who are without permanent social support (e.g., sojourners, international students) are likely to experience more mental health problems than those who are more permanently settled and established.

The third and fourth factors that influence an individual's acculturation are identified as the demographic and social characteristics of the individual (e.g., education, age, gender, life experiences), and one's psychological health can also influence the acculturation process. Some individuals possess a variety of coping skills that allow them to be more adaptable to the new environment and changes, while others lack the skills to acculturate to the new culture which can lead them to experience high acculturative stress.

Finally, the mode of acculturation refers to Berry's four modes of acculturation. These address the attitudes and positive or negative thoughts individuals develop toward their home and host cultures during the process of acculturation. Berry and Annis (1974) and Berry, et al. (1989) articulated two main concerns that individuals may have in this process. They proposed that an individual is likely to struggle between the need to maintain their own cultural identity and characteristics and the pressure to maintain relationships with their new culture. These two dimensions of a person's need can divide

them into four different categories of acculturation: (a) when one has a high identification with both the home and the host culture, the level of acculturation is called “integration.” This level of acculturation is often considered the healthiest. It is also possible to have (b) a high identification with the host culture but a weak identification with the home culture. This type is called “assimilation.” On the other hand, a person would be put in the category of “separation” if they have (c) a higher need to be connected to their original culture and devalue their host culture. Lastly, it is also possible for (d) a person to reject both their own cultural heritage and the new culture. In this case, the person would be viewed as “marginalizing” their self from both cultures. Some acculturation researchers have expressed reservations about these two dimensions and the four acculturation categories just mentioned. Rudmin and Ahmadzadeh (2001) criticized Berry, et al.’s theories for lack of evidence that supports the existence of the four ways of acculturating, and asserted that there is no evidence either that cultural integration is the ideal preferred way to acculturate. However, numerous empirical studies support Berry’s four modes of acculturation (e.g., Ryder, Alden, & Paulhus, 2000; Berry, Phinney, Sam, & Vedder, 2006). These studies support the conceptualization of acculturation in terms of two distinct dimensions that define the four modes of acculturation.

The attitudes in the four modes of acculturation have been argued to affect one’s acculturation stress (Berry, Kim, Power, Young, & Bujaki, 1986; Ward & Rana-Dueba, 1999). Ward and Rana-Deuba found that sojourners (international students and scholars) who adopted an integrated style of acculturation reported that they were doing better psychologically than others, whereas those who favored an assimilationist perspective experienced fewer social difficulties in the new culture. Berry, et al. (1986) found that in

addition to the stress one may have from the actual form of the acculturation process experienced, those who favored integration experienced less stress, while those who preferred separation tended to report greater stress. This study reported that assimilation attitudes were negatively correlated with stress. However, marginalization and stress were significantly correlated. Thus, obtaining an understanding of the study participants' acculturation stance would help the researcher in this study understand each group's experience.

The Difficulties of Acculturation

Regardless of where an individual falls in terms of the two dimensions of acculturation, two types of difficulties are expected of individuals who are going through acculturation: psychological struggle and socio-cultural adjustment (Ward & Kennedy, 1996, 1999). *Psychological and emotional struggle* has been described as a change in one's psychological understanding of self (e.g., sense of well-being or self-esteem), whereas *socio-cultural adjustment* has been understood as the ability to learn and perform new social skills and behavioral competence that would fit with the host culture (Ward, 1996). In terms of time, the levels of difficulty in the two areas of struggle (psychological and sociocultural adjustment) that a person experiences in acculturation were found to reach their highest level immediately after entry into the host culture. The difference between these two struggles is that sociocultural problems tend to gradually decrease in general, whereas psychological distress levels tend to vary over time depending on other external factors (Ward & Kennedy, 1996; Ward, Okura, Kennedy, & Kojima, 1998). The psychological distress that is correlated with sociocultural adaptation has been found to be more dependent on variables such as the length of time a person has spent in the new

culture (Ward & Kennedy, 1999). Language ability, cultural distance, and the quantity of contact with the host culture were also found to cause an acculturating person difficulty (Searle & Ward, 1990; Ward & Kennedy, 1992, 1993a, 1993b). Previous researchers have suggested that psychological and sociocultural adjustment are two distinct concepts, even though many assume that these concepts must be closely related. The psychological adjustment problems of those trying to acculturate have been represented by assessing their depression, confusion, and anxiety levels. Studies also indicate that stress caused by a psychological struggle has not only been affected by the actual acculturation process, but also by personality, life changes, and social support (Feinstein & Ward, 1990; Ward & Kennedy, 1992, 1993a, 1993b; Ward & Searle, 1991). Overall, Ward and Rana-Deuba's study (1999) suggested that people who report more problems in psychological adjustment tend to identify weakly with their home culture, whereas people who report more difficulties in sociocultural adaptation tend to identify more strongly with the host culture than with their home culture. Thus, the current study hypothesized that EA-I students who were unaccompanied by a parent would identify strongly with the host culture and weakly with the home culture, and report high levels of psychological distress.

Overall, the effects of acculturation stress can lower a person's mental health status and cause unhealthy habits, according to Berry and Annis (1974) who found that common emotions related to acculturation were associated with marginalization and alienation, heightened psychosomatic symptom levels, and identity confusion. Asian American adolescents who are viewed as highly acculturated are more likely to show higher levels of alcohol use than those who were less highly acculturated (Hahm, Lahiff,

& Guterman, 2003). Leung (2001) found that Chinese international students in Canada and Australia reported feeling higher levels of loneliness and lower levels of satisfaction with their social life than their non-international counterparts. Some researchers argue that being discriminated against by the members of the host society is likely to have a deleterious effect on international students' mental adjustment and overall adjustment in the host society (Berry, 1997; Lay & Nguyen, 1998; Ward, 2001).

In earlier explanations of the four possible categories of the acculturation mode, explanations of why an individual may fall into one category rather than another were not included. Oudenhoven and Hofstra (2006), however, found that different attachment styles influence one's acculturation process. Specifically, individuals who score lower on attachment anxiety and attachment avoidance (the more securely attached individuals) are more likely to move toward integration (high identification with both home and host cultures) compared to individuals with other attachment styles. Their study suggested that those low on both attachment anxiety and avoidance (securely attached individuals) are likely to feel secure enough to explore new environments because they are less likely to feel insecure about facing the new culture. Therefore, it is possible that individuals who are securely attached are more likely to accept the new culture and wish to acculturate while also respecting their home culture, which they might view as their "safe haven." Oudenhoven and Hofstra also found that the rest of the attachment styles, including individuals who are high on attachment avoidance and low on attachment anxiety, high on attachment anxiety and low on avoidance, or high on both attachment anxiety and avoidance, are less likely to prefer integration. Individuals with these three insecure attachment styles are inclined to have a separation acculturation style. Further,

Oudenhoven and Hofstra found that individuals who are high on attachment anxiety but low on avoidance are likely to develop a separation acculturation style so that they can avoid being rejected by the new culture. However, individuals who are high on attachment anxiety and avoidance have been found to avoid the new culture so that they do not have to confront its unknowns. Based on evidence from Oudenhoven and Hofstra's study, the present study theorized that EA-I students are less likely to report high identification with both their host and home culture than RA-I students, since most of the former have been separated from their secure parental figure at a young age. Without their safe haven, the EA-I students were theorized to find another way to cope with both their psychological and socio-cultural stress, which would encourage them to exhibit behaviors that fall into the different dimensions of acculturation. EA-I students who came to North America with their mother, however, are likely to exhibit less attachment anxiety and be more secure, and exhibit behaviors that suggest higher identification with both the host and home culture than the EA-I students who came with neither parent.

Evidence has shown that adult immigrants experience emotional and cognitive stress (e.g., Thomas, 1995). Thomas found that immigrants experience a deep sense of emotional and cognitive loss when they first land in the new culture. Another study indicated that coming to the new culture and facing the ambiguous cues in the new social environment can be distressing. Immigrants are often forced to face the new culture without being familiar with American norms of behaviors, and so trying to assimilate into the culture can be quite stress-inducing (Padilla, Wagatsuma, & Lindholm, 1985). EA-I students who arrive in North America without an accompanying parent face the stress

that adults face in acculturation but do so at a younger age without a parent to provide a secure base figure to provide needed comfort. In contrast, Korean college students' experience of facing the new culture may be less stressful than that of EA-I students who came to the new culture by themselves at an earlier age, because although these newer international students are facing acculturation stressors, they are doing so at a more mature age when they may be more equipped to handle these stressors on their own. EA-I students who came to North America with a parent at an early age and Korean college students are thus expected to report less stress in the acculturation process than unaccompanied EA-I students.

Other studies (e.g., Leung, 2001; Wong-Rieger & Quintana, 1987) have suggested that the acculturation process can be mediated by several factors. If an individual came to the new culture voluntarily in the hope of a better future, they were found to be better at adjusting to their new culture (Wong-Rieger & Quintana). These studies once again emphasize the reason persons leave their home country. If they are forced to come to a new culture by their parents, it is difficult to predict how their adjustment and acculturation process may evolve. A study by Sodowsky and Lai (1997) indicated that individuals who migrated during adolescence were more likely to report more distress than those who migrated during their adulthood. It is difficult to know if EA-I students who came to the U.S. by themselves moved to their host country at a relatively young age by their own choice, but it is imperative to recognize the fact that many of them are separated from their family and culture in their adolescent years.

However, individuals who learn to acculturate fairly well can still feel distressed about their identity. Berry, Kim, Minde, and Mok (1987) found that Koreans in the

United States who were at least 30 years of age reported using the Korean language daily, but not English. On the other hand, most of the respondents who were younger than 30 reported using English daily, but not Korean. Higher stress in acculturation was reported by younger respondents who were unable to speak Korean fluently, and by older respondents who were unable to speak English fluently. Berry, et al. posited that an inability to interact and communicate effectively with the members of the Korean community for individuals who were more fluent in English, and with the English speaking society for individuals who were more fluent in Korean, was positively correlated with distress. Due to their early entrance into the host culture, it is possible for some EA-I students, regardless of their parents' presence during their adolescence, to experience an inner struggle to find their cultural identity. Their Korean language skills are likely to be at the level they were when they left their home country unless their native language skills have regressed due to lack of use. These possibilities should be considered when the potential distress of EA-I students is discussed. The current study incorporated an acculturation measure that also looked at the participants' understanding of their home and host languages to assess their acculturation level.

Psychological Distress

As with other international students who experience differences and other cultural disparities in the host culture, both EA-I and RA-I students can experience psychological distress. International students have reported experiencing psychological distress in response to factors that are unique to students from foreign countries such as the language barrier, unfamiliar academic systems, racial discrimination, social interaction, and personal adjustment (Abe, Talbot, & Geelhoed, 1998; Anderson & Myers, 1985; Luzzo,

Henao, & Wilson, 1996; Parr, Bradley, & Bingi, 1992). Moreover, the desire to maintain their home culture can also be viewed as stressful, whereas fulfilling the host culture's demands to become acculturated may cause many international students to feel marginalized and stressed.

The limited studies on EA-I students suggest that their lifestyle is likely to result in psychological distress (e.g., Cheng, 1994; Chung, 1994; Hwang & Wantanabe, 1990). Chinese EA-I students who lived by themselves without the presence of their parents have indicated that they experienced more psychological distress such as depression, anxiety, and paranoid ideation than American-born Chinese and immigrant adolescents. The EA-I students in these studies also reported suffering loneliness, isolation, and struggle with identity issues. Psychological distress caused by loneliness is further described in the section on loneliness in this chapter. Thus, it is hypothesized that EA-I students living without their parents will report higher scores on psychological distress than the EA-I students who came with one of their parents.

For a different reason, the RA-I students are also expected to report high psychological distress. However, RA-I students are likely to achieve a college education despite the language barrier, unfamiliarity with the Western academic system, racial discrimination, and social interaction, which are likely to be stresses that EA-I students have experienced less because they have been in the host culture longer. It is also important to point out that RA-I students also leave their support system in their home country in order to receive a Western education, which may make them feel isolated and marginalized.

Loneliness

Loneliness certainly occurs among many EA-I students while living in the host culture on their own. Therefore, it may be valuable to examine whether there are group differences among Korean international students in regard to loneliness.

Loneliness has been defined as a subjective distressing and unpleasant state in which individuals perceive deficiencies in their social world (Peplau & Perlman, 1982). Loneliness has been associated with depression (Horowitz, French, & Anderson, 1982; Seligson, 1983; Young, 1982), suicide and suicide ideation (Cutrona, 1982; Diamant & Windholz, 1981; Trout, 1980, Wenz, 1977), anxiety (Bowlby, 1977; Bradley, 1969; Parkes, 1973; Weiss, 1973), and an increased vulnerability to health problems (Jones, Rose, & Russell, 1990). The pervasiveness of loneliness among young persons and others is reflected in the use of telephone emergency hot-lines, college psychological clinics, and youth marriage counseling services (Jones, et al., 1990). Marangoni and Ickes (1989) asserted that deficits in the structure and function of social networks is one of the potential causes of loneliness. Rook (1988) observed that loneliness often results from the interaction of personal factors and situational constraints.

Loneliness can be especially evident among international students since they are separated from their social support system. Sojourners, such as international students, are likely to feel loneliness and social isolation, which can affect their adjustment in the new culture (Ward & Rana-Dueba, 1999). The quality of relationships with family, friends, and romantic partners is significantly related to international students' degrees of loneliness (Sam, 2001; Ward & Kennedy, 1993). Because international students are often isolated from both their family support system and their peer social network, it could be

argued that they would report higher levels of loneliness in their relationships (DiTommaso & Spinner, 1993; DiTommaso, Brannen-McNulty, & Burgess, 2005).

Loneliness was found to affect all forms of one's world view. Loneliness affects an individual's opinions about people, life, and society, and can render a person apathetic and pessimistic (Jones & Carver, 1991; Rokach, 2000). Christensen and Kashy (1998) found that lonelier people tend to view their own social interactions more negatively than less lonely people. Interestingly, this negativity does not generalize to their view of others. Lonely individuals rated others as more intelligent and physically attractive than themselves. However, other studies contradict the results of Christensen and Kashy's study (e.g., Jones, Freeman, & Goswick, 1981; Spitzberg & Canary, 1985; Wittenberg & Reis, 1986). They suggested that lonelier individuals are negative in their perceptions of others as well as of themselves.

In order to understand how loneliness influences the lives of EA-I students, regardless of the presence of their parents, it is crucial to delineate two models. Both models of loneliness can provide a better understanding of how it has been defined in previous research. Levin and Stokes (1986) posited that lonely individuals may exhibit a negative cognitive process because there is a significant correlation between individual differences (e.g., shyness and neuroticism) and loneliness. Moreover, their study indicated that individuals who are insecurely attached may misinterpret social cues and information according to the negative expectations that are developed in their relations with parents (e.g., unavailability and unresponsiveness). This type of negatively skewed *cognitive biased* thinking is theorized to place a person at a higher risk of loneliness (Jong-Gierveld, 1987).

However, it is also reasonable to argue that failure to develop a social network is the source of loneliness rather than a person's cognitive thinking style. Levin and Stokes (1986) also speculated that personal factors influence loneliness through social network variables. Having personal qualities such as shyness and neuroticism is likely to reduce one's social desirability or motivation to initiate social contact, and unsuccessful and unrewarding social interactions are likely to take place if inappropriate behaviors in social situations are repeated due to these personal traits. Research has shown that students experiencing loneliness often do not possess appropriate social skills or social competence to initiate and develop close interpersonal relationships (Jones, Hobbs, & Hockenbury, 1982). The importance of certain structural features of the social network, namely size, density, composition, reciprocity, intimacy, and conflict, were demonstrated in various studies (Hamid, 1989; Levin & Stokes, 1986). In addition, functional features, such as support offered by the social members, were also found to play an important role in alleviating individuals' feelings of loneliness (Kraus, et al., 1993).

Loneliness and alienation frequently surface in the adolescent developmental stage since being accepted and loved is of such importance to one's identity formation (Ostrov & Offer, 1978; West, Kellner, & Moore-West, 1986). Sullivan (1953) theorized that loneliness among adolescents is often experienced quite intensely as a result of their emerging needs for intimacy. The fact that EA-I students are separated from their usual social support and family members during adolescence may cause or deepen their loneliness, which is usually part of their normal developmental stage. Thus, any social support, such as their mother's presence, may help reduce the intensity of loneliness many EA-I students experience during their adaptation to the host culture. On the other

hand, RA-I students who spent their adolescence with their family and friends in their home country are less likely to experience the level of loneliness that unaccompanied EA-I students had during their adolescence in North America. Considering these possible causes of loneliness, it is reasonable to argue that many EA-I students who came without parents are more likely to experience loneliness than RA-I students. EA-I students who came without parents are less likely to connect with either the host or home culture, and may also be likely to experience loneliness. It would also be interesting to learn how loneliness plays a role in their lives.

Studies on the relationship between attachment and loneliness have found that attachment anxiety and avoidance are positively related to increased feelings of loneliness (e.g., Hecht & Baum, 1984; Kobak & Sceery, 1988; Wei, Vogel, Ku, & Zakalik, 2005). Bowlby's theory would explain why individuals with insecure attachment are less likely to explore relationships due to a fear of rejection and thus more likely to feel lonely. As to specific dimensions of attachment, high attachment avoidance or high attachment anxiety have been individually found to be associated with loneliness (Kobak & Sceery, 1988). Man and Hamid (1998) also found that individuals with both high attachment avoidance and high attachment anxiety are likely to feel particularly lonely compared to those with high attachment anxiety. However, some studies did not find any significant differences in loneliness between those high on attachment avoidance or attachment anxiety (e.g., Lambert, Lussier, Sabourin, & Wright, 1995). Interestingly, some attachment researchers have discovered a strong link between insecure adult attachment patterns and loneliness (DiTommaso, Brannan-McNulty, Ross, & Burgess, 2003; Lambert, Lussier, Sabourin, & Wright, 1995; Leondari & Kiosseoglou, 2000).

Other studies (Buchholz & Catton, 1999; Fromm-Reichmann, 1959) have shown that feelings of loneliness can be linked to early experiences with parental figures, suggesting that loneliness may be associated with parental attachment. Thus, it is reasonable to assume that EA-I students who have spent their adolescence without their secure base are likely to feel more lonely than those who have been in family settings in which they have experienced a secure base.

The uniqueness of Korean EA-I students' loneliness can be explicated if the differences between their home and host cultures are considered in the construct. For example, Korean culture emphasizes harmonious and communal relationships, whereas Western culture encourages an individualistic lifestyle, which may be another factor in Korean students' difficulty with acculturation. The social pressure to identify with a more individualistic culture may cause EA-I students (regardless of the presence of their parents) to feel more isolated in their host country than in Korea. Sensing the influence to be more individualized in Western culture may cause non-Westerners to feel forced to be independent from others, which can be viewed as counter-cultural for those who have recently emigrated from a communal culture to a Western culture. This pressure may make them feel more lonely and isolated from the people they interact with on a daily basis in the host culture. In past research, higher levels of loneliness among non-Westerners have been associated with the Western cultural emphasis on individualism (e.g., Bhogle, 1991; Rokach & Bacanli, 2001; Rokach & Neto, 2000). Westerners who focus on individual achievement, competitiveness, and impersonal social relations are often identified as having socially alienating values that individuals from collectivistic culture find difficult to adjust to (Ostrov & Offer, 1978). Interestingly, some studies have

found higher levels of perceived loneliness among Chinese people than among Westerners (e.g., Anderson, 1999; Goodwin, Cook, & Yung, 2001). However, DiTommaso, Brannen, and Burgess (2005) argued that this result could have been due to various measurement approaches or to the interpretation of the results from measurements of loneliness. Geographic context and culture were also suggested as possible influences on the results of these studies.

Resilience

Thus far, the focus has been on negative outcomes that may occur in EA-I students due to the disruptions in their relationships with their attachment figures and their home culture. However, it is also possible for these students to experience positive outcomes in their new setting. For example, they may develop greater resilience as a result of their acculturation experience in the host culture. It is possible that EA-I students without accompanying parents may feel that they had no other choice than to endure their difficulties and grow from these experiences. Therefore, it is reasonable to speculate that EA-I students who had come alone to North America may be more resilient than the other two groups who are trying to acculturate.

