

CULTURE, SEX-ROLE, MUTUAL SOCIAL SUPPORT AND
ADULT ATTACHMENT AS PREDICTORS OF
KOREAN COUPLES' RELATIONSHIP SATISFACTION

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by

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KOREAN COUPLE'S RELATIONSHIP SATISFACTION

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ABSTRACT

This study examined the relationships among adult attachment, caregiving, perceived social support, seeking social support and couple satisfaction of Korean college students, and the moderator effects of cultural variables of sex role and collectivism-individualism. In study 1, Experience of Close Relationship Scale (ECRS), Social Provisions Scale (SPS), and Relationship Assessment Scale (RAS) were translated into Korean, and the reliability and validity for the translated scales were tested. Data were collected from 26 bilingual Korean international students in the U.S. The results suggested that Korean versions of scales were reliable and equivalent in reliability to original English versions scales, and the constructs of the translated Korean versions of scales were quite valid. In study 2 examining the research problems of this study, data from 242 Korean college students in current romantic relationship were used for analysis. The relationship between adult attachment and relationship satisfaction was mediated by the perceived social support from partners, but not by the perceived social support from others. Adult attachment was also related to the support seeking from partner. However, the moderator effects of sex role and collectivism-individualism were not detected. Data from 55 couples showed that female partner's caregiving was related to male counterpart's relationship satisfaction; while male partner's caregiving was not related to female counterpart's relationship satisfaction.

CHAPTER 1

INTRODUCTION

According to the report of a counseling center in South Korea, romantic relationship problems were the second most frequent issue as a presenting problem, and it was discussed in 13% of the individual sessions (Sogang University Counseling Center, South Korea, 2004). This suggests that social support seeking from partner were not always successful. For individual counseling about romantic relationships and couple counseling, a framework to understand the couples' social support interactions and couple dynamics is necessary.

Romantic relationships are bi-directional, and the characteristics of both parties are important for interactions, such as support seeking and relationship satisfaction. Attachment theory offers a framework to understand adult romantic relationships. The emotions and behaviors found in the adult romantic relationships are regulated by the attachment system including appraisal and behavioral components (Fraley & Shaver, 2000). People appraise the availability of an attachment figure and then adopt behavioral responses such as proximity avoidance or seeking help in order to deal with the feelings caused by the perceived partner's availability. A two dimensional model of attachment was suggested by extensive factor analysis with anxiety and avoidance as the two dimensions that emerged. Anxiety, which is related to the appraisal component, includes fears of abandonment and concerns about a partner's availability. Avoidance, which is related to behavioral component, includes fears of intimacy and maintaining autonomy from others (Brennan, et al., 1998).

People use their romantic partners as an attachment figure whom they seek proximity toward (proximity seeking), they turn to for help and advice (safe haven), they feel stressed when being separated from (separation protest), and they get security feelings from when exploring unfamiliar environment (secure base) (Fraley & Davis, 2000; Zeifman & Hazan, 1997). However, these attachment functions are not activated in all romantic relationships, therefore all romantic relationships are not necessarily attachment relationships (Fraley & Shaver, 2000). The beginning phase of romantic relationships, that includes just proximity seeking and safe haven functions, but has not yet developed separation protest and a secure base function, is not yet a true attachment relationship (Zeifman & Hazan, 1997). The romantic relationships are developed as attachment relationship through long time of interaction.

In addition to attachment system, adult romantic relationships include a mutual caregiving system (Feeney & Collins, 2001; Hazan & Shaver, 1987; Shaver et al., 1988). In romantic relationships, people respond to a partners' need for security, and they support the partner's autonomy and ability to explore the environment (Kunce & Shaver, 1994). The goal of caregiving system is for partner's sake, but it is also influenced by own attachment. Avoidance is negatively related to caregiving because people with avoidance attachment frequently have experiences of being rejected and they are lack the ability to solicit care from others. Anxiety is related to self-sacrificing and compulsive care-giving caused by the fear of abandonment and inconsistent care (Carnelley, Pietromonaco, & Jeffe, 1996; Feeney & Collins, 2001; Kunce & Shaver, 1994; Simpson et al., 1992; Shaver & Hazan, 1988). Thus, caregiving from one partner has a considerable potential to affect the perceived social support of the other partner.

Perceived social support is influenced by characteristics of both the care-receiver and the caregiver (Fincham & Bradbury, 1990; Kuncé & Shaver, 1994; Pierce et al., 1991). Perceived social support involves cognitions about whether support is available when necessary (Acitelli & Antonucci, 1994; Sarason et al., 1991), and this is related to the appraisal component of the attachment system. Internal working models about self and others, which are part of an individual's attachment style, influence the perceived social support (Bowlby, 1973; Coble, Gantt, & Mallinckrodt, 1996; Sarason, Sarason, Waltz, & Pope, 1991; Ptacek, 1997). Securely attached people perceive others' behavior and motivation favorably and tend to expect social support to be available. On the other hand, people with attachment anxiety or avoidance tend to perceive others as inaccessible and unsupportive (Coble et al., 1996). Also, perceived social support is related to the caregiving (Kuncé & Shaver, 1994).

Adult attachment, caregiving, and perceived social support are related to the social support seeking from partner, which is a behavioral component of attachment (e.g. Anderson & Tucker, 2000; Collins & Feeney, 2000; Fraley & Shaver, 1998; Mikulincer, Florian, & Weller, 1993; Mikulincer & Florian, 1996; Ognibene & Collins, 1998; Simpson et al., 1992). People who feel comfortable in close relationships and perceive others as helpful frequently seek support from others under stress. It is necessary to consider the severity of stress in understanding social support seeking (e.g. Ognibene & Collins, 1998).

The quality of the romantic relationship has been studied in connection with the adult attachment since Hazan and Shaver's pioneering study on adult attachment (1987). Regarding the relationship satisfaction, people with secure attachment report more

relationship satisfaction, whereas those with either avoidant or anxious attachment tend to report less couple satisfaction (e.g. Hazan & Shaver, 1987; Stackert & Bursik, 2003). Partner's caregiving and support are also associated with couples' satisfaction and quality of romantic relationship (Brunstein, Daygelmayer, & Schulthesis, 1996; Collins & Feeney, 2000; Collins & Feeney, 2001; Coyne & Anderson, 1991; Julien & Markman, 1991). Couples presenting more care and support in their interactions report their relationship as more satisfactory (Feeney & Collins, 2001; Kuncce & Shaver, 1994). Not only perceived social support from the partner but also social support from others is related to the couple satisfaction (Lee, 1988; Meyers & Landsberger, 2002). However, some studies reported the opposite results in the relationships between the support from others and the relationship satisfaction (McGonagel, Kessler, & Schilling, 1992; Julien & Markman, 1991).

This study examines the relationships among adult attachment, caregiving, perceived social support, seeking social support and couple satisfaction of Korean college students. We are aware of no previous study that included these variables in one model for Koreans and Korean couples. Data were gathered from Korean college students and their partners and included assessment of cultural variables of collectivism and individualism as well as individual differences.

In Korea, few studies have explored relationship satisfaction among dating couples. There might be two reasons this is the case: (a) romantic relationships are generally considered as satisfactory, because people can break up the dating relationship relatively easily when they are not satisfied; (b) Traditionally, Korean adolescents and young adults are traditionally not encouraged to get involved in the romantic relationship before

marriage, although these norms have been changed fast. Taboos regarding romantic relationships (e.g. pre-marital sex) are related to Confucianism, and some studies on the romantic relationship in Korea focused on the attitude toward the romantic relationship, sex, and marriage.

These cultural contexts affect romantic relationships, since culture is the process through which people experience themselves, society, and the world (Oyserman, Coon, & Kemmelmeier, 2001; Rothbaum, Weisz, Potot, Miyake, & Moridi, 2000). Recently, there have been efforts to understand the culturally unique process of relationship interaction, such as attachment, caregiving, and social support in addition to common phenomena (Dilworth-Anderson & Marshall, 1997; Rothbaum, Weisz, Pott, Miyake, & Morelli, 2002; Solomon & George, 1996; 1999; van Ijzendoorn & Sagi, 1999).

The secure base function of attachment figure that help infants or partners to increase autonomy and to explore the outer world has been questioned if it is common across cultures or not. The desirable sensitivity, that caregiver offers to infants or partners, depends on cultural values and goals (Carson & Harwood, 2003). The specific threat that activates parents' sensitivity to an infant's needs is different across culture. Among Japanese, the goal of attachment is not autonomy and exploration, but dependence and interdependence (Rothbaum et al., 2000; 2001). In Western culture, the goal of caregiving is often, ultimately, independence and autonomy of the child, and a balance between proximity and encouragement for exploration determines optimal caregiving (Solomon & George, 1996). The social support structure, type, and sources are also different across culture (Dilworth-Anderson & Marshall, 1997). For example, social

support of Asian Americans was more informal, and they receive most social support from close kin.

Regarding a cultural context, sex differences and the sex-role socialization process can be considered as factors that affect adult attachment, caregiving, couple interaction and relationship satisfaction. Feminine gender role is more frequently found among people with anxious attachment; whereas masculine gender roles were endorsed most strongly among individuals with avoidant attachment (Shaver et al., 1996). The socialized sex role affects the stability of romantic relationships of insecurely attached partners (Pietromonaco & Carnelley, 1994) The anxious woman-avoidant man couple is more stable than the avoidant woman-anxious man couple, regardless of the insecurity attachment of both parts of the couples. This is because models of self are confirmed in the anxious woman-avoidant man couple. Female partner offers more responsive caregiving and less compulsive caregiving (Feeney, 1996), which is related to the sex role socialization process (Kunze & Shaver, 1994). The sex difference in the perceived social support can be explained by sex role stereotype. It is difficult for men to accept the caregiving from their partner because of their sex-role stereotype that emphasizes autonomy and independence (Acitelli & Antonucci, 1994). There are limited number of studies have empirically examined the effect of sex-role orientation.

The main dependent variable in this study is relationship satisfaction, as rated by both members of a South Korean dating couple in which at least one partner is a college student. Based on the literature briefly summarized above, the following constructs are selected as independent variables, hypothesized to influence relationship satisfaction: adult attachment, caregiving, perceived social support from one's partner and from others,

perceived stress, and support seeking. In addition, in order to find the effect of cultural factors and sex role socialization, these variables were also examined. The data were gathered from Korean college students, and some measurements were translated into Korean for this study. Thus, another goal of this study is to test semantic equivalence of the scales and to find the factor structure of the translated measurements used in this study.

CHAPTER 2

LITERATURE REVIEW

In this chapter, the literature related to attachment theory, caregiving, perceived social support, social support seeking, romantic relationship satisfaction, sex differences, and cultural differences will be reviewed. First, attachment system, function of the attachment and individual differences will be presented. Second, the caregiving system and the relationships between attachment and caregiving will be discussed. Third, social support including both perceived social support and social support seeking will be presented. The relationships among attachment, caregiving, social support seeking, and perceived social support will be also reviewed. Fourth, romantic relationship satisfaction and its relationships with attachment caregiving and social support will be outlined. Then, sex differences in adult attachment, caregiving, social support, and romantic relationship satisfaction will be discussed. Finally, the cross-cultural studies in attachment, caregiving, social support, and romantic relationship satisfaction will be presented.

Attachment System

Infant-caregiver Attachment

Attachment theory was conceptualized as a biological behavior system that is developed from the infant-caregiver relationship (Ainsworth et al., 1978; Bowlby, 1982). The goal of attachment system is to maintain proximity for survival and safety: When infants are under stress, their attachment system is activated and they seek protection, security, support and comfort from their caregivers (Bowlby, 1969). The attachment system includes both appraisal and behavioral components (Fraley & Shaver, 1998; Shaver & Hazan, 1988). The appraisal process is used to evaluate whether the attachment

figure is available, attentive, and responsive, and this process results in emotions like love, anxiety, and fear (Shaver & Hazan, 1988; Fraley & Shaver, 1998). The behavioral component regulates interpersonal strategies and represents seeking contact and proximity (Fraley & Shaver, 1998). Some infants may present visual checking, signaling, reestablishing contact, calling, pleading, moving for contact, or clinging; others may avoid contact and explore the environment defensively (Shaver & Hazan, 1988). These behaviors were found in the observational research of Ainsworth et al. (1978).

Ainsworth and her colleagues (1978) observed the interactions between children and caregivers in laboratory separation-and-reunion situations. Based on their observation, they suggested three attachment styles: (a) secure, (b) avoidant, and (c) anxious/ambivalent. Secure infants actively explored the environment, checking the presence of the mother; felt distressed and cried when the mother left the laboratory; and were easily comforted at the reunion. Avoidant infants also explored the environment but did not check back the caregiver; did not show distress when the mother left the laboratory; and showed little interest to mothers when they came back. Anxious infants rarely left their mothers and kept in physical contact; cried strenuously at separation; and felt little comfort at reunion. These interactions between infant and caregiver reflect the internal representations of themselves and others (Bowlby, 1988).

Infants develop representational working models about self and others based on the attachment between them and caregivers (Bowlby, 1980; 1988). Children who developed secure attachment have positive sense of self and others (Main, Kaplan, & Cassidy, 1985). They perceive themselves as good, lovable, worthy of care and helped and perceive others as responsive, helpful, accessible, available, trustworthy, and

supportive (Bowlby, 1972, 1973). The working model from attachment relationship influences development of personality and affects other close relationships (Bowlby, 1988; Main, et al., 1985). Attachment relationship has its unique characteristics distinguished from other relationships.

Unlike other relationships, the attachment relationship has four critical functions: proximity seeking, separation protest, safe haven, and secure base (Ainsworth, 1989). Infants seek to maintain proximity to the attachment figure for safety and survival (proximity seeking). Separation from the attachment figure causes distress and grief with loss (separation protest). Attachment figures offer the sense of security that encourages infants and children to explore the world (secure base). The children come back to the attachment figure for comfort under conditions of stress (safe haven). Every attachment relationship does not include all of these functions. The first two characteristics of proximity seeking and separation protest exist in every attachment, but all attachments do not include secure base and safe haven elements (Ainsworth, 1989). Some insecurely attached infants may not be encouraged to explore very extensively and may not come back to the attachment figure when they felt stressed. Also, some functions of attachment may not found in the early stages of a particular attachment (Bowlby, 1969).

Bowlby (1969) suggested four phases of the infant attachment: pre-attachment phase, attachment in-the-making, clear-cut attachment, and goal-corrected partnership. In the pre-attachment phase at the age of 3-4 months old, infants begin to get comfort from anyone available when they are under stress. The attachment-in-the-making phase starts at about 6-7 months. In this stage, infants direct attempt to signal their caregivers when they experience distress. In the clear-cut attachment phase, beginning from around 2

years old, children experiences separation anxiety. Finally, in the goal-corrected partnership phase starting around 3-4 years old, children increases interests in exploration and peer relationship.

Adult Attachment

The attachment system, established in the relationship with a caregiver, is activated in the adult close relationships including romantic relationships (Bowlby, 1988; Hazan & Shaver, 1987; Hazan & Zeifman, 1994). The adult romantic relationship is influenced by the infant-caregiver attachment, and at the same time, the adult romantic relationship is developed as the attachment relationship (Hazan & Shaver, 1987; Shaver & Hazan, 1988; Shaver et al., 1988). The infant attachment and the adult attachment have similarities and differences. The attachment components, attachment styles, working models, attachment functions, and the attachment stages that are found in the adult attachment are similar to those of child attachment (Fraley & Shaver, 2000; Shaver et al., 1988, 1988). Unlike the infant-caregiver attachment, adult attachment system includes caregiving system and mating/reproductive system, and thus, it is more complicated compared to the child attachment (Hazan & Shaver, 1987; Shaver et al., 1988).

The emotions and behaviors that are found both in infant-caregiver relationships and in adult romantic relationships are regulated by the same biological attachment system (Fraley & Shaver, 2000). Like infants' attachment system, the adult attachment system is activated when the partner is not available or is expected not to be available is also designed for proximity seeking (Fraley & Shaver, 1998). The attachment adult system also includes appraisal and behavioral components (Fraley & Shaver, 2000; Shaver & Hazan, 1988). Regarding the appraisal component, the adult feels secure and

comfort when a partner is accessible and responsive; feels anxious when a partner is not available and accessible (e.g. Hazan & Shaver, 1987, 1990). The behavioral component, which is the second component of attachment system, is related to dealing with emotions. It includes avoidance-oriented goals and proximity-seeking goals (Fraley & Shaver, 2000). When the partner is not available and felt anxious, some people try to be close to him/her and demand the attention and care; others withdraw themselves from the situation and keep the distance from the partner (Fraley & Shaver, 2000). Fraley and Shaver (2000) related the appraisal component to the anxiety caused by the discrepancy between the desired proximity and the actual proximity to the partner. They also related behavioral component to the avoidance, the extent of seeking proximity to the caregiver.

The attachment styles found in the child attachment were also found among adults. Hazan and Shaver (1987) suggested three adult attachment types similar to infant-parent attachment styles delineated by Ainsworth et al. (1978): Secure, Avoidant, and Anxious/Ambivalent. People categorized as secure attachment easily get close to and depend on others, do not worry about being rejected or abandoned. They also feel comfortable when others get close to them. People categorized as avoidant attachment have uncomfortable feelings when they are close to others and depend on others. Avoidant attachment is related to keeping distance from others when anyone gets too close or wants them to be more intimate. People with anxious/ambivalent attachment want to merge with others and worry that others do not love them (Hazan & Shaver, 1987; Collins & Read, 1990). In addition to these three types of attachment, four-typology model was also suggested.

Bartholomew and Horowitz (1991) suggested four types of adult attachment based on the working model to self and working model to others: secure, preoccupied, dismissing, and fearful. Secure attachment group has positive working model to self and others; preoccupied attachment group has negative working model to others and positive working model to self; dismissing group has positive view to themselves and negative view to others. Fearful group has negative working model to self and others. The avoidance attachment style from Hazan and Shaver (1987) is divided into dismissing-avoidant style and fearful-avoidant style. People with dismissing-avoidant attachment style feel comfortable in close relationship but prefer independence. People with fearful-avoidant attachment style want close relationship but feel uncomfortable in close relationships.

Those four types of adult attachment can be perceived according to the attachment system model including appraisal and behavioral components (Fraley & Shaver, 1998). The secure attachment is low in both anxiety and avoidance: people with secure attachment type do not worry about being alone and feel comfortable in the close relationships. The preoccupied attachment is high in anxiety and low in avoidance: people in this group worry about being rejected and feel comfortable in close relationships. The dismissing avoidant is low in anxiety and low in avoidance: people prefer being alone and feel uncomfortable in close relationships. Finally, the fearful-avoidant attachment is high in both anxiety and avoidance: people from this group want to be close to others but feel uncomfortable in close relationships. The dismissing and fearful attachment groups are similar in terms of keeping distance from the attachment figure, but people with the fearful attachment groups have higher anxiety about being

hurt and rejected (Bartholomew & Horowitz, 1991). Emphasis on the two components of attachment was also found in the two-dimensional self-report attachment measurement.

Brennan, and his colleagues (1998) suggested a two-dimensional model of adult attachment including avoidance and anxiety in the Experience in Close Relationship Scale. Anxiety is related to concerns about their partner's unavailability in need; Avoidance is related to limiting intimacy and keeping independence from others (Brennan et al, 1998). These two dimensions were independent and include most of the important variance in romantic attachment (Brennan et al., 1998; Fraley & Shaver, 2000).

The observation study as well as the self-report study presented the individual differences in attachment among adults (Fraley & Shaver, 1998; Simpson, et al., 1992). Fraley and Shaver (1998) observed the separating dating couples in the natural airport situation, in which separation anxiety is provoked because of the anticipated departure of a partner. They observed the behaviors of holding, following, and searching for partners, and those behaviors were similar to the behaviors found among children (Ainsworth et al., 1978). They reported that the anxious women expressed more stress at separation. Avoidant women felt comfortable in being close to their partners when the situation was less anxious like flying together, but they kept distance from their partners when the situation was more threatening like impending departure.

Simpson and his colleagues (1992) observed the couple's interaction in the anxiety-provoking waiting room situation. They found that the secure women used their male partner as a safe haven to get the comfort and support. The avoidant women sought the more support and comfort from their partners when the anxiety was low, but pulled

away from their partners physically and emotionally when the anxiety increases (Simpson, et al., 1992).

Like the infant attachment, adult attachment was strongly related to working model to themselves and others. Secure adult attachment was positively associated to self-esteem, self-concept, self-confidence, and the love-worthiness (Feeney & Noller, 1990; Hazan & Shaver, 1987; Shaver & Hazan, 1996). People who felt comfortable in being close to their partners and in depending on them described themselves as self-worthy and socially self-confident (Collins & Read, 1990). Regarding to the working model to others, securely attached adults perceived their partners as available, trustworthy, dependable, altruistic, well intended, and good hearted (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987). People with avoidant attachment mistrust and keep distance from others; and people with anxious attachment considered that others were not willingly committed to them (Feeney & Noller, 1990). These internal working models affect their memory of the previous relationships and the dynamic of current relationships.

Adult attachment was related to the recollection of the relationships with their parents. Securely attached people recollected that their parents were warmer and non-rejecting (Collins & Read, 1990; Hazan & Shaver, 1987). People with avoidant attachment people described their mothers as cold and rejecting (Hazan & Shaver, 1987). Ambivalent/anxious attachment group reported a lack of support from their parents and described their parents as unfair, cold, and inconsistent (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987).

Adults tend to be involved in the romantic relationships with a partner who confirms their working models (Collins & Read, 1990; Feeney, 2002; Kirkpatrick & Hazan, 1994; Pietromonaco & Carnelley, 1994). Securely attached women feel comfortable with secure romantic partners confirming their working models that they are worthy of being loved, while anxious women have avoidant partners who confirm the working models that they cannot be so close to others as they want (Collins & Read, 1990; Pietromonaco & Carnelley, 1994). Feeney (2002) reported that anxious husband devalued the positive behaviors of his wife and perceived her negative behaviors more sensitively. In this way, they confirm their working models that others do not love them.

The adult attachment functions similar to the infant attachment were suggested: proximity seeking, separation protest, safe haven and secure base (Fraley & Davis, 2000; Zeifman & Hazan, 1997). Adults try to keep proximity to their romantic partners for comfort (proximity seeking). At the separation situation, adults show stress about separating from their romantic partners (separation protest). Adults also try to get support and comfort from their romantic partners when they were under stress (safe haven). When romantic partner is accessible, adults feel secure and explore the environment with confidence (secure base).

The proximity seeking function was examined even from the physiological perspective. Feeney and Kirkpatrick (1996) examined physiological activities in the stressful laboratory situation. When the partners were not there together, the physiological activities including heart rate were increased among women with anxious and avoidant attachment styles.

Hazan and Shaver (1990) explored the function of secure base examining the relationships among attachment, love and work. They considered the work as one of the way to explore the world. They found that secure people valued their work but did not let the work interfere their relationships. Anxious people put priority in the relationships and their work was interfered by their concerns about being rejected in the relationships. Avoidant people had good jobs in terms of income but were not satisfied with their work. As it were, people with anxious and avoidant attachment styles explored the world less than the securely attached people, and it may be caused by the deficiency of secure base. All romantic partners are not necessary attached to each other in specific romantic relationships (Fraley & Shaver, 2000).

The adult attachment is developed through different phases, like the infant attachment, including non-attachment phases and attachment phases (Bowlby, 1969; Zeifman & Hazan, 1997). Zeifman and Hazan (1997) suggested the four phases process model of adult romantic relationship development, which are parallel to but distinguished from the Bowlby's model (1969): attracting/flirting, falling in love, loving, and life as usual. They also described the physical behaviors in each phases. In attraction/flirting (pre-attachment) phase, people seek the proximity to their partners. People in this phase are described with the incidental physical contact, intermittent gazing, emotionally neutral conversation content, and animated and emotionally aroused voice. In the next phrase of falling in love (attachment-in-the-making), the attachment function of safe haven is added. The eye contacts and physical contacts become frequent and prolonged, the conversation includes care-deriving content, and the voice is soothing. In the loving (clear-cut attachment) phase, separation distress function of attachment is added. The

physical and eye contacts are frequent but not prolonged, the conversation is less emotional and more mundane, and the voice is contextually soothing or normal. In the life as usual (goal-corrected partnership) phase, the secure base component is added. This phase is described with the less frequent prolonged physical and eye contact, mundane conversation, and normal voice quality. Zeifman and Hazan (1997) categorized the first two phases as non-attached romantic relationship, and the last two phases as the attached romantic relationship. They added that these are the normative development phases and there would be differences according to the age, attachment style, sex, culture, and values.

A few empirical studies explored the attachment components among college students (Fraley & Davis, 1997; Trinke & Bartholomew, 1997). Parents are attachment figures for proximity seeking, safe haven, and secure base for children, and these functions are transferred to romantic partner. Trinke and Bartholomew (1997) found that college students used romantic partners as attachment figures. Sixty-two percents among students who were in the romantic relationship ranked romantic partner as the highest among attachment figures, and 23 percents among the students in the romantic relationship still reported that mother was the primary attachment figure.

This transference occurs from proximity seeking function to the safe haven function, and finally to the secure base function (Fraley & Davis, 1997; Hazan, et al., 1991, cited in Fraley & Shaver, 2001; Trinke & Bartholomew, 1997; Zeifman & Hazan, 1997). Before the full transference, parents still play roles of attachment figures for young adulthood. Trinke and Bartholomew (1997) reported that the primary attachment figures of college students who were not in the romantic relationship were mothers. Even among people who were in the romantic relationship sought the secure base function

from their parents rather than from their romantic partner (Fraley & Davis, 1997). These results suggested the transfer of attachment from parents to romantic attachment (Hazan, Hutt, Sturgeon, & Bricker, 1991, cited in Fraley & Shaver, 2000). The length of romantic relationships and their attachment seem to affect the fulfillment of the adult attachment functions.

Hazan and her colleagues (1991) said that it took two years to develop the romantic attachment (cited in Fraley & Davis, 1997). People who were longer in the romantic relationship tended to use their romantic partners as attachment figures for safe haven and secure base (Trinke & Bartholomew, 1997). Fraley and Davis (1997) reported that the mean months for which participants had been involved in the romantic relationship related to the attachment functions. People have been involved in the romantic relationship with the proximity seeking function only have been involved in the relationship for 18.42 months; with the proximity seeking and safe haven function for 21.61 months, and with proximity seeking, safe haven, and secure base function for 23.19 months. The length of the relationship was also related not only to the attachment function but also to the development of adult attachment styles.

Securely attached people were more likely to use romantic partners as the attachment figures than the insecurely attached people (Fraley & Davis, 1997) and reported less frequency of break-up (Kirkpatrick & Hazan, 1994). Anxious attachment and avoidant attachment were related to the short-term romantic relationships and insecurely attached people were likely to be less involved in the romantic relationships (Fraley & Davis, 1997; Kirkpatrick & Davis, 1994; Shaver & Brennan, 1992). Kirkpatrick and Davis (1994) reported no anxious-anxious couple and avoidant-avoidant

couple among 354 heterosexual couples. Shaver and Brennan (1992) reported that people who were categorized into anxious attachment style were less involved in the romantic relationship. Fraley and Davis (1997) reported that people with dismissing attachment style developed less attachment relationships. They discussed that dismissing group was lack of attachment functioning including proximity-seeking, safe-haven, and secure base.

Adult romantic relationship includes caregiving system and mating/reproductive system as well as the attachment system (Hazan & Shaver, 1987; Shaver et al., 1988). Sex is included in adult attachment because adult attachment is usually developed in romantic relationship. Sex plays an important role especially in the beginning phase of the attachment relationship and the factors that maintain the relationships are attachment and caregiving (Ainsworth, 1989; Hazan & Shaver, 1994). Adults in attachment relationships get care and security from their partners, and at the same time, they provide care and protection to their partner.

Caregiving System

Caregiving in Infant-caregiver relationships

The behavioral systems in the infant-caregiver relationships consist of infant's attachment system and the caregiver's caregiving system (Bowlby, 1982; Solomon & George, 1996, 1999). While the goal of attachment system is maintaining proximity to caregiver for safety and survival, the goal of caregiving is mainly to protect the infant from the threat (Bowlby, 1982; Solomon & George, 1996, 1999). As infants experience emotions based on the caregiver's availability and sensitivity, the caregivers also have strong emotions related to caregiving. Parents feel happy and satisfied when they can

protect their children from the danger and threat; they feel sad, anxious, and angry when they cannot protect their children (George & Solomon, 1999).

The reciprocal infant-caregiver relationship (Ainsworth, 1974; Bowlby, 1982; George & Solomon, 1999) is also supported by the laboratory strange situation observations (Ainsworth et al., 1978). The mother of secure infant was more sensitive, available, and accepting than the mother of insecure infant. The mother of avoidant infant tended to be angry, compulsive, and rejecting to the infant's seeking proximity. The mother of infant who developed anxious attachment was inconsistent to infant's needs: sometimes the mother was not available and sometimes intrusive. Based on the observation, Ainsworth and her colleagues (1974, 1978) suggested that the quality of mother's caregiving is related to the acceptance (vs. rejection), cooperation (vs. interference), and responsiveness (vs. insensitiveness).