Resilience has been traditionally defined as the process of and capacity for successful adaptation despite unfavorable or challenging circumstances (Masten, Best, & Garmezy, 1990). Luthar, Cicchetti, and Becker (2000) described resilience as the attainment of good outcomes despite the exposure of a significant threat or adversity. Resilience has also been conceptualized as a continuum of vulnerability and implied resistance to psychopathology. This does not necessarily mean that a person can be completely invulnerable to the development of psychopathology. However, having a

strong inclination to be resilient may keep some individuals from developing a psychiatric disorder (Ingram & Price, 2001).

Resilient individuals have specific characteristics that would qualify them as resilient. They are known to have an optimistic and energetic approach to life, and are highly open to novelty (Block & Kremen, 1996; Klohnen, 1996). These individuals have highly positive emotionality (Tugade & Fredrickson, 2004). They are likely to know how to strategically elicit positive emotions by proactively cultivating them through the use of humor (Werner & Smith, 1992), realization techniques (Demos, 1989), and optimistic thinking (Kumpfer, 1999).

Other personal characteristics such as extroversion and conscientiousness are also found to be strongly related to one's resilience (Campbell-Sills, Cohen, & Stein, 2006). Extroversion is likely to engender a positive affective style, provide opportunities for close interpersonal relationships, and frequent social interactions and activities. It is possible that these individuals are more likely to feel supported since their social interactions are likely to be stronger than those of introverted persons. Conscientiousness has been defined as the tendency to use task-oriented coping (Penley, Tomaka, & Wiebe, 2002). Individuals who are conscientious are likely to utilize active problem solving which would promote effective recovery from a variety of stressful situations (Penley, et al.). A study by Campbell-Sills, et al. (2006) indicated that the contributions of conscientiousness and task-oriented coping to resilience are more pronounced for ethnic minority groups.

In addition to relating personal characteristics to resilience, a person's perception of their available social support is known to influence their resilience, according to

Werner and Smith (1992). According to their study, individuals attributed their resilience to the support they received from caring adults such as a family member, neighbor, teacher, or mentor. Werner (1987) suggested that individuals who are resilient tend to have a more pronounced autonomy and positive social orientation from their infancy. Werner's study also reported that the availability of a sibling as a caretaker or confidant and the multigenerational network of kin and friends for young adults were also reported to be important to one's resilience. The permanent absence of the father or mother was found to be an important factor in facilitating children's autonomy and resilience. It is important to note that the current study examined Korean college students, regardless of the differences in their adolescent experiences in their host or home country. It is also possible that less resilient EA-I students who could not tolerate their adolescent life in North America without the presence of family and friends may have already returned to their home country. Thus, the current study hypothesized that the EA-I students who endured their adolescence without their parents may have been more resilient than students in the other two groups who did not require as much resilience to obtain their education in their host culture.

Research Hypotheses

The purpose of the present study was to examine the differences among three types of Korean college students on attachment style, acculturation, loneliness, psychological distress, and resilience. These types included (a) Early Arrived-International students who had lived in North America by themselves, (b) Early Arrived-International students who had come to North America with a parent, and (c) Recently Arrived-International students who had completed high school in Korea before entering

college in North America. The following general research questions and hypotheses were advanced.

The first set of hypotheses addressed the differences among the three types of Korean students on their level of acculturation in terms of identification with the home culture and identification with the host culture. First, it was hypothesized that the Korean EA-I students (both types) would score higher on identification with the host culture subscale than the RA-I students. However, the RA-I students were hypothesized to score higher on identification with the home culture subscale than both types of EA-I students. In addition, a significant difference was expected between EA-I students living in North America without parents and the EA-I students living with parents on identification with the home culture: the EA-I students with parents were expected to score higher on identification with the home culture than would the EA-I students without a parent accompanying them.

Identification with the host culture was hypothesized to mediate the link between the type of international student and their level of attachment avoidance. Specifically, it was hypothesized that the Korean EA-I students without the presence of their parents would show a higher identification with the host culture, which would lead to greater levels of attachment avoidance in this group. In addition, identification with the host culture was also hypothesized to mediate the link between the type of international student and the level of their psychological distress. Specifically, it was hypothesized that the Korean RA-I students would show less identification with the host culture, which would lead to greater levels of psychological distress, as Oudenhoven and Hofstra (2006) suggested.

The second set of hypotheses concerned possible differences between the types of Korean EA-I students on their level of attachment avoidance. It was hypothesized that the EA-I students without an accompanying parent would show higher levels of avoidance than the other groups due to the disruption in their parental attachment during their adolescence, and their expected higher level of acculturation to a more individualistic culture. The Korean EA-I students who came with one parent were expected to exhibit lower avoidance scores than the EA-I students who had come without a parent since they had had a secure base (parent) with them during their adjustment period in North America. It was difficult to hypothesize where the RA-I students would fall on this continuum; thus no specific hypothesis was developed for this particular group.

The third set of research hypotheses involved differences between the types of international students and their level of distress. It was hypothesized that the Korean EA-I students without an accompanying parent would report the most distress compared to the other two groups. The EA-I students who had come with one parent were expected to report the least distress. The EA-I students who had come with one parent were believed to have had a secure base to fall back on in times of difficulty, whereas the EA-I students who had come without a parent were forced to adjust to the new environment without any emotional help from them. It seemed reasonable to think that international college students would score high levels of distress due to their short stay in the host culture. Nevertheless, the EA-I students without an accompanying parent were expected to score the highest level of distress, due to their lack of available attachment figures in their adolescence.

The fourth set of research hypotheses involved differences among all three types of Korean international students on the level of attachment anxiety. First, it was hypothesized that the RA-I students would score higher on attachment anxiety than both types of EA-I students. The RA-I students who had finished high school in Korea were expected to show greater attachment anxiety than the EA-I students who had come to North America with one parent, because they were forced to adjust to the new culture and language. They had not been in their host culture long enough to feel secure in their new culture/environment, which most likely would have activated their attachment system and engendered more feelings of attachment anxiety in their interpersonal relationships in their efforts to acquire the social support they would like to have. Secondly, it was also hypothesized that the Korean EA-I students who had come with one parent would have lower levels of attachment anxiety than the students in the other two groups since they had spent many years in North America, in a culture that encourages psychological independence among adolescents. Moreover, these individuals had at least one of their secure base figures to support their exploration. In sum, the EA-I students accompanied by a parent were expected to score lower on attachment anxiety than the other two groups, and the RA-I students were expected to score higher on attachment anxiety than the other two groups.

The fifth set of research hypotheses was used to examine the possible differences between the types of Korean EA-I students on their level of loneliness. It was hypothesized that the EA-I students who came without a parent would report a higher score on loneliness than the other two groups, because it was speculated that the lack of constant first-hand support by their parents during adolescence might cause these EA-I

students to feel more isolated from and abandoned by their families. It was thought that the geographic distance might disrupt the attachment relationship the EA-I students needed with their parents. In addition, the discrepancies between their changing values as a result of their acculturation and the traditional values of their parents might cause them to feel lonelier than the other groups of Korean students. On the other hand, because the RA-I students' attachment system might have been activated by their recent move to the new culture, their experience of loneliness was expected to be lower than that of EA-I students who were unaccompanied by a parent, because the RA-I students had felt the support of their family during their adolescence in Korea. Thus, it was expected that the Korean EA-I students who were unaccompanied by their parents were likely to report higher scores on loneliness compared to the other two groups.

Lastly, a potential difference between the types of Korean international students on their level of resilience was assessed. It was hypothesized that the EA-I students without an accompanying parent would report a higher level of resilience than the other two groups since it was reasonable to assume that they had arrived at college age having managed their high school life and any difficulties by themselves without a secure base to fall back on, presumably developing greater resilience in the process of coping with their situation.

CHAPTER 3

METHODS

This chapter presents the research methods for this study. Included are a description of the translation and back translation of two instruments for which a Korean version did not exist at the time of the study, the selection of the participants, the study procedures, and a description of the instruments used.

Translation-Back Translation Process

All the instruments used in the study survey were provided to the participants in their own language; some measures were already in Korean, others had to be translated from English. The Experiences in Close Relationship Scale (ECRS; Brennan, et al., 1998), the Zung Self-rating Depression Scale (ZSDS; Zung, 1965), the Zung Self-rating Anxiety Scale (ZSAS; Zung, 1971), and the UCLA Loneliness Scale (Russell, 1996) already had a Korean version and were obtained from their developers. The psychometric information about these measures is provided below. There were, however, no Korean-language versions of the Asian American Multidimensional Acculturation Scale (AAMAS; Chung, Kim, & Abreu, 2004) and the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) when this study was designed. Thus, new translations of these measures were created by the researcher, and support for the validity of these measures was gathered for the present study. Another Korean version of the CD-RISC recently appeared (Baek, Lee, Joo, Lee, & Choi, 2010), but was not available at the time of data collection.

Following Brislin's (1970) guidelines, the AAMAS and CD-RISC were put through the translation and back translation process. First, the researcher recruited three

bilingual graduate students who were fluent in both English and Korean. Prior to beginning this process, the researcher gave each bilingual graduate student a set of instructions, both orally and in writing, including appropriate information about the context of the study so that they could fully understand the relevant semantic content of the instruments. First, the instrument instructions, questions, and response options were translated from English into Korean by one bilingual graduate student. Second, the translated Korean versions were translated back into English by a second bilingual graduate student. Both translators used *Webster's Collegiate Dictionary* and *Naver's English-Korean Dictionary* as references. Third, the original English version and the backtranslated English version were compared for content equivalence by a third bilingual graduate student. Finally, the researcher asked a focus group comprised of three Koreans not involved in the translation-backtranslation process to check the quality of the Korean translation and provide feedback in Korean regarding the clarity and accuracy of each question's translation (Frank-Stromborg & Olsen, 1997). The focus group included an educational psychology master's student and two undergraduate college students who were majoring in the social sciences.

Tests for Reliability and Validity of the Translated Instruments

After the Korean versions of the AAMAS and the CD-RISC were completed, two separate psychometric studies were conducted to test their reliability and validity. An advertisement of the survey was posted on Korean Web sites and blog pages (e.g., www.earlyarrivedis.com and www.cyworld.co.kr) after receiving approval to do so from the webmasters of the Web sites. The advertisements of the surveys were also posted, with webmaster permission, on a Korean International Student Association Web site

(www.miyoomo.com). In each psychometric study, Cronbach's alpha coefficients and item analyses were examined to ensure reliability. Validity was established through examination of the correlations between the dimensions of each of the two measures and measures of constructs that were theorized to be related to each of those dimensions.

The CD-RISC Validity-Reliability Study

A total of 102 Korean participants (54 male, 47 female; 1 did not indicate gender) completed an online survey that included the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003), Zung's Self-Rating Depression Scale (ZSDS; Zung, 1965), Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985), Rosenberg's Self-Esteem Scale (RSES; Rosenberg, 1965), and the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). The participants' ages ranged from 18 to 64 ($M = 33$, $SD = 12.42$). The participants were recruited online both in Korea ($n = 60$) and the United States ($n = 41$). No significant differences were found between these two groups. As expected, the findings indicated that the Korean version items of the CD-RISC were significantly positively correlated with self-esteem and life satisfaction, as well as inversely correlated with depression, providing evidence of the validity of the CD-RISC. In addition, a confirmatory factor analysis provided evidence that the Korean language version of the CD-RISC has 8 factors. The English language version has 5 factors, whereas the Korean language version was found to have 8 factors. Only the total score was used due to the discrepancy between the two versions. The internal consistency reliability of the Korean language version was .91.

The AAMAS Validity-Reliability Study

A total of 129 Korean individuals (65 male, 64 female), who currently reside in the United States, participated in this pilot study by using the online survey. The participants' ages ranged from 18 to 64 ($M = 30$, $SD = 11.08$). The participants completed a Korean version of the AAMAS, as well as the Individualism-Collectivism Scale (INDCOL; Singelis, et al., 1995), the Asian Values Scale-Revised (AVS-R; Kim, Atkinson, & Yang, 1999), and the Attitude Toward Seeking Professional Psychological Help-Short Form (ATSPPH; Fischer & Farina, 1995). Concurrent validity of the Korean version of the AAMAS was supported by correlations with other acculturation measures (i.e., the Asian Values Scale-Revised, and the Individualism-Collectivism Scale). As expected, the findings indicated that the Korean language version items were correlated with acculturation in theoretically-expected directions. Specifically, a positive correlation was also found between the AAMAS-Home and the Asian Values Scale; the expected positive relationship between the AAMAS-Host measure and the individualism dimension of the Individualism-Collectivism Scale was also detected. Additionally, as expected, the validity data derived from the tests for the present study indicated a theoretically expected significant inverse relationship between the AAMAS-Home measure and attitudes towards seeking professional psychological help. The internal consistency reliability estimate of the AAMAS-Home was .81 and of the AAMAS-Host was .87.

Procedures

The present study was conducted by having the participants complete a survey posted on an Internet Web site (61%) or, if preferred, by using a printed version (39%).

No significant differences were found between the participants who used the online survey and those who used the printed version as shown by an Analysis of Variance (ANOVA) (see Table 1).

Table 1

Results of the ANOVA Between Online and Printed Survey Use

Variables	Version	ANOVA		
		<i>M</i>	<i>SD</i>	<i>F(df)</i>
Acculturation	Online	4.89	.56	.53 (1,234)
-Home	Paper	4.83	.61	
Acculturation	Online	3.71	.66	1.16 (1, 231)
-Host	Paper	3.81	.72	
Attachment	Online	3.61	.78	.04 (1, 228)
Avoidance	Paper	3.63	.79	
Attachment	Online	3.81	.99	.47 (1,228)
Anxiety	Paper	3.71	1.16	
Loneliness	Online	38.57	6.88	1.69 (1, 233)
	Paper	39.83	7.54	
Resilience	Online	66.61	15.73	.30 (1,230)
	Paper	67.73	15.08	
Depressive	Online	42.48	5.95	.29 (1, 230)
Symptoms	Paper	42.94	6.46	
Anxiety	Online	38.32	6.80	1.70 (1, 232)
Symptoms	Paper	39.60	7.57	

Internet Version of the Survey

The procedures for using the Internet to collect the data for this study were developed according to the guidelines of Birnbaum (2000), who explained how this medium can be used to disseminate information about informed consent (Appendixes A & B), confidentiality, the recruitment of participants, and pilot testing. The Korean students who found the study interesting were encouraged to participate through the researcher's Web site where the survey was posted. Initially, an advertisement about the survey was posted on Korean Web sites and blog pages (e.g., www.earlyarrivedis.com and www.cyworld.co.kr) after receiving approval to do so from the webmasters of particular Web sites. These invitations had a link to the researcher's Web page, with a direct link to the survey on the same page. An email was also sent to the Korean Undergraduate Student Organization and Christian group leaders at five universities, with the request that it be forwarded to their members, inviting them to participate in the study. Many Korean college students consider Korean undergraduate Christian groups to be part of their community.

Based on the researcher's pilot study showing that the EA-I and RA-I students would prefer to have the questionnaires in Korean, the survey was translated and presented in Korean to encourage the participants to complete it. They were also asked to complete a demographic form (Appendixes C & D) before responding to the other measures. Data from 14 individuals (2 EA-I students without a parent, 4 EA-I students with their mother, and 8 RA-I students) who responded to the item "Do not answer this question. Please skip." were excluded from the analyses in order to filter out participants answering at random. At the end of each measure, the participants were to submit their

responses electronically. Upon completing the questionnaires, the students were invited to enter a drawing by submitting their email or postal address for a chance to win one of twenty \$10.00 Amazon.com gift certificates or Starbucks cards. Of the 138 participants who completed the survey via the Internet, 14.5% or 20 were selected to receive this compensation. The personal contact information for the drawing and the data collected for the study were not connected in order to protect the participants' confidentiality.

Printed Version of the Survey

To collect data for the study using a printed version of the survey, the researcher contacted the leaders of three university-based Korean student organizations to obtain permission to attend one of their official meetings in order to invite their members to participate in the study. As a result, Korean college students from one school in Alberta, Canada, and two universities in the eastern United States participated in the study using a printed version of the questionnaires. In total, 92 (36%) of the 259 participants completed the survey using the paper version, and 90 participants entered the drawing by submitting their email or postal address for a chance to win one of the ten \$10.00 Amazon.com gift certificates or Starbucks cards. Of these, 11% or 10 of the 90 participants were awarded these prizes. Again, the contact information for the drawing and the data collected for the study were separated from the survey as soon as the principal researcher received them in order to protect the participants' confidentiality. A total of 9 surveys of individuals who completed the study using a printed copy of the questionnaire (4 EA-I students without a parent, 1 EA-I student with a mother, and 4 RA-I students) who responded to the item "Do not answer this question. Please skip." were eliminated from the data.

Participants

The participants were divided into three groups according to their living situations when they were in high school: (a) 77 (32.6%) Early Arrived-International (EA-I) students who had come to North America during their adolescence without the company of a parent; (b) 80 (33.9%) EA-I students who had stayed in North America throughout high school with a parent, usually their mother, and (c) 79 (33.5%) Recently Arrived-International (RA-I) college students who grew up in Korea until their entry into the United States or Canada as young adults to attend college (*Total* = 236; 43.2% male, 56.8% female). At the time of the study, all of the participants were pursuing their college education either in the United States (195) or Canada (41). The questionnaires (both online and in print) were in their native language to encourage the EA-I and RA-I students to complete the surveys. A total of 259 participants completed the survey; however, of those, 23 were eliminated because they responded to “Do not answer this question. Please skip”, leaving a total of 236 Korean students in the study. In addition, 16 participants failed to respond to one or more instruments. These data were not included in the dataset to test the main hypotheses, but were included in the post hoc analyses.

Based on the results of the ANOVA, there were no significant differences between the Korean participants studying in Canada and the United States on any variables measured in the current study (see Table 2). The participants ranged in age from 18 to 29 ($M = 21.76$, $SD = 2.27$). Of the 236 participants, 15 did not disclose their gender. There was no significant difference between the three Korean student groups in terms of the proportion of men and women (see Table 3 for the number of men and women in each group). The average age of the female participants was 21.38 ($SD = 1.98$)

and 22.20 for males ($SD = 2.25$); however, no significant differences in age between the two groups were found ($F_{2, d 204} = 5.37, p = .15$). The participants' citizenship was reported as Korean (88.6%), American (7.6%), Other (3.5%), and Missing (3%).

Table 2

Comparison of the Results of the ANOVA Between U.S. and Canadian Groups

Variables		<i>M</i>	<i>SD</i>	<i>ANOVA</i> <i>F(df)</i>
Acculturation	USA	4.86	.59	.16 (1,234)
-Home	Canada	4.82	.61	
Acculturation	USA	3.78	.70	.21 (1,231)
-Host	Canada	3.72	.69	
Attachment	USA	3.63	.79	.08 (1, 231)
Avoidance	Canada	3.72	.74	
Attachment	USA	3.80	.1.08	2.28 (1,228)
Anxiety	Canada	3.51	1.16	
Loneliness	USA	39.46	7.49	.31 (1, 233)
	Canada	38.76	6.34	
Resilience	USA	67.47	15.40	.14 (1,230)
	Canada	66.48	15.08	
Depressive	USA	42.94	6.11	.84 (1, 230)
Symptoms	Canada	41.95	6.96	
Anxiety	USA	38.03	7.38	1.10 (1, 232)
Symptoms	Canada	39.11	6.88	

Instruments

The survey for the study contained a demographic questionnaire and six measures, all described below. (See Appendixes E through P for these measures.)

Demographic Information

The survey questionnaire for the present study contained questions about gender, age, year in college, college enrollment status, the students' living situation during high school, and length of time living in the U.S. or Canada. The participants were divided into the three groups according to their living situations during their high school period and their parents' place of residence at the time.

Attachment

The Experiences in Close Relationships Scale (ECRS; Brennan, et al., 1998) is a 36-item, self-report instrument that was created to assess adult attachment. This assessment includes two subscales: avoidance (18 items) and anxiety (18 items). The ECRS asks the respondents to rate how they generally experience romantic relationships, but not what they were experiencing in a current relationship. It is noteworthy to mention that adult romantic attachment as measured by self-report measures such as the ECRS has been conceptualized as having a global orientation towards all close relationships (Shaver & Mikulincer, 2005). The validity of the ECRS has been assessed by numerous researchers examining attachment in non-romantic contexts; this body of research has shown relations between adult romantic attachment and other constructs such as mental representations of self and others, psychological defenses, methods of emotional regulation, interpersonal behaviors (for reviews, see Mikulincer & Shaver, 2003; Shaver & Mikulincer, 2002). The responses are made to a 7-point Likert-type scale ranging from

1 (*disagree strongly*) to 7 (*agree strongly*). Factor analyses identified two orthogonal factors of attachment, anxiety and avoidance (Brennan, et al.). The anxiety subscale examines fear of abandonment, preoccupation with one's romantic partner, and fear of rejection (e.g., "I worry about being abandoned"). The avoidance subscale assesses the avoidance of intimacy, openness, and interdependence in romantic relationships (e.g., "I prefer not to show a partner how I feel deep down"). Both subscales showed high internal consistency estimates, that is, .94 for avoidance; .91 for anxiety (Brennan, et al.), with test-retest reliabilities over a three-week interval of .70 for both scales (Brennan, Shaver, & Clark, 2000).

Previous studies have provided ample support for the construct validity for the ECRS. For example, the ECRS is related in theoretically expected ways to psychological distress and support (Mallinckrodt & Wei, 2005), self-disclosure and loneliness (Wei, Russel, & Zakalik, 2005), coping and distress (Lopez & Gormley, 2002), differentiation of self (Skowron & Dendy, 2004), identity status (Berman, Weems, Rodriguez, & Zamora, 2006), and anxiety sensitivity (Weems, Berman, Silverman, & Rodriguez, 2002). Cross-cultural reliability was established by presenting the ECRS to both English and Chinese using a sample of Taiwanese international students, which reported an internal reliability of .91 for avoidance and .88 for anxiety (Mallinckrodt & Wang, 2004). The internal consistency reliability of a Korean version of the attachment avoidance and attachment anxiety were reported as .83 and .85. An internal consistency reliability of .89 for avoidance and .86 for anxiety was also reported (Chung, Choi, & Kang, 2000). In the current study, internal consistency reliability estimates were adequate for both attachment avoidance ($\alpha = .87$) and for attachment anxiety ($\alpha = .82$). The Korean version of the

ECRS is related in theoretically expected ways to identity status and differentiation of self (Lee, 2000). Other studies indicated strong correlations between the Korean version of the ECRS, as attachment avoidance and attachment were reported to correlate with psychological distress and self-disclosure (Chung, et al.).

Acculturation

The Asian American Multidimensional Acculturation Scale (AAMAS; Chung, Kim, & Abreu, 2004) consists of three 15-item, self-report scales: (1) the AAMAS-culture of origin, (2) the AAMAS-Asian American, and (3) the AAMAS-European American. The current study used only the first and third scales. These two scales of the AAMAS are orthogonal and distinguish the dimensions of acculturation to the host culture and to the Asian culture of origin. These two dimensions align with the two-dimensional acculturation model of Berry, et al. (1987). Each AAMAS scale has a 6-point Likert-type scale ranging from 1 = *not very much* to 6 = *very much*. In each scale, 10 items measure cultural behavior, 3 items measure cultural identity, and 2 items measure cultural knowledge associated with that dimension of acculturation (either identification with the culture of origin or identification with European American culture). The AAMAS scales scores are based on the average rating (ranging from 1 to 6) for the 15 items in each scale. One study indicated a coefficient alpha of .87 for the AAMAS-culture of origin and .81 for the AAMAS-European American scale (Chung, Kim, & Abreu). Support for concurrent validity includes correlations with other measures of acculturation, including the SL-ASIA (Suinn, et al., 1987) and the Cultural Identification Scale (CIS; Oetting & Beauvais, 1991). An inverse relationship between the Asian Values Scale (AVS; Kim, Atkinson, & Yang, 1999) and the AAMAS-European

American was reported. This was theoretically expected because the AVS measures the degree of adherence to Asian culture whereas the latter measures acculturation to the host culture. The pilot study provided support for the validity of the Korean version of the AAMAS. The Korean version of the AAMAS-culture of origin scale was significantly correlated with the Asian values as measured by the Korean version of the AVS (Pearson $r = .31, p < .01$) and intentions to seek professional help (Pearson $r = -.29, p < .01$), as predicted. As expected, the AAMAS-European American scale was significantly and inversely related with Asian values as measured by the Korean version of the AVS (Pearson $r = -.40, p < .01$), as well as significantly and positively associated with both horizontal individualism (Pearson $r = .25, p < .01$) and vertical individualism (Pearson $r = .28, p < .01$), as measured by the Individualism-Collectivism Scale (INDCOL; Singelis, et al., 1995). In the validity pilot study, the internal consistency reliability estimates of both the AAMAS-culture of origin ($\alpha = .81$) and the AAMAS-European American ($\alpha = .87$) were adequate. Likewise, in the current study, the internal consistency reliability estimates of both the AAMAS-culture of origin ($\alpha = .83$) and the AAMAS-European American ($\alpha = .86$) were adequate.

Psychological Distress

Psychological distress was measured by examining two separate (but related) constructs, depression and anxiety. The Brief Symptom Inventory (BSI; Derogatis, 1975) assesses global levels of psychological distress and was considered for this study. The BSI-18 has been widely accepted as a measure of psychological distress across cultural groups (Asner-Self, Schreiber, & Marotta, 2006). Unfortunately, permission to use the Korean version of the BSI-18 in a Web-based format was not granted by the publisher.

Because two thirds of the BSI-18 assesses depression and anxiety (Derogatis, 2000), a reasonable alternative to examining global psychological distress was to assess depressive and anxiety symptoms separately using the Zung Self-rating Anxiety Scale (ZSAS; Zung, 1965) and the Zung Self-rating Depression Scale (ZSDS; Zung, 1965).

The ZSAS (Zung, 1965) is a 20-item, self-report measure to assess anxiety symptoms. The measure asks participants to rate each item as to how they felt in terms of anxiety during the preceding week, according to a 4-point Likert-type scale (1 = *not at all*, 2 = *rarely*, 3 = *some*, 4 = *very often*). Internal reliability for the Korean version of the ZSAS was reported as .98 (Lee, 1996). A significant correlation with the Korean version of the Taylor Manifest Anxiety Scale (TMAS; Taylor, 1955) was demonstrated to support the validity of the measure (Lee, 1996). A significant correlation between anxiety and the loss of their mother among Korean women, using the ZSAS, was reported in a study by Chung (1983). In the current study, the reliability of the Zung Self-rating Anxiety Scale was $\alpha = .76$.

The ZSDS (Zung, 1965) is a 20-item, self-report that measures depressive symptoms. Subjects are asked to rate each item with regard to how they have felt during the previous week, using a 4-point Likert-type scale (1 = *a little of the time*, 2 = *some of the time*, 3 = *a good part of the time*, 4 = *most of the time*). Out of the 20 items, 10 are reverse-scored. Previous studies indicated that the scores are not to be used as strict diagnostic guidelines but rather to imply levels of depressive symptoms that might be clinically significant (Passik, et al., 2001; Zung, 1967). Several studies have found the ZSDS to be a reliable and valid instrument for measuring depressive symptoms (e.g., Agrell & Pakkala, 1986; Biggs, Wylie, & Ziegler, 1978). The Korean version of the

ZSDS has been found to be valid for measuring depressive symptoms and reliable for use with a Korean population (Kim, 2006). The Korean version used in this study is reported to have an internal consistency of .79 (Lee & Song, 1991). In the current study, the reliability of the Zung Self-rating Depression Scale was adequate with $\alpha = .76$.

Loneliness

The UCLA Loneliness Scale (Russell, 1996) is a 20-item, self-report scale that measures levels of loneliness in everyday life. It includes 9 positive (non-lonely) and 11 negative (lonely items) randomly distributed throughout the survey. Scores on the scale range from 20 to 80, with higher scores reflecting greater loneliness. Each item was rated on a 4-point, Likert-type scale ranging from 1 to 4 (1 = *rarely*, 2 = *little*, 3 = *occasionally*, and 4 = *most of the time*). Convergent validity was supported by positive correlations with scores on other measures of loneliness such as the NYU Loneliness Scale and the Differential Loneliness Scale (Russell). Russell reported that Version 3 of the scale is reliable, with the coefficient alpha ranging from .89 to .94 across different samples. Construct validity was supported by positive associations with depression and neuroticism and negative associations with several measures of social support and self-esteem (Russell). The loneliness scale was significantly related to the Beck Depression Inventory (Russell; $r = .62$). Coefficient alphas ranged from .89 to .94. The Korean version of the UCLA Loneliness Scale used in this study is reported to have a coefficient alpha of .93, which indicates overall homogeneity of the content on the scale. The Korean version also was significantly correlated with scores on the Beck Depression Inventory (Kim, 1997), providing support for the validity of the scale. In the current study, the reliability of this scale was $\alpha = .81$.

Resilience

The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is a 25-item, self-report assessment to measure coping with stress and adversity. The participants are asked to rate how they have felt over the past month. The total score ranges from 0 to 100, with higher scores reflecting greater resilience. Each item was rated on a 5-point, Likert-type scale (0 = *not true at all*, 1 = *rarely true*, 2 = *sometimes true*, 3 = *often true*, and 4 = *true nearly all of the time*). The internal consistency reliability coefficient of this scale was .89. A Chinese version of the CD-RISC also had a reliability coefficient of 0.91, which is consistent with the cross-cultural validity of the CD-RISC with the Asian population (Yu & Zhang, 2007). A test-retest reliability test also indicated a high level of agreement, with a correlation coefficient of 0.87. The CD-RISC has been inversely related to the Perceived Stress Scale (PSS-10), indicating that higher levels of resilience are related to less perceived stress (Pearson $r = .76$). The Sheehan Stress Vulnerability Scale (SVS) was also inversely correlated with the CD-RISC (Spearman $r = -0.32$, $p < .0001$). The authors of the latter scale have only used the total score in data analyses due to lack of the reliability and validity of the subscales (Connor & Davidson). Therefore, only the CD-RISC total scores were used in their study.

The pilot study preceding the present study that examined the validity and reliability of the Korean version of the CD-RISC provided support for the validity and reliability of the Korean version of the measure. The pilot study indicated that the Korean version is significantly correlated with self-esteem ($r = .60$, $p < .01$), life satisfaction ($r = .65$, $p < .01$), perceived psychological distress ($r = -.48$, $p < .01$), and depressive

symptoms ($r = -.35, p < .01$). The internal consistency reliability estimate of the Korean version was .91. In the present study, $\alpha = .93$ for the Korean version of the CD-RISC.

CHAPTER 4

RESULTS

This chapter presents the results of this study, which focused on the differences among three groups of Korean college students in terms of their attachment styles, acculturation, psychological distress, and loneliness. These three groups included (a) Early Arrived-International (EA-I) students who came to North America at a young age without the company of a parent; (b) EA-I students who stayed in North America throughout high school with a parent, usually their mother, and (c) Recently Arrived-International (RA-I) college students who grew up with both parents in Korea until their entry into the United States or Canada as young adults to attend college. First, the results of the preliminary analyses are presented, followed by the results of the tests of the study hypotheses. Finally, the results of a series of exploratory, post hoc analyses are described.

Preliminary Analyses

The dataset was first examined for missing values. Missing items that were distributed across the questionnaires administered were determined to have been accidentally excluded by the participants. These items were replaced by calculating regression coefficients (Schafer & Graham, 2002).

Data were then assessed for univariate outliers. A value that is 3.29 standard deviations or more from the mean was deemed to be a univariate outlier (Tabachnick & Fidell, 2007). No univariate outliers were found for the Asian American Multidimensional Acculturation Scale-European American, the Experiences in Close Relationships Scale-Anxiety, the Zung Self-rating Anxiety Scale, the UCLA Loneliness Scale, or the Connor-Davidson Resilience Scale. One univariate outlier was detected for

the Asian American Multidimensional Acculturation Scale-Home Culture, three univariate outliers were found for the Experiences in Close Relationships Scale-Avoidance, and one univariate outlier was identified in the Zung Self-rating Depression Scale. All of these univariate outliers were adjusted to within 1 unit of the next highest score according to Tabachnick and Fidell. The data were also examined to detect multivariate outliers using Mahalanobis distances (Tabachnick & Fidell), but none was discovered.

Prior to testing the hypotheses, preliminary analyses were conducted to ensure that the assumptions of the Analysis of Variance (ANOVA) and Multivariate Analysis of Variance (MANOVA) and regression were met. First, normality was assessed for the ANOVA. Second, the MANOVA requires that the dependent variables collectively have multivariate normality with groups (Field, 2005); thus normality for the combined data was examined. The score distributions within each subscale and the combined data were found to be normally distributed, as described below.

Because the current study utilized both ANOVA and MANOVA, skewness and kurtosis were assessed to examine the distributions and the normality of each variable collectively and for each group. A skew of less than 2 and a kurtosis of less than 7 have been recommended as guidelines to assess the dataset's distribution (Chou & Bentler, 1995; Curran, West, & Finch, 1996). The data indicated that the score distributions of all measures were within acceptable levels of skewness and kurtosis (See Table 3).

Lastly, the homogeneity of the covariance matrices was assessed. Field (2005) suggested that the assumption of the homogeneity of variance needs to be met in ANOVA. This assumption was checked by examining Levene's test (see Table 4). All

the variables except the anxiety scale satisfied the assumption of the homogeneity of the covariance matrices. This suggests that the accuracy of the result of the ANOVA regarding anxiety symptoms was compromised. In addition, it was expected that the correlation between the two dependent variables would be the same in all groups for the MANOVA analysis to hold. The Box Test of Equality of the Covariance on the SPSS indicated that the observed covariance matrices of the dependent variables were equal across groups ($p = .239$).

Table 3

Descriptive Statistics

Variables	<i>n</i>	<i>Mean</i>	<i>SD</i>	Skew	Kurtosis
Acculturation-Home	236	4.86	.59	-.42	-.24
EA-IS with parent	76	3.86	.68	-.18	-.91
EA-IS without parent	80	4.79	.62	-.54	-.00
RA-I S	79	4.96	.55	-.49	-.38
Acculturation-Host	233	3.77	.69	-.04	-.54
EA-IS with parent	77	4.82	.59	-.18	-.41
EA-IS without parent	77	3.88	.68	.15	-.61
RA-I S	79	3.57	.68	-.08	-.29
Attachment Avoidance	230	3.62	.78	.09	-.03
EA-IS with parent	77	3.57	.76	.02	-.11
EA-IS without parent	75	3.66	.88	.13	.05

RA-IS	78	3.62	.72	.02	-.33
Attachment Anxiety	230	3.75	1.10	-.01	-.33
EA-IS with parent	77	3.93	1.12	-.43	-.10
EA-IS without parent	75	3.58	.99	.01	-.56
RA-IS	78	3.73	1.17	.25	-.19
Loneliness	235	39.34	7.30	.23	-.65
EA-IS with parent	77	39.01	7.06	.01	-.75
EA-IS without parent	79	39.56	7.96	.36	-.69
RA-IS	79	39.42	6.91	.22	-.63
Resilience	232	67.30	15.31	.10	-.41
EA-IS with parent	75	66.43	15.44	-.13	-.28
EA-IS without parent	78	67.26	16.96	.32	-.68
RA-IS	79	68.18	13.52	.07	-.31
Depressive Symptoms	232	42.76	6.26	.02	-.52
EA-IS with parent	76	42.43	5.55	-.09	-.64
EA-IS without parent	80	43.25	6.45	-.05	-.81
RA-IS	76	42.58	6.77	.11	-.29
Anxiety Symptoms	234	39.11	7.29	.29	-.36
EA-IS with parent	76	39.46	5.31	-.15	-.13
EA-IS without parent	79	38.63	7.97	.30	-.70
RA-IS	79	39.24	8.24	.45	-.56

Table 4

Levene's Test of Homogeneity of Variance

Variables	<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p</i>
Acculturation-Home	.27	2	233	.76
Acculturation-Host	.10	2	230	.90
Attachment Avoidance	1.54	2	227	.22
Attachment Anxiety	.53	2	227	.59
Loneliness	1.69	2	232	.19
Resilience	2.06	2	229	.13
Depressive Symptoms	1.78	2	229	.17
Anxiety Symptoms	10.59	2	231	.00

The correlations of all the measured variables were examined to detect multicollinearity. No correlations exceeded .70. According to Tabachnick and Fidell (2007), correlations above .95 are considered especially problematic, and those above .70 are viewed as potentially creating issues of multicollinearity for data analysis. Table 5 displays all the zero-order correlations between the variables for the combined data. Table 6 presents the intercorrelations for the EA-I students with an accompanying parent, while Table 7 shows the correlations for the EA-I students without an accompanying parent. Lastly, Table 8 presents the intercorrelations among the variables for the RA-I students. Due to the number of correlations tested, the Bonferroni correction was conducted to reduce the overall Type I error. Specifically, the alpha of .05 was divided by

the number of correlational analyses conducted, 4. Thus, these analyses needed to have a p -value of less than .0125 to be significant.

In the correlations table, a number of notable correlations were discovered. First, as indicated in Table 5, two variables were correlated with the identification with the home. A small to moderate inverse correlation was found between the identification with the home culture and attachment avoidance among the Korean students. Second, identification with the home culture was also inversely related to loneliness with a small to moderate effect size. According to Cohen (1988), effect sizes smaller than .30 are considered small, and between .30 and .50 are considered moderate, whereas any effect larger than .50 is considered strong.

Three variables were correlated with the identification with the host culture. First, there was a significant moderate, positive correlation between identification with the host culture and resilience. Second, a positive correlation, with a small effect size, was found between identification with the host culture and depressive symptoms. Inverse relationships, with small effect size, according to Cohen's benchmarks (1988), were found between identification with the host culture and loneliness and depressive symptoms.

The correlations table also demonstrates that the two attachment dimensions were significantly correlated with loneliness, resilience, anxiety symptoms, and depressive symptoms. Moderate to strong correlations were detected between loneliness and each attachment dimension (attachment anxiety and avoidance). Resilience was found to be negatively correlated with attachment avoidance, attachment anxiety, and loneliness. The effect sizes for the associations between resilience and each of the two attachment

dimensions (attachment avoidance and anxiety) were small, whereas the effect size for the correlation between loneliness and resilience was moderate according to Cohen (1988). Anxiety symptoms were positively related to attachment anxiety and loneliness, and inversely correlated with resilience and depressive symptoms. The effect sizes for the links between anxiety symptoms and both attachment anxiety and depressive symptoms were strong, the correlations between anxiety symptoms and resilience were moderate, and the correlations between anxiety symptoms and loneliness were moderate in size.

The pattern of significant correlations was not identical across the three groups of Korean students. Tables 6 to 8 provide correlation matrices for study variables for each student group. In order to examine whether there were any significant differences between any of the correlation coefficients across the groups, z-tests were conducted. According to the z-tests (see Table 9 for results of all z-tests), there were no significant differences in the degree of correlation between the study variables across the groups except with respect to the correlation between loneliness and anxiety symptoms. In the combined data, an inverse relationship between loneliness and anxiety symptoms was evident, but the z-tests indicated that there were significant differences in the degree of correlation across the three student groups. The z-tests indicated significant differences in the relationship between loneliness and anxiety symptoms in the EA-I students with a parent and the EA-I students without a parent, as well as between the RA-I students and the EA-I students with a parent. There was no difference in the degree of correlation between loneliness and anxiety symptoms for the EA-I students without a parent and the RA-I students. Examination of the correlation coefficients showed that there was no significant correlation between loneliness and anxiety symptoms either for the EA-I

students without a parent and the RA-I students, whereas there was a significant correlation between loneliness and anxiety symptoms in the EA-I students with a parent.

Table 5

Intercorrelations Among the Variables for the Combined Data

	1	2	3	4	5	6	7	8
1. Acculturation-Home ($n = 236$)								
2. Acculturation-Host ($n = 233$)	-.13							
3. Attachment Avoidance ($n = 230$)	-.22*	-.12						
4. Attachment Anxiety ($n = 230$)	-.04	-.05	.07					
5. Loneliness ($n = 235$)	-.24*	-.19*	.51*	.36*				
6. Resilience ($n = 232$)	.09	.38*	-.18*	-.28*	-.46*			
7. Depressive Symptoms ($n = 232$)	-.07	-.15*	.26*	.38*	.54*	-.54*		
8. Anxiety Symptoms ($n = 234$)	-.03	.08	.10	.51*	.34*	-.38*	-.60*	

* $p < 0.0125$ level (2-tailed).