George and Solomon (1996) supported the relationships between mother's caregiving and the attachment of children. They also suggested four dimensions of mother's caregiving: secure base, rejection, uncertainty, and helplessness. Mother's Secure base represents being sensitive to the infant's needs, by offering safety, discipline, and punishment, and encouraging exploration and independence. Rejecting caregiver tends to be strict, demanding, and impatient, offering the limited protection, and keeping the distance from them. Uncertain caregiver also offers the limited protection because she does not know what is right and wrong, positive and negative, and effective and ineffective caregiving. Hopeless caregiver does not have the effective and appropriate resources for caregiving and tend to play a role of infant with the role-reversal. The mother of infant classified into the secure attachment was higher in Secure base

caregiving, the mother of avoidant infant was higher in Rejection caregiving, and the mother of anxious infant was higher in Uncertainty caregiving. They also included, in the child attachment, the category of controlling showing punitive care taking manner toward the mother, and found that their mother was higher in Hopeless caregiving. The caregiving is not only related to the infant's attachment, but also to the caretaker's characteristics including their own attachment.

George and Solomon (1996) explored the relationships between caregiving and mother's own attachment. To measure the adult attachment, they used Adult Attachment Interview categorizing the adult attachment into Autonomous (secure), Detached (dismissing avoidant), Enmeshed (anxiety/preoccupied), and Unresolved (fearful avoidant). The Secure base caregiving was frequently observed among Autonomous adults, Rejecting caregiving among Detached adults, Uncertain caregiving were found among Enmeshed type of adults. The Helpless caregiving was observed among both Enmeshed and Unresolved adults

The caregiving system of parents comes from the attachment system of their own (Solomon & George, 1996). van Ijzendoorn (1995), in his review paper, reported that the sensitive response to their children's needs was explained by 12% by their own secure attachment. Securely attached parents perceived their children's need accurately and responded to them appropriately and timely. A few studies explored the relationships between caregiver's attachment and caregiving quality in infant-caregiver (Cowell & Fieldman, 1991; Solomon & George, 1996). Cowell and Fieldman (1991) observed mother's behavior in the laboratory separation-reunion situation. When they left the room, secure mothers were affectionate and prepared their children to deal with being alone;

avoidant (dismissing-avoidant) mothers less prepared their children, anxious (preoccupied) mothers prepared their children because of their own anxiety. At the reunion, secure mother approached to their children, avoidant mother kept the distance, and the anxious mother did not come closer to their children.

Across different caregiving styles, the infant-caregiver relationship is complimentary and asymmetrical considering that the infants are supposed to receive care and the caregivers are supposed to give care (Ainsworth, 1989). Unlike the complimentary infant-caregiver relationship, the reciprocal and symmetrical relationship is considered to be desirable in the adult romantic relationship (Ainsworth, 1989).

Caregiving in adult relationship

Caregiving is an important part of adult romantic relationships with attachment system and mating/reproduction system (Hazan & Shaver, 1987; Shaver et al., 1988). Unlike the caregiving to infant, the adult caregiving is bi-directional, and each partner can be both a receiver and giver of the support, comfort, and security (Ainsworth, 1989; Fraley & Shaver, 2000; Shaver, et al., 1988). Shaver and Hazan (1988) suggested the optimal functioning of the attachment and caregiving system included identifying appropriate caregivers, exhibiting attachment behavior, playing a role of attachment figure or caregiver.

Adult caregiving is defined as the caregiver's behavior that responds to partners' need for security and supports them to pursue their autonomy and to explore the environment (Kunze & Shaver, 1994). Kunze and Shaver (1994) developed the Caregiving Questionnaire (CGQ) to measure adults' caregiving behaviors to their partners. Initially, they suggested seven caregiving dimensions based on the literature of

the parents-infant relationships: Sensitivity vs. Insensitivity, Acceptance vs. Rejection, Cooperativeness vs. Uncooperativeness, Accessibility vs. Inaccessibility, Physical contact, Affective expression, and Compulsive caregiving. Later, they combined acceptance, accessibility, physical contact, and affective expression into Proximity versus Distance. The proximity and the sensitivity caregiving play important roles in the children's development, and they are also essential factors of adult caregiving. Kunce and Shaver (1994) said that Cooperation vs. Control caregiving and Compulsive caregiving behaviors needs to be considered in adult caregiving patterns, considering the importance of developing autonomy and exploration of the world.

Carnelley and his colleagues (1996) operationally conceptualized the caregiving as high reciprocity and low neglecting between the romantic partners. They included three aspects of caregiving: reciprocal caregiving, engagement in caregiving, and neglectful caregiving. Reciprocal caregiving presents that both partners give and receive same amount of care. Engagement in caregiving measures how active partners are when offering care. Finally, the Neglectful caregiving presents neglecting partner's needs. Studies on caregiving have explored the relationships between caregiving and attachment because of the theoretically strong relationships between them.

Secure attachment is related to the positive caregiving. Shaver and Hazan (1988) claimed that securely attached adult felt comfortable in giving care compared to insecurely attached adults. The adults with avoidant attachment style cannot give the support because they were rejected and could not get the care from others. The anxiously attached adults offer the self-sacrificing and compulsive care because they could not get the consistent care from others. The empirical studies explored the relationships between

adult attachment and caregiving (Carnelley, et al., 1996; Feeney & Collins, 2001; Kunce & Shaver, 1994; Simpson et al., 1992; Shaver & Hazan, 1988). They showed the relationships between secure attachment and positive caregiving including responsiveness and sensitiveness, and the relationships between insecure attachment and the negative caregiving.

Kunce and Shaver (1994) found that securely attached people were more accepting, accessible and cooperative, and showed more physical contact and affective expression. On the other hand, people with avoidance attachment style were less sensitive, accepting, accessible and emotionally expressive. Preoccupied group showed acceptance and accessibility like the securely attached people, but they were lack of sensitivity and offered the compulsive caregiving (Kunce & Shaver, 1994). Carnelley et al. (1996) found that fearful-avoidant adults tend to neglect partner's need. However, they reported that the preoccupied attachment was not significantly related to the caregiving.

Feeney and Collins (2001) examined the relationships between adult attachment and caregiving. They combined proximity and sensitivity from CGS (Kunce & Shaver, 1994) into responsive caregiving. They reported that people with avoidant attachment style were not responsive to the partner's need and were dominant and controlling in offering caregiving to their partners. Anxious adult were intrusive, over-involved, and controlling, but were responsive to the partner's need.

The caregiving behaviors that are associated to the adult attachment were also observed in the stress-provoking laboratory experiment (Simpson et al., 1992; Collins & Feeney, 2000; Feeney & Collins, 2001). Simpson and his colleagues (1992) found, observing the couple interactions in their laboratory anxiety-provoking situation, that

securely attached men showed more positive caregiving behaviors and less negative caregiving behaviors to their female partners. Avoidant men expressed less positive and more negative caregiving and supporting behaviors compared to the securely attached adult. However, anxious men were not significantly different from the other groups in terms of caregiving (Simpson et al., 1992).

Feeney and Collins (2001) also observed the couple interactions in the stressful laboratory experiment. They found that avoidant people did not provide the emotional support under the high and low stress situations, but offered the instrumental support to their partners when their partners experienced low level of anxiety. Collins and Feeney (2000) found the relationship between anxious attachment and caregiving. They observed the anxiety provoking conversations between the romantic partners, and found that anxious people were less responsive, did not offer effective emotional and instrumental social support, and gave more negative support, such as avoiding the problems and blaming the partners. It was more obvious especially when avoidant partners did not seek support from them.

Avoidant adults cannot give qualified caregiving because they were rejected by their caregiver and did not have a role model (Shaver & Hazan, 1988; Feeney & Collins, 2001). The comfort to the closeness is related to the readiness to give emotional support (Feeney, 1996), and avoidant adult do not feel comfortable in being close. Also, they are lack of skills and motivation to take care of others, which is related to the lack of intimacy and trust (Feeney & Collins, 2001). Anxious people cannot give the positive caregiving because they worry that their partner may leave them (Feeney, 1996; Shaver

& Hazan, 1988). However, their motivation is selfish and they pay attention to their own interest, and thus, their caregiving is controlling and intrusive (Feeney & Collins, 2001).

Attachment, and Caregiving, Perceived Social Support

Perceived social support is the cognitions about whether the support is available when necessary (Acitelli & Antonucci, 1994; Sarason et al., 1991). The perceived social support includes perceptions about caring from others, belongingness to a group of similar others, positive evaluation from others, advice and information from others, tangible assistance offered by others, and providing support to others (Cutrona & Russell, 1987; 1990). As a personality characteristic, perceived social support is considered being stable through time (Sarason et al., 1989). Sarason et al. (1989) found that the perceived availability of social support was stable over up to 3 years, even during periods of developmental changes like moving to a new environment. Researchers showed that perceived support is related to coping effectiveness, adjustment outcome and psychological and physical well being (See Sarason, 1991). The perceived social support was overlapped with the actual social support but it was also differentiated from the actual social support (Sarason et al., 1991).

The perceived global social support is more than the sum of domain specific social support from others, and includes the interpretation of the both actual and imagined behaviors and motivations of others (Coble, et al., 1996; Davis, Morris, & Karus, 1998; Sarason et al., 1991). Davis and his colleagues (1998) suggested that the domains specific social support including four domains - family, friends, faculty, and faculty advisor, and the global perceived social support was more than the sum of domain specific social

support. Davis and his colleagues (1998) reported the correlations between the domain specific perceived social support and the global social support.

In addition, it needs to be noted that the perceived social support and the actual social support affect each other (Sarason et al., 1991). Collins and Feeney (2000) reported the strong correlations between actual social support and perceived social support. They found that people perceived more support from their partners when they offered instrumental and emotional social support.

The internal working model developed through the attachment relationships offer the frame to interpret and perceive the social support (Bowlby, 1973; Coble, et al., 1996; Sarason et al., 1991; Ptacek, 1996). When the attachment figure was responsive and supportive, people develop the positive sense of self and others, and consider that they are worthy of being supported and cared by others, and others will be accessible and supportive in need. Secure adults have belief that they would be able to get social support from others in need (Bowlby, 1973). Thus, securely attached people easily utilize the social support, and perceive others' behavior and motivation as favorable and secure. On the other hand, avoidant and anxious people perceive others inaccessible and unsupportive (Coble et al., 1996).

There are many empirical studies supporting the relationships among adult attachment, internal working model, and perceived social support (Anderson & Tucker, 2000; Collins & Feeney, 2000; Kobak & Sceery, 1988; Ognibene & Collins, 1998; Priel & Shamai, 1995; Sarason et al., 1995; Trinkle & Bartholomew, 1997). Securely attached people perceived more social support and were more satisfied with social support compared to the insecurely attached adults (Anderson & Tucker, 2000; Kobak & Sceery,

1988; Priel & Shamai, 1995). They also reported the bigger size of social support and higher satisfaction (Sarason, et al., 1991). Ognibene and Collins (1998) reported that secure adults sought more support and thus, they perceived more support from family and friends.

The higher anxiety and avoidance were related to the less perceived social support (Anders and Tucker, 2000; Priel & Shamai, 1995). Kobak and Sceery (1988) found that dismissing adult perceived low social support from the family compared to the secure adults, and preoccupied adults perceived higher family social support compared to the dismissing. Unlike Kobak and Sceery (1988)'s results, some studies reported no significant difference in the perceived social support between people with avoidant and anxious attachment styles (Anders & Tucker, 2000; Priel & Shamai, 1995). Avoidant people do not think that others will offer support and help them when they need; and anxious people are not satisfied with the social support (Anderson & Tucker, 2000). Ognibene and Collins (1998) also reported that preoccupied adults were high in support seeking but low in the perceived social support from family and friends. Anderson and Tucker (2000) explained the low social satisfaction among anxious people with negative expectations, heightened negative attribution, and negative memories. Based on the working model, anxious people expect that others would not be helpful and assertive.

Social support is the process in which not only attachment but also caregiving system is involved (Bowlby, 1982; Feeney& Collins, 2001). Kuncze and Shaver (1994) reported the significant positive correlations between self-report caregiving of male partner and the caregiving perceived by female partner. There was no relationship between women's self-reported sensitivity and the male partner's rating. This implies that

perceived social support is related to the actual caregiving but also includes more than the actual caregiving behaviors of the partner. The characteristics of caretaker as well as care seeker affect the perceived social support (Fincham & Bradbury, 1990). Feeney and Collins (2001) reported that the attachment style of caregiver was related to the perceived social support of the adult partner (Feeney & Collins, 2001). The perceived social support is related to the satisfaction of couple relationships.

Adult attachment, and Caregiving, Perceived Stress and Support Seeking

Social support seeking is one of the strategies for people to adopt in order to deal with the stressful situation (Folkman, 1984). Under the stress, people evaluate how much threatening the stressful situations are, and then appraise if they can deal with it or not (Folkman, 1984). Seeking support is important part of attachment system for safety and survival (Ainsworth, 1989). In the anxiety-provoking situations, people seek the social support from the attachment figure to get comfort, and the strategies vary according to their attachment. The anxiety is related to the hyper-activating coping strategies and the avoidance is related to the deactivating coping (Mallinckrodt, 2000). The empirical studies examining the relationships between attachment and social support seeking in the adult romantic relationships are reviewed.

The empirical studies explored these relationships (e.g. Anderson & Tucker, 2000; Collins & Feeney, 2000; Fraley & Shaver, 1998; Mikulincer et al., 1993; Mikulincer & Florian, 1996; Ogibene & Collins, 1998; Simpson et al., 1992). The secure adults feel comfortable in seeking the social support and utilize social support (e.g. Collins & Feeney, 2000). They also express their feelings easily, and thus, they are good

at seeking support and help in needs (Ogibene & Collins, 1998). These relationships are not consistent under different levels across related studies.

Some studies showed the difference of seeking social support among secure adult according to the severity of the stress. Ogibene and Collins (1998) reported that secure attachment was positively associated with seeking social support under the high stress, but securely attached adults sought less support under the low stress. Kemp and Neimeyer (1999) found no relationship between the secure attachment and support seeking and discussed that it was because secure adult sought social support when they had big stresses. However, Mikulincer and his colleagues (1993) reported that the level of stress was not associated with the social support seeking of secure adults. They examined the attachment and coping strategies of Israel college students after the Squid Missile attack during the Gulf War. They reported that the secure adults sought social support regardless the level of the dangerousness of the regions where they lived.

The avoidant adults have difficulty in seeking support because they do not trust others and others will not help them (Shaver & Hazan, 1988). Wallace and Vaux (1993) examined the relationships between attachment and network orientation (expectations to the social support). They found that avoidant adults did not use support network to discuss the problems and to get advices from others. Anderson and Tucker (2000) observed the anxiety provoking laboratory situation and found that avoidant people did not disclose themselves and did not actively seek the help from others, and thus got less social support. Collins and Feeney (2000) observed the dating couples discussing stressful events in the laboratory and found that avoidant people sought less social support from their partners when the stress increased. Mikulincer and Florian (1996)

tested the attachment styles and coping strategies among Israel young adults after their 4 months combat training. The attachment styles were measured before the training and the coping strategies were measured immediately after the training. They reported that Avoidant adults presented less social support seeking.

The stress level was also related to the social support seeking of the avoidant adults (Fraley & Shaver, 1998; Ogibene & Collins, 1998). Fray and Shaver (1998) observed dating couples in the natural airport situation. Avoidant women felt comfortable about seeking support when separation was not expected (low stress), but did not seek support and kept the distance from their partners when the separation was expected soon (high stress). Simpson and his colleagues (1992) reported the same results. The avoidant women sought the more support and comfort from their partner when the anxiety was low, but pulled away from their partners physically and emotionally when the anxiety increases (Simpson et al., 1992). Ogibene and Collins (1998) reported that dismissing attachment was not associated with the support seeking in the low stress but the support seeking of people with dismissing attachment style was low under the high stress.

The anxiously attached adults showed the similar level of seeking social support as the securely attached adults did (Ogibene & Collins, 1998; Simpson, et al., 1992; Mikulincer et al., 1993). Wallace and Vaux (1998) found that the anxious adults used support network as much as the secure adults did. Simpson and his colleagues (1992) also found no relationships between anxiety and actual contact-seeking behaviors. The anxious adults seek support from others because they want to depend on others though they cannot trust them and do not believe that others will help and support them (Shaver & Hazan, 1988; Wallace & Vaux, 1998). However, Mikulincer and Florian (1996)

reported that anxious college students sought less support than secure college students after the Squid Missile Attack during Gulf War. They discussed that this results might because they were asked to report retrospectively and they were not supposed to be with others. Collins and Feeney (2000) reported that anxiety was not related to the support seeking and but discussed this results in terms of the limited laboratory situation. There was interaction effect of anxiety and avoidance, and people who were high in both anxiety and avoidance showed less support seeking. They added that anxious people were not assertive in seeking help because of fear of rejection in spite of their strong desire for closeness, and that the laboratory situation may not have detected this.

The relationships between the social support seeking and the caregiving from the partners were not studied. It may be because that the support seeking is an important part of attachment with a safe haven function of attachment, and the studies on attachment and caregiving conceptually include the support seeking factors. Another reason may be that the adult caregiving is not much studied yet. Adult working model can be conceptualized as the working model of attachment - caregiving including support seeking and caregiving behavior (Collins & Feeney, 2000). This study will examine the social support seeking variables related to attachment and caregiving. In addition to the support seeking, perceived social supports from the partners and from others needs to be considered.

Adult attachment, caregiving, social support, and Romantic Relationship Satisfaction

The couple satisfaction has been studied as an evaluative characteristic of the couple relationships. In this section, the literatures of couple satisfaction, related to adult attachment, caregiving and social support, will be reviewed.

Adult attachment and couple satisfaction

The quality of the romantic relationship has been studied in relations with the adult attachment since Hazan and Shaver's pioneering study on adult attachment (1987). Hazan and Shaver (1987) reported that securely attached adults experienced their romantic relationships more positively than insecure adults. They perceived their current romantic relationships as happy, friendly, and trusting. Avoidant people experienced fear of closeness and anxious/ambivalent people presented higher jealousy, desire for union, desire for reciprocation, and love at first sight. Furthermore, adult attachment was related to the expectations about future relationships and secure attachment was positively related to the optimism about their future relationships (Pietrimonaco & Carnelley, 1994).

Regarding relationship satisfaction, securely attached people presented higher relationship satisfaction and both avoidant and anxious attachment was negatively related to the couple relationship satisfaction (e.g. Stackert & Bursik, 2003). Some studies explored the marital satisfaction among the married couples and other studies examined the couple satisfaction among the dating couples.

The studies empirically examined the relationships between adult attachment and the marital satisfaction (Cohn, et al., 1992; Feeney, 1996, 1999, 2002; Meyers & Landsberger, 2002). They found the positive relationships between the secure attachment and marital satisfaction; and the negative relationships between the insecure attachment and the marital satisfaction. Feeney (1999) found that both own anxiety and partner's anxiety were negatively related to marital satisfaction; and own comfort was positively related to marital satisfaction. Cohn et al. (1992) reported that the adult attachment was not significantly associated with the self-report marital satisfaction. However, they found

that adult attachment was related to the observational rating of the marital satisfaction. Secure husband presented positive behaviors and less conflict in the marital relationships, and the insecure-insecure couples were less functional than secure-secure and secure-insecure couples. The studies among college students presented the similar results (Brennan & Shaver, 1995; Carnelley, et al. 1996; Collins & Read, 1990; Kirkpatrick & Davis, 1994; Levy & Davis, 1988; Stackert & Bursik, 2003). They also reported that individuals with an insecure adult attachment style reported less relationship satisfaction than securely attached individuals.

Caregiving and Couple Satisfaction

There are relationships between caregiving from the partner and the quality of couple satisfaction. Feeney and Collins (2001) reported that the couples presenting care and support in their interactions frequently described their relationships as satisfactory. Especially partner's responsiveness was positively associated with the relationship satisfaction (Feeney, 1996; Feeney & Collins, 2001). However, the causal relationship between caregiving and relationship satisfaction is not clear (Collins & Feeney, 2001; Kuncie & Shaver, 1994). Kuncie and Shaver (1994) discussed that secure adults might have reported more positive caregiving behaviors and concerns about their partner because they were committed to and satisfied with their romantic relationships (Collins & Feeney, 2001; Kuncie & Shaver, 1994). The relationship between the caregiving and couple satisfaction is more important in the long term relationship compared to short term relationship in which sexual attraction is important factor in relationship satisfaction (Feeney, 1996).

Perceived Social Support and Couple Satisfaction

There are a few studies that examined the connection between social support and relationship satisfaction (Acitelli, 1997; Sarason et al., 1994). Acitelli (1997) suggested that it was necessary to examine the relationship between support and satisfaction in romantic relationships rather than just assuming the couple's relationship is supportive. Several studies found that high level of social support was associated with high couple satisfaction.

Partner's support within the marital relationship was strongly related to marital satisfaction (Brunstein, et al., 1996; Collins & Feeney, 2000; Coyne & Anderson, 1991; Julien & Markman, 1991). Brunstein and his colleagues (1996) found that perceived support from intimate partners predicted the relationship mood and relationship satisfaction four weeks later. Collins and Feeney (2000) also reported the positive correlation between perceived support and couple satisfaction. In their laboratory study, they found that people who were satisfied with their couple relationship perceived more support.

Not only the perceived social support from the partner but also the social support from others is related to the couple satisfaction. Lee (1988) reported that the social supports from others including friends and family enhanced marital satisfaction. Among avoidant women, lack of social support from others was related with lower marital satisfaction (Meyers & Landsberger, 2002). However, McGonagel, et al. (1992) and Julien and Markman (1991) found opposite results. McGonagel and his colleagues (1992) found that wives' perceptions of support from friends and husbands' perceptions of support from friends predicted the marital disagreement. Julien and Markman (1991)

reported that social support from others related to the couple problems decreased the couple adjustment. They discussed that it was because the couple's commitment was decreased and the conflict was not resolved by getting outside support. The sex difference is also an important factor to be considered in these relationships.

Sex Differences

The literatures related to attachment, caregiving, social support, and couple satisfaction have been reviewed. The sex differences found in each variable and the relationships among the variables will be reviewed and the implications will be discussed related to the sex role socialization.

Sex Differences in Attachment

Several studies reported the sex difference in the adult attachment but the results were not consistent (Cooper et al., 1998; Feeney, 1996; Mickelson et al., 1997). Cooper et al. (1998) reported that men presented more secure attachment styles than women while Mickelson et al. (1997) reported the opposite result that women were more securely attached than men. Feeney (1996) found that there were no sex difference in the secure attachment and reported that more dismissing attachment style were found among men and more preoccupied and fearful styles were found among women. Fraley and Shaver (1998) argued that discussing the sex difference is premature because the results are inconsistent and it does not have theoretical background. It was recommended to examine the sex differences using the sex role orientation variables (Fraley & Shaver, 1998; Stackert & Bursik, 2003).

A few studies found the relationships between the adult attachment and sex role (e.g. Collins & Read, 1990; Shaver et al., 1996). Collins and Read (1990) examined the

relationships between attachment dimensions (close, anxiety, and depend) and sex role. The found that close and depend dimensions were positively related to femininity and negatively associated with the masculinity. The anxiety was positively related to the femininity.

Shaver, Papalia, Clark, Tidwell, and Nalbone (1995) reported that attachment style and sex-role typology was associated. Androgyny, which includes both masculinity and femininity, was found among secure attachment more frequently than among insecure attachment. Femininity was more frequently found among anxious attachment and masculinity was among avoidant attachment. They discussed that the two concepts of adult attachment and sex role are different, although both of them are related to the self-esteem and relationship satisfaction. They added that sex role is related to the gender but attachment was not related to the gender as a gender-natural concept (Shaver et al., 1995). Though the studies including the sex role were limited, many studies found the sex difference in the relationships among attachment, caregiving, social support, and relationship quality.

Sex Differences in Relationship Satisfaction

Many studies have reported different patterns among men and women in the relationships between attachment and romantic relationship satisfaction (Collins & Read, 1990; Kirkpatrick & Davis, 1994; Pietrimonaco & Carnelley, 1994; Simpson, 1990). The empirical studies found that women's anxiety was negatively associated with both their own perceived relationship satisfaction and their partner's perceived satisfaction (Collins & Read, 1990; Simpson, 1990; Kirkpatrick & Davis, 1994; Pietromonaco & Carnelley, 1994). Anxiously attached female has high expectation about interpersonal relationship,

caring, and emotional expression, which is also supported by the sex role socialization. Their expectation is not fulfilled and the discrepancy between their expectations about relationships and the actual relationships may activate their anxiety of rejection and abandonment, and thus be unsatisfied with their romantic relationships (Pietrimonaco & Carnelley, 1994). From the perspective of the male partners, the anxious women's needs and behavior seeking strong intimacy and merging relationship may threaten them, who are socialized to pursue the autonomy and independence rather than the interpersonal relationships and the emotional expression (Collins & Read, 1990; Kirkpatrick & Davis, 1994; Simpson, 1990). Women's avoidance was not significantly related to the partner's perceived satisfaction (Simpson, 1990; Kirkpatrick & Davis, 1994). Women's avoidant attachment may not have much discrepancy from male partner's expectation to romantic relationships.

For men, avoidant attachment was related to relationship quality. Men with avoidance attachment rated the relationship more negatively (Collins & Read, 1990; Simpson, 1990; Pietromonaco & Carnelley, 1994). Traditional male role emphasizes work more than relationship and restraints of feelings, and the avoidant men may feel unpleasant and unsatisfied with the interpersonal and emotional expression in the romantic relationships. The results on men's anxious attachment and relationship satisfaction are not consistent. Lussier and his colleagues (1997) reported the negative relationships between husband's anxiety and the wives' marital satisfaction. Some studies reported no significant relationships between them (Simpson, 1990; Kirkpatrick & Davis, 1994). It may not threaten women who are socialized to be relationship-oriented and have learned to express feelings.

Pietromonaco and Carnelley (1994) discussed the importance of sex-role stereotype comparing the anxious women-avoidant men couple and avoidant women-anxious men couple. In the avoidant men and the anxious women pairs, they are not satisfied their relationship but continue the relationship because their working model is confirmed through the relationship. However, the relationship between avoidant women and anxious men is not stable though they confirm each other's working model. They explained this with the reason that those attachment styles were not different from their sex role stereotype.

Sex Differences in Caregiving and Couple Satisfaction

The studies that explored the relationships among attachment, caregiving and relationship satisfaction presented the sex difference (Feeney, 1996; Kuncce & Shaver, 1994). Generally, women displayed positive caregiving more frequently than men (Kuncce & Shaver, 1994). Feeney (1996) reported that female partner offered more responsive caregiving and less compulsive caregiving. Kuncce and Shaver discussed this result in terms of socialization process. During socialization, women got more positive feedback with the caregiving behaviors, which is the stereotype of female gender role.

The partner's care was important for women's relationship satisfaction but less important for men's relationship satisfaction (Feeney, 1996; Shaver et al., 1996). Shaver and his colleagues (1996) found, among college students, that women's relationship satisfaction was related to their own attachment and partner's caregiving; while men's relationship satisfaction was significantly associated to their own attachment and partner's attachment, but not partner's caregiving. Cohen and his colleagues (1992) reported the similar results. They reported that the relationships between women's adult

attachment and marital satisfaction were mediated by the husband's attachment related working model while men's adult attachment and marital satisfaction are directly related to each other.

Feeney (1996) found that husband's responsive care was important for wives' marital satisfaction. They also reported that wives' responsive care was significantly related to the husband's satisfaction when husbands' attachment related anxiety was high. Feeney (1996) discussed these results in terms of male sex role. Anxious adults has strong needs to be close to and to depend on their partners. These behaviors are not consistent to the male sex role and men may not express what they needs. When their female partners offer the responsive caregiving, their unexpressed needs are fulfilled and thus, they are likely to feel satisfied with their marital relationship.

Sex Difference in perceived social support and the couple satisfaction

The sex differences in the relationships between social support and relationship satisfaction has been reported. Many studies reported the higher social support among women than among men (e.g. Acitelli & Antonucci, 1994). Acitelli and Antonucci (1994) discussed three reason of sex difference in social support from partner: methodological problems, sex-role expectations, and social support sources. First, the measurements that assess the social support include the emotional support and support behaviors that are more frequently found among women. Second, even though men got the social support from their female partners, it is difficult for them to accept because of their sex-role stereotype that emphasizes the autonomy and independence. Finally, men have more diverse sources of social support including friends and colleagues at work compared to women.

The sex differences in the relationship between social support and relationship satisfaction were also found (Acitelli & Antonucci, 1994; Brustein, et al., 1996). Husbands' perceived social support from their wives was related to their marital satisfaction (Cutrona & Shur, 1994). Husband's support was more important for the wife's marital satisfaction compared to wife's support to husband's satisfaction (Acitelli & Antonucci, 1994; Antonucci & Akiyama, 1987; Julien & Markman, 1991; Sarason et al., 1986).