Table 6

Intercorrelations Among the Variables for the EA-Is with a Parent

	1	2	3	4	5	6	7	8
1. Acculturation-Home ($n = 77$)								
2. Acculturation-Host ($n = 77$)	-.12							
3. Attachment Avoidance ($n = 77$)	-.22	-.13						
4. Attachment Anxiety ($n = 77$)	-.02	-.05	.12					
5. Loneliness ($n = 77$)	-.28	-.14	.54*	.30*				
6. Resilience ($n = 75$)	.05	.31*	-.03	-.24*	-.31*			
7. Depressive Symptoms ($n = 76$)	-.10	-.03	.23	.23	.42*	-.43*		
8. Anxiety Symptoms ($n = 76$)	.00	.01	-.11	.37*	.04	-.42*	.48*	

* $p < 0.0125$ level (2-tailed).

Table 7

Intercorrelations Among the Variables for the EA-Is without a Parent

	1	2	3	4	5	6	7	8
1. Acculturation-Home ($n = 80$)								
2. Acculturation-Host ($n = 77$)	-.05							
3. Attachment Avoidance ($n = 75$)	-.22	-.06						
4. Attachment Anxiety ($n = 75$)	-.05	-.05	.13					
5. Loneliness ($n = 79$)	-.31*	-.23	.57*	.32*				
6. Resilience ($n = 78$)	.09	.44*	-.24*	-.20	-.50*			
7. Depressive Symptoms ($n = 80$)	.02	-.28	.24	.30*	.58*	-.59*		
8. Anxiety Symptoms ($n = 79$)	.04	-.20	.15	.51*	.37*	-.35*	.56*	

* $p < 0.0125$ level (2-tailed).

Table 8

Intercorrelations Among the Variables for the RA-Is

	1	2	3	4	5	6	7	8
1. Acculturation-Home ($n = 79$)								
2. Acculturation-Host ($n = 79$)	-.17							
3. Attachment Avoidance ($n = 78$)	-.23	-.19						
4. Attachment Anxiety ($n = 78$)	-.04	-.07	-.00					
5. Loneliness ($n = 79$)	-.13	-.20	.39*	.49*				
6. Resilience ($n = 79$)	.12	.41*	-.26*	-.42*	-.57*			
7. Depressive Symptoms ($n = 76$)	-.13	-.15	.30*	.58*	.60*	-.60*		
7. Anxiety Symptoms ($n = 76$)	-.14	-.02	.21	.62*	.51*	-.42*	.71*	

* $p < 0.0125$ level (2-tailed).

Table 9

Z-tests Comparing Correlation Coefficients Across the Three Groups

Correlation coefficients examined	Group 1 vs. Group 2 <i>Z</i> (<i>p</i> -value)	Group 2 vs. Group 3 <i>Z</i> (<i>p</i> -value)	Group 3 vs. Group 1 <i>Z</i> (<i>p</i> -value)
ID Home & ID Host	-.43 (.67)	-.74 (.46)	-.31 (.76)
ID Home & Loneliness	.2 (.84)	1.17 (.24)	-.96 (.34)
ID Host & Loneliness	.57 (.57)	.19(.85)	-.38 (.70)
ID Host & Depressive symptoms	1.58 (.11)	.84 (.40)	-.73 (.47)
Att Avoidance & ID Home	0 (1)	-.06 (.95)	-.06 (.95)
Att Avoidance & Resilience	1.3 (.19)	-.13 (.90)	1.44 (.15)
Att Avoidance & Depressive Symptoms	-.06 (.95)	.04 (.69)	.46 (.65)
Att Anxiety & Resilience	-.25 (.80)	-.151 (.13)	-1.23 (.22)
Loneliness & Anxiety Symptoms	2.13 (.03)	-1.06 (.29)	-3.16 (.00)

Note: Group 1 = EA-I students with a parent; Group 2 = EA-I students without a parent; and Group 3 = RA- I students

As mentioned earlier in the literature review, Berry, et al.'s (1989) model posits four modes of acculturation based on the levels of the two acculturation dimensions, identification with the home culture and identification with the host culture: *integration* (high identification with both the home and the host culture), *assimilation* (high

identification with the host culture but low identification with the home culture), *separation* (high identification with the home culture and low identification with the host culture), and *marginalization* (low identification with both the home and the host cultures). Scatter plots were graphed to examine the distribution of the scores in the present study on identification with the home culture and by identification with the host culture in terms of the four modes of acculturation proposed by Berry, et al., as represented by the four quadrants of the scatter plot. A scatter plot is presented to indicate scores on acculturation for all the participants in the full sample of the present study (see Figure 1). Three more scatter plots show the acculturation dimension for each student group (see Figures 2-4). The scatter plots indicate that it was relatively uncommon to have very low scores (i.e., 1 or 2) on identification with the home culture in the present study. Thus, it appeared that the marginalization and the assimilation modes of acculturation were less well represented in the present sample relative to the separation and integration modes of acculturation.

Dependent *t* tests were conducted with all four data sets (the combined data and the three Korean student groups' data) to determine whether there were significant differences between the means for identification with the home culture and identification with the host culture for the participants in the combined data set and for the participants in each of the three groups. The results of one of the *t* tests indicated that identification with the home culture was on average significantly greater ($M = 4.86$, $SE = .04$) than identification with the host culture ($M = 3.77$, $SE = .05$, $t(232) = 17.30$, $p < .00$, $r = .75$) in the combined data. The *t* test for the EA-I students with a parent also demonstrated that identification with the home culture was significantly greater ($M = 4.82$, $SE = .07$) than

identification with the host culture ($M = 3.86$, $SE = .08$, $t(76) = 8.87$, $p < .00$, $r = .71$).

However, the t test for the EA-I students without a parent showed that identification with the home culture for this group was significantly greater ($M = 4.81$, $SE = .07$) than identification with the host culture ($M = 3.88$, $SE = .08$, $t(76) = 8.64$, $p < .00$, $r = .70$).

Lastly, the t test for the RA-I students demonstrated that identification with the home culture was significantly greater ($M = 4.97$, $SE = .06$) than identification with the host culture ($M = 3.57$, $SE = .077$, $t(78) = 13.05$, $p < .00$, $r = .84$).

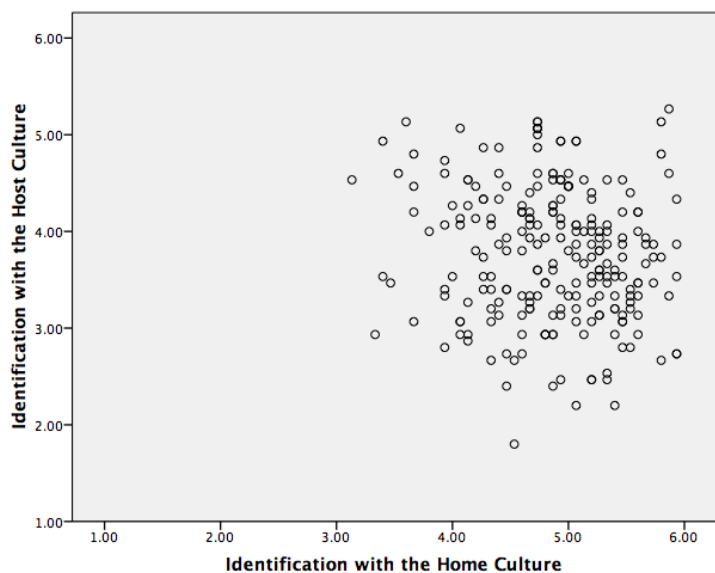


Figure 1. A scatter plot of the participants' acculturation for the combined data

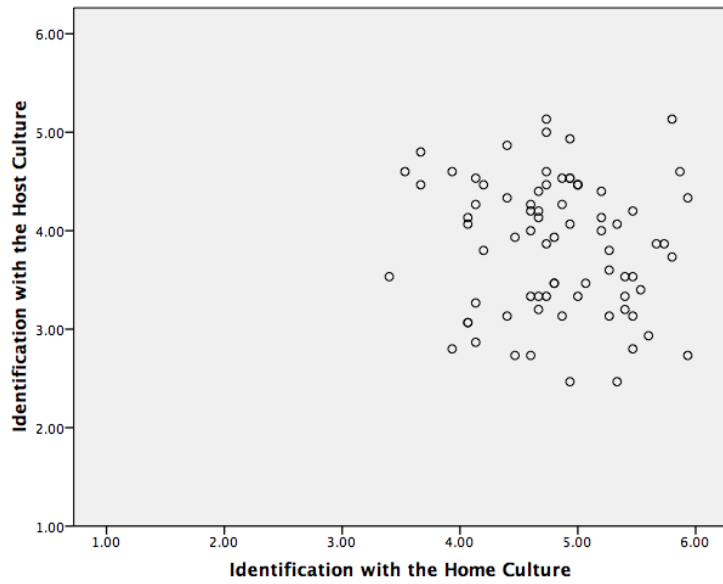


Figure 2. A scatter plot of the acculturation dimensions for the EA-I students with a parent

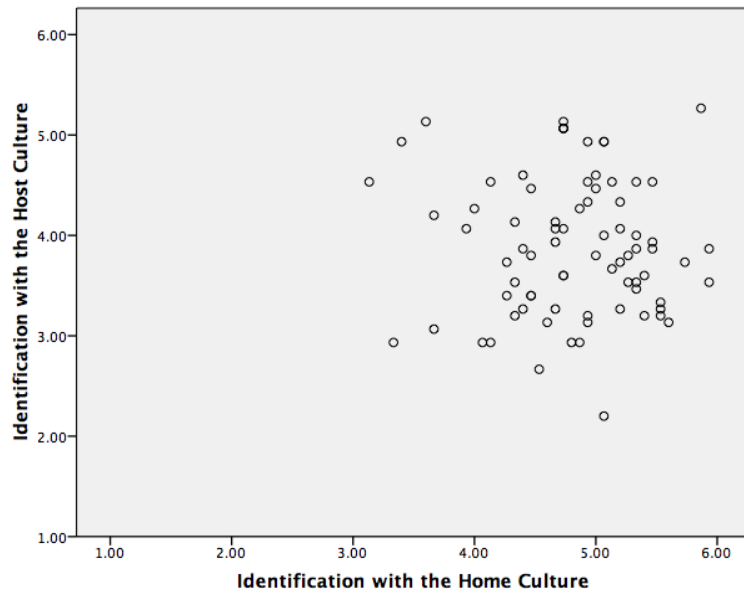


Figure 3. A scatter plot of the participants' acculturation dimension for the EA-I students without a parent

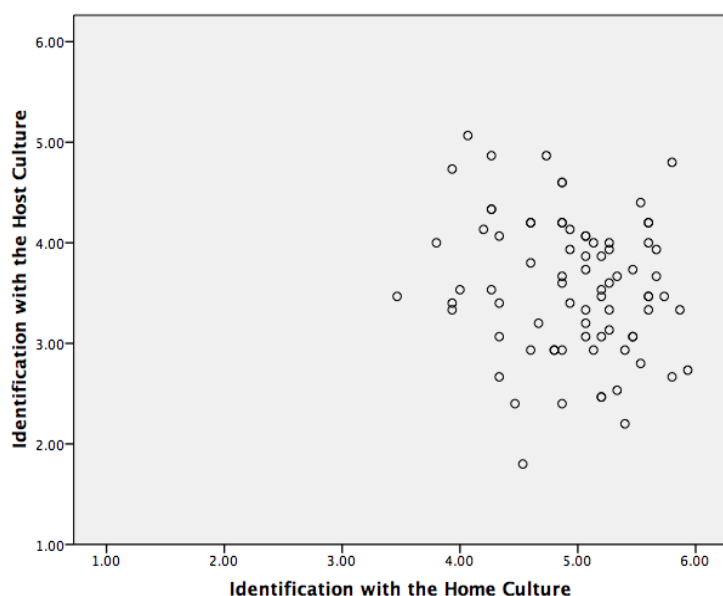


Figure 4. A scatter plot of the participants' acculturation dimensions for the RA-I students

Hypotheses Testing Results

The following describes the results of the hypotheses tested in this study.

Hypotheses Related to Acculturation

An analysis of variance (ANOVA) was used to test the hypotheses related to the differences among the three types of Korean students on their level of acculturation in terms of identification with their home culture, as well as identification with their host culture.

As expected, the first hypothesis that the EA-I students (both types) would score higher on identification with the host culture subscale than the RA-I students was supported. Overall, the ANOVA results are presented in Table 10. In order to see the

possible differences between the groups, a post hoc analysis was also conducted. Table 11 demonstrates that both types of EA-I students scored significantly higher than the RA-I students. However, it is important to note that the calculated eta squared is truncated to zero. The fact that the effect size is close to zero suggests that although a significant difference was found, that difference may have no practical significance and must be interpreted with caution.

The second hypothesis, however, that the RA-I students would score higher on identification with the home culture subscale than both EA-I student groups was not supported. Likewise, the third hypothesis proposing that the EA-I students with a parent would score higher on identification with the home culture than the EA-I students without a parent was not supported. There were no significant differences among the three groups on the level of identification with the home culture. These results are presented in Table 10.

Table 10

ANOVA Results for the Means of Acculturation

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	η^2	<i>p</i>
Acculturation-Home						
Between Groups	1.41	2	.70	2.03		.13
Within Groups	80.90	233	.35			
Total	82.31	235			.00	
Acculturation-Host						
Between Groups	4.91	2	2.45	5.28		.00*
Within Groups	106.94	230	.47	5.28		.00*
Total	111.85	232			.00	

* $p < 0.05$ level (2-tailed)

Table 11

Acculturation as a Function of Group Classification

Group Classification	Acculturation-Host	
	<i>M</i>	(<i>SD</i>)
EA-IS with parent ($n = 77$)	3.86 _a	(.68)
EA-IS without parent ($n = 77$)	3.88 _a	(.69)
RA-IS ($n = 79$)	3.56 _b	(.68)

Note. Means with different subscripts differ significantly from each other according to Tukey's HSD, $p < .05$.

The second set of hypotheses predicted that acculturation (both identification with the home culture and the host culture) would mediate the links between the type of Korean students and attachment avoidance and psychological distress. *Specifically, it was postulated that the EA-I students without an accompanying parent would show a higher identification with the host culture, which would lead to greater levels of attachment avoidance in this group.* This hypothesis was not supported, as described below.

Baron and Kenny (1986) suggested that the following four steps are required for a mediation process. First, the total effect of the independent variable on the dependent variable must be significant. Because the independent variable was a categorical variable, the type of Korean student was first dummy coded to run a regression analysis. However, the results of the present study showed no significant association between the dummy coded student group and attachment avoidance (see Table 12). Second, Baron and Kenny suggested that the path from the independent variable to the mediator must be significant. As expected, the results of the present study supported the hypothesis that the student group would predict the acculturation variables (see Table 13). Specifically, the findings suggested that the EA-I students who came to the host culture alone had a significantly higher identification with the host culture than did the RA-I students. Table 14 also implies that the EA-I students with an accompanying parent had a significantly higher identification with the host culture than the RA-I students. In sum, the results indicate that the student group status predicts the level of identification with the host culture, with students who arrived earlier in their lives having a higher level of identification with the host culture.

To test mediation, however, the third condition that Baron and Kenny suggested must be met to establish it is that the path from the mediator to the dependent variable be significant; this condition was not met (see Table 14). Specifically, the hypothesis that the mediator, identification with the host culture, would predict attachment avoidance, was not supported. Finally, Baron and Kenny suggested that the relationship between the independent variable and the dependent variable decreases significantly after the mediator has been controlled for in the model. This fourth condition for establishing mediation was not examined in the present study because two of the three assumptions were not supported. In sum, the results suggested that the first hypothesis was not supported.

Table 12

Summary of the Regression Analysis Predicting Attachment Avoidance from Group Type (n = 219)

Variable	R^2	B	β	t	p	sr^2
	.00				.89	
Dummy Code 1: Group 3 vs. Group 2		-.77	-.05	-.65	.89	.00
Dummy Code 2: Group 3 vs. Group 1		-.04	-.02	-.31	.76	.00

Group 1 = EA-I students with a parent; Group 2 = EA-I students without a parent;

Group 3 = RA-I student

Table 13

Summary of the Regression Analysis Predicting Identification with the Host Culture from Group Type (n = 233)

Variable	R^2	B	β	t	p	sr^2
	.00				.00	
Dummy Code 1: Group 3 vs. Group 2		.32	.22	2.93	.00	.04
Dummy Code 2: Group 3 vs. Group 1		.29	.20	2.67	.01	.03

Group 1 = EA-I students with a parent; Group 2 = EA-I students without a parent;
Group 3 = RA-I students

Table 14

Summary of the Regression Analysis Predicting Attachment Avoidance from Identification with the Host Culture (n =230)

Variable	R^2	B	β	t	p	sr^2
	.02				.07	
Acculturation-Host		-.14	-.12	-1.8	.07	.00

The mediational role of acculturation in the links between the types of Korean students and psychological distress was also tested. *Specifically, the RA-I students were predicted to show a lower level of identification with the host culture, which in turn would lead to greater levels of psychological distress.* The hypothesis was tested again by following Baron and Kenny's (1986) suggestions. First, the total effect of the initial predictor variable (student type) on the dependent variable (psychological distress) was

tested. The hypothesis that the group type would predict depressive symptoms and anxiety symptoms was not supported (see Tables 15 & 16). Second, the path from the independent variable to the mediator (identification with the host culture) was also examined. The hypothesis that the group predicts the identification with the host culture was previously tested and found significant (see Table 13). Lastly, the hypothesis that identification with the host culture (when type of group was controlled) would predict psychological distress was not supported (see Tables 17 & 18). The results indicated that identification with the host culture would not predict depressive symptoms if the independent variables were included in the path. Because the relationship between the independent variable and the dependent variable was not significant, the fourth assumption was not tested. Thus, in sum, these results indicated that the second mediational model hypothesis was not supported.

Table 15

Summary of the Regression Analysis Predicting Depressive Symptoms from Group Type (n = 232)

Variable	R^2	B	β	t	p	sr^2
	.00				.69	
Dummy Coding 1: Group 3 vs. Group 2		.67	.05	.67	.51	.00
Dummy Coding 2: Group 3 vs. Group 1		-.15	-.01	-.14	.89	.00

Group 1 = EA-I students with a parent; Group 2 = EA-I students without a parent;
Group 3 = RA-I students

Table 16

Summary of the Regression Analysis Predicting Anxiety Symptoms from Group Type (n = 234)

Variable	R^2	B	β	t	p	sr^2
	.00				.77	
Dummy Coding 1: Group 3 vs. Group 2		.61	-.04	-.52	.60	.00
Dummy Coding 2: Group 3 vs. Group 1		.22	.01	.19	.86	.00

Group 1 = EA-I students with a parent; Group 2 = EA-I students without a parent;
Group 3 = RA-I students

Table 17

Summary of the Regression Analysis Predicting Depressive Symptoms from Group Type (n = 229)

Variable	R^2	B	β	t	p	sr^2
	.03				.00	
Dummy Coding 1: Group 3 vs. Group 2		1.03	.08	1.01	.31	.00
Dummy Coding 2: Group 3 vs. Group 1		.24	.02	.24	.81	.00
Acculturation-Host		-1.36	-1.48	-2.26	.03	.00

Table 18

Summary of the Regression Analysis Predicting Anxiety Symptoms from Group Type (n = 231)

Variable	R^2	B	β	t	p	sr^2
	.01				.23	
Dummy Coding 1: Group 3 vs. Group 2		-.51	-.03	-.43	.67	.00
Dummy Coding 2: Group 3 vs. Group 1		.45	.03	.38	.70	.00
Acculturation-Host		-.80	-.08	-1.15	.25	.00

Hypotheses Related to Attachment Avoidance and Attachment Anxiety

A multivariate analysis of variance (MANOVA) was performed to test the hypotheses related to group differences in attachment avoidance and anxiety. *It was hypothesized that the EA-I students without an accompanying parent would show higher levels of avoidance than the students in the other two groups. In contrast, the RA-I students were predicted to score higher on attachment anxiety than both types of EA-I students, and the EA-I students who came with one parent were expected to have lower levels of attachment anxiety than the students in the other two groups.* But, these hypotheses were not supported. No significant differences were detected among the three groups of Korean students on the means of attachment avoidance or attachment anxiety. These results are presented in Table 19.

Hypotheses Related to the Levels of Psychological Distress

First, it was hypothesized that the EA-I students who had come with a parent would report the least amount of distress compared to the other two groups. The second hypothesis posited that the EA-I students who had come without a parent would report the most distress compared to the other two groups. No significant group differences were detected, however, with regard to either of the two measures of psychological distress (see Table 19).