Cultural Differences

Culture is the process in which people experience themselves, society, and the world; and thus there are both similarities across different cultures and diversities within cultures (Oyserman et al., 2001; Rothbaum, et al., 2000). Recently, there have been efforts to understand the unique process of attachment, caregiving, and social support in a specific the culture (Dilworkth-Anderson & Marshall, 1997; Rothbaum, et al, 2002; Solomon & George, 1996; 1999; van Ijzendoorn & Sagi, 1999;).

The cross-cultural studies adopt the perspective of either 'etic' or 'emic' to understand the similar and different phenomenon across cultures. In the perspective of 'etic' approach that emphasizes universality, the theories developed in a specific culture are applied to other cultures considering the phenomena are common. On the other hand, the studies adopting the 'emic' perspective pay attention to the cultural specific phenomenon and uses cultural specific references to understand the cultural phenomenon (Berry, 1969; van Ijzendoorn & Sagi, 1999).

Strictly speaking, most of the studies adopted 'etic' perspective. The theories and measurement that are applied to the minority groups of people from different culture have

been based on the findings among White Americans (Rothbaum, et al., 2000). The similarities across the culture can be caused by the measurement and theoretical frame from Western culture, and the difference still may not capture the cultural specific phenomenon (Rothbaum, et al., 2000). However, exploring the cultural difference, even using the theory and measurement from Western culture, is an important beginning step to understand the common and cultural specific phenomenon.

Attachment and Cultural Difference

The cross-cultural perspective in the attachment study was adopted recently (e.g. Rothbaum et al., 2000; van Ijzendoorn & Sagi, 1999). The attachment process had been considered as the universal phenomenon because the attachment behavioral system has the biological basis (Ainsworth, 1989; Bowlby, 1969). The empirical study adopting etic perspective goes back to the Ainsworth's study in Uganda (1967). Ainsworth replicated her strange situation experiment in Uganda and found the similar interaction infant and the caregiver, which was important for the secure attachment.

Van Ijzendoorn and Sagi (1999) meta-analyzed the studies on attachment across different cultures and examined four hypotheses: Universality hypothesis, Normativity hypothesis, Sensitivity hypothesis, and Competence hypothesis. Universality hypothesis suppose that all infants have one or more caregiver who are attachment figures. Normativity hypothesis suggest that secure attachment is normal in terms of frequency and physiology (relatively easily settled down). Sensitivity hypothesis is that the sensitive response of caregiver to the infant's need plays an essential role for the secure attachment. Competence hypothesis suggests that securely attached child is better in cognitive ability, emotional regulation, and interpersonal relationship.

Van Ijzendoorn and Sage (1999) supported these hypotheses: they found that the patterns of attachment behaviors were similar across the different cultures and the secure, avoidant, and anxious attachment behaviors were observed in different cultures (universality hypothesis). The secure attachment was the majority across the cultures (normativity hypothesis), parents' sensitivity and responsiveness was important in the development of secure attachment (sensitivity hypothesis). They also reported that the secure attachment was related to the future social competence, although the studies related to the competence was a few (competence hypothesis).

Rothbaum and his colleagues (2000, 2001) also supported that the proximity seeking and separation protest that were fundamental attachment components were relatively universal. The tendency to keep the closeness to attachment object and feeling distress with the separation from attachment object were commonly observed across cultures. However, they questioned about the sensitivity and competence hypotheses that van Ijzendoorn and Sage (1999) considered universal, and suggested the cultural difference in the secure base on attachment especially comparing among Japanese and Western cultures.

Rothbaum and his colleagues (2000) suggested that there were differences in the expression, timing, and objectivity of sensitivity among Japanese and Western culture. Japanese had extended physical proximity and responded to the anticipated infant's signal to increase the dependence and closeness. Regarding the competence, the social competency in the Western culture including exploration, autonomy while independence is not desirable in Japanese culture emphasizing harmony, self-criticism, and self-effacement. In terms of secure base component, Japanese use the caregiver as a secure

base for dependence, accommodation, and interdependence rather than exploration, individuation, and autonomy. The exploration of the world is the process of individualization, which is considered healthy in Western culture but less important among Japanese. Rothbaum and his colleagues (2000) argued that the attachment phenomenon was different in terms of attachment antecedent (sensitivity), consequence (social competence), and the nature (secure base).

These results, based on findings among Japanese, cannot be applied automatically to other Asian cultures without examination. The historical experience also affects the attachment process (Rothbaum, et al., 2000), and it needs be avoided to determine the characteristics of cultures just based on the regional background (Oyserman, 2001). Regarding the attachment styles, Japanese may have higher attachment-anxiety and lower attachment-avoidance (Rothbaum et al., 2000). As it were, they may experience more anxiety in separation situation because it is not usual experience, and lower avoidance because of their closer and more interpersonal relationships compared to Americans. However, Taiwanese people reported higher anxiety and avoidance compared to the U.S. people for their actual and ideal attachment (Wang & Mallinckrodt, 2003). The cultural differences are also found in the caregiving.

Cultural Differences in Caregiving

The optimal caregiving may vary according to the context of culture (Carson & Harwood, 2003; Solomon & George, 1996; 1999). Carson and Harwood (2003) said that the optimal sensitivity of caregiver depended on the cultural goal, value, and belief system. The goal of caregiving is protection form the threats: some threats, especially physical threat, are universal and others are culturally developed (Carson & Harwood,

2003). In the Western culture, the goal of caregiving is the independence and autonomy of the child and balancing between proximity and encouragement for exploration determine the optimal caregiving (Solomon and George, 1996). The caregiver keeps the proximity to protect the child, and at the same time encourages exploration and independence as the child become older. In Japanese culture, the dependence, accommodation, and harmony are valued goals among Japanese and the optimal balance may weigh on the keeping proximity compared to encouraging independence (Rothbaum et al., 2000).

Carlson and Harwood (2003) compared the maternal sensitivity and infant attachment between Puerto Rican and Anglo mother-infant pairs and found the cultural differences. Among Puerto Rican mother-infants, there was no significant relationship between maternal control and the insecure attachment, and the positive relationship between physical control of caregiver and the secure attachment. The parents offer the caregiving congruent with the socialization goal and values (Carson & Harwood, 2003; Rothbaum et al., 2000). There are cultural differences in the social support.

Cultural Differences in Social Support

Culture plays an important role in social support, because people seek and supply the social support based on the shared belief system among specific group members (Dilworkth-Anderson & Marshall, 1997). Dilworkth-Anderson and Marshall suggested that culture influenced the social support structure, social support type, and social support sources. For example, the social support of Asian Americans was more informal and they got social support especially from close kin. They sought and gave financial, instrumental, and emotional social support rather than material social support. The main sources of

social support among Asian Americans were parents, siblings, and in-laws and the social support from friends, and distant kin was not frequently observed.

This study is interested in the adult attachment, caregiving, and social support of Korean, which is one of the Asian countries but has unique history and culture of their own. This study considers the cultural variables by measuring collectivism and individualism of Korean college students, and explores the relationships between cultural variables and the adult attachment.

Statement of the Problem

Regardless the emphasis on cultural differences in understanding close relationships, there are a few studies about Korean couples. Though the Asian countries share similar values and philosophies, a careful examination of the differences and similarities among Asian countries would be necessary. It is expected to study many Asian countries before generalization the result of one country to another country is possible.

A review of literature was unable to locate any study of adult attachment, caregiving, perceived social support, and couple satisfaction of Korean couples. Including these variables in one model would help understand the dynamics and interaction of couple relationships. Since romantic relationship involves two partners, the interaction is more complicated. Gathering the data from both partners of a couple, well allow an expanded understanding of the dynamics of the interaction that influence relationship satisfaction.

The previous studies reported inconsistent results related those variables. In this study, we want to understand those inconsistent relationships among Korean people and

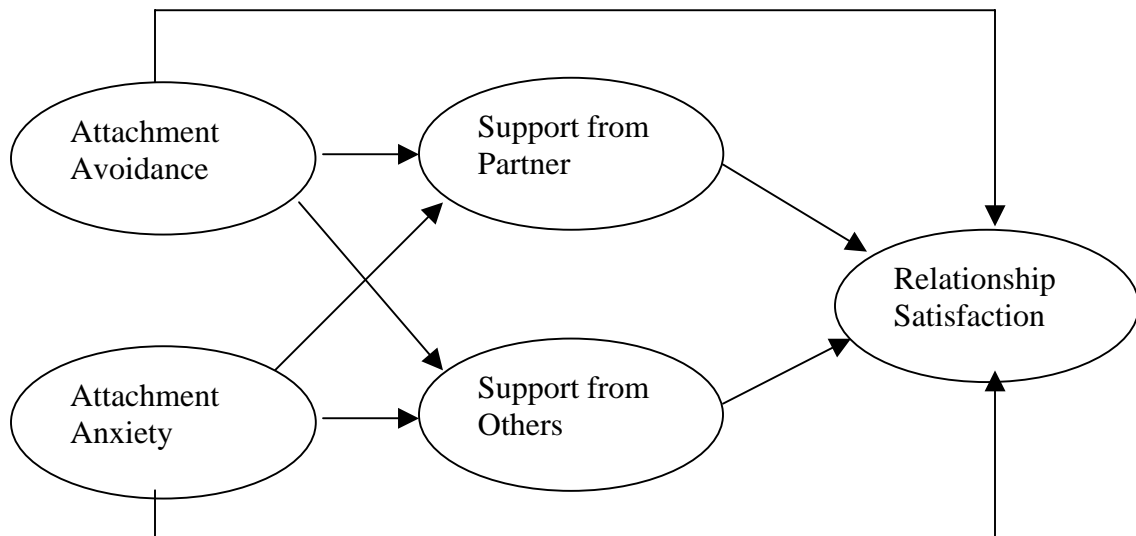
to explore the cultural factors surrounding the inconsistencies. The previous studies also discussed cross-cultural differences in the perspective of cultural values; and gender differences in terms of gender role socialization. However, these variables were not empirically examined. In this study, individualism-collectivism, and instrumentality-expressiveness were measured as indicators of cultural values and gender role socialization.

The hypotheses of this study are as follows:

Hypothesis 1: Mediator effect of perceived social support on the relationships between adult attachment and the relationship satisfaction

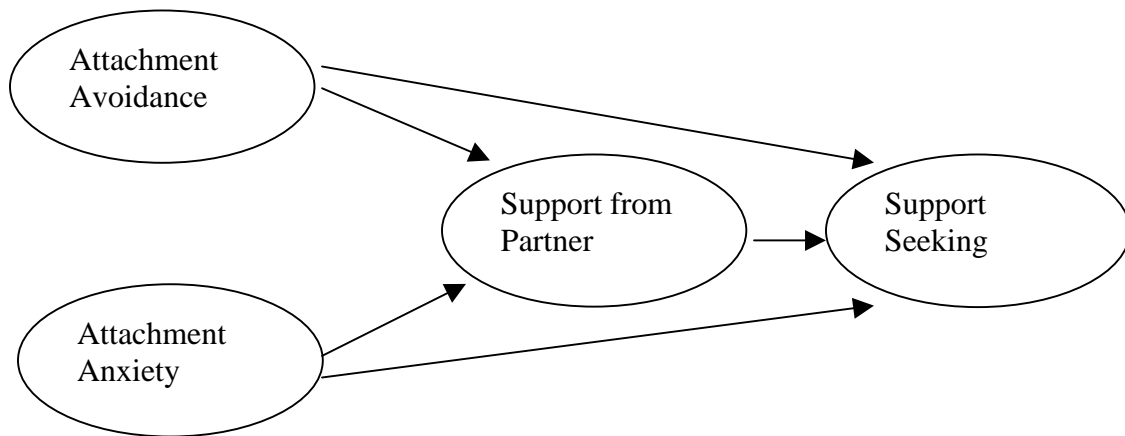
1a. The effect of attachment avoidance on relationship satisfaction will be mediated by perceived social support from both partner and others.

1b. The effect of attachment anxiety on relationship satisfaction will be mediated by the perceived social support from both partner and others.



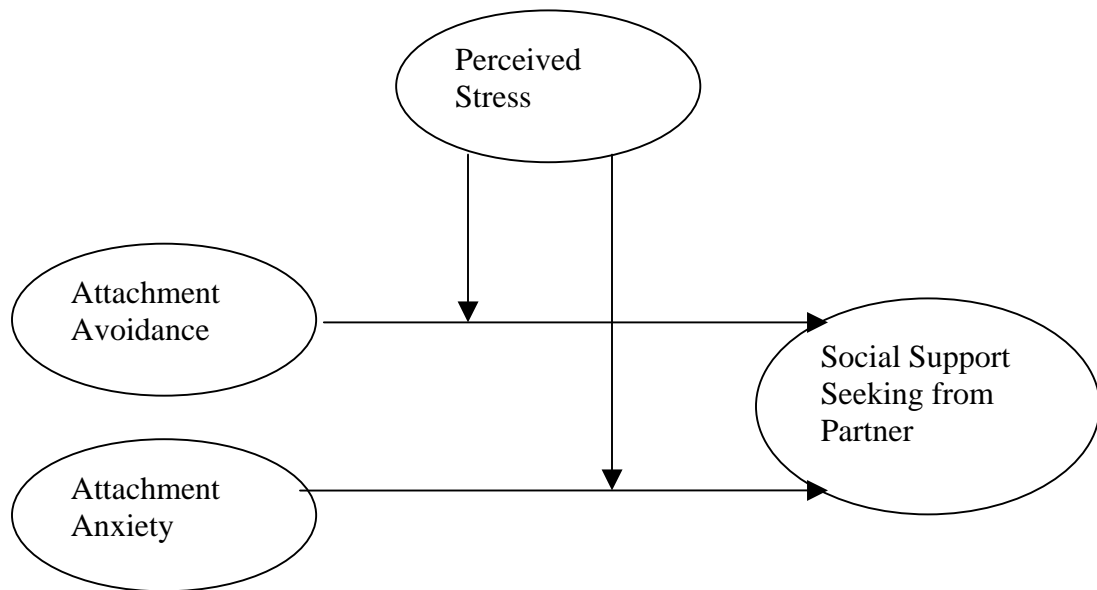
Hypothesis 2: Mediator effect of perceived social support on the relationships between adult attachment and the social support seeking

- 2a. The effect of attachment avoidance on social support seeking will be mediated by perceived social support from partners.
- 2b. The effect of attachment anxiety on social support seeking will be mediated by perceived social support from partners.



Hypothesis 3: Moderator effect of perceived stress in the relationships between adult attachment and social support seeking from partners

- 3a. Attachment Avoidance will be positively related to social support seeking from the partner when the perceived stress is low, but negatively related to social support seeking when perceived stress is high
- 3b. Attachment Anxiety will be positively related to the social support seeking from the partner, and the strength of this relationship will increase as perceived stress increases.



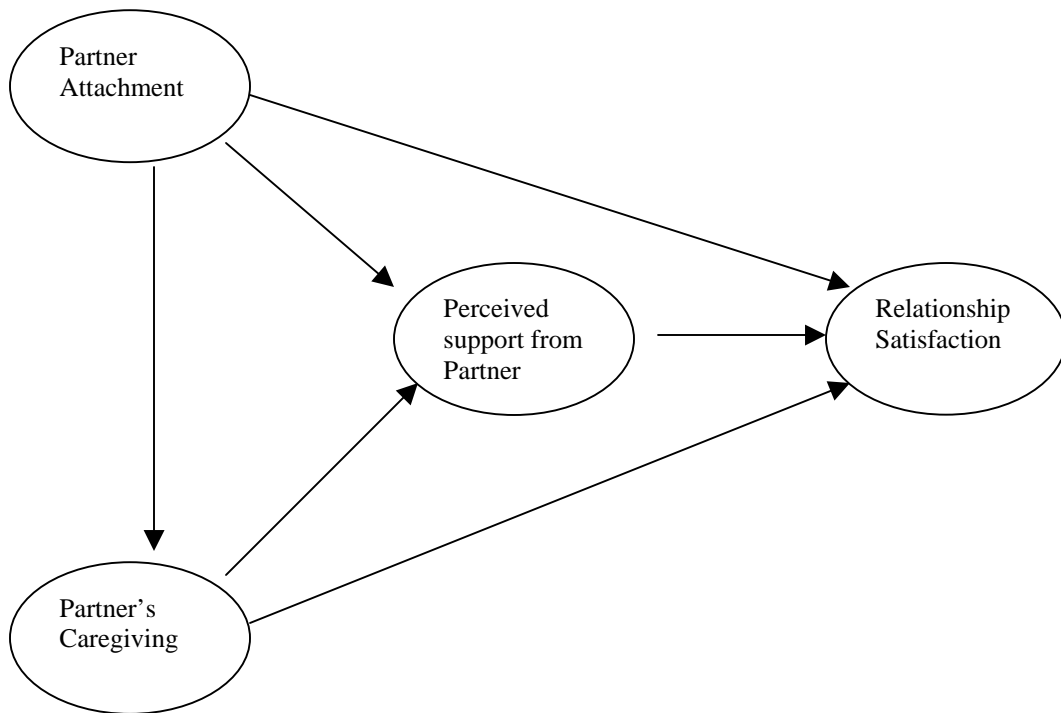
Hypothesis 4: Associations between Adult Attachment and Caregiving

- 4a. Attachment Avoidance will be negatively related to proximity, sensitivity, cooperation, and compulsive caregiving.
- 4b. Attachment Anxiety will be negatively related to proximity, sensitivity, and cooperation caregiving and positively related to compulsive caregiving.

Hypothesis 5: There will be relationships among and partner's adult attachment and caregiving and respondents' own perceived support from partner and relationship satisfaction

5a. Partner's attachment and partner's caregiving will be directly related to relationship satisfaction.

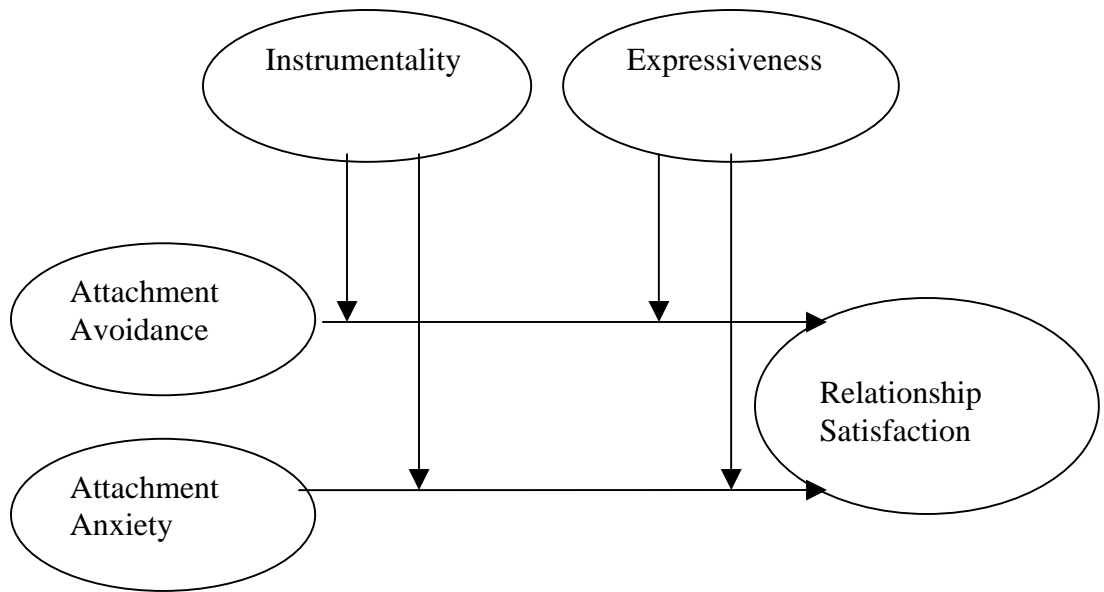
5b. The effect of partner's attachment and caregiving on relationship satisfaction will be mediated by perceived support from partner.



Hypothesis 6: Interaction effect of adult attachment and personal attribute

6a. Instrumentality and expressiveness will interact with attachment avoidance in predicting relationship satisfaction

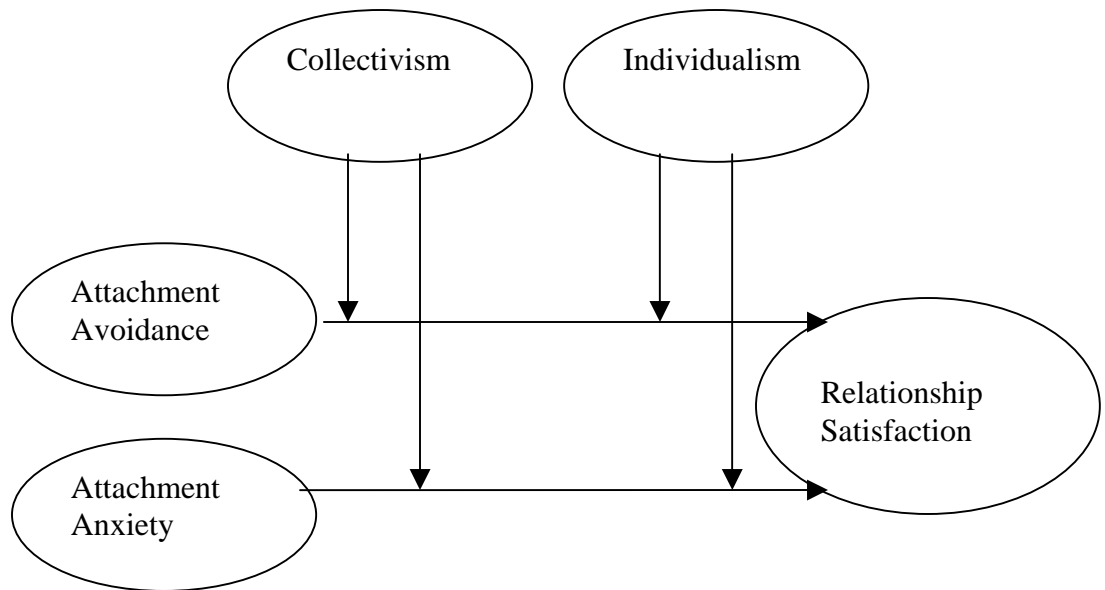
6b. Instrumentality and expressiveness will interact with attachment anxiety in predicting relationship satisfaction



Hypothesis 7: Moderator effect of collectivism/individualism

7a. Collectivism and Individualism will interact with attachment avoidance in predicting relationship satisfaction.

7b. Collectivism and Individualism will interact with attachment anxiety in predicting relationship satisfaction.



CHAPTER 3

METHOD

STUDY 1. SCALE MODIFICATION

Study 1 reports the process of scales translation and back-translation into Korean and the quantitative checks of reliability and validity for the translated scales. This section will present description of participants, instruments, process of instrument adaptation into Korean, and data analysis. First, the participants in translation – back translation and participants for reliability and validity study will be described. Second, the English versions of instruments to be translated will be described: Experience of Close Relationship Scale (ECRS), Social Provisions Scale (SPS), Relationship Assessment Scale (RAS), Caregiving Questionnaire (CGQ), and Personal Attribute Questionnaire (PAQ). In addition, three scales used to examine construct validity, including Fear of Intimacy Scale (FIS), Social Self-Efficacy Scale (SSE), and Rosenberg Self-Esteem Scale (RSE) will be presented. Third, the procedures of translation -back translation and data collection for validity study will be presented. Finally, data analysis methods will be described.

Participants

Three doctoral students in the U.S. and one doctoral student in South Korea participated in the English-to-Korean translation, while six Korean graduate students in U.S. and one Korean-American journalist participated in the Korean-to-English portion of the translation. Also, a native English speaker, who has a Ph.D. in Counseling Psychology participated in the procedure to evaluate the semantic equivalence of original

English versions and Korean translated versions by comparing the original English items and back translated items.

For the reliability and validity verification part of the study, 30 bilingual Korean students were recruited and volunteered to participate. Among them, four had TOEFL scores lower than 550. They were not included in the analysis. (Most graduate programs in the U.S. require TOEFL score 550 as a cutting score to indicate English fluency.) Among the remaining 26 students, 18 (69.2%) were male and 8 (30.8%) were female. Two (7.7%) were undergraduate students and 24 (92.3%) were graduate students. The age mean was 31.31 (SD=3.67) and the mean of length of staying in U.S. was 29.45 months (SD=19.45). For the criterion sample, 38 U.S. students (19 men and 19 women) were recruited. Their mean age was 25.16 (range 23-44).

Instruments

Experience in Close Relationship Scale (ECRS). The ECRS was developed to measure adult attachment by Brennan, Clark, and Shaver (1998). Participants are asked to respond to this measure according to how they generally feel in romantic relationships, not just in the current relationship. The ECRS includes two subscales: Avoidance and Anxiety. Avoidance measures the degree to which people avoid intimacy and keep psychological and emotional distance from others. Anxiety measures the degree to which people worry that their partners may leave them or will not be available when needed. ECRS contains 36 items, with 18 items in each subscale. Respondents use a 7-point Likert scale ranging from *disagree strongly* (1) to *agree strongly* (7). The higher value in each subscale indicates a higher tendency toward avoidance and anxiety. Brennan, et al. (1998) reported that the two scales were not significantly correlated ($r = .11$), which

suggested that the two dimensions are essentially orthogonal. The internal consistency coefficients (Cronbach's alpha) were .94 for the Avoidance subscale and .91 for the Anxiety subscale. The Avoidance subscale was strongly correlated with discomfort with closeness, whereas the Anxiety subscale was highly correlated with preoccupation with attachment, jealousy, and fear of rejection (Brennan, et al., 1998).

Social Provisions Scale. The SPS (Cutrona & Russell, 1987; 1990) measures perceived social support from others and includes six subscales: (a) Attachment - caring from others, (b) Social Integration - belonging to a group of similar others, (c) Reassurance of Worth - positive evaluation from others, (d) Guidance - advice and information from others, (e) Reliable Alliance - which measures tangible assistance supplied by others, and (f) Opportunity for Nurturance - which represent providing support to others. SPS is composed of 24 items with 4 items per subscale, and is measured on a 4 point Likert scale (1= *strongly disagree*, 4=*strongly agree*). Twelve negative statements are reversed and the higher scores indicate more perceived social support. Cronbach's alpha measuring internal consistency ranged from .87 to .92 for individual provision scores and .94 for total social support score (Cutrona & Russell, 1987).

Relationship Assessment Scale. The RAS (Hendrick, 1988) was designed to measure not only marital relationships but also romantic relationships in general. This scale contains 7 items. Respondents use a 5-point scale (1= *poorly*, 3=*average*, 5= *extremely well*). Two negative items are reverse keyed and the higher scores indicate higher satisfaction in romantic relationships. In the original scale development research, the internal consistency measured by Cronbach's alpha was .86. RAS had significant

correlations with Dyadic Adjustment Scale (Spanier, 1976) and love attitudes (Hendrick, 1988).

Caregiving Questionnaire. The CGQ was developed by Kunce and Shaver (1994) and includes four subscales: Proximity vs. Distance, Sensitivity vs. Insensitivity, Cooperation vs. Control, and Compulsive Caregiving. The Proximity subscale measures caregiving behaviors including accessibility, physical contact, and emotional expression. Sensitivity assesses the degree that people are sensitive to their partner's needs and feelings. Cooperation measures the degree that people cooperate versus control their partners, and Compulsive caregiving measures a tendency toward over-involvement to the partner's problems. The scale includes 32 items and each subscale consists of 4 positive items and 4 negative items. Participants are asked to respond using a 6-point Likert Scale (1=*strongly disagree*; 6=*strongly agree*). Kunce and Shaver (1994) reported that the Cronbach's alphas of Proximity vs. Distance, Sensitivity vs. Insensitivity, Cooperation vs. Control, and Compulsive Caregiving subscales were .83, .83, .87, .80 respectively. The test-retest reliability of those subscales were .77, .78, .88, .81. Kunce and Shaver reported significant correlations in the expected direction between adult attachment and caregiving.

Personal Attributes Questionnaire. The PAQ (PAQ: Spence, Helmreich, & Stapp, 1973) was designed to measure socially desirable, gender-related personality traits (Spence, 1984). The PAQ includes 24 items and yields three scores: Masculinity (M), Femininity (F), and Masculinity-Femininity (M-F). The M scale assesses characteristics appropriate for both sexes but considered more socially desirable of men (e.g. independence and competitiveness). The F scale measures characteristics that are

appropriate for both sexes but considered more socially desirable for women (e.g. warmth and devotion to others). M-F composite assesses the ideal male and female characteristics: the higher score presents the ideal male quality and the lower score presents the ideal female quality. Participants respond with 5-point scale ranging from 0 to 4, and higher scores on the M and F scales indicate higher levels of instrumentality and expressiveness, respectively. In this study, only the items from Instrumentality and Expressiveness subscales were translated into Korean.

Fear of Intimacy Scale The FIS (Descutner & Thelen, 1991) is an instrument that was developed to measure fear of intimacy. Fear of intimacy means the inhibited capacity of an individual to exchange thoughts and feelings with significant others. This scale consists of 35 items measured on 5 point Likert scale (1= *not at all characteristic of me*, 5= *extremely characteristic of me*). Participants are asked to respond to the items as they would if they were in a hypothetical close relationship. Among 35 items, 15 items are reverse-coded and the responses to the items are summed for total score. Higher scores indicate higher fear intimacy in close relationships. The internal consistency reliability (Cronbach's alpha) was .93 and the one-month test-retest reliability was .89. For validity, FIS had positive correlation with loneliness and negative correlation with self-disclosure and social intimacy (Descutner & Thelen, 1991).