Hypotheses Related to Loneliness and Resilience

The hypotheses related to loneliness that posited significant differences between the three groups on their level of loneliness were also not supported (see Table 19). *Specifically, it was hypothesized that the EA-I students who had come without a parent would report a higher score on loneliness than the other two groups.*

Lastly, the prediction that the EA-I students without an accompanying parent would report a higher level of resilience than the other two groups was also not supported (see Table 19).

Table 19

MANOVA Results for the Means of the Variables

Group	Acculturation		Acculturation		Attachment		Attachment		Loneliness		Resilience		Depressive		Anxiety	
	-Home		-Host		-Avoidance		-Anxiety						Symptoms		Symptoms	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Group 1	4.82	.60	3.81	.67	3.59	.77	3.91	1.15	39.01	7.14	66.71	15.19	42.44	5.53	39.58	5.23
Group 2	4.80	.62	3.87	.69	3.66	.89	3.59	1.0	39.18	7.91	67.07	16.64	43.25	6.45	38.65	7.78
Group 3	4.96	.56	3.57	.68	3.62	.72	3.71	1.18	39.21	7.32	68.69	13.57	42.71	6.72	39.13	7.17

Group 1 = EA-I students with a parent ($n = 73$); Group 2 = EA-I students without a parent ($n = 73$);

Group 3 = RA-I students ($n = 75$)

Post hoc Analyses

In addition to testing the main hypotheses, several post hoc analyses were conducted. Because only one of the main hypotheses was supported, new post hoc analyses were conducted to assess possible relationships between the measured variables instead of simply focusing on the group differences between the Korean students. Although these analyses were exploratory in nature, they were conducted after developing new hypotheses based on theory, in consideration of detected bivariate correlations. Therefore, these post hoc analyses should be interpreted with caution because of their post hoc nature and the potential to capitalize on chance.

Korean international students who have U.S. citizenship due to their parents' job/education were included in the study to be more inclusive of this cultural group. Yet, because citizenship has been theorized to have an effect on the results of the acculturation process, because different statuses could create different motivations and reasons for the students to become acculturated (Berry & Kim, 1988), analyses were run without the citizens from non-Korean countries. The pattern of significant results was the same for the full data set and the data set with Korean citizens only. Thus, the results are presented throughout with the U.S. citizens included (the table for the results of the Korean citizens can only be obtained from the author of this dissertation).

Acculturation

First, the researcher expected that positive acculturation would be linked to lower levels of distress (Berry, Kim, Minde, & Mok, 1987). Thus, it was expected that higher levels of either identification with the home culture or identification with the host culture would be associated with lower levels of loneliness, depressive symptoms, and anxiety

symptoms; and would be linked to higher levels of resilience. At the same time, however, because no bivariate correlations were found between acculturation variables and anxiety symptoms, we did not explore links between these variables any further. Moreover, it was theorized that identification with the home culture and identification with the host culture could potentially interact with one another to predict the outcomes of interest. Thus, three hierarchical regressions were conducted in which identification with the home culture and identification with the host culture were entered at Step 1, and the interaction effect was entered at Step 2. The criterion variables included loneliness, depressive symptoms, and resilience. All continuous variables were standardized prior to running the hierarchical regression analyses.

The first hierarchical regression analysis examined links between acculturation and loneliness. The results indicated that 11% of the variance in the students' loneliness was explained by their identification with their home and host cultures. Specifically, identification with the home culture uniquely predicted loneliness with 7% of the variance explained. This suggests that low identification with the home culture would predict a higher level of loneliness. The results were similar with respect to identification with the host culture. Identification with the host culture predicted loneliness with 5% of the variance explained. This result suggests that a low level of identification with the host culture predicts a higher level of loneliness. No significant interaction effect was found (see Table 20).

Table 20

Summary of the Hierarchical Regression Analysis Predicting Loneliness from the Acculturation Dimensions (n = 232)

Variable	R^2	ΔR^2	B	β	t	p	sr^2
	.11	.11				.00	
Acculturation-Home			-3.37	-.27	-4.31	.00	.07
Acculturation-Host			-2.37	-.22	-3.56	.00	.05
Step 2	.11	.00				.00	
Acculturation-Home			-3.32	-.27	-4.24	.00	.07
Acculturation-Host			-.24	-.23	-3.60	.00	.05
Acculturation-Home X Acculturation-Host			-.88	-.05	-.80	.42	.00

The second hierarchical regression analysis was conducted to test the link between the acculturation variables and depressive symptoms, as well as to test whether the interaction of the acculturation variables predicted depressive symptoms. Again, the overall Model 1 was significant, indicating that depressive symptoms were predicted by the acculturation variables. However, no interaction effect was found (i.e., Model 2 was not significant). The results indicated that 3% of the variance in the Korean students' depressive symptoms was explained by the acculturation variables together. The variance explained in depressive symptoms was relatively low. Identification with the home culture uniquely predicted depressive symptoms with 1% of the variance explained. This indicates that low identification with the home culture would predict higher depressive

symptoms. Identification with the host culture also predicted depressive symptoms with 3% of the variance explained. Again this result suggests that a low level of identification with the host culture predicted a higher level of depressive symptoms. These results are presented in Table 21. (Note that the percentages of the variance explained by each of the acculturation variables do not equal three due to rounding error.)

Table 21

Summary of the Hierarchical Regression Analysis Predicting Depressive Symptoms from the Acculturation Dimensions (n =229)

Variable	R^2	ΔR^2	B	β	t	p	sr^2
	.03	.03				.03	
Acculturation-Home			-1.01	-.10	-1.45	.15	.01
Acculturation-Host			-1.44	-.16	-2.43	.02	.03
Step 2	.03	.00				.07	
Acculturation-Home			-1.00	-.10	-1.43	.15	.01
Acculturation-Host			-1.44	-.16	-2.42	.02	.03
Acculturation-Home X Acculturation-Host			-.10	-.01	-.10	.92	.00

The third hierarchical regression analysis was performed to test the link between acculturation and resilience. The overall model was significant, indicating that 16% of the variance in resilience was predicted by the acculturation variables. As expected, both identification with the home culture and identification with the host culture were unique,

significant predictors of resilience. Specifically, the results suggested that both identification with the home culture and identification with the host culture were positively related to resilience. No significant interaction effect was found. These results are presented in Table 22. Identification with the home culture accounted for 2% of the variance in resilience, and identification with the host culture accounted for 15% of the variance in resilience.

Table 22

Summary of the Hierarchical Regression Analysis Predicting Resilience from the Acculturation Dimensions (n = 228)

Variable	R^2	ΔR^2	B	β	t	p	sr^2
	.16	.16				.00	
Acculturation-Home			3.51	.14	2.20	.03	.02
Acculturation-Host			8.66	.39	6.38	.00	.15
Step 2	.16	.00				.00	
Acculturation-Home			3.56	.14	2.22	.03	.02
Acculturation-Host			8.73	.39	6.34	.00	.15
Acculturation-Home X Acculturation-Host			-.92	-.25	-.41	.68	.00

Attachment

Given the previous research findings that suggest links between attachment and distress (e.g., Mallinckrodt & Wei, 2005; Vogel & Wei, 2005) and between attachment

and resilience (e.g., Li, 2008), the researcher decided to examine such links in the present data for all four outcome variables: loneliness, depressive symptoms, anxiety symptoms, and resilience. Hierarchical regressions were performed in which attachment avoidance and attachment anxiety were entered at Step 1, and the interaction effect was entered at Step 2. The criterion variables for the four regression analyses included loneliness, anxiety symptoms, depressive symptoms, and resilience.

First, the role of attachment dimensions on loneliness was explored. It was specifically hypothesized that both the attachment variables and the interaction effect would predict the level of loneliness. The results indicated that both attachment avoidance (23% of the variance explained) and attachment anxiety (11% of the variance explained) uniquely predicted loneliness. There was, however, no significant interaction effect (see Table 23).

Table 23

Summary of the Hierarchical Regression Analysis Predicting Loneliness from the Attachment Dimensions (n = 228)

Variable	R^2	ΔR^2	B	β	t	p	sr^2
	.37	.37				.00	
Attachment Avoidance			4.51	.49	9.13	.00	.23
Attachment Anxiety			2.17	.33	6.16	.00	.11
Step 2	.37	.00				.00	
Attachment Avoidance			4.50	.48	9.08	.00	.23
Attachment Anxiety			2.16	.33	6.10	.00	.11
Attachment Avoidance			-.04	-.00	-.08	.93	.00
X Attachment Anxiety							

The second hierarchical regression analysis in this section assessed the links between the attachment variables and anxiety symptoms. The results indicated that 26% of the variance in the anxiety symptoms of the Korean students (in the combined group) was explained by their level of attachment anxiety. No significant link was found between attachment avoidance and anxiety symptoms. This result suggests a positive association between attachment anxiety and anxiety symptoms. No significant interaction effect was found (see Table 24).

Table 24

Summary of the Hierarchical Regression Analysis Predicting Anxiety Symptoms from the Attachment Dimensions (n = 228)

Variable	R^2	ΔR^2	B	β	t	p	sr^2
	.26	.26				.00	
Attachment Avoidance			.61	.07	1.17	.24	.01
Attachment Anxiety			3.29	.50	8.79	.00	.26
Step 2	.26	.00				.00	
Attachment Avoidance			.62	.07	1.18	.24	.01
Attachment Anxiety			3.30	.51	8.75	.00	.26
Attachment Avoidance			.11	.01	.24	.81	.00
X Attachment Anxiety							

Another hierarchical regression analysis was conducted to examine the relationship between the attachment variables and depressive symptoms. The overall model for Model 1 was significant, but Model 2 was not. Thus, no interaction was found. The results indicated that 19% of the variance in depressive symptoms was predicted by the attachment variables as a set. It is noteworthy that both attachment avoidance (6% of the variance explained) and attachment anxiety (14% of the variance explained) uniquely predicted depressive symptoms. The results are presented in Table 25.

Table 25

Summary of the Hierarchical Regression Analysis Predicting Depressive Symptoms from the Attachment Dimensions (n =226)

Variable	R^2	ΔR^2	B	β	t	p	sr^2
	.19	.19				.00	
Attachment Avoidance			1.79	.23	3.74	.00	.06
Attachment Anxiety			2.03	.36	5.96	.00	.14
Step 2	.19	.00				.00	
Attachment Avoidance			1.79	.23	3.73	.00	.06
Attachment Anxiety			2.03	.36	5.92	.00	.14
Attachment Avoidance			.01	.00	.02	.99	.00
X Attachment Anxiety							

Finally, it was predicted that the *attachment dimensions would predict resilience*. The results supported the hypothesis. The overall model for Model 1 was significant, but Model 2 was not significant. As expected, both attachment avoidance and attachment anxiety were negatively related to resilience. Specifically, attachment anxiety accounted for 2% of the variance in resilience, and attachment avoidance accounted for 7% of the variance in resilience. These results suggested that there was a positive association between the attachment anxiety level and anxiety symptoms, as well as between attachment avoidance and the level of anxiety symptoms. The results also suggested that high levels of attachment dimensions predict a lower level of resilience. No significant interaction effect was found (see Table 26).

Table 26

Summary of the Hierarchical Regression Analysis Predicting Resilience from the Attachment Dimensions (n = 226)

Variable	R^2	ΔR^2	B	β	t	p	sr^2
	.10	.10				.00	
Attachment Avoidance			-3.02	-.16	-2.45	.02	.02
Attachment Anxiety			-3.74	-.27	-4.26	.00	.07
Step 2	.11	.01				.00	
Attachment Avoidance			-2.92	-.15	-2.36	.02	.02
Attachment Anxiety			-3.63	-.26	-4.11	.00	.07
Attachment Avoidance			1.25	.07	1.14	.25	.00
X Attachment Anxiety							

Mediational Model Including Identification with the Home Culture as a Mediator of the Link Between Attachment Avoidance and Loneliness

Correlations between attachment avoidance, identification with the home culture, and loneliness prompted the researcher to test a mediational model that examined the role of identification with the home culture as a mechanism explaining the relationship between attachment avoidance and loneliness. The significant correlation found between attachment avoidance and loneliness raised the question of whether it may be difficult for individuals who have a high level of attachment avoidance to make new connections in the host culture because of their tendency to avoid interpersonal connections (Bernardon,

Babb, Hakim-Larson, & Gragg, 2011). Thus, such individuals who are high in attachment avoidance, who may be less likely to venture out, would tend to maintain a strong identification with the home culture, which could, in turn, result in greater loneliness for those who are high in attachment avoidance.

The mediational model was tested by following the guidelines of Baron and Kenny (1986). First, the relationship between the initial predictor variable, attachment avoidance, and the dependent variable, loneliness, was tested, and the relationship was found to be significant (see Table 27). Second, the path from the initial predictor variable to the mediator (identification with the home culture) was tested to test the second assumption that is required in the Baron and Kenny method. The regression correlation was significant, satisfying the requirement of a link between the initial predictor variable and the mediator (see Table 28). Third, a regression analysis was conducted to examine the link between the mediator (identification with the home culture) and the criterion variable (loneliness), while the initial predictor variable (attachment avoidance) was controlled. The results showed a significant link between identification with the home culture and loneliness (see Table 29). Lastly, when the reduction in the link between attachment avoidance and loneliness was tested using the multivariate Sobel test (Sobel, 1986), the results were significant (Sobel Test Statistic: 2.52, $p < .01$). The results supported the hypothesis that identification with the home culture is a partial mediator of the relationship between attachment avoidance and loneliness.

Table 27

Summary of the Regression Analysis Predicting Loneliness from Attachment Avoidance (n = 229)

Variable	R^2	B	β	t	p	sr^2
	.26				.00	
Attachment-Avoidance		4.73	.51	8.92	.00	.26

Table 28

Summary of the Regression Analysis Predicting Attachment Avoidance from Identification with the Home Culture (n = 230)

Variable	R^2	B	β	t	p	sr^2
	.05				.00	
Acculturation-Home		-.29	-.22	-3.36	.00	.05

Table 29

*Summary of the Regression Analysis Predicting Loneliness from Attachment**Avoidance and Identification with the Home Culture (n = 229)*

Variable	R^2	B	β	t	p	sr^2
	.28				.00	
Attachment		4.46	.48	8.27	.00	.23
Avoidance						
Acculturation		-1.68	-.14	-2.35	.00	.02
-Home						

Mediational Model Including Resilience and the Mediator of the Link Between Loneliness and Depressive Symptoms

Moderate to strong correlation coefficients were also detected between loneliness, depressive symptoms, and resilience in the combined data. Based on these results, it was first theorized that loneliness would predict depressive symptoms (Beck, 1972; Gotlib & Hammen, 1992). The researcher conjectured that perhaps loneliness lowers resilience, which in turn increases depressive symptoms. Therefore, a mediational model which examined the role of resilience as a mechanism explaining the relationship between loneliness and depressive symptoms was tested. An alternate plausible moderation model, in which resilience was assumed to moderate the relationship between loneliness and depressive symptoms, was assessed to rule out a potential alternative model. A hierarchical regression showed that although there were significant direct links between resilience and depressive symptoms ($R^2 = .40$, $\beta = -.37$, $p = .00$) and loneliness and

depressive symptoms ($\beta = .37, p = .00$), there was no significant interaction between resilience and loneliness in predicting depressive symptoms (Step 1: $\beta = .37, p = .85$ Step 2: $\Delta R^2 = .00, p = .59$).

The mediational model, in which resilience was hypothesized to mediate the link between loneliness and depressive symptoms, was tested using Baron and Kenny's suggestions (1986). First, the relationship between the initial predictor variable, loneliness, and the dependent variable, depressive symptoms, was tested, and the relationship was found to be significant (see Table 30). Second, Baron and Kenny suggested that the path from the initial predictor variable to the mediator (resilience) must be significant. Loneliness was tested as a predictor for resilience, which satisfied the requirement of a link between the initial predictor variable and the mediator (see Table 31). Third, a regression was conducted to examine the link between the mediator (resilience) and the criterion variable (depressive symptoms), while the initial predictor variable (loneliness) was controlled. The results indicated there was a significant link between resilience and depressive symptoms (see Table 32). Lastly, the significance of the reduction in the link between loneliness and depressive symptoms was tested using the multivariate Sobel Test (Sobel, 1986). The results were found to be significant (Sobel Test Statistic: 6.06, $p < .01$). The results supported the hypothesis that resilience is a partial mediator of the link between loneliness and depressive symptoms.

Table 30

Summary of the Regression Analysis Predicting Depressive Symptoms from Loneliness

(n = 231)

Variable	R^2	B	β	t	p	sr^2
	.29				.00	
Loneliness		.42	.43	9.73	.00	.30

Table 31

Summary of the Regression Analysis Predicting Resilience from Loneliness (n = 231)

Variable	R^2	B	β	t	p	sr^2
	.21				.00	
Loneliness		-.96	-.46	-7.8	.00	.21

Table 32

Summary of the Regression Analysis Predicting Depressive Symptoms from Resilience

and Loneliness (n = 227)

Variable	R^2	B	β	t	p	sr^2
	.40				.00	
Resilience		-.15	-.37	-6.31	.00	.15
Loneliness		.32	.37	6.28	.00	.15

An alternative mediational model, in which it was hypothesized that loneliness would mediate the link between resilience and depressive symptoms was also tested. It was theorized that low resilience might heighten a sense of loneliness, which in turn could increase depressive symptoms.

This second mediational model was also tested by following Baron and Kenny's suggestions (1986). First, the total effect of the predictor variable (resilience) on the dependent variable (depressive symptoms) was tested, and the relationship was found to be significant (see Table 33). Second, Baron and Kenny suggested that the path from the predictor variable to the mediator (loneliness) must be significant. Resilience was tested as a predictor for loneliness, which satisfied the requirement of a link between the initial predictor variable and the mediator (see Table 34). Third, a regression was conducted to examine the link between the mediator (loneliness) and the criterion variable (depressive symptoms) while the initial predictor variable (resilience) was controlled. The results indicated there was a significant relationship between loneliness and depressive symptoms (see Table 32). In the last step, as suggested by Baron and Kenny, the significance of the reduction in the link between resilience and depressive symptoms was tested using the multivariate Sobel test (Sobel, 1986). Interestingly, this mediational model was also significant (Sobel test statistics: 6.07, $p < .01$). Together, these mediational analyses indicated that there could be two potential mediational pathways. First, loneliness can predict one's resilience, which in turn predicts depressive symptoms. Alternatively, resilience can predict one's sense of loneliness, which in turn predicts the level of depressive symptoms. However, no evidence was found for an alternative model in which loneliness and resilience interact to predict depressive symptoms.

Table 33

Summary of the Regression Analysis Predicting Depressive Symptoms from Resilience

(n = 228)

Variable	R^2	B	β	t	p	sr^2
	.29				.00	
Resilience		-.22	-.54	-9.70	.00	.29

Table 34

Summary of the Regression Analysis Predicting Loneliness from Resilience (n = 231)

Variable	R^2	B	β	t	p	sr^2
	.21				.00	
Resilience		-.22	-.46	-7.79	.00	.21

CHAPTER 5

DISCUSSION

The present research study was designed to examine the differences among three types of Korean international students in regard to attachment styles, acculturation dimensions, loneliness, psychological distress (depressive symptoms and anxiety), and resilience. Because, contrary to expectations, support was found for hypothesized group differences on only one variable, identification with the host culture, a number of exploratory post hoc analyses were conducted to understand the relationships between the variables of interest. The exploratory post hoc analyses focused on the prediction of the outcome variables (i.e., loneliness, resilience, depressive symptoms, and anxiety symptoms) as a function of the dimensions of acculturation (identification with the home culture and identification with the host culture) and attachment (attachment anxiety and avoidance). In addition, post hoc analyses were conducted to examine the links between acculturation and attachment.

Overview of the Chapter

This chapter will first review and interpret the major findings of the current study. Second, some limitations of the present study will be discussed, and suggestions for future research will be offered. Lastly, the implications of the results will be considered.

Acculturation

As expected, there were significant differences among the three types of Korean students on identification with the host culture, with both types of EA-I students scoring significantly higher than the RA-I students. When the scores of identification with the

host culture were compared, the RA-I students who had come to the host culture when they were older had the lowest mean identification with it, whereas the EA-I students who had been in the host country since their early youth had significantly higher levels of identification with the host country. This finding is consistent with a previous research finding that the length of time in the host culture was highly correlated with identification with American culture and experience (Wang & Mallinckrodt, 2006). No other study was found, however, that had examined differences among various types of Korean international students as had the present study. The effect size for the significant difference found between both types of EA-I students and the RA-I students, however, was close to zero. Therefore, this finding has little or no practical meaning.

In contrast to the findings on identification with the host culture, the current study found no significant differences among the Korean student groups in identification with their home culture. It was surprising that only identification with the host culture demonstrated significant group differences, given that the length of the EA-I students' stay without a parent may have given them fewer opportunities to connect with their home culture because of their prolonged stay in North America. This phenomenon may be explained by their use of the Internet and the media access that current international students have for connecting easily with their social support in their home country (Cemalcilar, Falbo, & Stapleton, 2005). Cemalcilar, et al. found that international students who used computer-mediated communication tended to have a higher level of perception of available support from their home countries. Cummings, Lee, and Kraut (2002) also found that people tend to feel close in distant friendships with frequent use of various communication applications such as email or instant messaging. They also

believe it is possible that the students' annual visit to Korea helps them stay connected with their home culture.

No support was found for the hypothesis that examined the possible mediational role of acculturation in the relationship between the type of Korean international student and (a) attachment avoidance and (b) psychological distress. Nevertheless, an inverse correlation ($r = -.22, p < .01$) between identification with the home culture and attachment avoidance was detected. Only one previous study examining the relationship between attachment styles and acculturation was found (Wang & Mallinckrodt, 2006). As in the present investigation of Korean international students, Wang and Mallinckrodt revealed an inverse relation between attachment avoidance and identification with the home culture in Chinese/Taiwanese international students. However, they also found that attachment anxiety was negatively associated with Chinese/Taiwanese international students' acculturation to American culture. In contrast, the present study found no significant correlation between attachment anxiety and identification with the host culture; thus, the results of the current study only partially parallel the findings of Wang and Mallinckrodt. The results from the two studies suggest that Asian international students (at least Korean and Chinese/Taiwanese international students) who are high in attachment avoidance also tend to have lower identification with the home culture than do students low in attachment avoidance. One speculation as to these results is that identification with the home culture is inversely related to attachment avoidance due to the collectivist nature of Korean culture. Cultural comparison studies have indicated that Asian subjects often provide more "collective" responses than do European and North American subjects on questionnaires that examine their collective and private selves (e.g.,

Higgins & King, 1981). According to Higgins and King, Asian culture has been conceptualized as one that emphasizes the importance of the collectivistic group. Perhaps those who are high in attachment avoidance (i.e., who tend to avoid intimacy and close relationships; Hazan & Shaver, 1987) also tend to avoid feeling closely tied to a collective cultural identity as well. Alternatively, perhaps those who are high in attachment avoidance have had negative personal experiences (Waters, Merrick, Treboux, Crowell, & Albersheim, 2000) that have led to both the development of more avoidant attachment and a lower investment in an identification with the home culture. Further research is needed to better understand this documented inverse relation between attachment avoidance and identification with the home culture.

It is difficult to interpret the discrepancy between these two studies in terms of the differences in the results for attachment anxiety, but it is possible that these differences might be explained by the nationalities of the student groups in each study. Some researchers have emphasized the importance of subgroup differences among Asian populations (e.g., Bhattacharya, 1998). Thus further research is needed to more fully explore the ways in which attachment anxiety is linked to acculturation over time in international students of different nationalities.

Although a mediational model proposing that acculturation would mediate the links between the type of international student group and the two psychological distress variables (depressive and anxiety symptoms) was not significant in the current study, the significant outcomes of the post hoc analyses regarding the links between acculturation and the two psychological distress variables are noteworthy. First, identification with the Korean students' host culture was inversely related to their depressive symptoms,

although the effect size was extremely small. Likewise, there was a small inverse relation between identification with the home culture and depressive symptoms. These results suggest that a low level of identification with *either* the host culture *or* the home culture may predict a higher level of depressive symptoms. These results stand in contrast to the study by Berry, et al. (1986), who reported finding that a high level of assimilation (only high on identification with the host culture) acculturation attitude reported less stress, whereas a high level of separation (only high on identification with the home culture) acculturation attitudes reported high stress. The present study did not find any such significant interaction effect between identification with the home culture and identification with the host culture in predicting depressive symptoms. Unlike the study by Berry, et al., the present study found only direct effects for both identification with the home culture and identification with the host culture; differing combinations of high and low identification with home and host culture did not appear to differentially predict depressive symptoms. It is not clear why the results of the present study differed from those of Berry, et al. It is likely that the interaction effects were extremely difficult to detect due to lack of power. The post hoc power analysis was indeed conducted, and it was found that power to detect a significant effect in the second step of the regression was less than .50 (Aiken & West, 1991). Future studies to see whether the results of the present study can be replicated with larger samples are suggested.

Unlike depressive symptoms, anxiety symptoms were not predicted by identification with the host culture in the present study. Only one other study was found that examined the relationship between acculturation and anxiety symptoms in international students. Fritz, Chin, and Demarinis (2008) hypothesized that international

students in the U.S. would report significantly higher levels of anxiety compared to U.S. resident students, based on Gudykunst's (1998) theory that acculturation will often trigger feelings of anxiety and uncertainty. Fritz, et al. found that there were no significant differences in anxiety levels between international students and U.S. resident students. However, Asian international students scored significantly higher on the level of anxiety than did the European international students or the U.S. resident students. Fritz, et al. speculated that Asian international students may have been more anxious than European international students even in their home countries, although no data were available to test this idea. It is possible that the Korean students' anxiety level in the present study was consistently high regardless of the acculturation process (although no evidence of elevated anxiety scores was found in the present study). But there may be a number of factors related to anxiety in addition to, or in lieu of, the effects due to acculturation. For example, Korean international students may experience transient episodes of anxiety related to academic concerns that fluctuate, depending on the time of the semester, obscuring any potential effect of acculturation. Future research could take into account other potential sources of variance in anxiety for Korean students in order to examine whether anxiety symptoms are linked to acculturation.

The post hoc analyses also detected interesting relationships between the acculturation variables and both loneliness and resilience. First, the results for links between acculturation and loneliness were examined. Both acculturation variables as a set predicted loneliness (with 11% of the variance explained; 7% of the variance was uniquely explained by identification with the home culture, and 4% of the variance was uniquely explained by identification with the host culture), with no interaction effect

detected. Although loneliness is conceptualized as common in cross-cultural experience (Neto, 2002), research that examines the connection between these two variables is surprisingly scarce (Jones, Carpenter, & Quintana, 1985). The results of the present study suggest that Korean international students are likely to feel lonely when they feel disconnected *either* from their home culture *or* from their host culture. These results are in contrast to previous research mentioned earlier, suggesting that an interaction effect could be important, so that marginalization (scoring low on *both* identification with the home culture and identification with the host culture) acculturation attitude is associated with a high level of stress. It is important to note that the model was likely to have lacked the power to pick up an interaction effect (Aiken & West, 1991). The observed power of the analysis was detected to be less than .30 when the post hoc power analysis was conducted. Future studies that further examine the interaction effect are needed.

Significant relations were also found between both the acculturation dimensions and resilience in the present study, with no interaction effect found. Together the two acculturation variables accounted for 16% of the variance in resilience. It is necessary to point out that there are no benchmarks currently available for evaluating the effect of the squared semi-partial correlation (sr^2), but Cohen and Cohen's (1983) benchmarks for small (1%), medium (9%), and large (25%) effect sizes for the amount of variance explained can be used to provide tentative guidance to understand sr^2 . Such a method is likely to under-represent the importance of the associations detected, because Cohen and Cohen's r^2 benchmark does not partial out variance due to other variables. If their benchmarks are applied, the effect size for the association between identification with the host culture and resilience in the present study was moderate in size (with 15% of the

variance explained), whereas the effect size for identification with the home culture and resilience was small (with 2% of the variance explained).

The significant relationship between identification with the home culture and resilience may be due to the role of the home culture in these Korean students' lives. It can be speculated that a person with a high identification with the home culture is likely to be motivated to build a new social network with other Korean international students in the host culture in order to seek a connection with the home culture. The process of building new social support networks in the host culture, compared with those in the home country, has been viewed as being extremely difficult. Thus, building such new support networks in the host culture may be associated with resilience (Mallinkrodt & Leong, 1992). It is also reasonable to assume that a high identification with the home culture may itself feel like a support system, thus moderating the acculturation stress one may experience daily. If this is true, then high identification with the home culture could be correlated with resilience.

On the other hand, the significant relation between identification with the host culture and resilience might be explained by the acculturative stress and racial discrimination Korean students may experience during their time in the host culture. For example, it may be that resilient individuals are likely to cope with such difficulties and develop higher levels of identification with the host culture; alternatively, it may be that higher levels of identification with the host culture provide sources of resilience in the face of the stressors they face. Also a third variable (e.g., openness to new experiences or extraversion) may have caused both resilience and acculturation. In fact, Swagler and Jome (2005) found that greater psychological adjustment to the host culture was

associated with low levels of neuroticism, greater agreeableness, and high levels of conscientiousness among North American sojourners in Taiwan. Future studies that examine possible third variables in the link between resilience and acculturation variables are necessary to understand these associations. In addition, longitudinal research on acculturation may help shed light on the links found in the present study.

Attachment Styles

Contrary to expectations, no significant differences among the three types of Korean international students on the level of attachment avoidance were found. The EA-I students without an accompanying parent were hypothesized to show higher levels of attachment avoidance than the other groups because of the early disruption in the attachment relationships they experienced and the independent lifestyle they were expected to cultivate when they were left in North America by their parents. Also, contrary to expectations, no significant differences in attachment anxiety emerged among the three types of Korean international students. It had been hypothesized that RA-I students would score higher on attachment anxiety than either of the two types of EA-I students. It was hypothesized that RA-I students have not been in their host culture long enough to feel secure in the new environment, which is likely to activate their attachment system. This hypothesis was not supported by the current study. No past research was found that compared the three groups on attachment; thus the interpretation of these findings is difficult.

It is possible that no group differences in attachment were found because there may have been a great deal of variability in the individual situations of the students within each group. There are potentially a number of reasons for the lack of no group

differences in attachment. First, it is possible that the Korean students' attachment dimensions were different even before they left their home country. It is reasonable to assume that some parent-child attachments were not secure even before the student left their home country. Second, the experience of separation could have had different effects on individuals, which also could have affected their adjustment process in the host culture. In addition, it is possible that the parent-child relationship changed during their separation despite long-distance communication and visits home, which would ordinarily have alleviated the struggles the students were experiencing in their separation from their families. These are only hypotheses, however. Future longitudinal studies are recommended to assess these speculations.

As described below, no student group differences were found on loneliness, psychological distress (depressive and anxiety symptoms), or resilience. Thus, the post hoc analyses focused on possible connections between all of the variables in the current study. These post hoc findings are discussed in the sections below concerning the outcome variables of interest (i.e., loneliness, psychological distress, and resilience).

Loneliness

Contrary to expectations, there were no significant differences among the three types of Korean students in their level of loneliness. It was hypothesized that the EA-I students who had come without a parent would report a higher score on loneliness than the other two groups because of their separation from their parents at a relatively young age. It may be that each group's level of loneliness was similar, but for different reasons. Perhaps the EA-I students who had come to the host culture without a parent were lonely because they missed their family and realized that their family may not understand their

experiences as international students in the host culture. On the other hand, the RA-I students' sense of loneliness may have come from struggling to adjust to the new culture without a stable support system. Unfortunately, the measure of loneliness was not designed to detect different reasons for loneliness; thus such differences were not examined. It is possible that there were no differences in loneliness between the groups because there are equivalent levels of isolation for each group, or because there were sufficient supports for each group (e.g., through international student groups, religious groups, and individual relationships) so that loneliness was minimized. It is also possible that, overall, the level of loneliness for Korean international students is higher than the general population, because loneliness has been conceptualized as common in cross-cultural experience (Neto, 2002). The researcher could not find any studies that examined possible differences between the Korean students in North America and Korean college students in Korea. Future research that examines possible differences between these two types of Korean college students would be helpful to understand the experiences of these populations. Also, reporting biases can be speculated to understand why there were no differences among the three groups. As suggested in the limitations section, it is possible that the participants may not have been honest in reporting their sense of loneliness due to what success in the host culture may symbolize for them and their family. It may have been difficult for them to acknowledge their sense of loneliness in their current living situation, and thus they may have under-reported their experience of loneliness. Further research is needed to understand the unique experiences of international students who have taken different paths to their studies.

In addition to examining group differences in loneliness, the present study also investigated the mediational role of identification with the home culture in the link between attachment avoidance and loneliness. Indeed, the findings indicated that identification with the home culture mediated the link between attachment avoidance and loneliness. In other words, a high level of identification with the home culture could allow individuals to have a low level of attachment avoidance by sparing them from experiencing separations from important others as an attachment trauma that decreases their security of attachment. Low levels of attachment avoidance would then allow these international students to feel more connected with others and thus experience lower levels of loneliness. The possible interpretation of the negative association between identification with the home culture and attachment avoidance was explored earlier in this chapter, and the relation between attachment avoidance and loneliness has been amply supported by the past research body (e.g., Wei, Shaffer, Young, & Zakalik, 2005; Wei, Russel, & Zakalik, 2005).

Psychological Distress

Contrary to expectations, no significant differences were found among the three groups on either depressive or anxiety symptoms. It was hypothesized that the EA-I students with an accompanying parent would report the least distress and that the EA-I students who had come alone would report the most, but this was not supported by either of the psychological distress measures used in the current study. As noted earlier, the hypotheses regarding psychological distress were developed with acculturation stress in mind; however, one cannot assume that all psychological distress (depressive symptoms and anxiety symptoms) among international students would be related to acculturation.

Again, it is speculated that there may have been a great deal of variability within the groups (perhaps due to pre-existing or current family dynamics, genetic factors, situations encountered at school, resources available, etc.) that could have obscured any potential differences among the three groups of Korean international students. There appeared to be no significant differences in the magnitudes of the correlations across the three student groups, except with respect to one particular correlation. The association between loneliness and anxiety symptoms found in the EA-I students with a parent was significantly higher than between loneliness and anxiety in the other two groups. It is difficult to interpret the meaning of this difference. Future research could examine the sources and levels of distress in Korean international students and how distress is experienced, both before and after arriving in the host country.

The post hoc regression analyses also indicated that both attachment avoidance and attachment anxiety were significantly associated with depressive symptoms, which is consistent with numerous research studies that reported positive links between these variables (e.g., Wei, et al., 2005; Wei, Russel, & Zakalik, 2005). These results also suggest that past research that examined the relationships between attachment styles and psychological distress related variables are cross culturally valid.

Resilience

The results of the current study also failed to demonstrate significant differences among the three groups with regard to resilience. The hypothesis that predicted significant differences among the three groups on resilience was developed because of the expected autonomy of EA-I students who had come to North America alone. As explained in Chapter 2, it was suggested that individuals with a pronounced autonomy are

likely to be resilient (Werner, 1987). Contrary to expectations, the results in the current study did not support this main hypothesis. Although it is difficult to interpret non-significant results, it is possible, as mentioned earlier, that there may be great variability within each group with respect to early experiences with important caregivers, current relationships with family and friends in the home country, and other salient factors.

Although the core hypothesis related to resilience was not supported, a number of post hoc results were noteworthy. First, resilience was predicted by both attachment anxiety and attachment avoidance. The results of this study suggest that individuals with a high level of attachment avoidance and attachment anxiety are likely to have a low level of resilience. Attachment anxiety explained 7% of the variance in resilience, and attachment avoidance explained 2% of the variance.

In addition, post hoc analyses were conducted to examine the relationships between resilience and psychological symptoms such as depression and loneliness, with the results indicating that resilience partially mediates the link between loneliness and depressive symptoms. This result suggested that loneliness predicted the level of resilience (with 21% of the variance explained), which in turn predicted depressive symptoms (with 30% of the variance explained). Specifically, this model suggests that a high level of loneliness would predict a low level of resilience, which in turn would predict a high level of depressive symptoms. Moreover, further analyses that examined loneliness as a partial mediator of the link between resilience and depression were also significant. This second model indicated that resilience also predicts the level of loneliness (with 21% of the variance explained). This model indicated that a high level of resilience will predict a low level of loneliness, which will in turn predict a low level of

depressive symptoms. These inverse relations between loneliness and resilience (e.g., Adams, Sanders, & Auth, 2004) and between resilience and depressive symptoms (e.g., Southwick, Vythilingam, & Charney, 2005) found in the current study mirror the results of a number of previous studies. These two mediational models imply that there may be intricate links between resilience, loneliness, and depressive symptoms in the Korean international students' psychological well-being.

Limitations of the Study

Two major limitations may have compromised the results of this study: (a) the sampling, which includes the sample size itself and possible differences within each group, and (b) the self-report measure issue.

Sampling

Statistical power was limited and may have contributed to a lack of findings. Initially, the study was designed to recruit 100 participants per group. Guildford and Frunchter (1978) suggested using at least 72 to observe moderate effects. They stated that over 160 individuals per group would be required to detect small effect sizes, which was thought to be unrealistic for the current study. Thus, it is possible that small effects were present in the current study but were not detected. In addition, it is very difficult to detect moderation effects with small effect sizes. The sample's unbalanced distribution between Korean students in the U.S. ($n = 195$) and Canada ($n = 41$) may also have been a limitation. Because most of the study participants were in the U.S., the results should be generalized to Korean international students in Canada with great caution. Also, many Korean undergraduate Christian groups participated in the study. The researcher contacted a number of these groups because many Korean international students use them

as their support system. Because religious affiliation was not one of the demographic questions, the exact number of Korean students who would identify as a Christian is unknown. Thus, it is not clear how the participants' religious affiliations may have affected the results.

The possible variations within the groups were also considered a limitation in the study. The researcher attempted to divide the Korean students according to the country in which they received their high school degree, and according to their family situations. Despite this effort to divide the groups reasonably, the within group variability is likely to have been considerable. In addition, the duration of these students' stay in the host culture was unknown. This information seems very important because it is well known that some Korean parents send their children abroad at a young age, as early as 10. The country where these individuals had received their high school education may not have been the best criterion for the three types of group either. Also, the frequency of their return to Korea could have made a difference in the college students' acculturation dimensions, psychological distress, and loneliness variables. Moreover, nothing is known about the nature of the attachment relationships within the families prior to the students' coming to the host country or about the nature of the current relationships in the students' lives. None of this information was collected for the study. Future research on these groups may benefit from collecting such data if the focus is between group variability.

Measures

First of all, the fact that the data in the current study were self-reported may have threatened their validity. The students in the present study were attending school believing that their parents were expecting them to do well and thrive in the new culture.

Thus, it may have been very difficult for them to have a good understanding of how they were currently doing psychologically because most of their focus was on academic performance. Also, it is possible that the study participants were less likely to have reported their psychological conditions accurately, or may have reported them according to what they thought was expected of them.

Another major limitation of the current study may have been the simplicity of the hypotheses. Most were comparing the three groups rather than exploring the possible relationships between variables within each group. However, to examine the relationships within groups would have required more participants in order to detect significant relationships with medium or moderate effect sizes.

In addition, the study might have made more of a contribution if the sources of psychological distress had been identified. These limitations prevented the study from creating in-depth knowledge about sources of distress in the three types of Korean students. A more specific analysis of *SOURCES* of distress among international students in their acculturation could be explored in future studies.

Research Implications (Future Studies)

This section offers suggestions for future research. The current study provided limited information about three groups of Korean college students. It is possible that these groups were less unique than originally conceived; however, this population can be further examined in order to understand them and their experiences in their host culture.

Qualitative Studies

First, qualitative studies are recommended to gain a deeper understanding of these Korean international student groups and their experiences in North America. Qualitative

research has been encouraged in order to “build a complex, holistic picture” of a phenomenon (Creswell, 2008, p. 15) and to accurately describe “human experience as it appears in people’s lives” (Polkinghorne, 2005, p. 137). Because the research on these populations is very limited, gaining a holistic understanding of their experience may reveal different facets of it. For example, to listen to the narratives of Korean students who have had to be independent at a very young age would provide a holistic view of this group’s experiences. A qualitative study could also examine how these groups and their parents select themselves to be in a particular group. Choi (2006) conducted a qualitative study that examined the common reasons for Korean mothers to accompany their children to another country and leave their husbands behind in Korea, and found that mothers who had difficult relationships with their in-laws were more likely to accompany the child to the U.S. or Canada. It is also not clear whether there were differences among the Korean groups before they experienced their own differentiating adolescent experiences. These questions could be addressed in qualitative studies, which would also identify what the variables are, to gain a better understanding of this unique population.