Rosenberg Self-Esteem Scale The RSE (Rosenberg, 1965) is an widely used instrument designed to measure self-esteem. This scale consists of 10 items measured on 4 point Likert scale (3= *strongly agree*, 0= *strongly disagree*). Five items in negative directions are reversed, then all items are summed for a total score. The total score can

range from 0 to 30 and higher score means more self esteem. Typical scores on the Rosenberg scale are around 22, with most people scoring between 15 and 25.

Procedure

The Scale modification followed the procedure suggested by Mallinckrodt and Wang (2004). First, permissions were obtained through the personal communication from each of the scale developers in order to adapt the instruments into Korean except for Personal Attribute Questionnaire (See Appendix A). The PAQ had already been translated into Korean. However, upon inspection this translation of the PAQ appeared to lack accuracy in several areas. Thus, the PAQ was translated again for this study. To begin the translation, two bilingual students translated each scale into Korean, working independently and then discussed their separate translations to produce one agreed draft of Korean version. Next, two different bilingual students back translated the first draft of the Korean version into English, working independently. Then, a native English speaker, who has a Ph.D. in Counseling Psychology, compared the original English version and the back translated English version to evaluate the semantic equivalence. Discrepancies were identified, and these items were subjected to a new cycle of translation and back translation until all the items are judged to be equivalent.

Regarding the ECRS-K, three cycles of translation, back-translation, and evaluation were conducted. Eight of the 36 items were not evaluated semantically equivalent after the first translation and back translation cycle. After the second cycle four items out of the eight items were again evaluated as not semantically equivalent. Finally, after the third translation and back-translation, every item was evaluated to be equivalent. For the other scales including SPS-K, RAS-K, CGQ-K, and PAQ-K, the

semantic equivalence was achieved after the second cycle. Regarding the SPS-K, six items were found to be not semantically equivalent after the first cycle. One item from the RAS-K, four items from the CGQ-K, and one item from the PAQ. In the second cycle, the modifications were conducted in the translation and back translation and those items were evaluated to be semantically equivalent. The translated Korean versions of scales were included in the Appendix B as a survey form.

After IRB approval from University of Missouri at Columbia, Korean students in UMC were initially contacted through the e-mail listserv of Korean Students Association. In the recruitment e-mail, the purpose of this research, procedure, required time, information about incentives, and time line for the time 1 and time 2 surveys for test-retest reliability were included. Two weeks after the advertisement, additional phone contact and personal contact were used until 30 individuals had agreed to participate. Data were collected by inviting students to a specified classroom on campus at a specific date and time.

Following the procedure recommended by Mallinckrodt & Wang (2004), two different forms of the survey were prepared. Half items were presented in Korean (ECRS-K, SPS-K, and RAS-K) and half in English (ECRS, SPS, and RAS). In Form A, the first half items of each translated instrument were Korean and the second half were English. In Form B, order was the reverse: The first half items were English and the last half items were Korean. In this way, all the Korean and all the English items were presented across two different forms, but never is the same English and Korean item presented on the same form.

In order to evaluate test-retest reliability, every participant received two different surveys. The Time 1 survey included demographic questions, half-Korean and half-English versions of ECRS SPS, and RAS as described in the previous paragraph, and English versions of Social Self-Efficacy Scale, Fear-of-Intimacy Scale, and Rosenberg Self-Esteem Scale. The first three scales were intended for use in Study 2, and the last three scales were intended to check the construct validity and translation accuracy of these first three target scales. The Time 2 packet for test-retest reliability consisted of demographic questions, half-Korean and half-English versions of ECRS, SPS, and RAS. Code numbers were pre-assigned to the first pages of Time 1 and Time 2 surveys so that the completed surveys could be matched over time without revealing the participants' identities.

In the data collection meeting, each participant received a survey packet with two consent form, Time 1 survey, Time 2 survey, \$10 gift certificate, pre-stamped and self-addressed envelop. Participants signed consent form, completed Time 1 survey and it took 20-30 minutes. After they completed the survey, participants took gift certificate, envelope, and the Time 2 survey with them. The participants were asked to complete the second packet 10 – 14 days later and to send it to the address written in the envelope. Participants received a reminder e-mail regarding the Time 2 survey 10 days after they completed the first packet.

Data Analysis

In order to test reliability of this scale, (a) the correlation between English set of items and Korean set of items, (b) the internal consistency reliability (Cronbach's alpha) including half Korean and half English items, (c) correlation analysis between Time1 and

Time 2 for test-retest reliability were examined. An additional test is provided by a comparison of the correlation between English and Korean half scales with correlations between the same half sets of items obtained from the all-English version of the instrument. Correlation coefficients were compared using Fisher's r to z transformation. To examine the concurrent validity of ECRS-K, the correlation analysis will be conducted among ECRS-K, Social Self-Efficacy Scale, Fear-of-Intimacy Scale, and Rosenberg Self-Esteem.

STUDY 2 HYPOTHESES

This chapter will present description about participants, instruments, data collection procedure, and data analysis. First, demographic information about the participants will be described. Second, the Korean versions of measurements used in this study will be presented. In addition to the five scales that were translated into Korean for this study, already translated three Korean scales including Perceived Stress Scale - Korean (PSS-K), Social Support Seeking (SSS-K) from Coping Strategy Indicator-Korean (K-CSI), and Individualism-Collectivism Scale -Korean (INDCOL-K) will be described. Then, the data collection procedure will be presented. Finally, the procedures for confirmatory factor analyses and hypotheses analyses will be described.

Participants

Completed surveys were received from 518 Koreans, 215 (41.5%) men and 303 (58.5%) women. Their mean age was 21.81, $SD=3.67$ (range 18-55). Regarding student status, college students were 497 (95.9%), part-time students were 3 (.6%) and non-students were 18 (3.5%). Thirteen (2.5%) were married, 2(.4%) were living together, 229

(44.2%) were dating exclusively, 174 (33.6%) had romantic relationship experience but did not have current partners, and 100 (19.3%) had no romantic relationship experience.

For tests of hypotheses, only the 244 participants who had current romantic partners were included. The data from two participants were excluded because they did not respond the Relationship Assessment Scale that is the main dependent variable of this study. Men were 106 (43.5%) and female were 136 (56.5%). The mean age of these participants was 22.27 (SD=4.43). Among them, 222 (91.7%) were full time students, 2 (.8%) were part-time students, and 18 (7.4%) were not students. Regarding romantic relationship status, 12 (5.0%) were married, 2 (.8%) lived together, and 228 (94.2%) were exclusively dating and not being married nor living together. The mean length of dating period was 17.46 months (SD=33.97).

Materials distributed to these students, and their romantic partners were invited to the survey, using an online version of the survey. For the fourth hypothesis regarding partner's caregiving, the data from identified couples were used. Among 242 participants in a relationship, 55 were identified as couples. Among these, 53 couples were heterosexual couples and two were lesbian couples. Although we are very interested in the relationship satisfaction of lesbian (and gay couples), and research in this area is very much needed, only two couples were not a large enough sample for separate analyses. Therefore, data from only the heterosexual couples were used to test the hypothesis. Regarding romantic relationship status, 4 (3.8%) were married and 102 (96.2%) were exclusively dating and not being married nor living together. The mean age of participants was 22.22 (SD=4.48) and the mean length of dating period was 16.42 months (SD=39.62).

Instruments

The following scales were used in Study 2 as well as Study 1 and will not be described here again in detail: Experience in Close Relationship Scale-Korean (ECRS), Social Provision Scale–Korean (SPS), Relationship Assessment Scale –Korean (RAS), Caregiving Scale –Korean (CGS), Personal Attribute Questionnaire-Korean (PAQ). The three additional scales used in study 2 are described below.

Perceived Stress Scale-Korean The Korean version of Perceived Stress (Kim et al., 1990) measure was based on the Perceived Stress Scale (PSS; Cohen, Kamarck & Mermelstein, 1983). PSS The translation was slightly modified for clarification. For example, “last month” was modified to “during last one month” and the formal address form of “you” was to the informal and general term of “you” .The participants are asked to respond with five-point response format (0 = *never*, 1 = *almost never*, 2 = *sometimes*, 3 = *fairly often*, 4 = *very often*). PSS-K includes 14 items and seven positive items were reversed and the higher score means that participants perceived more stress during the last month. Cohen et al. (1983) reported that internal reliability coefficient (coefficient alpha) was .78. This scale was significantly related to the self-reported psychosomatic symptoms, use of health services, help-seeking, and poor life satisfaction (Cohen et al., 1983). Choi (2002) reported the internal consistency coefficient of .77 among Korean middle aged women. She reported the positive correlation between the perceived stress and the self-esteem support.

Social Support Seeking-Korean Social Support Seeking subscale of Korean Coping Strategy Indicator (K-CSI; Shin & Kim, 2002) were used to measure social support seeking. Amirkhan (1990, 1994) developed CSI to assess the coping strategies

that people adopt to deal with stress. CSI includes 3 subscales and 11 items in each scale. A factor analysis of responses from a Korean sample yielded the same factors with the same items in each factor (Shin & Kim, 2002). Eleven items measuring Social Support Seeking were used in this study. For the purpose of this study, the items were modified to target the romantic partner as a source of support. For example, “Did you confide your fears and worries to a friend or relative?” was modified into “Did you confide your fears and worries to your partner?” Respondents were asked to answer with 3-point scale (1=*not at all*, 2=*a little*, 3=*a lot*). Higher scores indicate that respondents seek more support from their partner. Amirkhan (1990) reported that the internal consistency coefficient (alpha) of social support seeking was .89, .75 and .85, respectively. Clark, Bormann, Cropanzano, and James (1995) reported that the social support seeking from CSI was positively correlated with the social support seeking of COPE (.83) and with the social support seeking from the Ways of Coping-R (.97). Shin and Kim (2002) reported that the internal consistency coefficient of Social Support Seeking from K-CSI was .90.

Cultural Construct Scale-Korean version The Individualism and Collectivism Scale – Korean version (INDCOL-K; Kim & Kim, 1997) is based on the original INDCOL scale (Singelis, Triandis, Bhawuk, & Gelfand, 1995). The INDCOL consists of 32 items that assess dimensions of collectivism and individualism in conjunction with dimensions of equality-hierarchy: Thus, the INDCOL contains four subscales that measure Horizontal Individualism (HI), Vertical Individualism (VI), Horizontal Collectivism (HC), and Vertical Collectivism (VC). HI measures the degree to which people perceive themselves as unique and self-reliant. VI assesses the degree to which people see themselves as independent, but competitive with others. HC measures the

degree to which people perceive themselves as interdependent and sociable. Finally, VC assesses people's perception of themselves as a part of group who willingly sacrifice their own needs for the benefit of the group. The INDCOL-K, translated by Kim and Kim (1997) also consists of 32 items, with 8 items per subscale. Participants are asked to respond using 9-point Likert-type partially anchored scales (1=never or definitely no, 5=neutral, 9=always or definitely yes). Internal reliability coefficients (alpha coefficient) of the English version in were .74 for VI, .67 for HI, .68 for VC, and .74 for HC (Singelis et al., 1995). Kim and Kim (1997) reported coefficient alpha of VI, HI, VC, and HC subscales were .71, .81, .68, and .75 respectively. Kim and Kim (1997) also reported the validity of this scale examining the relations to we-ness and mediating type in the conflict situation. In this study, VI and HI were also merged to create a single index of individualism (IND), and VC and HC were combined to create a single measure of collectivism (COL). The combined IND and COL were used in the previous study (Choi, 2002), based on the associations between VC and HC and between VI and HI (Choi, 2002, Singelis et al., 1995).

Procedure

Contacts were made with the instructors in six Universities in South Korea regarding this study (Hanrim University, Hanyang Women's University, Jungang University, Korean Foreign Language University, Woosuk University, and Yonsei University). The approval to conduct this study was obtained from the IRB in University of Missouri-Columbia, but IRB approval from Universities in South Korea was not necessary given that approval was obtained from the researcher's "home" university.

After IRB approval, the research assistant, who had a Master's degree in counseling psychology and was a certified counselor in South Korea, visited the classrooms to collect data during classes. The research assistant recruited the students reading a recruitment script, and then distributed surveys. Students who showed interest in participating in this study received a survey packet including the consent form, the survey questionnaire, the online survey instruction sheet for their partner, and the sheet of contact information for incentive. The survey included about 204 items and it took 35-40 minutes to complete the survey.

In order to match data provided from both members of a couple, the surveys were labeled with a pre-assigned code number which were identical with the code numbers in the online survey instruction sheet for the partner. Participants were asked to give the online survey instruction sheet to their partner or send the site address of online survey to their partner through e-mail. The online survey instruction sheet given to partners directed them to complete the online survey. This step is necessary for two reasons: (1) so that partners could return the data privately and directly to the researchers without further involvement from partner (2) to avoid the expense of postage. The contact information sheet for incentives were labeled with the code number, and participants were asked to write their contact information to participate in the lottery of 10,000 won (approximately 10 dollars) book gift certificate with 10% opportunity.

The paper survey packet and online survey presented the same items. The paper survey was divided into three sections. The first section included demographic questions, PAQ-K, INDCOL-K, SPS-K-O, and PSS-K, which all the participants were asked to complete. The second section included ECRS-K, CGS-K, SPS-K-O, and RAS-K, which

only people who had had romantic relationship experience were asked to respond. ECRS-K and CGS-K measures the general romantic relationships not the current romantic relationships. SPS-K-O and RAS-K measures the specific romantic relationships, and participants who did not have a current romantic partner were asked to complete them thinking about the most meaningful relationships for them. The last section included SSS-K, which was completed only for participants who had a current romantic partner. These sections were marked with the statement: “ You can stop this survey, if you do not have romantic relationship experience” was stated between first section and second section” and “You can stop this survey, if you do not have a current partner” was stated between second section and third section. The different sections were not necessary for the online survey because only people who had a current romantic partner participated in the online survey.

Data Analysis

As preliminary analyses, confirmatory factor analyses were conducted using AMOS 4.1 for all the measurements in order to confirm the scale structure of original English version for the translated Korean versions of scales. When the model fit indices were not good, items whose loadings that were low were deleted to improve the model fit. When it did not increase model fit, the exploratory factor analyses were conducted to invest different factor structures of Korean versions of scales. Another confirmatory factor analyses were conducted with the model from the exploratory factor analyses.

The first hypothesis, mediator effects of the social support from partner and the social support from others in the influence of adult attachment on the relationship satisfactions, and the second hypothesis, mediator effect of the social support from

partner in the influence of adult attachment on the social support seeking from partner were examined with structure equation model. The fourth hypothesis involving the moderator effect of perceived stress in the relationships between adult attachment and support seeking from partner were examined using hierarchical regression analysis. The third hypothesis, correlations between adult attachment caregiving, was examined using correlation and path analysis. The fourth hypothesis, the influence of partner's adult attachment and caregiving on the own perceived social support from partner and relationship satisfaction was tested using correlation and path analysis. The fifth hypothesis, the moderator effect of instrumentality and expressiveness on the relationships between adult attachment and relationship satisfaction, and between adult attachment and social support seeking, was examined with correlation and regression analysis. The sixth hypothesis, the moderator effect of individualism and collectivism in the influence of adult attachment on the relationship satisfaction and social support seeking were tested using regression analysis.

CHAPTER 4

RESULTS

STUDY 1

In study 1, reliability and validity tests were conducted for ECRS-K, SPS-K, and RAS-K using the procedure for confirming semantic equivalence recommended by Mallinckrodt and Wang (2004). First, the subscale means for different language versions were compared. Table 1 shows that there were no mean differences for any subscale. Showing that there are no mean differences between language versions is only the first step of the procedure. The core analyses in the Dual Language Split-Half (DLSH) method recommended by Mallinckrodt and Wang (2004) involve comparison of internal consistency (Cronbach's alpha), and test-retest reliability. These results are presented in Table 2. For the DLSH analysis, Pearson correlation analyses were calculated separately for English items and Korean items, to assess the strength of association with other construct validity measures in the bilingual sample. Then the correlation coefficients were compared with those of correlation between half English item and half English item completed by the criterion samples, using Fisher's r to z transformation. Table 2 shows there were no significant correlation coefficient difference in Avoidance, Anxiety, SPS, and RAS. These results provided the support for the semantic equivalences between ECRS and ECRS-K, SPS and SPS-K, and RAS and RAS-K.

Table 1. Means and Standard Deviations for Split Halves of ECRS, SPS, and RAS and Construct Validity Measures

Variable	n	English Language		Korean Language		df	t	p
		M	SD	M	SD			
Bilingual Sample								
ECRS (-K) test								
Avoidance	26	2.74	.85	2.56	.89	25	1.37	ns
Anxiety	26	3.71	1.03	3.56	.95	25	1.14	ns
ECRS (-K) retest								
Avoidance	24	2.61	.83	2.39	.98	23	1.54	ns
Anxiety	24	3.23	1.10	3.15	.89	23	.44	ns
SPS (-K) test								
SPS (-K) retest	24	3.38	.47	3.50	.40	23	-1.90	ns
RAS (-K) test								
RAS (-K) retest	24	4.02	.56	4.07	.68	23	-.64	ns
Social Self-Efficacy	26	3.34	.56					
Fear of Intimacy	26	2.42	.46					
Self-Esteem	26	3.16	.44					
Criterion Sample								
ECRS								
Avoidance	38	2.69	1.03					
Anxiety	38	3.61	1.17					
SPS	38	3.48	.33					
RAS	38	4.30	.64					

Then, internal consistency coefficients (Cronbach's alpha) of half-English and half-Korean scales rated by bilingual sample were also compared with Cronbach's alpha of all English scales completed by the criterion sample. The Cronbach's alphas of Avoidance, Anxiety, SPS, and RAS of bilingual sample were .88, .86, .90, and .84 respectively, and those of criterion sample were .94, .93, .85, and .88 respectively. In order to compare the alphas, the following formula by Feldt (1969) was used: $F(N-2, N-1) = (1-\alpha_1)/(1-\alpha_2)$

Table 2. Dual-Language, Split-Half, Internal Consistency, and Retest Reliabilities

Analysis	Bilingual Sample (n=26)	Criterion Sample (n=38)	Difference
Dual-language, split half reliability (Pearson correlation)			Pearson r to Z Transformation
	Half Korean items with Half English items	Half English items with Half English items	
ECRS			
Avoidance	.69	.66	$z = .21$ ($p=.58$)
Anxiety	.75	.72	$z = .24$ ($p=.60$)
SPS	.74	.65	$z = .65$ ($p=.74$)
RAS	.73	.76	$z = -.25$ ($p=.40$)
Internal consistency (Cronbach's alpha)			
	Half Korean items and Half English items	All English items	
ECRS			
Avoidance	.88	.94	$F(37,25) = 2.07$, $p<.05$
Anxiety	.86	.93	$F(37,25) = 1.96$, $p<.05$
SPS	.90	.85	$F(37,25) = .67$, ns
RAS	.84	.88	$F(37,25) = 1.27$, $p<.05$
Test-Retest Reliability (n=24)			
ECRS			
Avoidance	English items	.70	$z = -1.51$ ($p=.06$)
	Korean items	.85	
Anxiety	English items	.75	$z = .58$ ($p=.72$)
	Korean items	.66	
SPS			
	English items	.62	$z = -.80$ ($p=.21$)
	Korean items	.75	
RAS			
	English items	.55	$z = -.19$ ($p=.42$)
	Korean items	.59	

Unexpectedly, the alpha of SPS by bilingual sample was *higher* than that of SPS by criterion sample and the two-tailed test were used to examine the alpha differences.

With the degree of freedom of numerator of 37, that of denominator of 25, and

probability level of .05, the critical value of F was 1.18 (www.biokin.com/tool/fcrit.html for calculation). The F values of Avoidance, Anxiety, and RAS were 2.07, 1.96, and 1.27 respectively, which were higher than the critical value. These results suggested that the alphas of half-English and half-Korean versions of ERCS Avoidance, ERCS Anxiety, and the RAS rated by bilingual people were not equivalent to the all English versions of these scales completed by Americans.

Finally, the test-retest reliabilities using Pearson correlation were presented. The test-retest reliabilities of the Korean items of Avoidance, SPS, and RAS were higher than English items. For Anxiety, the reliability of the English subscale was higher than that of Korean subscale. The comparisons of two correlation coefficients using Fisher' r to z transformation showed no significant difference between retest reliabilities of English items and Korean items. These results also suggested that the retest reliability for ERCS-K, SPS-K, and RAS-K were equivalent of retest reliability of ERCS, SPS, and RAS.

In order to examine the construct validity of ERCS-K, SPS-K, and RAS-K, the correlations with fear of intimacy, social self-efficacy, and Rosenberg self-esteem were calculated. Results are shown in Table 3. As expected, both English and Korean subscales of avoidance were significantly correlated with fear of intimacy. Anxiety were positively correlated with fear of intimacy and negatively associated with social self-efficacy and self-esteem, in which there was no difference between English items and Korean items. Both English and Korean items of SPS were positively associated with self-esteem. The English subscale of SPS was negatively correlated with Fear of intimacy and Korean item subscale was not. On the contrary, the English subscale of SPS was not correlated with social self-efficacy, and Korean subscale was positively

correlated. Regardless the statistical significance of correlations, the comparison of correlation coefficients showed that they were not significantly different. Regarding RAS, both English versions and Korean versions were negatively correlated with fear of intimacy and positively associated with self-esteem, as expected. Thus, the results shown in Table 3 suggest that the Korean and English versions of the scales were equivalent, but key analysis shown in Table 2 regarding comparisons of internal consistency suggested that the two versions were not semantically equivalent.

Table 3. Differences in Construct Validity Correlations

Correlated variable	English	Korean	Within-subject r to Z comparisons
ECRS	9 items	9 items	
Avoidance			
Fear of intimacy	.64**	.61**	$z = .17$ ($p = .57$)
Social self-efficacy	.03	-.10	$z = .21$ ($p = .58$)
Rosenberg Self-Esteem	-.21	-.06	$z = -.44$ ($p = .67$)
Anxiety			
Fear of intimacy	.54**	.51**	$z = .14$ ($p = .56$)
Social self-efficacy	-.45*	-.44*	$z = -.04$ ($p = .48$)
Rosenberg Self-Esteem	-.41*	-.42*	$z = .04$ ($p = .52$)
SPS	12 items	12 items	
Fear of intimacy	-.42*	-.25	$z = -.65$ ($p = .26$)
Social self-efficacy	.19	.48*	$z = .21$ ($p = .58$)
Rosenberg Self-Esteem	.67**	.77**	$z = -.07$ ($p = .24$)
RAS	3(4) items	4 (3) items	
Fear of intimacy	-.44*	-.47*	$z = .13$ ($p = .55$)
Social self-efficacy	.12	.18	$z = -.21$ ($p = .42$)
Rosenberg Self-Esteem	.48*	.40*	$z = .34$ ($p = .63$)

STUDY 2

Preliminary Analyses

As preliminary analyses, confirmatory factor analyses for nine measurements that were used in this study were conducted. Among them, six scales were translated into Korean for this study: Experience of Close Relationship Scale- Korean (ECRS-K), two versions of Social Provisions Scale-Korean (SPS-K): Social support from partner (SPS-K-P) and Social support from others except for partner (SPS-K-O), Relationship Assessment Scale- Korean (RAS-K), Caregiving Scale-Korean (CGS-K), Personal Attribute Scale-Korean (PAS-K). In addition, confirmatory factor analyses were conducted for the previously translated Korean versions of Individualism-Collectivism Scale (INDCOL), Perceived Stress Scale – Korean (PSS), Social Support Seeking-K (SSS-K; a subscale of Coping Strategy Inventory-K), since the results of confirmatory factor analyses were not reported in the translation and validity study of these scales.

Experience of Close Relationship Scale-Korean (ECRS-K)

Because results from Study 1 suggested that items of the ECRS-K might not perform in the same way as items from the English version ECRS, a confirmatory factor analysis was conducted to test the factor structure of ECRS-K using the maximum-likelihood method in the AMOS 4.1. Original English version of ECRS consists of two factors and 18 items in each factor. The results showed a very poor model fit of the model to the data, $\chi^2(593, N=373)=2773.64$, $p < .001$, CFI=.66, RMSEA=.10 (90% CI = .096 - .103) (See Appendix C-1 for more results of model fit). In order to improve model fit, items were deleted when the standardized factor loadings were lower than .60 and the modification indices from the structural equation analysis indicated a significant cross-

loadings. Twenty-one items were deleted because of low factor loadings and two more items were deleted because of high cross-loadings. Then, another confirmatory factor analysis with eight items in Avoidance factor and five items in Anxiety factor was conducted (See Appendix C-2 to find the items included in each factor). The results showed improved model fit, $\chi^2(64, N=373)=251.48, p<.001, CFI=.93, RMSEA=.09$ (90% CI = .096-.103). Since more than half items (23 items) were deleted, exploratory factor analyses were conducted to investigate additional factors in ECRS-K.

In order to estimate the number of factors of ECRS-K, a principal axis factoring (PAF) analysis was conducted on the 36 scale items with 373 Koreans. Results of Bartlett's test of sphericity ($\chi^2(630)=6713.932, p<.001$) and the Kaiser-Meier-Olkin test (.905) supported the factorability. Six factors of which eigenvalues were higher than 1 were extracted, but three factors looked appropriate based on a scree plot. An oblique rotation was used for three-factor solution. In order to refine the factors, items were deleted when the communality was lower than .4 and the cross-loading was higher than .25. As a result, fourteen items were deleted because of low communality and seven more items were deleted because of high cross-loadings. The final run of PAF and oblique rotation on the three factors with 15 items explained 59.46% of the variance (See Appendix C-2 to find the items included in factors in the three factor model). The confirmatory factor analysis on 15 items and three-factor model of ECRS-K was conducted using AMOS 4.1. The results showed a very good model fit of the model to the data ($\chi^2(87, N=373)=185.09, p<.001, CFI=.97, RMSEA=.06$ (90% CI = .044-.066).

Inspection of the items indicated that one of the three factors consisted of a smaller subset of the original Anxiety factor. Whereas the ten remaining items belonged

to two factors derived from the original Avoidance factor. One of these two Avoidance-based factors was named “Safe Haven” after the careful conceptual examination of the items. These items from third factor emphasize using romantic partner as an attachment figure that one can turn on under stress. For example, “I feel comfortable depending on romantic partners” and “ I don't mind asking romantic partners for comfort, advice, or help” were included. The remaining items from the original Avoidance factor were renamed as “Proximity Avoidance”. The five items of “Proximity Avoidance” factor showed uncomfortable feelings to be close to partners. For example, the highest loading item was “I get uncomfortable when a romantic partner wants to be very close.” The five items from “Anxiety factor” measured concerns about being abandoned or being alone. The items included “I worry a fair amount about losing my partner” and “I do not often worry about being abandoned.” This “Anxiety” factor seemed to describe the extreme aspect of caregiver’s availability rather than presenting a general appraisal of partner’s availability.

Given this configuration of 3 new factors, it seemed valuable to examine how the items would align if a four-factor solution had been selected instead. An oblique rotation was used for this four-factor solution. In order to refine the factors, 19 items were deleted using communality and factor cross-loadings. The final run of PAF and oblique rotation on the four factors with 17 items explained 60.88% of the variance (See Appendix C-2 to find the items included in four factors). The confirmatory factor analysis on 17 items and four-factor model of ECRS-K was conducted using AMOS 4.1. The results showed a very good model fit of the model to the data ($\chi^2(113, N=373)=261.13$, $p < .001$, CFI=.95, RMSEA=.06 (90% CI = .050-.069) (For the factor loadings,

correlations and items, see Appendix C-3 and C-4). The three factors from the three-factor model were retained with virtually no changes in the four-factor model of ECRS-K, with the exception that one item from the Anxiety factor was excluded. The fourth factor was named “Unavailability Anxiety” (3 items) because the items described the anxiety feelings when the partners are not around. The items included “I get frustrated when my partner is not around me as much as I would like” and “I resent it when my partner spends time away from me.” The Anxiety subscale that was extracted previously in the 3-factor analysis of the ECRS-K was renamed as “Abandonment Anxiety” to differentiate it from “Unavailability Anxiety.” The internal consistencies (Cronbach’s alpha) of Proximity Avoidance, Safe Haven, Abandonment Anxiety, and Unavailability Anxiety, were .92, .85, .83, and .79 respectively. There were negative correlations between “Proximity Avoidance” and “Safe Haven” ($r = -.44$). There was a positive correlation between “Abandonment Anxiety” and “Unavailability Anxiety” ($r = .42$). There was also a positive correlation between “Safe Haven” and “Unavailability Anxiety” ($r = .40$). Considering that Safe Haven was from the “Avoidance” subscale and “Unavailability Anxiety” was from the Anxiety subscale, this result was not expected. Thus, given the clearly superior model fit, for the main analyses in the remainder of this study, the 4-factor version of the ECRS-K described above was used.