Longitudinal Studies

Second, longitudinal studies on Korean adolescents and young adults are suggested to understand the effects of entering a different culture. Longitudinal research could reveal how individual differences in students before entering the host culture can affect outcome measures such as acculturation dimensions, attachment dimensions, loneliness, and depressive symptoms over time. A longitudinal study would also contribute to the understanding of how these students are personally affected by their experience in the host culture. It would be helpful to examine how these subgroups

experience psychological distress (i.e., acculturative, discriminatory, and social adjustment stress), social support, and loneliness over time.

Lastly, studies that examined the willingness of Korean international students to seek counseling were not found. Such a study could assist clinicians with understanding how this population can be served. Currently, Koreans are one of the largest international student groups in the United States. Therefore, it is crucial to understand the needs of this population and their willingness to seek counseling, because the number of these students has been growing in the past decade (Korean Ministry of Education, 2007).

Implications for Practice

The findings of the current study have several implications for clinical practice. Those related to acculturation suggest that clinicians consider international students' identification with both the home and the host culture. First, it seems imperative to realize the importance of the home culture among Korean international students. The results of the current study indicated that their identification with their home culture did not vary as a function of the age at which they arrived in the host country (i.e., length of time in the host culture). The results also suggested that identification with the home culture was inversely related to the sense of loneliness these students felt in the host culture.

It is also noteworthy that the acculturation measure that was used in this study not only looks at cultural identity but also at cultural behavior, cultural language, and a sense of language competence. The scale suggests that many Korean international students often engage in Korean cultural practices, consume Korean ethnic food, and communicate in their first language regardless of their identification with the host culture. Those students who rank high on both identification with the home and host culture

would be considered bicultural. LaFromboise, Coleman, and Gerton (1993) defined biculturalism as the capacity to “live effectively, and in a satisfying manner, within two groups without compromising one’s sense of cultural identity” (p. 404). They also identified facets of biculturalism such as knowledge of cultural beliefs and values, positive attitudes toward both majority and minority groups, and communication ability. In the present study, the participants’ acculturation level was assessed in terms of both identification with the home and identification with the host culture because many Korean international college students may be functioning in two cultures simultaneously. In fact, the scatter plots of the participants’ scores on the two dimensions of acculturation suggested that at least some students in each group were likely to be functioning biculturally. In sum, although the two dimensions of acculturation were modestly inversely correlated in the present study, because the two dimensions of acculturation are considered orthogonal on the basis of the previous research (Berry & Annis, 1974), clinicians would be advised to refrain from making any assumptions about their Korean clients’ cultural values and practices by assessing the level of their identification with either the host culture.

Second, the significant relations between the attachment dimensions and psychological outcome variables are also important. The significant relations between the attachment dimensions and loneliness, depression and resilience have been reported in past research (e.g., Kobak & Sceery, 1988), but the current study suggests that the connections between the attachment dimensions and psychological variables such as depressive symptoms, loneliness, and resilience are indeed cross culturally applicable for Korean international students. Conducting an accurate assessment of the Korean

students' attachment dimensions may also give some direction to the treatment of these students. It is also reasonable to suggest that perhaps developing a secure attachment relationship with the therapist or significant others could alleviate a sense of loneliness and depressive symptoms. Further research is needed, however, to test this possibility. Bowlby's (1988) contention that the therapeutic relationships may be seen as a specialized form of attachment, which may meet a client's need to have a secure base nearby, may apply to Korean international students who are quite distanced from their secure bases or who may not have had positive relationships with attachment figures in the past. Third, the results of the current study offered possible directions for treating psychological distress among Korean international students, and has supported past research that connected both loneliness and depressive symptoms with acculturation experiences (Sheehan & Pearson, 1995). The results of the current study have also suggested that both dimensions of acculturation can predict loneliness. Thus, Korean students are likely to see improvement when not only their identification with the host culture but also their identification with the home culture is strengthened. The outcome of the current study also suggests that acculturation dimensions are associated with depressive symptoms. Thus, encouraging Korean international students to interact with both their home and host culture could help ameliorate their depressive symptoms.

Also, significant correlations were found between resilience and loneliness and depressive symptoms. These findings suggest that Korean students' depressive symptoms can be addressed and treated by examining their sense of loneliness and level of resilience. Outreach programs to educate Korean students in regard to these findings may help them adjust and prevent them from having to struggle with depressive symptoms.

Overall, the three Korean international student groups in this study appeared to differ little from one to another, except with respect to their degree of identification with the host culture; however, the study shed light on the possible connections between attachment dimensions, acculturation dimensions, and variables such as loneliness, depressive and anxiety symptoms. Moreover, it would be helpful if practitioners could be sensitive to the degree to which the two dimensions of acculturation can affect Korean students' adjustment and well-being in their adjustment. In addition, the positive correlation between identification with the host culture and resilience is a relationship that can be emphasized with Korean international students to empower them while they are receiving counseling.

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APPENDIX A



 Informed Consent Form for Social Science Research (English)
 The Pennsylvania State University

Title of Project: The Experience of Early Arrived International Students (EA-I students): Comparisons With Recently Arrived international Students (RA-I students) on Attachment Styles, Acculturation, Loneliness, Psychological Distress, and Resilience.

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1. **Purpose of the Study:** The purpose of this research study is to examine the experiences of Korean international students who have spent their adolescence in the United States or Canada, with the respect to attachment styles, acculturation, psychological distress, sense of loneliness and resilience.
2. **Procedures to be followed:** You will be asked to answer 151 questions on a survey. You will be asked to answer 151 questions about your attachment styles, acculturation, psychological distress, sense of loneliness, and resilience.
3. **Benefits:** You may be able to reflect on experience in your host culture as an international student by participating in this study. By looking into variables that are related to the experience of Korean international students, this research will provide knowledge that help to understand and address the unique needs and issues of Korean international students in the United States and Canada.
4. **Duration:** It will take about 20 minutes to complete the survey.
5. **Statement of Confidentiality:** Your participation in this research is confidential. The surveys will be kept in locked file cabinets in a locked office (327 St. Liam, University of Counseling Center, University of Notre Dame). The surveys will be destroyed in 2014 (3 years after the completion of the researcher's dissertation defense). In the event of a publication or

presentation resulting from the research, no personally identifiable information will be shared.

6. **Right to Ask Questions:** Please contact MinJung Doh, M.A. (917.291.3013; mdoh@psu.edu) or Susan Woodhouse, Ph.D. (814.863-5726; ssw10@psu.edu) with questions, complaints or concerns about this research.

7. **Voluntary Participation:** Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty.

8. **Payment for Participation:** At the end of the survey, you will be provided with the opportunity to participate in a drawing. Twenty participants will be randomly selected to receive \$10 gift certificate from Amazon.com or starbucks. In order to participate in the drawing, you will be asked to submit an email address or mailing address so that you can be contacted in the event that you are selected. Your contact information will be stored separately from your survey responses.

You must be 18 years of age or older to take part in this research study. In addition, you must be enrolled at a university/college either in the United States or Canada.

Completion and submission of the survey is considered your implied consent to participate in the study.

Please keep this page for your information.

APPENDIX B



Informed Consent Form for Social Science Research (Korean)

The Pennsylvania State University

- Title of Project:** The Experience of Early Arrived International Students (EA-I students): Comparisons With Recently Arrived international Students (RA-I students) on Attachment Styles, Acculturation, Loneliness, Psychological Distress, and Resilience.
- Principal Investigator:** MinJung Doh, M.A.,
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1. **연구목적:** 이 연구는 유학생의 청소년기의 생활이 미국/캐나다에서의 유학생 생활에 어떤 영향을 미치는지에 대해 알아나가기 위함입니다.
 2. **연구과정:** 이 설문지에는 성인애착, 문화적응, 정서적 스트레스, 외로움, 탄력성에 관련된 총 151 문항이 포함되어 있습니다.
 3. **혜택:** 여러분의 설문 참여로 인해 여러분들은 유학생 생활이 본인에게 미치는 영향에 대해 다시 한번 생각할 기회를 갖고, 본 연구자는 한국 유학생들이 미국이나 캐나다에서 생활하면서 겪는 경험과 그리고 새로운 문화에 적응하는데 필요함 환경에 대한 정보를 얻을 것입니다.
 4. **예정소요시간:** 이 설문지 작성 소요 시간은 약 30 분정도로 예상하고 있습니다.
 5. **비밀유지:** 저희는 전문가들에 의해 도안 운영되는 Psychdata Online 설문조사 시스템을 사용할 것입니다. 여러분의 모든 답변은 128-bit SSL technology (Secure

Socket Layer)를 이용한 보안 장치를 통해 철저히 보안 유지 될 것이며, 어떠한 경우에도 여러분의 개인정보는 유출되지 않을것입니다.

6. **질문:** 여러분의 참여에 감사드리며, 질문이 있으신 분은 아래의 연락처로 연락해주십시오.
 - MinJung Doh, M.A – 917.291.3013 or mdoh@psu.edu
 - Susan Woodhouse, Ph.D. – 814.863.5726 or ssw10@psu.edu
7. **자발참여:** 여러분의 연구참여는 전적으로 자발적인 것이며, 설문지 작성도중 언제든지 그만두셔도 됩니다. 또한 설문지 작성중 원치 않는 문항을 답하지 않으셔도 됩니다.
8. **설문지 참여후:** 설문에 참여하시면, Starbucks 나 Amazon.com 의 상품권 \$10.00 을 추첨을 통해 받으실 수 있게 됩니다. 이 추첨을 통해 여러분의 이메일/주소를 묻는 질문이 있을것이니, 추첨에 참여하시기를 원하시면 이메일/주소를 입력하여주십시오. 이메일 주소는 설문지에서 구분되 보관될 것입니다.

18 세 이상의 한국인은 누구나 이 설문지에 참여 하실 수 있습니다.

이 설문지를 작성하시면 위의 모든 사항을 읽고 이해한것으로 간주됩니다.

APPENDIX C
Demographic Information (English)

Please answer all items listed below.

1. Is Korean your native language?
 - a. Yes
 - b. No

2. You feel more comfortable with speaking . . .
 - a. Korean
 - b. English
 - c. I am equally comfortable using both English and Korean.

3. What is your gender?
 - a. Male
 - b. Female

4. What is your age? _____

5. Your current location of residence is
 - a. Korea
 - b. the United States
 - c. Canada
 - d. Other _____

6. Are you currently enrolled in 4 year college?
 - a. Yes
 - b. No

7. What is your current academic status?
 - a. Freshmen
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Senior +

8. What is your major? _____

9. Where did you get your high school degree?
 - a. United States/Canada

- b. Korea
- c. Another foreign country _____

10. Did your mother accompany you to the foreign country for your high school education if you received your high school degree in a country other than Korea?

- a. Yes
- b. No

11. How long have you lived in the country where you currently reside?

_____ (ex. 3 years).

12. How long have you lived in a country outside of Korea?

APPENDIX D
Demographic Information (신상정보-Korean Version)

1. 한국어가 모국어입니까?
 - a. 예
 - b. 아니오
2. 난 _____ 언어가 내 의사를 표현하는데 더 편하다
 - a. 한국어
 - b. 영어
 - c. 두개의 언어가 똑같이 편하다.
3. 성별:
 - a. 남
 - b. 여
4. 연령: _____
5. 현재 거주하고 있는 나라는?
 - a. 한국
 - b. 미국
 - c. 캐나다
 - d. 그 외 국가 _____
6. 현재 캐나다/미국 4년제 대학에 입학중입니까?
 - a. 예
 - b. 아니오
7. 현재 대학교 학년은?
 - a. 1학년
 - b. 2학년
 - c. 3학년
 - d. 4학년
 - e. 4학년 +
8. 당신은 전공은? _____
9. 고등학교 졸업은 어느 나라에서 하였습니다습니까?
 - a. 미국/캐나다
 - b. 한국
 - c. 그 외의 국가 _____
10. 만약 한국외의 국가에서 고등학교를 졸업하였다면, 고등학교 생활중 어머니가 가족을 떠나 외국에서 본인과 같이 생활하였습니까?

- a. 예
- b. 아니오

11. 현재까지 한 유학생할 기간: _____년 (예: 3년)

12. 한국외의 국가에서 생활 기간: _____년

APPENDIX E
Experiences in Close Relationships Scale (ECRS) (English)
(Brennan, et al., 1998)

We would like for you to take a moment to think about how you *generally* feel in *important relationships in your life*. Think about your past and present relationships with people who have been especially important to you, such as romantic partners and close friends. Respond to each statement in terms of how you *generally* feel in these relationships. Please circle ONE number.

Disagree Strongly Neutral/Mixed Agree Strongly

1 2 3 4 5 6 7

1.	I prefer not to show people how I feel deep down.	1	2	3	4	5	6	7
2.	I worry about being abandoned.	1	2	3	4	5	6	7
3.	I am very uncomfortable being close to people.	1	2	3	4	5	6	7
4.	I worry a lot about my relationships.	1	2	3	4	5	6	7
5.	Just when people start to get close to me, I find myself pulling away.	1	2	3	4	5	6	7
6.	I worry that people won't care about me as much as I care about them.	1	2	3	4	5	6	7
7.	I get uncomfortable when people want to be very close to me.	1	2	3	4	5	6	7
8.	I worry a fair amount about losing close relationships.	1	2	3	4	5	6	7
9.	I don't feel comfortable opening up to others.	1	2	3	4	5	6	7
10.	I often wish that other people's feelings for me were as strong as my feelings for them.	1	2	3	4	5	6	7
11.	I want to get close to people, but I keep pulling back.	1	2	3	4	5	6	7
12.	I often want to merge completely with people, and this sometimes scares them away.	1	2	3	4	5	6	7
13.	I am nervous when people get too close to me.	1	2	3	4	5	6	7
14.	I worry about being alone.	1	2	3	4	5	6	7
15.	I feel comfortable sharing my private thoughts and feelings with others.	1	2	3	4	5	6	7

16.	My desire to be very close sometimes scares people away.	1	2	3	4	5	6	7
17.	I try to avoid getting too close to people.	1	2	3	4	5	6	7
18.	I need a lot of reassurance that I am loved by others.	1	2	3	4	5	6	7

19.	I find it relatively easy to get close to others.	1	2	3	4	5	6	7
20.	Sometimes I feel that I force people to show more feeling and more commitment.	1	2	3	4	5	6	7
21.	I find it difficult to allow myself to depend on others.	1	2	3	4	5	6	7
22.	I do not often worry about being abandoned.	1	2	3	4	5	6	7
23.	I prefer not to be too close to others.	1	2	3	4	5	6	7
24.	If I can't get other people to show interest in me, I get upset or angry.	1	2	3	4	5	6	7
25.	I tell close others just about everything.	1	2	3	4	5	6	7
26.	I find that people don't want to get as close as I would like.	1	2	3	4	5	6	7
27.	I usually discuss my problems and concerns with others.	1	2	3	4	5	6	7
28.	When I'm not involved in a relationship, I feel somewhat anxious and insecure.	1	2	3	4	5	6	7
29.	I feel comfortable depending on others.	1	2	3	4	5	6	7
30.	I get frustrated when people are not around as much as I would like.	1	2	3	4	5	6	7
31.	I don't mind asking others for comfort, advice, or help.	1	2	3	4	5	6	7
32.	I get frustrated if people are not available when I need them.	1	2	3	4	5	6	7
33.	It helps to turn to close others in times of need.	1	2	3	4	5	6	7
34.	When others disapprove of me, I feel really bad about myself.	1	2	3	4	5	6	7
35.	I turn to others for many things, including comfort and reassurance.	1	2	3	4	5	6	7
36.	I resent it when close others spend time away from me.	1	2	3	4	5	6	7

APPENDIX F

Experiences in Close Relationships Scale (ECRS) (Korean)
(Brennan, et al., 1998)

(성인애착유형검사)

이검사는 다른 사람과의 관계에서 스스로 어떻게 느끼는지를 알아보기 위한 것이다. 지금현재상태가 아니라면, 일반적인 관계에서 자신의 경험을 토대로 응답하면 된다.

전혀 아니다

매우 그렇다

1 2 3 4 5 6 7

1.	내가 얼마나 호감을 가지고 있는지 상대방에게 보이고 싶지 않다.	1	2	3	4	5	6	7
2.	나는 버람받는것에 대해 걱정하는 편이다.	1	2	3	4	5	6	7
3.	나는 다른 사람과 가까워지는것이 매우 편안하다.	1	2	3	4	5	6	7
4.	나는 다른 사람과의 관계에 대해 많이 걱정하는 편이다	1	2	3	4	5	6	7
5.	상대방이 적극적으로 나와 친해지려고 할때 꺼려하는 나를 발견한다.	1	2	3	4	5	6	7
6.	내가 다른 사람에게 관심을 가지는 만큼 그들이 나에게 관심을 갖지 않을까 봐 걱정된다.	1	2	3	4	5	6	7
7.	다른 사람이 나와 매우 가까워지려 할때 불편하다.	1	2	3	4	5	6	7
8.	나는 나와 친한 사람을 잃을까 봐 걱정이 된다.	1	2	3	4	5	6	7
9.	나는 다른 사람에게 마음을 여는것이 편안하지 못하다.	1	2	3	4	5	6	7
10.	나는 종종 내가 상대방에게 호의를 보이는 만큼 상대방도 그렇게 해주기를 바란다.	1	2	3	4	5	6	7
11.	나는 상대방과 가까워지고 싶지만 생각을 바꾸어 그만둔다.	1	2	3	4	5	6	7
12.	나는 상대방과 하나가 되기를 원하기 때문에 사람들이 때때로 나에게서 멀어진다.	1	2	3	4	5	6	7
13.	나는 다른 사람이 나와 너무 가까워졌을때 예민해진다.	1	2	3	4	5	6	7
14.	나는 혼자 남겨질까봐 걱정이다.	1	2	3	4	5	6	7
15.	타인에게 내 생각과 감정을 이야기하는것이 편하다	1	2	3	4	5	6	7
16.	지나치게 친해지고자 하는 욕심때문에 때때로 사람들이 두려워하여 거리를 둔다.	1	2	3	4	5	6	7
17.	나는 상대방과 너무 가까워지는 것을 피하려고 한다.	1	2	3	4	5	6	7
18.	나는 상대방으로부터 사랑받고 있다는것을 자주 확인받고 싶어한다.	1	2	3	4	5	6	7

19.	나는 다른 사람과 가까워지는것이 비교적 쉽다.	1	2	3	4	5	6	7
20.	가끔 나는 다른 사람에게 더 많은 애정과 헌신을 보여 줄 것을 강요한다고 느낀다.	1	2	3	4	5	6	7
21.	나는 다른 사람에게 의지하기가 어렵다.	1	2	3	4	5	6	7
22.	나는 버림받는것에 대해 때때로 걱정하지 않는다.	1	2	3	4	5	6	7
23.	나는 다른 사람과 너무 가까워지는것을 좋아하지 않는다.	1	2	3	4	5	6	7
24.	나는 상대방이 나에게 관심을 보이지 않으면 화가 난다.	1	2	3	4	5	6	7
25.	나는 상대방 에게 모든것을 이야기한다.	1	2	3	4	5	6	7
26.	나는 상대방이 내가 원하는 만큼 가까워지는것을 원하지 않는다는것을 안다.	1	2	3	4	5	6	7
27.	나는 대개 다른 사람에게 내 문제와 고민을 상의한다.	1	2	3	4	5	6	7
28.	다른 사람과 교류가 없을때 나는 좀걱정스럽고 불안하다.	1	2	3	4	5	6	7
29.	다른사람에게 의지하는 것이 편안하다.	1	2	3	4	5	6	7
30.	상대방이 내가 원하는 만큼 가까이 있지 않을때 실망하게 된다.	1	2	3	4	5	6	7
31.	나는 상대방에게 위로, 조언, 또는 도움을 청하지 못한다.	1	2	3	4	5	6	7
32.	내가 필요로 할때 상대방이 거절한다면 실망하게 된다	1	2	3	4	5	6	7
33.	내가 필요로 할때 상대방에게 의지하면 도움이 된다	1	2	3	4	5	6	7
34.	상대방이 나에게 불만을 나타낼때 나 자신이 정말 형편없게 느껴진다.	1	2	3	4	5	6	7
35.	나는 위로와 확신을 비롯한 많은 일들을 상대방에게 의지한다.	1	2	3	4	5	6	7
36.	상대방이 나와 떨어져 많은 시간을 보냈을때 나는 불쾌하다.	1	2	3	4	5	6	7

APPENDIX G

The Asian American Multidimensional Acculturation Scale (AAMAS) (English)

This section is concerned with how you see yourself in relationship to your home and host cultures. Please respond to all items by using the scale below to describe your thought and behaviors.