Social Provisions Scale-Korean (SPS-K)

In this study, two different versions of SPS-K were used: one was perceived social support from others excluding one’s romantic partner (SPS-K-O) and the other was perceived social support from partner (SPS-K-P). Two different confirmatory factor analyses were conducted to test how well the six factor model of the English version fits

of SPS-K-O and SPS-K-P. Original English version of SPS includes 24 items and consists of six factors, such as Attachment, Social Integration, Reassurance of Worth, Guidance, Reliable Alliance, Opportunity for Nurture. The results showed a poor model fit of the six factor model of SPS-K-O to Korean data (χ^2 (246, N=503)=929.47, $p < .001$, CFI=.85, RMSEA=.07 (90% CI = .069-.080) (See Appendix D-1 for more fit indices and see Appendix D-3 for the items and factor loadings). Another confirmatory factor analysis conducted to test the model of SPS-K-P also showed a poor model fit to Korean data (χ^2 (246, N=380)=813.93, $p < .001$, CFI=.86, RMSEA=.08 (90% CI = .072-.084) (For more fit indices of SPS-K-P, see Appendix D-2). The internal reliability coefficients of Reliable alliance, Attachment, Guidance, Opportunity of nurture, Social integration, and Reassurance of worth of SPS-K-O were .78, .66, .79, .58, .52, and .74 respectively. Those of SPS-K-P were .78, .78, .78, .56, .68, and .82 respectively.

In order to improve model fit, the items with low factor loadings in both SPS-K-O and SPS-K-P were deleted. Item #5 from Social Integration (standardized factor loading: .44 in SPS-K-O and .45 in SPS-K-P) and #7 from Opportunity of Nurture (.21 in SPS-K-O and .42 in SPS-K-P) were deleted. The model fit with 22 items was not much improved for both SPS-K-O (χ^2 (203, N=503)=708.47, $p < .001$, CFI=.87, RMSEA=.07 (90% CI = .070-.081) and SPS-K-P (χ^2 (203, N=380)=651.02, $p < .001$, CFI=.88, RMSEA=.08 (90% CI = .070-.083).

Four more items with low factor loadings either in SPS-K-O and SPS-K-P were deleted. The deleted items included item #4 from Opportunity of Nurture (factor loading of .33 in SPS-K-P) and the remaining three items from Social Integration (factor loadings of .33, -.55, and -.45 in SPS-K-O). The model fit of five factor with 22 items

was not much improved for SPS-K-O (χ^2 (103, N=503)=600.59, $p<.001$, CFI=.88, RMSEA=.09 (90% CI = .070-.081), and somewhat improved for SPS-K-P(χ^2 (130, N=380)=424.01, $p<.001$, CFI=.91, RMSEA=.08 (90% CI = .070-.083). Since the model fits were not much improved by deleting the items for both SPS-K-O and SPS-K-P, it was decided to use the original six factors with 24 items.

Relationship Assessment Scale-Korean (RAS-K)

Confirmatory factor analyses were conducted to test the model fit of RAS-K with original English RAS scoring of seven items and one factor. The first factor analysis was conducted with data of Koreans who had current partners, and the second analysis was with Koreans who had romantic relationship experiences. The results showed good model fits of RAS-K for both samples with current partners (χ^2 (14, N=241) = 46.70, $p<.001$, CFI=.95, RMSEA=.10 (90% CI = .068-.131) and samples with romantic experience (χ^2 (14, N=393)=31.21, $p<.01$, CFI=.99, RMSEA=.06 (90% CI = .029-.083) (For more fit indices, see Appendix E-1). The items and factor loadings were presented in Appendix E-2.

Caregiving Questionnaire-Korean (CGQ-K)

Confirmatory factor analyses were conducted to test the model fit of CGQ-K. English version of CGQ has four factors of Proximity vs. Distance, Sensitivity vs. Insensitivity, Cooperation vs. Control, and Compulsive caregiving. In the CGQ eight items are included in each factor. The results showed a poor model fit of this scoring for CGQ-K to Korean data (χ^2 (458, N=367) = 1953.81, $p<.001$, CFI=.66, RMSEA=.09 (90% CI = .090-.099). (See Appendix F-1 for more results of model fit). In order to improve model fit, 13 items were deleted when the factor loadings were low. Cut off of

.60 was used, except for the items of Cooperation factor. Among eight items of Cooperation subscale, just one item has factor loading that is higher than .6 (.617), therefore .55 were used as a cut off score in order to retain this subscale. Three additional items with high cross-loadings were also deleted. In this revised model, the Proximity factor included five items, Sensitivity had five items, Cooperation and Compulsive caregiving had three items each. Then, another confirmatory factor analysis with four factors and 16 items were conducted. The results showed a good model fit of CGQ-K to Korean data ($\chi^2(98, N=367) = 317.36, p < .001, CFI = .90, RMSEA = .08$ (90% CI = .069-.088)). (See Appendix F-1 for more results of model fit). The items and factor loadings were presented in Appendix F-3. The internal reliability coefficients of factors, Proximity, Sensitivity, Cooperation, and Compulsive caregiving were .82, .82, .67, and .78 respectively. Proximity, Sensitivity, and Cooperation were positively correlated each other ($r = .21 - .33$). The Compulsive caregiving was negatively correlated with Cooperation ($r = -.21$) (See Appendix F-2).

Perceived Stress Scale-Korean (PSS-K)

Confirmatory factor analyses were conducted to test the model fit of PSS-K. The English version of PSS has one factor and 14 items. The results showed a poor model fit of this scoring when used with the CGQ-K and Korean data ($\chi^2(77, N=510) = 907.97, p < .001, CFI = .58, RMSEA = .15$ (90% CI = .137-.154)). (See Appendix G-1 for more results of model fit). In order to improve model fit, eight items were deleted because the factor loadings were lower than .50. Among the selected six items, the factor loadings of five items were higher than .60 and the factor loading of one item was .57. Then, the confirmatory factor analysis with 6 items was conducted. The results showed a good

model fit of PSS-K to Korean data (χ^2 (9, N=510) = 29.87, $p > .05$, CFI=.98, RMSEA=.06 (90% CI = .038-.092). (See Appendix G-1 for more results of model fit). The items and factor loadings were presented in Appendix G-2. The internal reliability coefficient (Cronbach's alpha) of PSS-K with 6 items was .83.

Social Support Seeking from partner-Korean (SSS-K)

Confirmatory factor analyses were conducted to test the model fit of SSS-K with eleven items in one factor used for scoring the English SSS. The results showed a good model fit of SSS-K to Koreans (χ^2 (44, N=374) = 178.24, $p < .001$, CFI=.90, RMSEA=.11 (90% CI = .093-.126) (For more fit indices, see Appendix H-1). The sample items and factor loadings were presented in Appendix H-2.

Personal Attribute Questionnaire-Korean (PAQ-K)

The confirmatory factor analyses were conducted to test the model fit of PAQ-K. The two factors from English version of PAQ were translated: Instrumentality and Expressiveness. Both Instrumentality and Expressiveness consist of eight items each. The results showed a poor model fit of PAQ-K to Korean data (χ^2 (103, N=515) = 412.54, $p < .001$, CFI=.79, RMSEA=.08 (90% CI = .069-.0984). (See Appendix I-1 for more results of model fit). In order to improve model fit, ten items were deleted because of low factor loading of .55 and lower. Among the remaining six items, just two items has factor loadings higher than .60. Among the selected six items, there was no cross loading according to modification indices. The results of confirmatory factor analysis with 6 items showed a good model fit of PAQ-K to Korean data (χ^2 (8, N=367) = 14.45, $p < .05$, CFI=.99, RMSEA=.04 (90% CI = .000-.072). (See Appendix I-1 for more results of model fit). The items and factor loadings are presented in Appendix I-2. The internal

reliability coefficients of Instrumentality and Expressiveness were .71 and .59. The correlation between Instrumentality and Expressiveness was .32.

INDCOL-K

The confirmatory factor analysis was conducted to test the model fit of INDCOL-K. INDCOL-K has two subscales of Individualism and Collectivism. The results showed a poor model fit of INDCOL-K to the data ($\chi^2(463, N=497) = 1819.11, p < .001, CFI=.58, RMSEA=.08$ (90% CI = .073-.081). (See Appendix J-1 for more results of model fit). In order to improve model fit, 22 items were deleted because of low factor loading (standard regression weight estimates) using the cut off of .50. Four items were included in Individualism subscale and six items were included in Collectivism factor and there was no significant cross loading according to modification indices. The results of confirmatory factor analysis with 10 items showed a good model fit of INDCOL-K to the data ($\chi^2(34, N=497) = 106.35, p < .05, CFI=.94, RMSEA=.07$ (90% CI = .052-.080). (See Appendix J-1 for more results of model fit). The items and factor loadings are presented in Appendix J-2. The internal reliability coefficients of Instrumentality and Expressiveness were .73 and .76. The correlation between Individualism and Collectivism was -.22.

As preliminary analyses, t-tests were conducted to compare the mean scores of the variables used in this study by sex. Table 4 shows the mean, standard deviation, and t-test results. Men exhibited significantly higher scores in proximity caregiving ($t(241)=2.58, p < .05$) than women. Women were higher in scores of safe haven from adult attachment ($t(241)=-2.75, p < .01$), perceived stress ($t(241)= -3.32, p < .01$) and support seeking from partner ($t(241)=-2.80, p < .1$).

Table 4. Gender Differences

	Male (n=106)		Female (n=136)		t
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
Adult Attachment					
Proximity Avoid	2.29	1.17	2.50	1.25	-1.34
Safe Haven	4.87	1.10	5.26	1.11	-2.75**
Abandonment Anxiety	3.43	1.33	3.46	1.47	-.21
Unavailability Anxiety	3.70	1.29	3.98	1.40	-1.60
Caregiving					
Proximity vs. Distance	5.07	.74	4.81	.79	2.58*
Sensitivity	3.73	.82	3.71	.88	.20
Cooperation vs. Control	4.51	.79	4.49	.82	.21
Compulsive Caregiving	3.24	.89	3.19	1.01	.35
Perceived Social Support from others					
Alliance	3.48	.49	3.50	.47	-.35
Attachment	3.42	.45	3.43	.47	-.23
Guidance	3.42	.52	3.43	.52	-.24
Opportunity of Nurture	3.27	.49	3.32	.44	-.75
Social Integration	3.25	.46	3.26	.45	-.24
Reassurance of Worth	3.22	.47	3.25	.41	-.40
Perceived Social Support from Partner					
Alliance	3.35	.50	3.41	.46	-.99
Attachment	3.35	.53	3.45	.49	-1.53
Guidance	3.24	.55	3.28	.51	-.64
Opportunity of Nurture	3.12	.57	3.07	.53	.80
Social Integration	3.15	.59	3.24	.53	-1.23
Reassurance of Worth	3.17	.63	3.28	.48	-1.64
Stress	2.85	.70	3.16	.73	-3.32**
Social Support Seeking	2.35	.42	2.51	.43	-2.80**
Relationship Satisfaction (RAS)	3.95	.63	3.87	.67	.94
Personal Attribute					
Instrumentality	3.51	.70	3.40	.69	1.27
Expressiveness	3.88	.52	3.90	.53	-.35
Cultural Construct					
Individualism	5.58	1.48	5.42	1.30	.93
Collectivism	6.33	.90	6.25	1.09	.57

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

Tests of Hypotheses

Hypotheses One and Two: Mediator effects of Perceived Social Support

The first hypothesis proposed mediator effects of perceived social support from partner and perceived social support from others in the relationships between adult attachment and romantic relationship satisfaction. The second hypothesis also suggested the perceived social support from partner's mediator effect in the relationships between adult attachment and social support seeking from partner.

These two hypotheses were tested together using structure equation modeling. In total, 35 measurement variables representing eight latent variables. Four latent variables of adult attachment including Proximity Avoidance, Safe Haven, Abandonment Anxiety, and Unavailability Anxiety. These latent variables were measured with five, five, four and three items respectively. Perceived social support from partner was measured with six subscale scores of alliance, attachment, guidance social integration, opportunity of nurturance, and reassurance of worth. The perceived social support from others was also measured with six subscale scores.

For constructs with one measured variable, the item parcels were created, following the recommendation by Russell, Kahn, Spoth, and Altmaier (1998). The parcels were created using factor loadings of the items from confirmatory factor analysis. In order to have three parcels with the equal average loadings, the items highest and lowest loadings were assigned to each parcel successively. The three parcels with two or three items were developed to measure relationship satisfaction and the three parcels with three or four items were created as indicators of social support seeking from partner.

Table 5 showed means, standard deviations, and zero-order correlations for the 35 variables used to test the hypotheses 1 and 2. The factor loadings of measurement variables were presented in Table 6. All of the measurement variables were statistically significant, which showed that they measured the latent variables adequately. Table 7 shows the correlations among independent latent variables, mediator latent variables, and dependent latent variables.

Table 5. Correlations among measurement variables

	Mean	SD	N	1	2	3	4	5	6	7	8	9	10	11
1. pa1	2.22	1.35	240	1										
2. pa2	2.63	1.58	242	.64	1									
3. pa3	2.54	1.51	242	.58	.72	1								
4. pa4	2.37	1.40	242	.62	.70	.70	1							
5. pa5	2.29	1.32	242	.58	.68	.64	.71	1						
6. sh1	4.96	1.58	242	-.23	-.29	-.22	-.32	-.38	1					
7. sh2	5.06	1.51	242	-.22	-.18	-.16	-.23	-.30	.54	1				
8. sh3	5.26	1.40	242	-.19	-.28	-.25	-.25	-.29	.48	.46	1			
9. sh4	5.50	1.26	242	-.27	-.26	-.22	-.30	-.35	.50	.55	.46	1		
10. sh5	4.68	1.52	241	-.14	-.11	-.09	-.14	-.16	.40	.51	.48	.55	1	
11. aa1	3.39	1.78	242	.11	.10	.13	.20	.02	-.08	-.03	-.13	-.01	.06	1
12. aa2	3.59	1.80	241	.19	.18	.12	.21	.13	.00	.10	-.07	.02	.03	.46
13. aa3	3.24	1.74	241	.12	.12	.13	.16	.01	-.03	.07	-.08	.06	.12	.79
14. aa4	4.46	1.76	241	-.05	-.13	-.06	-.14	.02	.08	.04	.19	-.06	-.01	-.55
15. ua1	4.08	1.63	242	.00	-.20	-.08	-.14	-.20	.20	.32	.17	.20	.21	.21
16. ua2	3.73	1.60	242	.05	.08	.09	.11	.01	.08	.19	.15	.26	.35	.13
17. ua3	3.76	1.69	242	.10	.04	.04	.05	-.03	.09	.17	.08	.16	.22	.21
18. spso1	3.49	.48	242	-.21	-.18	-.23	-.22	-.20	.17	.06	.18	.13	.10	-.11
19. spso2	3.42	.46	242	-.17	-.15	-.18	-.21	-.20	.11	.03	.11	.06	.03	.01
20. spso3	3.43	.52	242	-.17	-.16	-.23	-.21	-.18	.21	.09	.29	.20	.15	-.08
21. spso4	3.16	.42	242	-.12	-.12	-.17	-.14	-.15	.06	.03	.14	.12	.10	-.06
22. spso5	3.26	.43	242	-.11	-.14	-.18	-.19	-.20	.12	.01	.18	.09	.04	-.01
23. spso6	3.24	.43	242	-.13	-.13	-.16	-.19	-.21	.16	.03	.24	.18	.03	-.10
24. spspl	3.38	.48	242	-.32	-.28	-.31	-.38	-.39	.42	.35	.39	.44	.38	-.17
25. spsp2	3.41	.51	242	-.48	-.43	-.38	-.53	-.58	.39	.37	.37	.43	.32	-.13
26. spsp3	3.26	.53	242	-.38	-.39	-.34	-.41	-.49	.47	.37	.47	.45	.35	-.09
27. spsp4	3.12	.49	242	-.20	.22	-.20	-.31	-.29	.24	.18	.27	.29	.19	-.06
28. spsp5	3.09	.54	242	-.27	-.31	-.24	-.39	-.44	.37	.33	.42	.33	.33	-.13
29. spsp6	3.23	.55	242	-.28	-.22	-.23	-.30	.26	.23	.20	.32	.26	.21	-.14
30. ras1	4.13	.71	241	-.38	-.38	-.38	-.39	-.53	.36	.35	.31	.38	.20	.07

(continued)

31. ras2	3.99	.78	241	-36	-33	-35	-43	-.47	.25	.26	.27	.37	.21	-.04
32. ras3	3.70	.72	241	-34	-30	.31	-.39	-.45	.34	.29	.26	.40	.22	-.09
33. sss1	2.41	.48	240	-33	-30	-.21	-.33	-.33	.40	.33	.36	.48	.48	-.04
34. sss2	2.44	.51	240	-26	-.25	-.15	-.29	-.31	.45	.34	.36	.44	.45	-.03
35. sss3	2.46	.47	241	-33	-.26	-.19	-.35	-.33	.44	.33	.35	.34	.36	-.04
12. aa2	1													
13. aa3	.44	1												
14. aa4	-.32	-.51	1											
15. ua1	.20	.22	-.13	1										
16. ua2	.22	.21	-.23	.46	1									
17. ua3	.24	.26	-.15	.62	.50	1								
18. spso1	-.04	-.14	.08	-.11	-.15	-.15	1							
19. spso2	.02	-.01	.03	-.08	-.15	-.15	.71	1						
20. spso3	.03	-.11	.07	-.08	-.10	-.10	.78	.68	1					
21. spso4	-.03	-.08	.05	-.10	-.09	-.05	.61	.53	.53	1				
22. spso5	.02	-.01	.04	-.09	-.19	-.16	.64	.64	.65	.55	1			
23. spso6	.02	-.11	.07	-.05	-.09	-.06	.61	.55	.64	.60	.56	1		
24. spsp1	-.23	-.08	.06	-.02	-.02	-.13	.38	.25	.39	.30	.32	.34	1	
25. spsp2	-.18	-.07	.05	.12	.06	-.07	.32	.31	.30	.27	.31	.30	.70	1
26. spsp3	-.15	-.03	.04	.04	-.03	-.09	.41	.32	.43	.32	.44	.36	.75	.72
27. spsp4	-.13	-.06	.09	.04	.02	-.02	.27	.27	.30	.38	.35	.37	.49	.53
28. spsp5	-.13	-.05	.07	.08	-.01	-.05	.34	.30	.30	.31	.34	.37	.65	.70
29. spsp6	-.18	-.06	.11	-.03	-.05	-.06	.31	.21	.31	.33	.25	.46	.62	.56
30. ras1	-.07	.13	-.11	.17	.04	-.01	.24	.17	.16	.16	.19	.17	.47	.55
31. ras2	-.06	-.03	-.01	.06	.01	-.10	.22	.18	.21	.11	.21	.18	.46	.57
32. ras3	-.17	-.04	.02	.05	.00	-.12	.22	.16	.18	.13	.19	.15	.49	.56
33. sss1	-.03	.09	.00	.13	.20	.16	.22	.16	.22	.20	.17	.22	.43	.51
34. sss2	.05	.07	.01	.11	.13	.15	.24	.18	.27	.14	.18	.17	.45	.47
35. sss3	-.06	.06	.04	.09	.06	.05	.27	.22	.32	.20	.20	.22	.53	.54

	26	27	28	29	30	31	32	33	34	35
26. spsp3	1									
27. spsp4	.47	1								
28. spsp5	.68	.54	1							
29. spsp6	.60	.55	.65	1						
30. ras1	.48	.25	.39	.32	1					
31. ras2	.51	.28	.44	.32	.68	1				
32. ras3	.48	.28	.44	.34	.66	.74	1			
33. sss1	.52	.29	.42	.30	.34	.31	.29	1		
34. sss2	.56	.23	.46	.33	.31	.38	.32	.70	1	
35. sss3	.60	.28	.49	.36	.37	.40	.41	.73	.75	1

Note. pa=proximity avoidance; sh=safe haven; aa=abandonment anxiety; ua=unavailability anxiety; spsp=perceived social support from partner; spso=perceived social support from others; ras=relationship satisfaction; sss=social support seeking

Table 6. Factor loadings for the Measurement Model

Measured Variables	Unstandardized Factor Loadings	S.E.	C.R.	Standardized Factor Loadings
Proximity Avoidance				
PA1	.98	.08	12.84	.73
PA2	1.32	.09	15.62	.84
PA3	1.22	.08	14.86	.81
PA4	1.20	.07	16.21	.86
PA5	1.08	.07	15.11	.82
Safe Haven				
SH1	1.08	.10	11.41	.69
SH2	1.09	.09	12.27	.73
SH3	.92	.09	10.79	.66
SH4	.94	.07	12.86	.75
SH5	1.05	.09	11.48	.69
Abandonment Anxiety				
AA1	1.60	.10	16.63	.90
AA2	.93	.11	8.23	.52
AA3	1.51	.10	15.92	.87
AA4	-1.06	.11	-9.83	-.60
Unavailability Anxiety				
UA1	1.24	.10	12.12	.76
UA2	1.00	.10	9.73	.63
UA3	1.35	.11	12.82	.80
Perceived Social Support from Others				
Alliance (o)	.42	.03	16.88	.88
Attachment	.37	.03	14.50	.80
Guidance	.45	.03	16.39	.86
Opp. Of Nurture	.29	.02	11.81	.69
Social Integration	.33	.02	13.69	.76
Reassurance of worth	.32	.03	12.83	.73
Perceived Social Support from Partner				
Alliance(p)	.40	.03	15.82	.84
Attachment	.44	.03	16.18	.85
Guidance	.46	.03	16.75	.87
Opp. Of Nurture	.29	.03	9.95	.60
Social Integration	.43	.03	14.82	.80
Reassurance of worth	.39	.03	12.26	.70
Relationship Satisfaction				
Parcel 1	.56	.04	14.33	.80
Parcel 2	.67	.04	15.97	.86
Parcel 3	.60	.04	15.49	.84
Social Support Seeking from				
PartnerParcel 1	.40	.03	15.30	.83
Parcel 2	.44	.03	15.87	.85
Parcel 3	.41	.03	16.66	.88

Table 7. Correlations among Latent variables

	1	2	3	4	5	6	7	8
1. Proximity Avoidance	--							
2. Safe Haven	.41***	--						
3. Abandonment Anxiety	.17*	-.01	--					
4. Unavailability Anxiety	-.04	.36***	.33***	--				
5. Support from others	-.28**	.21**	-.10	-.18*	--			
6. Support from partner	-.56***	.64***	-.14	-.03	.51***	--		
7. Relationship Satisfaction	-.56***	.51***	-.02	-.00	.29**	.68***	--	
8. Social Support Seeking	-.40***	.65***	.01	.18*	.33***	.69***	.49***	--

Table 8. Summary of Fit Indices

	χ^2	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Model	863.780***	533	.84	.80	.85	.94	.93	.93	.05 (.045-.058)

Note. *** $p < .001$. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation.

The model fits of the model were suggested in the Table 8. The results showed a model fit of the model to the data, $\chi^2(532, N=242)=868.780$, $p < .001$, GFI=.84, CFI=.93, RMSEA=.05 (90% CI = .048 -.060). The structural paths in the model are presented in Figure 1. The first hypothesis that suggested mediator effects of perceived social support in the relationships between adult attachment and romantic relationship satisfaction was partially supported. Perceived social support from a partner mediated the effect of proximity avoidance, safe haven, and unavailability anxiety on relationship satisfaction. However, the perceived social support from others did not significantly mediate the relationships between adult attachment and romantic relationship satisfaction. Proximity avoidance, safe haven, and unavailability anxiety were significantly related with

perceived social support from others, which were not significantly related to relationship satisfaction. In addition, the direct effect of proximity avoidance to romantic relationship satisfaction was significant ($\beta=.28, p<.01$).

The second hypothesis suggesting mediator effect of perceived social support from partner in the relationships between adult attachment and social support seeking from partner was supported. The effect of adult attachment except for abandonment anxiety on social support seeking from partner last one month was mediated by perceived social support from partner. There was also significant direct effect of safe haven on social support seeking ($\beta=.31, p<001$).

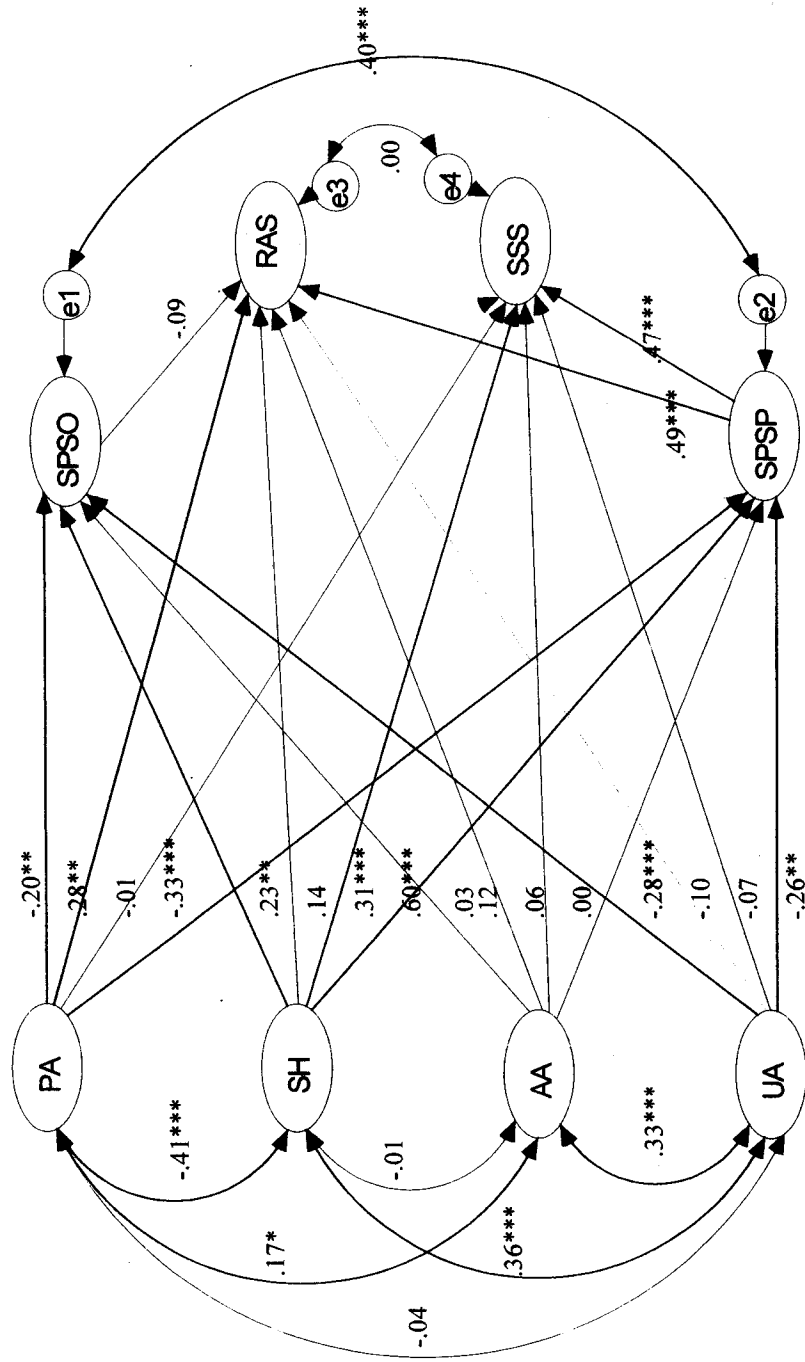


Figure 1. Structural model for perceived social support's mediation of adult attachment on relationship satisfaction and social support seeking. PA=proximity avoidance; SH=safe haven; AA=abandonment anxiety; UA=unavailability anxiety; SPSO=perceived social support from partner; SPSO=perceived social support from others; RAS=relationship satisfaction; SSS=social support seeking

Hypothesis 3: Moderator Effect of Perceived Stress

The third hypothesis considered the moderator effect of stress in the relationships between adult attachment and social support seeking. The correlations among related variables were presented in Table 9. Since women were higher in perceived stress and support seeking from partner than men, the correlation analyses were conducted separately by sex. For both men and women, social support seeking from partner was negatively correlated with proximity avoidance and positively correlated with safe haven. There were differences among adult attachment and stress by gender. For men, perceived stress was positively correlated with proximity avoidance; while women’s perceived support was positively correlated with abandonment anxiety and unavailability anxiety.

In order to examine the moderator effect of stress in the relationships between adult attachment and social support seeking, hierarchical regression analyses were conducted. Two different regression analyses were conducted for both men and women, and the results are presented in Table 10.

Table 9. Correlations among adult attachment, perceived stress and social support seeking

	1	2	3	4	5	6
1. Proximity Avoidance	--	-.39***	0.22*	-.04	.14	-.40***
2. Safe Haven	-.34***	--	-.10	.30***	.07	.53***
3. Abandonment Anxiety	.10	.08	--	.18	.21*	.00
4. Unavailability Anxiety	-.01	.26**	.50*	--	.23*	.15
5. Perceived Stress	.28**	-.02	.03	.14	--	-.02
6. Social Support Seeking	-.39***	.61***	-.03	.14	-.08	--

* $p < .05$. ** $p < .01$. *** $p < .001$. Men’s data were presented below diagonal and women’s data were presented above diagonal.

Table 10. Hierarchical Regression Analysis for Moderating Effect of Perceived Stress

Step and Variables	R^2	Adj. R^2	F_{change}	df	B	SE	$Beta$
Analysis A, Panel: Male, Criterion Variable: Social Support Seeking from Partner							
Step 1	.42	.39	14.44***	(5, 99)			
Proximity Avoidance (PA)					-.08	.04	-.19*
Safe Haven (SH)					.23	.04	.50***
Abandonment Anxiety (AA)					-.04	.04	-.00
Unavailability Anxiety (UA)					.03	.04	.00
Perceived Stress (STRESS)					-.01	.04	-.03
Step 2	.43	.37	.24	(4, 95)			
PA x Stress					-.02	.04	-.00
SH x Stress					.02	.03	.05
AA x Stress					.01	.04	.02
UA x Stress					.01	.04	.02
Analysis B, Panel: Female, Criterion Variable: Social Support Seeking from Partner							
Step 1	.34	.31	13.15***	(5, 129)			
Proximity Avoidance (PA)					-.12	.04	-.27*
Safe Haven (SH)					.18	.04	.43***
Abandonment Anxiety (AA)					.05	.04	.12
Unavailability Anxiety (UA)					.03	.04	.00
Perceived Stress (STRESS)					.00	.04	-.01
Step 2	.34	.30	.32	(4, 125)			
PA x Stress					.02	.04	.05
SH x Stress					.03	.03	.09
AA x Stress					-.01	.03	-.02
UA x Stress					-.01	.04	-.03

* $p < .05$. ** $p < .01$. *** $p < .001$.

In the analysis, four adult attachment and perceived stress were included in the first step and the four interactions of adult attachment and stress were included in the next step. In order to calculate the interaction terms, the standardized z scores were used as Frazier, Tix, and Barron (2004) recommended. The interaction effects of adult attachment and perceived stress did not explain additional variance of perceived social support from partner for both men ($F_{change}(4,95)=.24, p>.05$) and women ($F_{change}(4,125)=.32,$

$p > .05$), and the unique contributions of interaction effects were not significant. Thus, the third hypothesis suggesting the moderator effect of perceived stress was not supported.

Hypothesis 4: Correlations between adult attachment and caregiving

In order to test the fourth hypothesis proposing a significant association between adult attachment and caregiving, correlation analyses were conducted separately by gender. Table 11 shows the correlations among the variables. These relationships were examined with structure equation model. These results are presented in Figure 2 for men and Figure 3 for women.

For both men and women, the unique contribution of proximity avoidance on proximity caregiving and the unique contribution of safe haven and unavailability anxiety on cooperative caregiving were significant. For men, sensitivity caregiving was related to proximity avoidance and compulsive caregiving significantly contributed to unavailability anxiety. For women, safe haven and abandonment anxiety significantly contributed to proximity caregiving, and safe haven and unavailability anxiety contributed to sensitivity. For women, compulsive caregiving was not significantly related to adult attachment. Thus, the fourth hypothesis was partially supported.

Table 11. Correlations for Attachment and Caregiving

Variables	1	2	3	4	5	6	7	8
1. PA	--	-.39***	.22**	-.04	-.53***	-.21*	-.19*	-.15
2. SH	-.34***	--	-.10	.30***	.50***	.33***	.27**	.08
3. AA	.10	.08	--	.18*	.03	-.20*	-.02	.00
4. UA	-.08	.26**	.50***	--	.03	-.10	-.16	.07
5. Proximity	-.63***	.31**	.04	-.01	--	.30***	.39***	.13
6. Sensitivity	-.26**	.16	-.24*	-.18	.32**	--	.21*	-.04
7. Cooperation	-.10	.30**	-.13	-.16	.06	.24*	--	-.13
8. Compulsive	-.05	.18	.18	.34***	.04	-.12	-.11	--

* $p < .05$. ** $p < .01$. *** $p < .001$. Men's data were presented below diagonal and women's data were presented above diagonal.

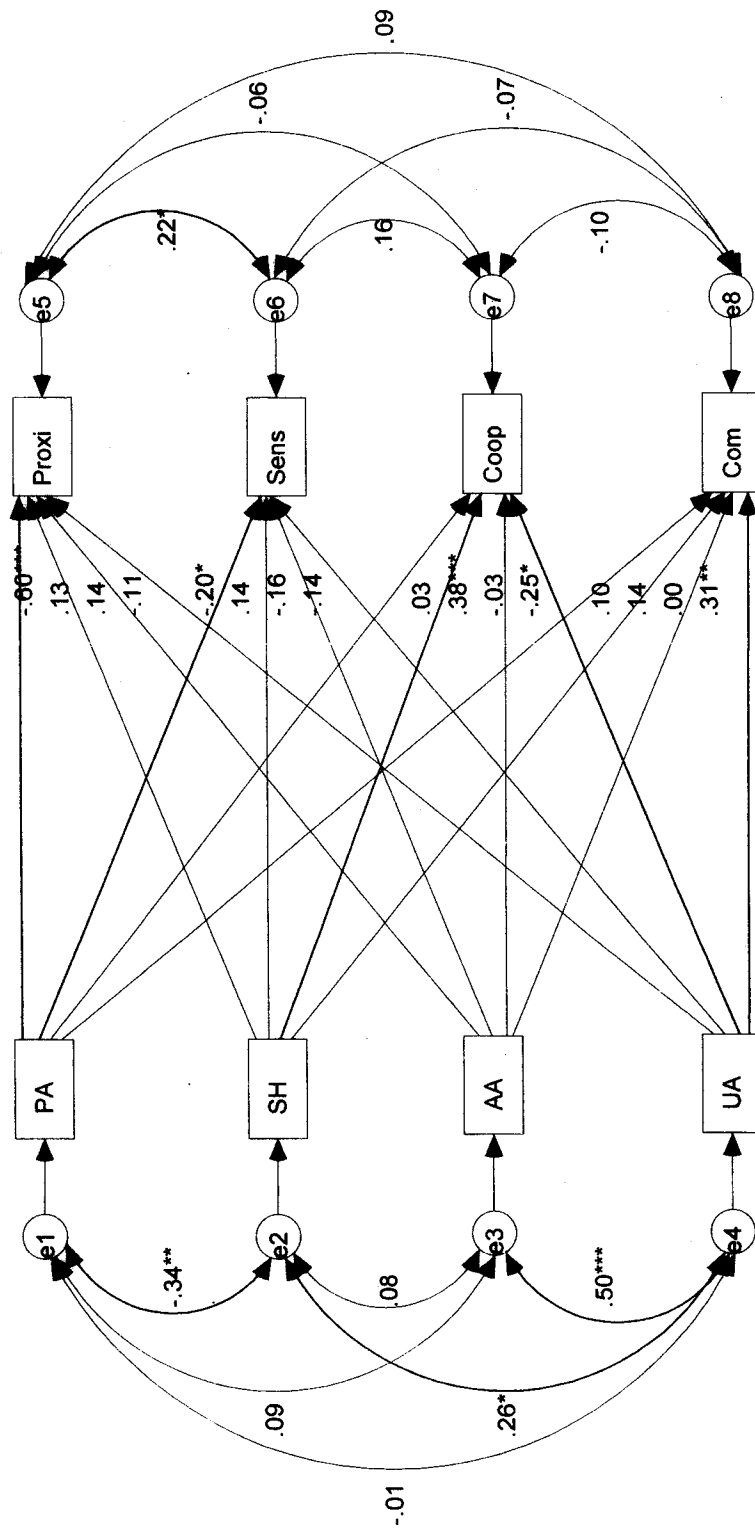


Figure 2. Relationships between Adult Attachment and Caregiving for Male

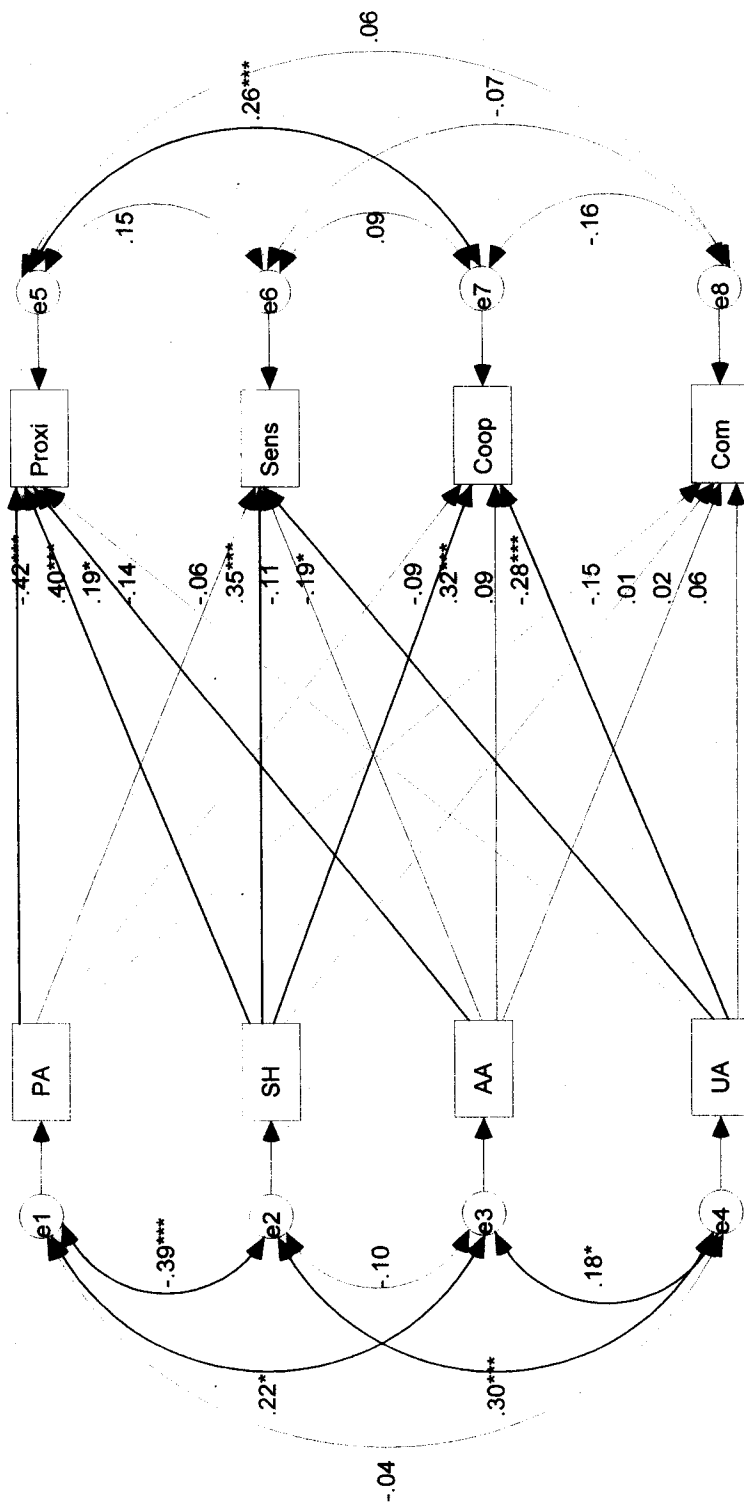


Figure 3. Relationships between Adult Attachment and Caregiving for Female

Hypothesis 5: Partner's Attachment and Caregiving

The fifth hypothesis suggested that partner's adult attachment and caregiving would be related to their own perceived social support from partner, social support seeking from partner, and relationship satisfaction. Table 12 shows the zero-order correlations among those variables separately by men and women. Men's perceived social support was positively correlated with female partner's safe haven and sensitivity caregiving. Men's relationship satisfaction was also positively correlated with female partner's sensitivity caregiving and cooperative caregiving. On the contrary, Women's perceived social support from partner and relationship satisfaction was not significantly related to male partner's adult attachment and caregiving. The analysis using structural equation model was conducted to investigate the unique contribution of the paths among the variables. The results are presented in Figure 4 for male partners of the couples and in Figure 5 for female partners of the couples. The unique contribution of partner's adult attachment and caregiving did not contribute one's own perceived social support from partners and relationship satisfaction in both men and women.

Table 12. Correlations among variables

Partner's ratings	Male			Female		
	SPS	SSS	RAS	SPS	SSS	RAS
Proximity Avoidance	-.04	-.07	-.18	.03	-.10	-.12
Safe Haven	.28*	.24	.16	.14	.10	.20
Abandonment Anxiety	.06	.01	.07	.21	-.07	-.03
Unavailability Anxiety	.01	.09	-.24	.05	-.18	-.04
Proximity vs. Distance	.10	.00	.11	.12	-.16	.14
Sensitivity	.33*	.23	.38*	.04	.03	.20
Cooperative Caregiving	.21	-.07	.35*	.25	.07	.07
Compulsive Caregiving	.01	.25	-.02	.12	.00	.05

Note * $p < .05$. SPSP=Perceived Social Support from Partner; SSS = Social Support Seeking from Partner; RAS = Relationship Satisfaction

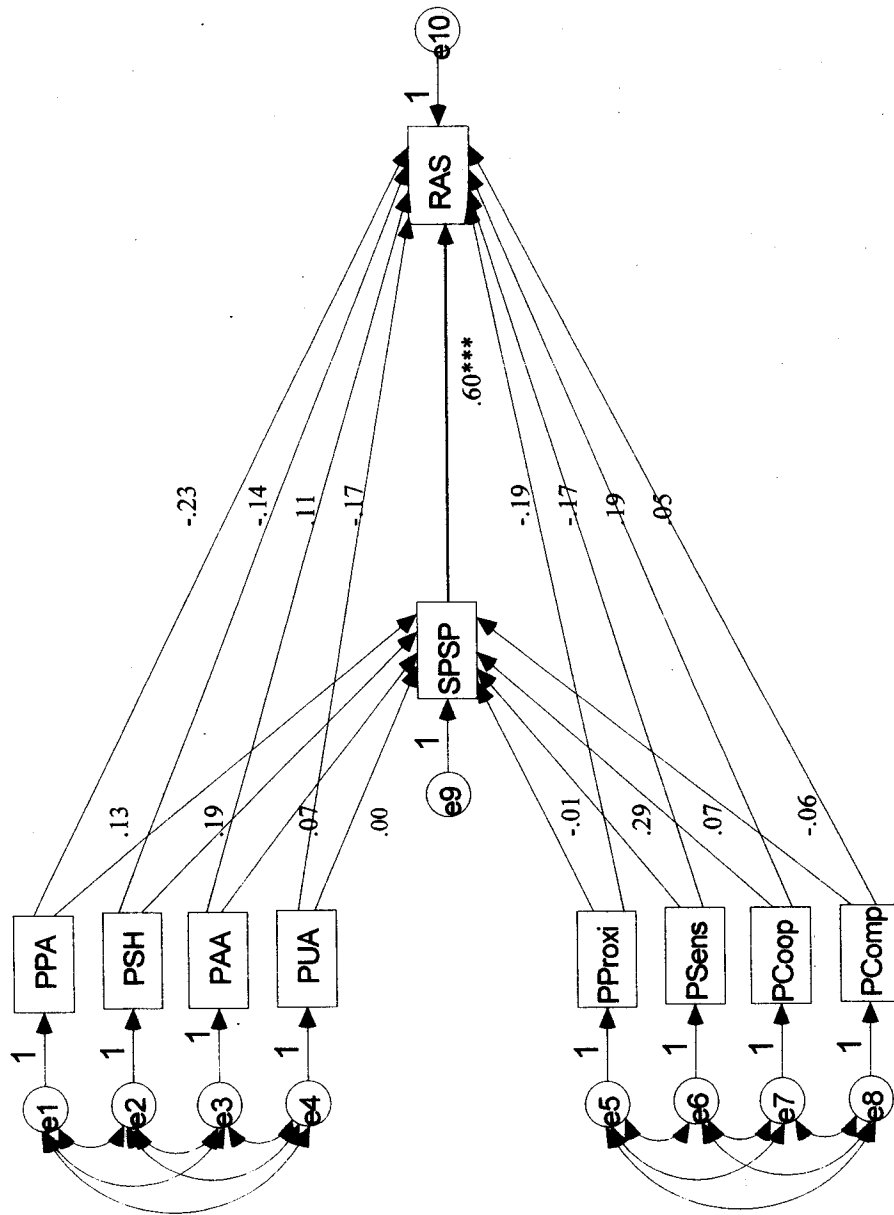


Figure 4. Men's Perceived Social Support and Relationship Satisfaction and Their Female Partners' Adult Attachment and Caregiving

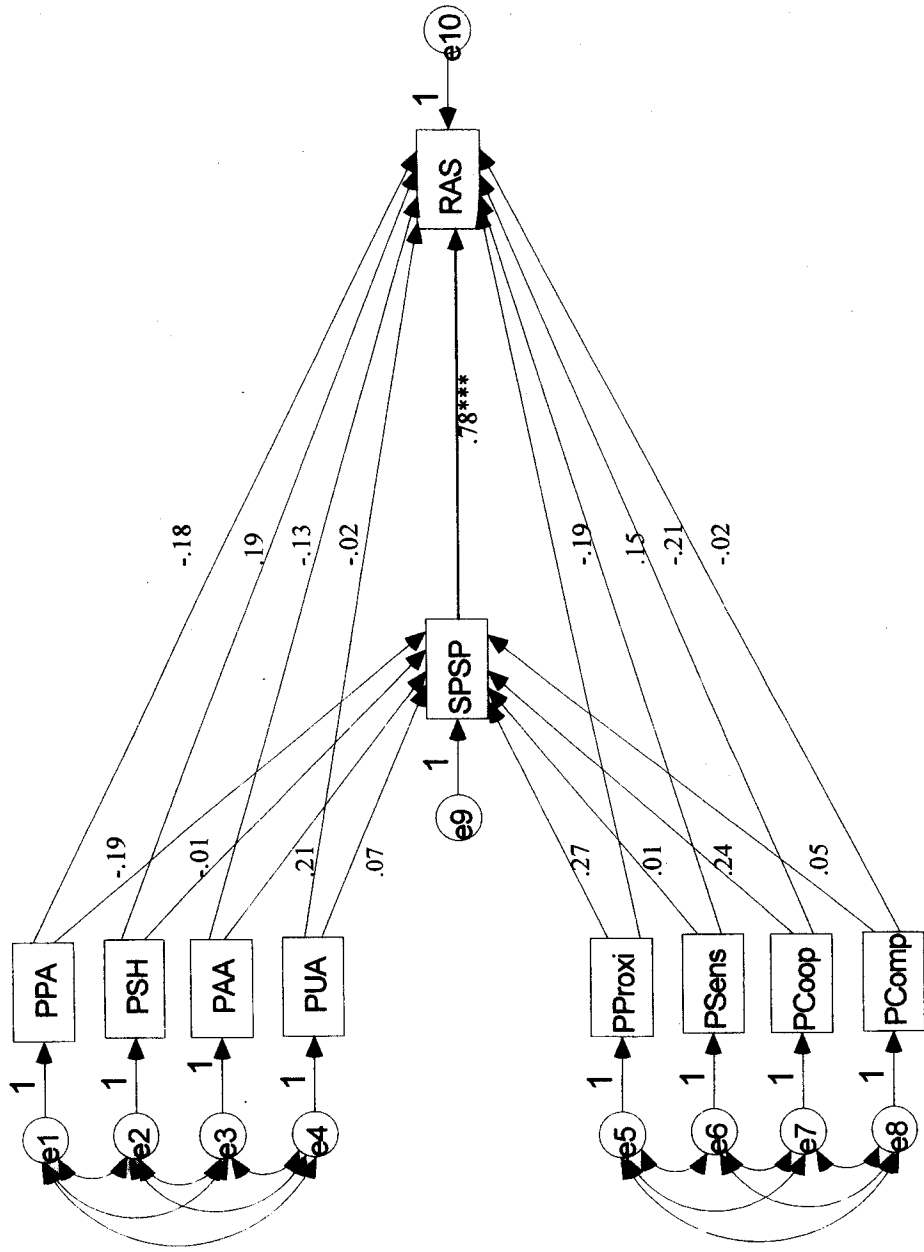


Figure 5. Women's Perceived Social Support and Relationship Satisfaction and their male partners' adult attachment and caregiving

Hypothesis 6: The moderator effects of Instrumentality-Expressiveness

Hypothesis 6 suggested that instrumentality and expressiveness would moderate the influence of adult attachment on social support seeking and relationship satisfaction. In order to test the moderator effect of instrumentality-expressiveness in the relationships between adult attachment and social support seeking and between adult attachment and relationship satisfaction, hierarchical regression analyses on social support seeking and relationship satisfaction were conducted. In the analysis, one of the factors of adult attachment, instrumentality, and expressiveness were included in the first step and the two interactions of one of the factor of adult attachment and instrumentality and adult attachment and expressiveness were included in the next step. In order to create interaction terms, standardized scores of the variables were used. The interactions did not additionally explain the variances of each variable and the unique contribution of the interaction terms were not significant. Thus, the sixth hypothesis was not supported.

Hypothesis 7: The moderator effects of Individualism-Collectivism

Hypothesis 7 suggested that individualism and collectivism would moderate the influence of adult attachment on social support seeking and relationship satisfaction. In order to test the moderator effect of individualism and collectivism, hierarchical regression analyses were conducted as similar way as in hypothesis 6. No interaction effect of adult attachment and individualism-collectivism was detected, and the seventh hypothesis was not supported.

Follow-up Analyses

The correlations between relationship satisfaction, adult attachment, and caregiving were presented in Table 13. Hierarchical regression analyses, were used to

determine the additional amount of relationship satisfaction that might be explained by caregiving in addition to that explained by attachment. In the first step the four adult attachment factors were included, and in the second step the four caregiving subscales were included. The results are presented in Table 14.

For men, adult attachment explained 37% of the variance of relationship satisfaction ($F(4, 100) = 14.85, p < .001$) and caregiving did not explain the additional variance of relationship satisfaction. Among the variables, the unique contribution of proximity avoidance was significant. For women, adult attachment explained 33% of the variance of adult attachment ($F(4, 130) = 15.97, p < .001$) and caregiving significantly explained additional 8% of the variance of adult attachment ($F(4, 126) = 4.20, p < .01$). The unique contributions of proximity avoidance, safe haven, proximity caregiving, and compulsive caregiving were significant.

Table 13. Correlations for Attachment, Caregiving, and Relationship Satisfaction

Own ratings	Relationship Satisfaction	
	Male	Female
1. Proximity Avoidance	-.56***	-.45***
2. Safe Haven	.39***	.49***
3. Abandonment Anxiety	.03	-.08
4. Unavailability Anxiety	-.01	.03
5. Proximity	.49***	.51***
6. Sensitivity	.24*	.30***
7. Cooperation	.27**	.31
8. Compulsive	-.04	-.10

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 14. Hierarchical Regression Analysis for moderating effect of sex in the relationships between adult attachment and caregiving

Step and Variables	R^2	Adj. R^2	F change	df	B	SE	$Beta$
Analysis A, Panel: Male, Criterion Variable: Relationship Satisfaction							
Step1: Adult Attachment	.37	.35	14.85***	(4,100)			
Proximity Avoidance					-.20	.06	-.37**
Safe Haven					.09	.05	.16
Abandonment Anxiety					.06	.04	.13
Unavailability Anxiety					-.04	.05	-.08
Step2: Caregiving	.42	.37	1.86	(4,96)			
Proximity					.15	.09	.18
Sensitivity					.03	.07	.05
Cooperation					.13	.07	.16
Compulsive Caregiving					-.02	.06	-.03
Analysis B, Panel: Female, Criterion Variable: Relationship Satisfaction							
Step1: Adult Attachment	.33	.31	15.97***	(4,130)			
Proximity Avoidance					-.21	.06	-.22**
Safe Haven					.16	.05	.27**
Abandonment Anxiety					.01	.03	.02
Unavailability Anxiety					-.02	.04	-.05
Step2: Caregiving	.41	.37	4.20**	(4,126)			
Proximity					.21	.08	.24*
Sensitivity					.05	.06	.07
Cooperation					.05	.06	.07
Compulsive Caregiving					-.11	.05	-.17*

* $p < .05$. *** $p < .001$.

CHAPTER 5

DISCUSSION

STUDY 1

In this section, discussion of the results of translation and back-translation and reliability-validity study of the Korean translated scales will be presented.

Translation and Back-translation

For this study, five scales were translated into Korean using the translation and back-translation method. At least two people participated in each half of this process in order to reduce personal impressions and misunderstanding in translation and back-translation. There were some difficulties and considerations related to the terms and language styles. There were several terms that we struggled to translate into Korean. For example, the term “partner” from ECRS-K was the most difficult one. In Korean, “partner” usually means business partner in relatively formal relationships, and thus, the terms of lover, spouse, girlfriend/boyfriend were considered. However, the terms of spouse, girlfriend and boyfriend limit the boundary of romantic relationship and lover in Korean may not include marital relationships. In order to include all the relationships, “Lover (including spouse, girlfriend/boyfriend)” was used in the instructions for the instrument. Then, just “lover” were used in each item to indicate “partner” in English.

Another difficult term to translate was “close” in romantic relationships. When translated into Korean, “close” seems to be not capture the depth of romantic relationships, therefore the Korean term best translated as “intimate” in English was used. However, the term “intimate” seemed to be inappropriate for relationships measured in

Perceived Social Support for non-romantic relationships. Considering the options the Korean term for, “close” was consistently used through different scales.

Regarding the language style, there were difficulties related to the positively and negatively stated items at the beginning phase of translation. The sentence with a term of negative meaning was translated into Korean as a negatively stated sentence with positive terms, For example, “I feel uncomfortable...” was translated into “I do not feel comfortable...”, because the sentence seemed to flow in Korean. On the other hand, we considered the consistency between English scales and translated Korean scales. Finally, “I feel uncomfortable...” was kept in order to avoid the differences by the negative or positive statement itself.

Reliability and Validity Tests

The Dual-Language Split Half method of determining reliability was used in this study. The DLSH was developed in order to provide empirical and statistical evidence of the semantic equivalence of the translated scales to the original English versions of scale (Mallinckrodt & Wang, 2004). The positive correlations between half English items and half Korean items, and no significant differences from the correlations between half English and half-English items showed that people responded to English items and Korean items similar ways. The correlation coefficients comparison using the r to z transformation suggested that translated ECRS-K, SPS-K, and RAS-K are as much reliable as the original English version of ECRS, SPS, and RAS.

The internal consistency coefficients of the half-Korean and Half-English items of ECRS, SPS, and RAS completed by bilingual people were quite satisfactory in absolute terms. However, in some cases the dual language split-half reliability was significantly

lower than the all-English items completed by American. Selectively deleting items raised the dual language consistency coefficients slightly, but they were still significantly lower than internal consistency coefficient of all-English items. There are two possibilities regarding these results. First, some items may not have been translated accurately. Second, for Koreans, some items may not consistently describe the construct as intended in the English version of the items. Finally, there might be more than two constructs embedded in the one subscale for Korean respondents.

Checks of test-retest reliability indicated acceptable reliability coefficients except for RAS. The test-retest reliability coefficients were actually higher in Korean items of Avoidance and SPS than corresponding scales of English items, and lower in Korean items of Anxiety than English items. These inconsistent results in both half-Korean items and half-English seems to support the second possibility of unstable construct of these scales for Koreans. The test-retest reliability of RAS were quite low, but this can be understood in terms of the sensitivity of RAS to daily experiences. RAS measures the current romantic relationship satisfaction, which can be affected by the recent experiences in a relationship (e.g, an argument, or other source of injured feelings). Actually, one of the participants mentioned (through writing in margin of the survey) that the happenings in the morning of that day in the romantic relationship affected the way he answered those questions.

The results of construct validity analyses provided support for the constructs of avoidance, anxiety and RAS. Both half Korean items and half English items of Avoidance were correlated with fear of intimacy, the inhibited capacity of an individual to exchange thoughts and feelings with significant others. As expected, avoidance was

not related to social self-efficacy and self-esteem. This seems to be because avoidance is not related to the concerns of being rejected, and it does not affect the working model of self; whereas anxiety is related to the working model of self. As expected, people who were anxious about their partners had low social self-efficacy and self-esteem in both half-English items and half-Korean items. In addition, both half-Korean and half-English items of anxiety were correlated with fear of intimacy, which was not expected. The result showed that the concerns about partner's unavailability or being rejected by their partner were related to inability to share feelings and thoughts with their partners. This result may imply that the anxiety and avoidance are not orthogonal for Korean.

The results presented that SPS (-K) had quite valid construct. As expected, SPS was positively correlated with self-esteem. Both half English items and Korean items of SPS were negatively related to fear of intimacy and positively related to social self-efficacy. Although some correlations were not significant, there were not significant differences between the correlation coefficients of Korean half items and English half items SPS with fear of intimacy and social self-efficacy. RAS (-K) was negatively correlated with fear of intimacy in close relationship and positively correlated with self-esteem in both English half-items and Korean half-items. The non-significant correlations between RAS and social self-efficacy were expected, because the construct that RAS measures is limited to romantic relationships.