STATEMENT	Not at	Less	A little	A little	Some	Very
-----------	--------	------	----------	----------	------	------

	all (1)	than some (2)	less (3)	(4)	(5)	(6)
How much do you feel you have in common with Koreans?						
How much do you interact and associate with people from Korea?						
How much do you identify with Koreans?						
How much would you like to interact and associate with people from Korea?						
How proud are you to be a part of Korea?						
How negative do you feel about people from Korea?						
How well do you speak the language of Korea?						
How well do you understand the language of Korea?						
How well do you read and write in the language of Korea?						
How often do you listen to music or look at movies and magazines from Korea?						
How knowledgeable are you about the culture and traditions of Korea?						
How knowledgeable are you about the history of Korea?						
How much do you actually practice the traditions and keep the holidays?						
How often do you actually eat the food of Korea?						
How much do you like the food of Korea?						
How much do you feel you have in common with Americans/Canadian?						
How much do you interact and associate with people from host culture?						
How much do you identify with Americans/Canadian?						

How much would you like to interact and associate with people from the US/Canada?						
How proud are you to be a part of Host Culture?						
How negative do you feel about people from the US or Canada?						
How well do you speak English?						
How well do you understand English?						
How well do you read and write English?						
How often do you listen to music or look at movies and magazines from the US or Canada?						
How knowledgeable are you about the culture and traditions of the US or Canada?						
How knowledgeable are you about the history of the US or Canada?						
How much do you actually practice the traditions and keep the holidays?						
How often do you actually eat the food of the US or Canada?						
How much do you like the food of the US or Canada?						

APPENDIX H

The Asian American Multidimensional Acculturation Scale (AAMAS) (Korean)

이 척도는 본인이 한국문화와 현재 생활하고 있는 외국인들과의 관계를 알아보고자 합니다.
 여러분의 일상에서 겪는 다양한 경험들이 한국문화 혹은 현재 생활하고 있는 외국문화와 얼마나
 비슷한지 아래의 번호를 사용하여 응답하여 주십시오. 모든 질문에 대답해주시면 감사하겠습니다.
 전혀 같지 않다 1-----2-----3-----4-----5-----6 아주 비슷하다.

STATEMENT	Not at all (1)	(2)	(3)	(4)	(5)	Very (6)
당신은 얼마나 한국인들과 공통점이 있다고 생각합니까?						
당신은 한국사람들과 얼마나 교제합니까?						
당신은 얼마나 한국 문화 동질감을 느낍니까?						
당신은 한국사람들과 얼마나 교제하기를 원합니까?						
당신이 한국사회의 한 부분이라는 사실이 얼마나 자랑스럽습니까?						
당신은 한국사람들에 대해 얼마나 부정적으로 생각합니까?						
당신은 한국어를 얼마나 잘합니까?						
당신은 한국어를 얼마나 잘 이해합니까?						
당신은 한국어를 얼마나 잘 읽고 쓸 수 있습니까?						
당신은 얼마나 자주 한국 음악을 듣거나 한국영화 잡지를 보니까?						
당신은 한국 문화나 전통에 대한 지식이 얼마나 있습니까?						
당신은 한국 역사에 대한 지식이 얼마나 있습니까?						
당신은 한국 전통이나 공휴일을 얼마나 지킵니까?						
당신은 얼마나 자주 한국음식을 먹습니까?						
당신은 얼마나 한국음식을 좋아합니까?						

STATEMENT	Not at all (1)	(2)	(3)	(4)	(5)	Very (6)
당신은 얼마나 미국/캐나다인들과 공통점이 있다고 생각합니까?						
당신은 미국/캐나다인들과 얼마나 교제합니까?						
당신은 얼마나 미국/캐나다 문화와 동질감을 느끼니까?						
당신은 얼마나 미국/캐나다인들과 교제하기를 원합니까?						
당신이 미국/캐나다사회의 한 부분이라는 사실이 얼마나 자랑스럽습니까?						
당신은 미국/캐나다인들에 대해 얼마나 부정적으로 생각합니까?						
당신은 영어를 얼마나 잘합니까?						
당신은 영어를 얼마나 잘 이해합니까?						
당신은 영어를 얼마나 잘 읽고 쓸 수 있습니까?						
당신은 얼마나 자주 미국/캐나다 음악을 듣거나 그문화의 영화 잡지를 봅니까?						
당신은 미국/캐나다 문화나 전통에 대한 지식이 얼마나 있습니까?						
당신은 미국/캐나다 역사에 대한 지식이 얼마나 있습니까?						
당신은 미국/캐나다 전통이나 공휴일을 얼마나 지킵니까?						
당신은 얼마나 자주 미국/캐나다 음식을 먹습니까?						
당신은 얼마나 미국/캐나다 음식을 좋아합니까?						

APPENDIX I

Zung Self-Rating Depression Scale (ZSDS) (English)
(Zung, 1965)

Please read each statement and decide how much of the time the statement describes how you have been feeling during the past several days.

- 1 – A little of the time
- 2 – Some of the time
- 3 – Good part of the time
- 4 – Most of the time

- _____ 1. I feel down hearted and blue.
- _____ 2. Morning is when I feel the best.
- _____ 3. I have crying spells or fee like it.
- _____ 4. I have trouble sleeping at night.
- _____ 5. I eat as much as I used to.
- _____ 6. I still enjoy sex.
- _____ 7. I notice that I am losing weight.
- _____ 8. I have trouble with constipation.
- _____ 9. My heart beats faster than usual.
- _____ 10. I get tired for no reason.
- _____ 11. My mind is as clear as it used to be.
- _____ 12. I find it easy to do the things I used to.
- _____ 13. I am restless and can't keep still.
- _____ 14. I feel hopeful about the future.
- _____ 15. I am more irritable than usual.
- _____ 16. I find it easy to make decisions.
- _____ 17. I feel that I am useful and needed.
- _____ 18. My life is pretty full.
- _____ 19. I feel that others would be better off if I were dead.
- _____ 20. I still enjoy the things I used to do.

APPENDIX J

Zung Self-Rating Depression Scale (ZSDS) (Korean)

(Zung 자기평가 우울 척도)

이 질문지는 여러분이 일상 생활에서 경험할 수 있는 내용들로 구성되어 있습니다. 각 문장을 자세하게 읽어보시고 요즘 얼마나 자주 그렇게 경험하거나 느끼시는지 자신을 가장 잘 나타낸다고 생각되는 번호를 왼쪽 빈칸에 써 넣으세요. 응답 방식은 다음과 같습니다.

- 1 - 그렇지 않다
- 2 - 가끔 그렇다.
- 3 - 자주 그렇다
- 4 - 항상 그렇다

- ___ 1. 나는 기운이 없고 우울하다.
- ___ 2. 나는 하루 중 아침에 기분이 가장 좋다.
- ___ 3. 나는 눈물을 쏟거나 울고 싶어진다.
- ___ 4. 나는 밤에 잠을 잘 못잔다.
- ___ 5. 나는 평상시처럼 잘 먹는다.
- ___ 6. 나는 여전히 성관계를 즐긴다.
- ___ 7. 나는 체중이 줄고 있음을 느낀다.
- ___ 8. 나는 번비로 고생하고 있다.
- ___ 9. 심장이 전보다 빨리 뛰다.
- ___ 10. 나는 별다른 이유 없이 피곤해진다.
- ___ 11. 나의 정신은 전과 같이 맑다.
- ___ 12. 나는 예전처럼 일들을 쉽게 처리한다.
- ___ 13. 나는 안전부절못해서 진정할 수가 없다.
- ___ 14. 나는 미래를 희망적이라고 생각한다.
- ___ 15. 나는 평소보다 신경이 더 날카롭다.
- ___ 16. 나는 결정을 내리는데 별 어려움이 없다.
- ___ 17. 나는 쓸모 있고 필요한 사람이라고 느낀다.
- ___ 18. 나의 삶은 매우 충만해 있다.
- ___ 19. 내가 죽어야 남들이 더 잘 될 것이다.
- ___ 20. 나는 예전에 하던 일들을 여전히 즐긴다.

APPENDIX K

UCLA Loneliness Scale (Version 3; English)

(Russell, 1996)

Instructions: The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by circling a number in the space provided. Here is an example:

How often do you feel happy?

If you never felt happy, you would respond “never”; if you always feel happy, you would respond “always.”

Rarely or None of the Time (Less than 1 day)	Some of of the Time (1-2 days)	Occasionally (3-4 days)	Most of the Time (7 days)
--	--------------------------------------	----------------------------	---------------------------------

1. How often do you feel that you are “in tune” with the people around you?
2. How often do you feel that you lack companionship?
3. How often do you feel that there is no one you can turn to?
4. How often do you feel alone?
5. How often do you feel part of a group of friends?
6. How often do you feel that you have a lot with the people around you?
7. How often do you feel that you are no longer close to anyone?
8. How often do you feel that your interests and ideas are not shared by those around you?
9. How often do you feel outgoing and friendly?
10. How often do you feel close to people?
11. How often do you feel left out?
12. How often do you feel that your relationships with others are not meaningful?
13. How often do you feel that no one really knows you well?
14. How often do you feel isolated from others?
15. How often do you feel you can find companionship when you want it?
16. How often do you feel that there are people who really understand you?
17. How often do you feel shy?
18. How often do you feel that people are around you but not with you?
19. How often do you feel that there are people you can talk to?
20. How often do you feel that there are people you can turn to?

APPENDIX L

UCLA Loneliness Scale (Version 3; Korean)

(Russell, 1996)

UCLA 외로움사정도구

이하의 문항은 사람들이 느끼는 감정을 표시하기 위하여 설정되었습니다. 각각의 문항에, 본인이 얼마나 자주 느끼는지를 표시해주시요.

예) 난 항상 행복하다.

만약에 전혀 행복하지 않다면 “전혀 그렇지 않다” 를 선택해주시고, 항상 행복하다면 “항상” 을 선택해주시요.

전혀 그렇지 않다. (1 일 이하)

좀처럼 그렇지 않다. (1-2 일)

가끔 그렇다. (3-4 일)

거의 대부분 그렇다 (5-7 일)

1. 나는 내 주위 사람들과 기분이 통한다.
2. 나는 사람들과 교제가 부족하다.
3. 나는 의지할 사람이 한 사람도 없다.
4. 나는 혼자라고 느끼지 않는다.
5. 나는 친구들 모임에 속해 있다.
6. 나는 내 주위 사람들과 많은 공통점을 가지고 있다.
7. 나는 더 이상 아무하고도 가깝지 않다.
8. 주위 사람들은 나의 관심사와 생각들을 나와 함께 나누지 않는 것 같다.
9. 나는 외향적이다.
10. 나는 가깝게 느끼는 사람들이 있다.
11. 나는 혼자 남겨진 느낌이 든다.
12. 사람들과 나와의 교제는 피상적이다.
13. 어느 누구도 나를 잘 알지 못한다.
14. 나는 다른 사람으로부터 소외감을 느낀다.
15. 내가 교제를 원할때 나는 친구들을 사귄 수 있다.
16. 나를 진심으로 이해해 주는 사람들이 있다.
17. 나는 소외된 것 같아 슬픈 느낌이 든다.
18. 사람들은 내 주위에 있는것이지 진정 나와 함께 있는것이 아니다.
19. 나와 함께 얘기를 나눌 수 있는 사람들이 있다.
20. 나는 의지할 사람들이 있다.

APPENDIX M

The Connor-Davidson Resilience Scale (CD-RISC) (English)
(Connor & Davidson, 2003)

25 items, all of which carry a 5-point range of responses

(0) not true at all

(1) rarely true

(2) sometimes true

(3) often true

(4) true nearly all of the time

Please rate the scale based on how you have felt over the past month.

1. able to adapt to change
2. close and secure relationships
3. sometimes fate or God can help
4. Can deal with whatever comes
5. Past success gives confidence for new challenge
6. see the humorous side of things
7. coping with stress strengthens
8. tend to bounce back after illness or hardship
9. things happen for a reason
10. best effort no matter what
11. you can achieve your goals
12. when things look hopeless, I don't give up
13. know where to turn for help
14. under pressure, focus and think clearly
15. prefer to take the lead in problem solving
16. not easily discouraged by failure
17. think of self as strong person
18. make unpopular or difficult decision
19. can handle unpleasant feelings
20. have to act on a hunch
21. strong sense of purpose
22. in control of your life
23. I like challenges
24. you work to attain your goals
25. pride in your achievements

APPENDIX N

The Connor-Davidson Resilience Scale (CD-RISC) (Korean)

(Connor & Davidson, 2003)

25 items, all of which carry a 5-point range of responses

다음 25 개의 문항에 대해 각각의 답안에 0-5 점의 점수가 적용된다.

- (0) not true at all – 전혀 그렇지 않다.
- (1) rarely true – 좀처럼 그렇지 않다.
- (2) sometimes true – 때때로 그렇다.
- (3) often true – 대체적으로 그렇다.
- (4) true nearly all of the time – 거의 대부분 그렇다.

수치는 본인이 지난 한달동안 어떻게 지각하였는지를 토대로 하십시오.

1. 변화에 잘 순응한다.
2. 가깝고 안정적인 관계가 있다.
3. 때로는 운명이나 신이 도울수 있다.
4. 어떤 상황에도 잘 대처한다.
5. 과거에 겪었던 성공의 경험이 새로운 도전을 위한 동기부여를 한다.
6. 항상 유머스러운 면모를 본다.
7. 스트레스 극복이 날 강하게 한다.
8. 병이나 어려움을 잘 극복 한다.
9. 모든 일에는 이유가 있다.
10. 어떤 상황에도 최선을 다 한다.
11. 자신이 정한 목표를 달성한다.
12. 비록 희망적이지 않더라도 포기하지 않는다.
13. 도움을 받기 위해 어디로 가야 하는지 안다.
14. 압박감속에서도 현명하게 생각하고 집중한다.
15. 문제 해결에 있어서 리더 역할을 하기를 원한다.
16. 실패에 쉽게 낙담하지 않는다.
17. 스스로를 강인한 사람이라 생각한다.
18. 가망이 없거나 어려운 결정을 내린다.
19. 불쾌한 감정을 잘 다스린다.
20. 직감적으로 행동한다.
21. 강한 목적 의식을 가지고 있다.
22. 자신이 좋아하는 것을 지배한다.
23. 도전을 지향한다.
24. 목표 달성을 위해서 일한다.
25. 목적 성취에 자랑스러워 한다.

APPENDIX 0

Zung Self-Rating Anxiety Scale (ZSAS) (English)

Please read each statement and decide how much of the time the statement describes how you have been feeling during the past several days.

- 1 – A little of the time
- 2 – Some of the time
- 3 – Good part of the time
- 4 – Most of the time

- _____ 1. I feel more nervous and anxious than usual.
- _____ 2. I feel afraid for no reason at all.
- _____ 3. I get upset easily or feel panicky.
- _____ 4. I feel like I'm falling apart and going to pieces
- _____ 5. I feel that everything is all right and nothing bad will happen.
- _____ 6. My arms and legs shake and tremble.
- _____ 7. I am bothered by headaches, neck and back pains.
- _____ 8. I feel weak and get tired easily.
- _____ 9. I feel calm and can sit still easily.
- _____ 10. I can feel my heart beating fast.
- _____ 11. I am bothered by dizzy spells.
- _____ 12. I have fainting spells or feel like it.
- _____ 13. I can breathe in and out easily.
- _____ 14. I get feelings of numbness and tingling in my fingers and toes.
- _____ 15. I am bothered by stomachaches or indigestion.
- _____ 16. I have empty my bladder often.
- _____ 17. My hands are usually dry and warm.
- _____ 18. My face gets hot and blushes.
- _____ 19. I fall asleep easily and get a good night's rest.
- _____ 20. I have nightmares.

APPENDIX P
Zung Self-Rating Anxiety Scale (ZSAS) (Korean)

ZSAS: 이하의 문항 또한 여러분이 일상 생활에서 경험할 수 있는 내용들로 구성되어 있습니다. 각 문장을 자세히 읽어보시고 요즈음 얼마나 자주 그렇게 경험하거나 느끼시는지 자신을 가장 잘 나타낸다고 생각되는 번호를 왼쪽 빈칸에 써 넣으세요.

- 1 - 전혀 그렇지 않다.
- 2 - 가끔 그렇다.
- 3 - 자주 그렇다.
- 4 - 항상 그렇다

- _____ 1. 나는 요즈음 전보다 신경질적이고 불안하다.
- _____ 2. 나는 공연히 두려워진다.
- _____ 3. 나는 사소한 일에 당황하고 어쩔 줄 모른다.
- _____ 4. 나는 신경이 극도로 약해져서, 마음을 가줄 수 없다.
- _____ 5. 나는 만사가 순조로울 것 같다.
- _____ 6. 나는 손발이 떨리고 안절부절하다.
- _____ 7. 나는 머리가 아프고 목덜미가 무겁거나 혹시 허리가 아프다.
- _____ 8. 나는 이유없이 몸이 약하고 피곤하다.
- _____ 9. 나는 마음이 안정되고 편하게 오래앉아 있을 수 있다.
- _____ 10. 나는 가슴이 두근거린다.
- _____ 11. 나는 어지러워서 고생한다.
- _____ 12. 나는 졸도하거나 졸도 할 것 같은이 느낄 때가 있다.
- _____ 13. 나는 가슴이 답답하지 않다.
- _____ 14. 나는 손에 쥐가 나거나 저려서 고생을 한다.
- _____ 15. 나는 소화가 안되어 고생을 한다.
- _____ 16. 나는 소변을 잘본다.
- _____ 17. 내 손은 보통 덥고 땀이 나지 않는다.
- _____ 18. 내 손은 보통 덥고 땀이 나지 않는다.
- _____ 19. 내 손은 보통 덥고 땀이 나지 않는다.
- _____ 20. 나는 꿈자리가 사납다.

APPENDIX Q
Drawing for a Gift Certificate for Participation (English)

You have completed the survey. Thank you for participating in the study. You may be able to get a \$10.00 Starbucks gift card or an Amazon.com gift certificate.

If you would like to be placed in a drawing for an Amazon.com gift, write down your email address.

If you would like to be placed in a drawing for a Starbucks gift card, write down your name and mailing address.

This information will be separated and will not be connected to the survey at all.

For an Amazon.com gift certificate:

Email: _____

For a Starbucks gift card

Name: _____

Mailing Address: _____

APPENDIX R

Drawing for a Gift Certificate for Participation (Korean)

설문지 참여 감사합니다.

추첨을 통해 \$10 Starbucks card 나 Amazon.com Gift Certificate 을 원하시면 이메일 주소를
적어주세요. Starbucks Gift card 을 원하신다면 성함과 현재 mailing 주소또한 적어주셔야 합니다.

이 페이지의 정보는 설문지 내용과 분리되어 보관될것입니다.

Email: _____

For Starbucks Gift card

Name: _____

Mailing Address: _____

VITA

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Selected Presentations

Wilson, D., Kim, E., Smith-Janik, S., & Doh, M. (2009, February). *Dialogue on Race: What is Being Said and What is Not Being Discussed Openly?* Presentation at the Annual Big 10 Counseling Center Conference, University Park, PA.

Kwon, K., & Doh, M. (2008, August). *Survival in the U.S. as Korean International Students: Qualitative Study*. Poster presentation at the Annual Meeting of the American Psychological Association, Boston, MA.

Doh, M., Hardy, J., & Woodhouse, S. (2008, August). *The Influence of Acculturation and Relationship Styles on Intentions to Seek Counseling Among Asian University Students*. Poster presentation at the Annual Meeting of the American Psychological Association, Boston, MA.

Park, J., Nyutu, P., Conrath, J., Doh, M., & Gemignani, M. (2008, March). *Mentoring and Orientation Programs for International Students in Counseling Psychology Programs*. Working Group at the biennial meeting of the International Counseling Psychology Conference, Chicago, IL.