In short, results suggested that the ECRS-K, SPS-K, and RAS-K were quite reliable and equivalent in reliability to original English versions of ECRS, SPS, and RAS. The constructs of the translated Korean versions of scales were also quite valid. However, the results of this study suggested more close exploration on the construct of

adult attachment measured by the ECRS-K was necessary, including the possibility of cultural differences.

STUDY 2

In this section, discussion on the results of confirmatory factor analyses as preliminary analyses, results of statistical tests of hypotheses, and several follow-up results will be presented.

Confirmatory Factor Analyses

Confirmatory factor analyses were conducted in order to investigate the equivalence of construct of translated scales into Korean. In two scales of RAS-K (Relationship Assessment Scale) and SSS-K (Social Support Seeking from partner), all the items from English version were retained for the Korean scales based on the results of confirmatory factor analysis. These results showed that RAS-K and SSS-K had equivalent construct to RAS and SSS. However, for other scales, it was necessary to delete items with low factor loadings to produce a model with reasonable fit for the data. Those deleted items may not be accurately translated into Korean in spite of multiple cycles of careful translation-back translation-evaluation process. Relatively many items were deleted from PAQ-K (Personal Attribute Questionnaire-Korean) and INDCOL-K. Thus, only 13 out of 36 items of ECRS-K, 6 items out of 16 items of PAQ-K and 10 out of 32 items of INDCOL-K were retained. Rather than a problem only with translation, perhaps the fact that so many items must be deleted suggests the constructs have a different cultural meaning for Korean's than native English speakers.

Exploratory factor analysis was conducted for ECRS-K to find the additional factors as suggested by the reliability and validity tests. Statistically and conceptually, a

total of four factors seem to describe adult attachment much better for Koreans than the original two-factor solution traditionally used in assessment of English speaking adults. In total, original anxiety subscale was split into two subscales for Korean: Abandonment anxiety and Unavailability anxiety. Abandonment Anxiety seems to measure the expected unavailability of partner in the future and the concerns about termination of the relationship (e.g. “I worry a fair amount about losing my partner”), and Unavailability Anxiety seems to measure the concerns about inaccessible partners within the on-going relationships (e.g. “I get frustrated when my partner is not around me as much as I would like”). For Koreans, these two subscales were correlated, but the correlation was not high enough to be one factor. People who worry about their partners unavailability may not necessary worry about being abandoned or being alone. In Korea, it is common that family members cannot spend much time together, because they often have to stay late in their work places. They may lose their jobs, otherwise, and people believe that this is the way they take care of their family and close people eventually. Koreans often exposures in the situations that their partners are not available, but it does mean the termination of relationships.

The original avoidance subscale was divided into two factors for Koreans: Proximity avoidance and safe haven. These may represent two different attachment related behavioral goals of avoidance-orientated goal and proximity-seeking goal (Fraley & Shaver, 2000). In order to deal with the feelings caused in anxiety-provoking situations, some respondents may try to withdraw themselves and others try to get attention and care. “Proximity avoidance” included items measuring uncomfortable

feelings of being close to partner; and items of “Safe Haven” represented seeking support and help under stress.

Regarding the orthogonal relationships between avoidance and anxiety, “Proximity avoidance” and “Unavailability Anxiety” had very low correlation, and the two subscales were orthogonal. However, “Safe haven” from avoidance and “Unavailability Anxiety” from anxiety were significantly correlated ($r = .44$). This result explains the unexpected significant relationships between avoidance and anxiety in the previous studies. People who often seek support from partner under stress may more often notice that their partners are not available than people who do not seek help from partner under stress. On the other hand, when people notice that partners are not available, they may feel stressful and then seek support from partner.

Hypotheses Tests

The general purpose of this study was to investigate the relationships of adult attachment, caregiving, mutual social support among partners, and romantic relationship satisfaction of Koreans. The participants who had current partners were included in this study because of the main interest in social support seeking from current partner and the current romantic relationship satisfaction.

The first hypothesis held that the effect of adult attachment on relationship satisfaction would be mediated by the perceived social support from partner and perceived social support from others. The hypothesis was only partially supported. As hypothesized, the people perceived more support from their partner when they less concern about the unavailability of their partners, less avoid proximity to their partners,

and seek more help and advice from their partners. And thus, they reported higher romantic relationship satisfaction.

Adult attachment was related to the perceived social support from both partner and others. These results support the previous studies that showed negative relationships between adult attachment including anxiety and avoidance and perceived social support (e.g. Anderson & Tucker, 2000; Priel & Shamai, 1995). People who are high in unavailability anxiety may think that the support resources are not available, and thus perceive low social support. People who are high in proximity avoidance and low in safe haven does not seek proximity and support, and thus perceive low social support.

The unique contribution of perceived social support from partner on relationship satisfaction was significant; while the unique contribution of the perceived social support from others were not significant. The result of positive correlation between perceived social support from partner and the romantic relationship satisfaction is consistent with results of previous studies of U.S. samples (Brunstein et al., 1996; Collins & Feeney, 2000). However, the insignificant relationship between social support from others and relationship satisfaction was different from previous studies. Some previous studies in the Western culture showed positive relationships (Lee, 1988) and others showed negative relationships (Julien & Markman; McGonagel, et al., 1992). In this study, the zero-order correlations between perceived social support from others and relationship satisfaction was significant. Interestingly, people who perceive more support from others feel more satisfied in their romantic relationships. However, there was no direct effect of perceived social support from others on the relationship satisfaction, in the structure equation modeling. The relationships between them seemed to be caused by the significant

correlations between perceived social support from partner and perceived social support from others, and these two variable's correlations with adult attachment (see Figure 1).

In addition to the indirect effect of perceived social support, there was a direct effect of proximity avoidance on the relationship satisfaction (see Figure 1). Withdrawing or keeping distance from partner (proximity avoidance) negatively influenced romantic relationship satisfaction regardless of the perceived social support from partner. This result implies that feeling comfortable being close to partner is the most important factor for the relationship satisfaction among all the adult attachment factors. The effect of abandonment anxiety on the romantic relationship satisfaction was not significant. Even if people have high abandonment anxiety in the relationship, it may be less activated in the currently active romantic relationship, and thus may not be related to the current romantic relationship satisfaction.

In the second hypothesis, the mediator effect of perceived social support in the relationships between adult attachment and social support seeking to partner was suggested. Regarding seeking support, participants reported their seeking social support from partner during last one month. The mediator effect of perceived social support from partner was partially significant, and the hypothesis was partially supported. People with low proximity avoidance, high safe haven, and low unavailability anxiety, perceived more support from partner, and thus they sought support from their partner. As in hypothesis 1, there was no direct or indirect effect of abandonment anxiety on social support seeking. Feeling anxious about being abandoned or being alone was not related to seeking support from partner. This result is consistent with some of the results of Collins and Feeney (2000), in that anxiety was not related to support seeking. People with high

abandonment anxiety may feel ambivalent in seeking social support. They may want to seek social support from partner because they want to depend on their partner; but at the same time, they may not want to do so, because they believe that a partner may leave them (Wallace & Vaux, 1998). The fear of being abandoned may prevent people from seeking support from their partner in spite of their strong needs (Collins & Feeney, 2000). This finding suggests a basic dilemma for young Korean adults which may be a core reason for much of the relationship unhappiness of persons with high fear of abandonment.

In contrast to these findings about potential sources of unhappiness, there was a positive indirect effect of safe haven on social support seeking from partner. People who are high in safe haven sought social support from their partner regardless the perceived social support from their partner. Considering that seeking support is important part of attachment system (Ainsworth, 1984) and safe haven measures the tendency to seek support under stress, the direct relationship between safe haven and social support seeking in addition to the indirect effect are understandable. This result supports the additional factor of “Safe Haven” has different construct from proximity avoidance. It can be seen that the “Safe Haven” aspect of adult attachment is a personality trait that may be especially important for coping.

In the third hypothesis, the moderator effect of perceived stress in the relationships between adult attachment and social support seeking from partner was suggested. Both perceived stress and social support seeking were what participants experienced during the last one week. Surprisingly, the social support seeking from partner was not influenced by the perceived level of stress for either men or women, and

this hypothesis was not supported. This result partially supports the previous study by Kemp and Neimeyer (1999) and Mikulincer and his colleagues (1999). They reported that the level of stress was not associated with the social support seeking of securely attached adults.

However, considering that most of the previous studies reported different social support seeking under the different level of stress (e.g. Anderson & Tucker, 2000; Ogibene & Collins, 1998), the insignificant result of this study may be understood, considering the differences of actual stress and perceived stress. Even if actual stressful events appear to be the same for people from the perspective of an outside observer, the evaluation and perception about the stress among individuals would vary. Perceived stress was significantly correlated with proximity avoidance and safe haven, which suggests that people perceive the stress differently according to their adult attachment. In addition, perceived stress may have been affected by social support seeking and that resulted in actual support received after the stressful events but before the survey for this study.

In the fourth hypothesis, the correlations between adult attachment and caregiving were examined. This hypothesis was partially supported. For men and women, proximity avoidance was related to proximity caregiving; and both safe haven and unavailability anxiety was associated with cooperative caregiving. These results are congruent with results of studies by Kuncze and Shaver (1994) and Feeney and Collins (2001). In this study, people with high proximity avoidance were less accepting and accessible for their partners. People who feel comfortable in being close offered support staying close with their partner when needed. People who sought support from their partner reported high

cooperative caregiving to their partners. People who feel comfortable in seeking support seemed to feel comfortable in providing support, suggesting a kind of mutual cooperative attitude. Worrying about their partner's unavailability was related to high controlling and low cooperative caregiving. People with high unavailability anxiety may pay more attention to their own needs and thus, may offer the controlling caregiving to their partners.

There were sex differences in caregiving and relationships between adult attachment and caregiving. Korean men were higher in proximity caregiving than women, and this result was different from previous studies of the U.S. men (e.g. Feeney, 1996; Kuncle & Shaver, 1994). This result may be because Korean men feel more responsibility in taking care of their partners, by offering support when it is needed, while men expect themselves solve the problems independently. Regarding the relationships between adult attachment and caregiving, men who were anxious about their partner's unavailability offered more intrusive and over-involved caregiving, but this relationship was not significant for women. The result for men supported the previous studies (Feeney & Collins, 2001; Kuncle & Shaver, 1994). This insignificant relationship for women may be perhaps because compulsive caregiving is what women believe they are expected to provide due to their gender-role socialization. For women, the tendency to seek support from their partner when they are under stress (safe haven) was positively related to proximity caregiving and sensitivity caregiving, in addition to the cooperative caregiving. Women who could actively seek support from their partner, not expecting their partners to be recognized, may easily take care of partner's needs by offering positive caregiving.

This result showed that seeking support from partner is the most important factor for women's caregiving in this sample of young adult Koreans.

In the fifth hypothesis, the relationships between partner's adult attachment and caregiving on perceived social support and relationship satisfaction of one's own were suggested. The hypothesis was partially supported. Men perceived more social support from their partner and rated higher relationship satisfaction, when their female partner sought more support from them and offered more sensitivity and cooperative caregiving. The unique contributions of female partner's attachment and caregiving on men's perceived social support and relationship satisfaction were not significant, and it seems to be because of the correlations among women's attachment factors and caregiving factors. Unlike men, female partner's rated perceived social support and relationship satisfaction were not related to male partner's adult attachment and caregiving.

In terms of sex difference in the relationships between partner's caregiving and perceived social support, the results were opposite of Kuncze and Shaver (1994). They showed the significant relationships between men's self-report caregiving and their female partner's perceived caregiving, and the non-significant relationship between women's self-report caregiving and their male partner's perceived caregiving. There are two interpretations possible from the result of this study. First, male's self-reported caregiving may be different from the level of caregiving perceived by the partner. Even when men think that they offer positive caregiving, it is not perceived in this way by the female partner. Second, women's perception of the relationship is likely to be less affected by the actual partner in terms of caregiving. What the actual partner does in terms of caregiving seems to be more important for men than for women.

The positive relationship between female partner's sensitivity and cooperative caregiving and men's relationship satisfaction is similar in some respects to the results of previous studies (Feeney, 1996; Feeney & Collins, 2001). Men are socialized not to express their feelings or concerns, but to take care of themselves. The results of this study suggest that when a female partner sensitively notices men's needs and offers cooperative caregiving, men's unexpressed needs can be satisfied, and thus they may feel satisfied in the romantic relationship (Feeney, 1996). The results related to the partner's attachment partially supported the previous study (Feeney & Collins, 2001). There was no direct effect of female partner's adult attachment on men's perceived social support of the partner, but female partner's sensitivity caregiving mediated the effect of their safe haven on men's perceived social support and relationship satisfaction.

The sixth hypothesis proposed a moderating effect of instrumentality-expressiveness in the relationships between adult attachment and relationship satisfaction. This hypothesis was not supported. Unexpectedly, the relationships between adult attachment and social support seeking were not different according to the sex role socialization measured by instrumentality-expressiveness. Instrumentality has previously been called "masculinity", and expressiveness has previously been called "femininity" to indicate the attributes of female sex stereotype. In this study there were no interaction effects of these on romantic relationship satisfaction. Previous studies (e.g. Pietrimonaco & Carnelley, 1994) had showed the gender differences in the relationships between adult attachment and relationship satisfaction and had discussed these differences in terms of gender role socialization. Unlike the previous studies, the results of this study suggest that relationship satisfaction is negatively influenced by proximity avoidance and

positively influenced by safe haven, regardless the sex role socialization. The results of this study that are not consistent with the previous studies can perhaps be explained in terms of the fit of sex role socialization of Korean measured with instrumentality-expressiveness.

The seventh hypothesis held the moderating effect of individualism and collectivism in the relationships between adult attachment and social support seeking, and between adult attachment and relationship satisfaction. It was expected that individualism and collectivism would have moderator effect considering the influence of Korean culture in these relationships. However, these moderator effects were not found and the hypothesis was not supported. This may be because of the correlations between adult attachment and individualism-collectivism.

People who reported higher individualistic values reported higher scores in abandonment anxiety and unavailability anxiety. In a collectivistic society, people who adopt individualistic values (e.g. privacy and competition) are likely to evaluate that their partners would not be available. On the other hand, people from collectivistic culture may adopt individualistic values (e.g. privacy, competition) when they are more likely to appraise that their partners are not available. Likewise, in a collectivistic culture, people who value the collectivistic characteristics (e.g. group harmony and interests of group) tended not to withdraw from their partners, although the results were not significant. In contrast, people who tend to keep distance from their partner in the collectivistic culture seem not to adopt collectivistic values.

Follow-up Analyses

Following the notion that both exhibiting attachment behavior and playing a role of caregiver are important for the optimal functioning of romantic relationship (Shaver & Hazan, 1988), the unique contributions of caregiving on relationship satisfaction was examined in a follow-up analysis, not related to any particular hypothesis. Caregiving uniquely contributed the relationship satisfaction for women; while it was not significant for men. For women, responding to partner's needs and supporting them explained their relationship satisfaction in addition to their own adult attachment. Specifically, when women thought that they were more accessible and accepting, and less intrusive and over-involved to their partners, they felt more satisfied in their relationship. This may be related to their gender socialization in Korea, in which women are encouraged to provide support and take care of others in the relationship. By providing caregiving to their partner, women may meet the cultural expectations about the relationship and thus feel satisfied in their romantic relationship.

Limitations

A number of important methodological limitations in this study must be acknowledged. First, the data used to test the main hypothesis were subsets of the data used for confirmatory factor analyses. We used the data from all the participants for most of the confirmatory factor analysis and then selected participants who had current romantic partners for the analysis of main hypotheses. This limits the stable factor structures of Korean versions of scales.

Second, there is a limitation in generalizing the results of this study to Korean population. At least one member of each couple studied (and often both) were Korean

college students, as well as every research participant was not part of a couple. The results of this study can be generalized to college students, but careful consideration is necessary in applying the results to Korean couples who are not college students, or who graduated from college some time ago when cultural norms were different than they may be today.

Third, one of the hypothesis examined the influence of partner's attachment and caregiving on relationship satisfaction. Among the identified couples, two were lesbian couples and they were excluded for this hypothesis. The results of the couple interaction related to this specific hypothesis cannot be generalized to GLBT couples. The data from fifty-three couples were used for the analysis. The small number of significant findings seems to be partially because of the relatively small number of couples and low statistical power. Future research with more couples would be helpful in understanding the couple interaction

Fourth, we need to be careful in compare the result of this study to previous research conducted in Western cultures. First, the psychological constructs are different among Korean and Western people, as we observed in this study with regard to the ECRS-K. Second, in the similar context, different measurements were used in order to measure the same construct across the study. Finally, societal changes need to be considered. For example, sex role socialization in contemporary Korean society would be different from 20 years ago.

Fifth, the causal relationships among the variables are not clear, since all data was collected at one point in time. Some instruments asked respondents to give general ratings across relationships, whereas other ratings were specific to current relationships.

However, there are possibilities that the current relationships affect their perception of their general attitude and styles. Halo effects and other forms of single method bias may have influenced these ratings. Firm conclusions about causal relationships are not possible.

Suggestions for Further Research

In this section, the directions for the further research would be suggested. First, the suggested based on the methodological limitation addressed above will be discussed. Then, further research grounding the results of this study will be addressed.

Regarding the methodological limitations, first, more studies on ECRS-K are recommended in order to confirm the stable four- factor structure of the ECRS-K for Korean respondents. Studies on long-term romantic relationships are also necessary, since we cannot be sure that the romantic relationships in this study were attachment relationships or pre-attachment relationships.

Second, in the context of cultural differences and considering the limitation of cultural comparisons, cross-cultural studies are needed. As mentioned above, we cannot tell if the differences observed in this study were caused by cultural differences or other methodological or social changes. In this study, collectivism and individualism was measured to investigate the influences of cultural factors. However, the phenomenon that we explored in this study was a within relatively collectivistic culture, without direct comparisons to other cultures.

Third, related to the limitation of causal relationships among the variables, longitudinal experimental research is needed. Using these methods may help expand the

understanding among the general attitudes to relationships and the perception on the actual relationships, and the attachment or caregiving behaviors in actual relationship.

Fourth, the instruments that were developed in the U.S. were translated and used in this study for Koreans. Although we found some factor differences with the items of ECRS-K, it does not mean that the items include all the important aspects of Korean adult attachment. As it were, we used the frame of Western adult attachment to see the adult attachment of Korean and we could find some differences. However, there might some parts that the Western frame could not figure. And thus, endogenous studies in adult attachment are recommended. For example, qualitative study using interview may be helpful in finding unique aspects of the adult attachment and the romantic relationship interactions.

Fifth, more exploration on the separation protest and secure base function of the attachment are recommended in the further study. Among the four attachment functions, proximity seeking, safe haven, separation protest, and secure base, the first were investigated in this study. The first two are functions that are more frequently found at the beginning phase of the attachment relationship. In order to better understand the adult attachment function, it would be necessary to examine those functions all together.

Sixth, the adult romantic relationships include attachment system, caregiving system, and sex (mating or reproduction). This study explored the attachment system and caregiving system. Including the sex would help understanding the romantic relationship. Considering the sex is important part at the relatively beginning of the relationships and the caregiving is more important in the long-term relationships, it might be especially helpful in understanding pre-attachment romantic relationships. There could be also

cultural differences that Korean society that are affected by the Confucianism, which discourages pre-marital sex.

Implications for Theory

In general, the findings of this study of Korean students are consistent with findings from previous studies of English speaking research participants. As expected, adult attachment was associated with caregiving, perceived social support, social support seeking, and relationship satisfaction. Specifically, adult attachment was related to perceived social support from both from partners and from others. The fact that adult attachment activated in the romantic relationships affected the perceived social support from others as well as the perceived support from one's partner confirmed predictions from adult attachment theory about how working models influence perceptions of others. Second, adult attachment and perceived social support from partner was associated with the quality of relationships and social support seeking behaviors from one's partner. Third, caregiving attitudes to their partners were strongly related to adult attachment. These results also supported predictions derived from attachment theory that the caregiving system is affected by an individual's attachment system.

Although the results of this study supported attachment theory and findings from previous studies in broad outlines, at a more specific level there were some differences. These differences may be caused by only cultural differences, but it is also possible that methodological factors were responsible. First, results suggested not two factors of adult attachment anxiety and avoidance, but four factors of Proximity avoidance, safe haven, abandonment anxiety, and unavailability anxiety. The association patterns of these factors

to other variables were different in important respects for each factor, which supported that they are unique factors.

Second, this study showed that participants' own caregiving, in addition to adult attachment, explained women's own relationship satisfaction, but men's own caregiving did not contribute their relationship satisfaction. Adult romantic relationships have been differentiated from infant-caregiver attachment, in that the relationship for adults involves bi-directional caregiving. Consequently, it was expected that both parts of the couple played a role of giver and receiver and both roles influenced the relationship satisfaction. However, the role of caregiver did not affect the relationship satisfaction for Korean men. This result is very interesting considering that men were higher in proximity caregiving than women. Although Korean men feel responsibility in taking care of partners and offer support, this role apparently is not likely to influence their relationship satisfaction.

Third, another different finding was in the affect of partner's attachment and caregiving on the own perceived social support from partner and relationship satisfaction. Since perceived social support may be only marginally related to the actual support an "unbiased" observer might report, and relationship satisfaction is the evaluation of the current relationship, it was expected that the partner's characteristics would affect the relationship satisfaction. Men's perceived social support and relationship satisfaction was correlated with female partner's attachment and caregiving; but the reverse was not true. The relationship satisfaction of Korean women was *not* associated with the adult attachment and caregiving of their male partners. For Korean women, their perceptions were important for relationship satisfaction; but the actual partner's characteristics of

their partners apparently were not important. These results and other sex differences were discussed in terms of gender role socialization.

Implications for Counseling Practice

If the results of this study are confirmed with further research, some growing confidence in implications for counseling may result. First, as addressed in the introduction, many clients complain about problems in their romantic relationships in counseling sessions. This study may provide a framework to understand romantic relationship related issues, such as adult attachment, mutual caregiving, and perceptions of support. Counselors may explore clients' adult attachment, caregiving, seeking support, perception of support, and relationship satisfaction for clients to understand their interactions within the romantic relationship. In addition, sex differences in romantic relationship issues suggested in this study may help counselor understand client with different sex from counselor.

Second, this study will be helpful in understanding especially Koreans who are one of the biggest populations among international students in the U.S. The aspects that can be considered as cultural differences were suggested through the discussion. Although the more studies are necessary, counselors may keep in mind that those possible differences. In South Korea, this study would be helpful for counselors to capture the differences between the Western theories or studies and actual romantic relationships of Korean, and thus better understand the Korean clients with romantic relationship issues.

REFERENCES

- Acitelli, K. L. (1996). The neglected links between marital support and marital satisfaction, In R. G. Pierce, R. B. Sarason & G. I. Sarason (Eds.), *Handbook of Social Support and the Family* (pp. 83-104). Plenum Press: New York.
- Acitelli, L. K. & Antonucci, T. C. (1994). Gender differences in the link between marital support and satisfaction in older couples. *Journal of Personality and Social Psychology*, 67, 688-698.
- Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore: Johns Hopkins University Press.
- Ainsworth, M. D. S. (1989). Attachment beyond infancy. *American Psychologist*, 44 (4), 709-716.
- Ainsworth, M. D. S., Bell, S. M., & Stayton, D. J. (1974). Infant-mother attachment and social development: Socialization as a product of reciprocal responsiveness to signals. In M. P. M. Richards (Ed.), *The Integration of a Child into a Social World*. Cambridge University Press: New York.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*, Hillsdale, NJ: Erlbaum.
- Amirkhan, J. H. (1994). Criterion validity of a coping measure. *Journal of Personality Assessment*. 62, 243-261.
- Amrikhan, J. H. (1990). A factor analytically derived measure of coping: The Coping Strategy Indicator. *Journal of Personality and Social Psychology*, 59, 1066-1075.

- Anders, S. L., & Tucker, J. S. (2000). Adult attachment style, interpersonal communication competence, and social support. *Personal Relationships*, 7(4), 379-389.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four category model. *Journal of Personality and Social Psychology*, 61, 226-244.
- Bowlby, J. (1968). *A secure base*. New York: Basic Books.
- Bowlby, J. (1969/1982). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation*. New York: Basic Books.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Loss*. New York: Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Brennan, K. A., & Shaver, P. R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin*, 21, 267-283.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J.A. Simpson & W. S. Rholes (Eds.). *Attachment theory and close relationships* (pp. 46-76). New York: Guilford Press.
- Brunstein, J. C., Dangelmayer, G., Schultheiss, O. C. (1996). Personal goals and social support in close relationships: Effects on relationship mood and marital satisfaction. *Journal of Personality & Social Psychology*, 71(5), 1006-1019.

- Carlson, V. J., & Harwood, R. L. (2003). Attachment, culture, and the caregiving system: The cultural patterning of everyday experiences among Anglo and Puerto Rican mother-infant pairs. *Infant Mental Health Journal, 24*(1), 53-73.
- Carnelley, K. B., Pietromonaco, P. R., Jaffe, K (1996). Attachment, caregiving, and relationship functioning in couples: Effects of self and partner. *Personal Relationships, 3*, 257-278.
- Cho, Y-J, Mallincorkdt, B., & Choi, H-R . (2004). *Influence of separation from parents on Korean students' adult attachment*. Poster session presented at the 2004 American Psychological Annual Convention, Honolulu, Hawaii.
- Choi A-S (2002). *A study on the relationship between perceived stress and social support of middle- aged women*. Unpublished master's thesis. Ehwa Women's University, Seoul, Korea [Korean]
- Choi, K-H. (2002). Psychological separation-individuation and adjustment to college among Korean American students: The roles of collectivism and individualism. *Journal of Counseling Psychology. Vol 49*(4), 468-475.
- Clark, K. K., Bormann C. A., Cropanzano, R. S., & James, K. (1995). Validation Evidence for three coping measures. *Journal of Personality Assessment, 65*(3), 434-455.
- Coble, H. M. & Gantt, D. L., & Mallinckrodt, B. (1996). Attachment, social competency, and the capacity to use social support, In R. G. Pierce, R. B. Sarason & G. I. Sarason (Eds.), *Handbook of Social Support and the Family* (pp. 141-172). Plenum Press: New York.

- Cohen, S., Kamark, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396.
- Cohn, D. A., Silver, D. H., Cowan, C. P., Cowan, P. A., & Pearson, J. (1992). Working models of childhood attachment and couple relationships. *Journal of Family Issues, 13*(4), 432-449.
- Collins, N. L. & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support-seeking and caregiving in adult romantic relationships. *Journal of Personality and Social Psychology, 78* (6), 1053-1073.
- Collins, N. L. & Read, S. J. (1990). Adult, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*(4), 644-663.
- Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology, 74*(5), 1380-1397.
- Coyne, J. C. & Andersaon, K. K. (1999). Marital status, marital satisfaction, and support processes among women at high risk for breast cancer. *Journal of Family Psychology, 13*(4), 629-641.
- Crowell, J. A. & Feldman, S. S. (1991). Mothers' working models of attachment relationships and mother and child behavior during separation and reunion. *Developmental Psychology, 27*, 597-605.
- Cutrona, C. E. & Suhr, J. A. (1994). Social support communication in the context of marriage: An analysis of couple's supportive interactions. In B. Burleson & T. Albrecht (Eds). *Communication of social support: Messages, interactions, relationships, and community* (pp. 113-135). Thousand Oaks, CA

- Cutrona, C. E. (1989). Ratings of social support by adolescents and adult informants: Degree of correspondence and prediction of depressive symptoms. *Journal of Personality and Social Psychology*, 57, 723-730.
- Cutrona, C. E., & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. R. Sarason, I. G. Sarason & G. R. Pierce (Eds.), *Social Support: An interview view* (pp. 319-366). New York: Wiley.
- Davis, M. H., Morris, M. M., & Karus, L. A. (1998). Relationship-specific and global perceptions of social support: Associations with well-being and attachment. *Journal of Personality and Social Psychology*, 74(2), 468-481.
- Dilworth-Anderson, P. & Marshall, S. (1996). Social Support in its cultural context, In R. G. Pierce, R. B. Saraso & G. I. Sarason (Eds.), *Handbook of Social Support and the Family* (pp. 67-82). Plenum Press: New York.
- Feeney, B. C. & Collins, N. L. (2001). Predictions of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology*, 80(6), 972-994.
- Feeney, B. C., & Kirkpatrick, L. A. (1996). Effects of adult attachment and presence of romantic partners on physiological responses to stress. *Journal of Personality and Social Psychology*, 70(2). 255-270.
- Feeney, J. A. & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58(2), 280-291.
- Feeney, J. A. & Noller, P. (1996). *Adult attachment*. Beverly Hills, CA:Sage
- Feeney, J. A. (1996). Attachment, caregiving, and marital satisfaction. *Personal Relationships*, 3, 401-416.

- Feeney, J. A. (1999). Adult attachment, emotional control, and marital satisfaction. *Personal Relationships, 6*(2), 169-185.
- Feeney, J. A. (2002). Attachment, marital interactions, and relationship satisfaction: A diary study. *Personal Relationships, 9*, 39-55.
- Feldt, L. S. (1969). A test of the hypothesis that Cronbach's alpha or Kuder-Richardson coefficient twenty is the same for two tests. *Psychometrika, 45*, 99-105.
- Fincham, F. D. & Bradbury, T. N. (1990). Social support in marriage: The role of social cognition. *Journal of Social and Clinical Psychology, 9*, 31-42.
- Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology, 46*(4), 839-852.
- Fraley, R. C. & Davis, K. E. (1997). Attachment formation and transfer in young adults' close friendships and romantic relationships. *Personal Relationships, 4*, 131-144.
- Fraley, R. C. & Shaver, P. R. (1998). Airport separations: A naturalistic study of adult attachment dynamics in separating couples. *Journal of Personality and Social Psychology, 75*, 1198-12122.
- Fraley, R. C. & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology, 4*, 132-154.
- Frazer, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology. *Journal of Counseling Psychology, 31* (1), 115-134.
- George C., & Solomon, J. (1996). Representational models of relationships: Link between caregiving and attachment. *Infant Mental Health Journal, 17*, 198-216.

- George C., & Solomon, J. (1999). Attachment and caregiving: The caregiving behavioral system. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 649-670). New York, NY
- Hazan, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511-524.
- Hazan, C. & Shaver, P. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology*, 59(2), 270-280.
- Hendrick, S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage & the Family*. 20(1), 93-98.
- Julien, D., & Markman, H. J. (1991). Social support and social networks as determinants of individual and marital outcomes. *Journal of Social and Personal Relationships*, 8, 549-568.
- Kemp, M. A. & Neimeyer, G. J. (1999). Interpersonal attachment: experiencing, expressing, and coping with stress. *Journal of Counseling Psychology*, 46(3), 388-394.
- Kim, K & Kim, U. (1997). Conflict, in-group, and out-group distinction and mediation: Comparison of Korean and American students. In K. Leung, U. Kim, S. Yamaguchi, & Y. Kashima (Eds.). *Progress in Asian Social Psychology* (Vol.1, pp.241-259). Singapore: Wiley.
- Kim, Sin-Jung, Jung, K-H, & Hah, Y-S (1990). The relationship between the perceived stress and healthy life style in the process of acquisition of mothering role. *Nursing Science*, 2, 23-47. [Korean]

- Kirkpatrick, L. A., & Davis, K. E. (1994). Attachment styles, gender, and relationship stability: A longitudinal analysis. *Journal of Personality and Social Psychology*, 66, 502-512.
- Kirkpatrick, L. A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships*, 1, 123-142.
- Kobak, R. R. & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation and perceptions of self and others. *Child Development*, 88, 135-146.
- Kunce, L. J., & Shaver, P. R. (1994). An attachment-theoretical approach to caregiving romantic relationships. *Advances in Personal Relationships*, 5, 205-237.
- Lee, G. R. (1988). Marital satisfaction in later life: The effects of non-marital roles. *Journal of Marriage and the Family*, 50, 775-783.
- Levy, M. B., & Davis, K. E. (1988). Love styles and attachment styles compared: Their relations to each other and to various relationship characteristics. *Journal of Social and Personal Relationships*, 5, 439-471.
- Lussier, Y., Sabourin, S., & Turgeon, C. (1997). Coping strategies as moderators of the relationship between attachment and marital adjustment. *Journal of Social and Personal Relationships*, 14 (6), 777-791.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, 50 (1&2), 66-104.
- Mallinckrodt, B. & Wang, C-C. (2004). Quantitative methods for verifying semantic equivalence of translated research instruments: A Chinese version of the

- Experiences in Close Relationships Scale. *Journal of Counseling Psychology*, 51(3), 368-379.
- Mallinckrodt, B. (2000). Attachment, Social competencies, and interpersonal process in psychotherapy. *Psychotherapy Research*, 10, 239-266.
- McGonagle, K. A., Kessler, R. C., & Schilling, E. A. (1992). The frequency and determinants of marital disagreements in a community sample. *Journal of Personal and Social Relationships*, 9, 507-524.
- Meyers, S. A. & Landsberger, S. A. (2002). Direct and indirect pathways between adult attachment style and marital satisfaction. *Personal Relationships*, 9(2), 159-172.
- Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and posttraumatic psychological distress: The impact of the Gulf War in Israel. *Journal of Personality and Social Psychology*, 64(5), 817-826.
- Mikulincer, M. & Florian, V. (1995). Appraisal of and coping with a real-life stressful situation: The contribution of attachment styles. *Personality and Social Psychology Bulletin*, 21(4), 406-414.
- Ognibene, T. C., & Collins, N. L. (1998). Adult attachment styles, perceived social support and coping strategies. *Journal of Social and Personal Relationships*, 15, 323-345.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta analysis. *Psychological Bulletin*, 128(1), 3-72.

- Pietrimonaco, P. R., & Carnelley, K. B. (1994). Gender and working model of attachment: Consequences for perceptions of self-romantic relationships. *Personal Relationships, 1*, 63-82.
- Priel, B. & Shamai, D. (1995). Attachment style and perceived social support: Effects on affect regulation. *Personality and Individual Differences, 19*, 235-241.
- Ptacek, T. J. (1996). The role of attachment in perceived support and the stress and coping process. In Pierce, G. R. & Sarason, B. R.. & Sarason, I. G. (Eds.). *Handbook of Social Support and the Family* (pp. 495-520). Plenum Press: New York.
- Rothbaum, F., Weisz, J., Pott, M., Miyake, K., & Morelli, G. (2000). Attachment and culture: Security in the United States and Japan. *American Psychologist, 55*(10), 1093-1104.
- Rothbaum, F., Weisz, J., Pott, M., Miyake, K., & Morelli, G. (2001). Deeper into attachment and culture. *American Psychologist, 56*, 827-829.
- Russell, D. W., Kahn, J. H., Spoth, R., & Altmaier, E. M. (1988). Analyzing data from experimental studies: A latent variable structural equation modeling approach. *Journal of Counseling Psychology, 45*, 18-29.
- Sarason, B. R., Pierce, G. R., Shearin, E. N., Sarason, I. G., Waltz, J. A., & Poppe, L. (1991). Perceived social support and working models of self and actual others. *Journal of Personality and Social Psychology, 60*, 273-287.
- Sarason, I. G., Sarason, B. R., & Shearin, E. N. (1986). Social support as an individual difference variable: Its stability, origins, and relational aspects, *Journal of Personality and Social Psychology, 50*, 845-855.

- Shaver, P. R., & Hazan, C. (1988). A biased overview of the study of love. *Journal of Social and Personal Relationships*, 5, 473-501.
- Shaver, P. R., & Hazan, C., & Bradshaw, D. (1988). Love as attachment: The integration of three behavioral systems. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 68-69). New Haven, CT: Yale University Press.
- Shaver, P. R., Papalia, D., Clark, C. L., Tidwell, M. C., & Nalbone, D. (1996). Androgyny and attachment security: Two related models of optimal personality. *Personality and Social Psychology Bulletin*, 22(6), 582-597.
- Shin, H-J., & Kim, C-D. (2002). A validity study of coping strategy indicator (CSI). *The Korean Journal of Counseling and Psychotherapy*, 14 (4), 919-935. [Korean]
- Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology*, 59(5), 971-980.
- Simpson, J. A., Rholes, S. W., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation. *Journal of Personality and Social Psychology*, 62, 434-446.
- Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research*, 29(3), 240-275.
- Sogang University Counseling Center (2004). Reports on Soganag University Counseling Center: From March 1st 2003 to February 28th 2004. *In-gan-ea-hae*. [Understanding Human Being], 25, 167-194.
- Solomon, J. & George, C. (1996). Defining the caregiving system: Toward a theory of caregiving. *Infant Mental Health Journal*, 17, 183-197.

- Spence, J. T. & Helmreich, R. L. (1978). *Masculinity & femininity. Their psychological dimensions, correlates and antecedents*. Austin: University of Texas Press.
- Spence, J. T. (1984). Masculinity, femininity, and gender-related traits: A conceptual analysis and critique of current research. In B. A. Maher & W. B. Maher (Eds.) *Progress in Experimental Personality Research*. Vol. 13 (pp.1-97). New York: Academic
- Stackert, R. A., & Bursik, K. (2003). Why am I unsatisfied? Adult attachment style, gendered irrational relationship beliefs, and young adult romantic relationship satisfaction. *Personality & Individual Differences*, 34(8), 1419-1429.
- Trinke, S. J., & Bartholomew, K. (1997). Hierarchies of attachment relationships in young adulthood. *Journal of Social and Personal Relationships*, 14(5), 603-625.
- van Ijzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult attachment Interview. *Psychological Bulletin*, 117, 387-403.
- van Ijzendoorn, M., & Sagi, A. (1999). Cross-cultural of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.) *Handbook of attachment: Theory, research, and clinical applications* (pp. 713-734). New York, NY
- Wallace, J. L., & Vaux, A. (1994). Social support network orientation: The role of adult attachment style. *Journal of Social and Clinical Psychology*, 12, 354-356.
- Zeifman, D., & Hazan, C. (1997). A Process Model of Adult Attachment Formation. In Duck Steve (Ed.) *Handbook of Personal Relationships* (179-195). New York.

APPENDICES

APPENDIX A:

Permission Letters

 You forwarded this message on 4/10/2004 3:50 PM.
Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Cho, Young-Ju (UMC-Student)

From: Hendrick, Susan [SUSAN.HENDRICK@ttu.edu] **Sent:** Fri 4/9/2004 11:51 AM
To: Cho, Young-Ju (UMC-Student)
Cc:
Subject: RE: Relationship Assessment Scale - Korean Version
Attachments:  RAS.doc(26KB)

You are welcome to translate the RAS into Korean, and we wish you luck in your research. I am attaching a copy of the RAS in case you need it.
Susan Hendrick

-----Original Message-----

From: Cho, Young-Ju (UMC-Student) [mailto:yckr4@mizzou.edu]
Sent: Friday, April 09, 2004 11:19 AM
To: Hendrick, Susan
Cc: Mallinckrodt, Brent S.
Subject: Relationship Assessment Scale - Korean Version

Dear Dr. Hendrick:

I am a doctoral student in Counseling Psychology Program, University of Missouri-Columbia. I am interested in couple relationships and am working on my dissertation with my advisor, Dr. Brent Mallinckrodt. We are thinking about using your RAS (Relationship Assessment Scale, 1998) and gathering the data from Korean college couples. RAS is not translated into Korean as far as I know and I wonder if you can give us permission of Korean version of RAS. Thank you very much.

Sincerely,

Young-Ju Cho

Doctoral Student
Counseling Psychology Program
ESCP Department
University of Missouri-Columbia

Cho, Young-Ju (UMC-Student)

From: Mallinckrodt, Brent S. **Sent:** Tue 2/17/2004 7:26 PM
To: Cho, Young-Ju (UMC-Student)
Cc:
Subject: Fwd: Re: request for permission
Attachments:

X-Sender: fzshaver@mailbox.ucdavis.edu
Date: Tue, 17 Feb 2004 14:56:04 -0800
To: Brent Mallinckrodt <mallinckrodtb@missouri.edu>
From: "Phillip R. Shaver" <prshaver@ucdavis.edu>
Subject: Re: request for permission
X-Scanned-By: MIMEDefang 2.36
X-OriginalArrivalTime: 17 Feb 2004 23:15:37.0763 (UTC) FILETIME=[F3F4DF30:01C3F5AB]

This is completely okay with me. I'm delighted to see that the whole world is gradually getting interested in the topic and will soon have measures to add to our fund of knowledge about attachment. --Phil Shaver (Hi to Brent.)

At 10:17 AM 2/17/2004, you wrote:

Dear Dr. Shaver,

I am a doctoral student in counseling psychology, at the University of Missouri-Columbia. Dr. Brent Mallinckrodt is my advisor. I am working on my dissertation related to adult attachment. I am from Korea, and I am interested in Korean college students as my research subjects. Dr. Mallinckrodt and I are hoping for your permission to translate the Experiences in Close Relationships Scale (ECRS) into Korean for use in our research. Of course we would be happy to share the translated scale with you, and the results of our research as soon as the study is completed. I am very excited about this project, and eager to begin.

If it is most convenient, you could simply reply to let us know whether it will be possible to have your permission by sending an email to Brent.

Thank you very much,

Young-Ju Cho

Doctoral Student
Counseling Psychology Program
University of Missouri- Columbia

--

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Dept. of Educational, School, fax: 573-884-5989
and Counseling Psychology email: mallinckrodtb@missouri.edu
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Phillip R. Shaver, Ph.D.
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Cho, Young-Ju (UMC-Student)

From: Mallinckrodt, Brent S. **Sent:** Thu 4/15/2004 9:55 AM
To: Cho, Young-Ju (UMC-Student)
Cc:
Subject: Fwd: Social Provisions Scale
Attachments:  Social_Provisions_Scale_cha.pdf(292KB)

>Young-Ju,

I received this message from Dan, so you can consider that you have permission to translate the scale.

>
>Brent:
>
>Attached is a paper on the Social Provisions Scale; a copy of the
>measure with scoring instructions is included at the end. I have
>not kept track of studies that have translated the scale into
>different languages; you should do a literature search on the
>measure and see what you find.
>
>Dan
>
>Daniel W. Russell, Ph.D.
>Professor, Department of Human Development & Family Studies
> and Institute for Social and Behavioral Research
>Iowa State University
>72 LeBaron Hall
>Ames, IA 50011-1120
>USA
>(515) 294-4187 Fax: (515) 294-1765
>Home page: <http://www.isbr.iastate.edu/Staff/drussell/default.htm>
>
>

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Columbia, MO 65211

Cho, Young-Ju (UMC-Student)

From: Linda Kunce [lkunce@iwu.edu]

Sent: Wed 3/16/2005 8:31 AM

To: Cho, Young-Ju (UMC-Student)

Cc:

Subject: Re: Caregiving Questionnaire Korean version

Attachments:

Dear Young-Ju Cho,

It was fun getting a request from UMC. I graduated from Mizzou and my father used to teach in the Counseling Psych program (Joe Kunce).

So, it is a pleasure to say that you certainly have my permission. If you decide to use the measure, I would be interested in your results.

Best of luck with your studies and research.

Linda Kunce

At 05:36 PM 3/14/2005, you wrote:

Dear Dr. Kunce:

I am a doctoral student in Counseling Psychology Program, University of Missouri-Columbia. I am working my dissertation with my advisor, Dr. Brent Mallinckrodt and consider using your Caregiving Questionnaire (Kunce & Shaver, 1994). We will gather the data from Korean college couples as well and need Korean version. Your scale is not translated into Korean as far as I know and I wonder if you can give us permission of Korean version of Caregiving Questionnaire. Thank you very much.

Sincerely,

Young-Ju Cho

Doctoral Student
Counseling Psychology Program
ESCP Department
University of Missouri-Columbia

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APPENDIX B:

Survey Questionnaire

Form A : _____

낭만적 관계에 관한 설문지

- 낭만적 관계는 여러분이 애인 (배우자, 남자친구, 여자친구 등) 과 맺고 있는 관계를 말합니다
- 여러분이 현재 애인이 없거나 사귀 경험 없더라도 본 연구에 참여할 수 있습니다.

지시문: 다음 설문지에는 여러가지 형태의 문항이 포함되어 있으며, 문항에 따라서 다른 응답 방식이 있습니다. 응답하실 때에는 해당 번호를 까맣게 칠해 주십시오.

예를 들면, “나는 내가 맺고 있는 관계에 만족한다.” 라는 진술문에 5점 척도로 응답하게 되어 있는 경우, 여러분이 “동의”하시면, “4”번 동그라미를 다음과 같이 까맣게 칠하시면 됩니다.

매우
 동의하지 않는다 동의하지 않는다 보통이다 동의한다 동의한다 매우

① ② ③ ④ ⑤

<<인적 사항>>

나이 (만)

- ① ①
- ② ②
- ③ ③
- ④ ④
- ⑤ ⑤
- ⑥ ⑥
- ⑦ ⑦
- ⑧ ⑧
- ⑨ ⑨

성별:

- ① 남자
- ② 여자

학생여부

- ① 학생 (full time)
- ② 시간제 학생 (part time)
- ③ 학생 아님

낭만적 관계 여부

- ① 결혼
- ② 동거
- ③ 현재 남자친구/여자 친구 있음(1 번이나 2 번은 아님)
- ④ 현재 사귀고 있지는 않지만, 과거에 사귀 경험은 있음
- ⑤ 남자친구/여자 친구를 사귀 경험이 없음

- ① ② ③ ④ 14. 관심사나 걱정거리를 함께 나눌 수 있는 사람이 없다.
 ① ② ③ ④ 15. 자신들의 행복을 위해 나에게 의지하는 사람이 없다.

- ① ② ③ ④ 16. 나에게 문제가 있을 때, 조언을 구할 수 있는 믿을만한 사람이 있다.
 ① ② ③ ④ 17. 적어도 한 사람과는 강한 정서적 유대감을 느낀다.
 ① ② ③ ④ 18. 정말로 필요할 때 나를 도와줄 의지할 수 있는 사람이 없다.
 ① ② ③ ④ 19. 문제에 대해서 편안하게 얘기할 수 있는 사람이 없다.
 ① ② ③ ④ 20. 내 재능과 능력을 칭찬해 주는 사람들이 있다.

- ① ② ③ ④ 21. 나는 다른 사람과 친밀감이 부족하다.
 ① ② ③ ④ 22. 내가 하는 일을 같이하기를 좋아하는 사람이 없다.
 ① ② ③ ④ 23. 위급할 때 내가 의지할 수 있는 사람들이 있다.
 ① ② ③ ④ 24. 아무도 내가 돌봐주기를 바라지 않는다.

각 문항에 대해서 다음 척도를 사용하여 여러분이 찬성하거나 반대하는 정도에 표시해 주십시오.

1	5	9
전적으로 반대	중간	전적으로 찬성
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		1. 나는 사람들과 토론할 때 솔직하고 있는 그대로 얘기하는 것을 좋아한다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		2. 나의 행복은 주변 사람의 행복에 의존한다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		3. 나는 가족에게 행복을 주는 일이라면 그것이 싫은 일이라도 할 것이다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		4. 항상 이기는 것이 최선이다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		5. 인간은 누구에게 의지하지 않고 혼자서 살아야 한다
.....		
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		6. 나에게 일어나는 일은 모두 나의 책임이다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		7. 나는 보통 조직을 위해 나 자신의 이익을 희생한다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		8. 나는 다른 사람이 나보다 일을 잘하면 화가 난다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		9. 나는 조직의 조화를 중요시 여긴다
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨		10. 나는 다른 사람보다 일을 더 잘하는 것을 중요시 여긴다
.....		

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 11. 나는 작은 일이라도 이웃과 함께 나누기를 좋아한다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 12. 나는 경쟁 상황 하에서 일하길 좋아한다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 13. 나이 드신 부모님을 집에서 모셔야 한다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 14. 나는 동료 직원들의 복지를 중요시 여긴다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 15. 자신의 여러 방면에서 튀기를 좋아한다

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 16. 만약 친척이 재정적으로 어려움에 처해 있다면 능력이 닿는 데까지
 도울 것이다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 17. 자식들은 부모가 상을 받는다면 영광스럽게 느껴야
 한다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 18. 나는 종종 독자적인 일을 한다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 19. 경쟁은 자연의 법칙이다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 20. 동료직원이 상을 받으면 자랑스러울 것이다

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 21. 나는 특이한 사람이다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 22. 나에겐 다른 사람들과 어울리는 것이 즐거움이다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 23. 다른 사람이 나보다 더 잘한다면 나는 긴장하고
 화가 날 것이다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 24. 가족이 반대하면 좋아하는 일을 포기할 것이다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 25. 나는 프라이버시를 존중한다

- ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 26. 경쟁이 없다면 좋은 사회를 만들 수 없다.
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 27. 아이들에겐 즐거움보다 의무를 중요시하도록
 가르쳐야 한다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 28. 나는 다른 사람과 협동할 때 기분이 좋다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 29. 나는 조직 내 다른 사람에게 반대하는 것이 싫다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 30. 어떤 이는 승리하는 것을 강조하지만 나는 그렇지
 않다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 31. 여행가기 전 나는 가족 및 친구들과 상의한다
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 32. 일이 잘 되면 보통 이것은 나의 능력 덕분이다

다음 문항들은 여러분이 자기자신을 어떻게 생각하는지에 관한 것입니다. 각 문항은 한쌍의 특성으로 구성되어 있으며, 그 사이에 1-5 번이 매겨져 있습니다. 예를 들면,

전혀 예술적이지 않다 ① ② ③ ④ ⑤ 매우 예술적이다

각 쌍으로서 구성된 각 문항은 모순되는 두가지 특징, 즉, 동시에 두 가지를 가질 수 없는 특성으로 구성 되어 있습니다. 숫자는 두 극단 사이의 척도이며, 여러분이 어디에 해당하는지 잘 나타나는 번호에 표시하면 됩니다. 예를 들면, 여러분이 전혀 예술적인 능력이 없다면 1 번을 선택하시고, 꽤 예술적이라고 생각한다면 4 번을, 중간 정도라면 3 번을 선택하십시오.

- | | | | | | | |
|-------------------------------|---|---|---|---|---|------------------------------|
| 1. 전혀 독립적이지 않다 | ① | ② | ③ | ④ | ⑤ | 매우 독립적이다 |
| 2. 전혀 감정적이지 않다 | ① | ② | ③ | ④ | ⑤ | 매우 감정적이다 |
| 3. 매우 수동적이다 | ① | ② | ③ | ④ | ⑤ | 매우 적극적이다 |
| 4. 다른사람을 위해 나 자신을 전혀 헌신할 수 없다 | ① | ② | ③ | ④ | ⑤ | 다른 사람을 위해 나 자신을 완전히 헌신할 수 있다 |
| 5. 매우 거칠다 | ① | ② | ③ | ④ | ⑤ | 매우 부드럽다 |
| | | | | | | |
| 6. 다른 사람을 전혀 도와줄 수 없다 | ① | ② | ③ | ④ | ⑤ | 다른사람을 매우 잘 도와줄 수 있다 |
| 7. 전혀 경쟁적이지 않다 | ① | ② | ③ | ④ | ⑤ | 매우 경쟁적이다 |
| 8. 전혀 친절하지 않다 | ① | ② | ③ | ④ | ⑤ | 매우 친절하다 |
| 9. 다른 사람의 감정을 전혀 알아차리지 못한다 | ① | ② | ③ | ④ | ⑤ | 다른 사람의 감정을 매우 잘 알아차린다 |
| 10. 쉽게 결정을 내릴 수 있다 | ① | ② | ③ | ④ | ⑤ | 결정을 내리기 어렵다 |
| | | | | | | |
| 11. 매우 쉽게 포기한다 | ① | ② | ③ | ④ | ⑤ | 절대 쉽게 포기하지 않는다 |
| 12. 전혀 자신감이 없다 | ① | ② | ③ | ④ | ⑤ | 매우 자신감이 있다 |
| 13. 매우 열등하다고 느낀다 | ① | ② | ③ | ④ | ⑤ | 매우 우월하다고 느낀다 |
| 14. 다른 사람을 전혀 이해할 수 없다 | ① | ② | ③ | ④ | ⑤ | 다른 사람을 매우 잘 이해할 수 있다 |
| 15. 다른사람과의 관계에서 매우 냉담하다 | ① | ② | ③ | ④ | ⑤ | 다른 사람과의 관계에서 매우 우호적이다 |
| 16. 스트레스에 잘 대처하지 못한다 | ① | ② | ③ | ④ | ⑤ | 스트레스에 잘 대처한다 |

다음의 질문은 **지난 한 달 동안** 경험했던 당신의 감정과 생각에 대해 묻는 것입니다. 각각의 경우에 있어서 어떤 방식으로 생각했거나 느꼈는지 응답해 주시기 바랍니다. 몇몇 질문은 유사한 듯 하지만 차이가 있으므로, 각 질문을 분리된 별개의 것으로 생각하셔야 합니다. 가급적 생각이 떠오르는 대로 즉시 대답해 주십시오. 각 질문에 대해서 다음 척도를 참고하여 해당되는 번호해 표시해 주십시오.

- | 1 | 2 | 3 | 4 | 5 | |
|-----------|-------|-------|-----------|---------|-----------------------------------------------------------|
| 전혀 없음 | 거의 없음 | 가끔 있음 | 비교적 자주 있음 | 매우자주 있음 | |
| ① ② ③ ④ ⑤ | | | | | 1. 지난 한 달 동안, 생각지도 않게 갑자기 생긴 일 때문에 당황하십니까? |
| ① ② ③ ④ ⑤ | | | | | 2. 지난 한 달 동안, 생활 속에서 일어난 중요한 일들을 직접 해결할 수 없다고 느낀 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 3. 지난 한 달 동안, 불안하다거나 “스트레스를 받는다”고 느낀 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 4. 지난 한 달 동안, 귀찮고 성가신 일을 성공적으로 다룬 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 5. 지난 한 달 동안, 생활 중에 생긴 중요한 변화를 효율적으로 대처했던 적이 있습니까? |
| | | | | | |
| ① ② ③ ④ ⑤ | | | | | 6. 지난 한 달 동안, 개인적인 문제를 다루는 능력에 대해 자신감을 가진 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 7. 지난 한 달 동안, 일들이 자신의 뜻대로 되고 있다고 느낀 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 8. 지난 한 달 동안, 해야 할 일들을 모두 감당할 수 없다고 생각한 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 9. 지난 한 달 동안, 생활 속에서 생기는 짜증을 조절할 수 있다고 생각했던 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 10. 지난 한 달 동안, 모든 일에서 최고라고 느꼈던 적이 있습니까? |
| | | | | | |
| ① ② ③ ④ ⑤ | | | | | 11. 지난 한 달 동안, 능력 밖에 일이 일어나서 화가 났던 적이 있습니까? |
| ① ② ③ ④ ⑤ | | | | | 12. 지난 한 달 동안, 해야 할 일을 생각하고 있는 자신을 발견한 적이 있습니까? |

① ② ③ ④ ⑤ 13. 지난 한 달 동안, 마음대로 내 시간을 조정할 수 있다고 느낀 적이 있습니까?

① ② ③ ④ ⑤ 14. 지난 한 달 동안, 장애가 너무 많아서 극복할 수 없다고 느낀 적이 있습니까?

여러분이 결혼했거나, 현재 누군가 사귀고 있거나, 혹은 과거에 누군가 사귀 경험이었다면,
>>>>>> 계속해서 설문지를 작성해 주십시오!!! 여러분은 거의 반 정도 응답하셨습니다.

여러분이 현재 혹은 과거에 누군가를 사귀 경험이 없다면,

>>>>>> 여기서 설문을 그만 두셔도 좋습니다. 연구에 참여해 주셔서 감사합니다!!

다음은 여러분의 애인 (배우자, 남자친구, 여자친구)과의 관계에 관한 것입니다. 다음 문항을 읽고, 여러분에게 가장 적절한 응답에 표시하십시오.

여러분이 현재 결혼했거나 누군가를 사귀고 있다면, 현재 배우자, 남자친구 혹은 여자친구와의 관계를 생각하면서 응답해 주십시오. 여러분이 과거에 사귀 경험은 있지만 현재 누군가를 사귀고 있지 않다면, 과거의 관계 중에서 여러분에게 가장 중요했고 의미있었던 관계에 대해 생각하면서 응답해 주십시오.

1. 당신의 애인이 당신의 욕구를 얼마나 잘 충족시킵니까?

- ① 전혀충족시키지 못한다
- ②
- ③ 보통이다
- ④
- ⑤ 매우 잘 충족시킨다

2. 당신의 관계에 대해 전반적으로 얼마나 만족합니까?

- ① 만족하지 못한다
- ②
- ③ 보통이다
- ④
- ⑤ 매우만족한다

3. 대부분의 다른 사람과 비교할 때, 당신의 관계는 얼마나 좋습니까?

- ① 나쁘다
- ②
- ③ 보통이다
- ④
- ⑤ 매우 좋다

4. 이 관계가 없었더라면 하고 바랄 때가 얼마나 자주 있습니까?
- ① 전혀 없다
②
③ 보통이다
④
⑤ 매우 자주 있다
5. 당신의 현재 관계는 당신의 본래 기대를 얼마나 충족시킵니까?
- ① 거의 충족시키지 못한다
②
③ 보통이다
④
⑤ 완전히 충족시킨다
6. 당신의 애인을 얼마나 사랑합니까?
- ① 거의 사랑하지 않는다
②
③ 보통이다
④
⑤ 매우 사랑한다
7. 당신의 관계에는 얼마나 많은 문제가 있습니까?
- ① 거의 없다
②
③ 보통이다
④
⑤ 매우 많다

다음은 문항은 여러분이 사랑하는 사람과의 관계(배우자, 남자친구, 여자 친구)에서 어떻게 느끼는지에 관한 것입니다. 이 설문은 여러분의 현재 관계뿐만 아니라, 여러분이 일반적으로 사랑하는 사람과의 관계에서 어떤 경험을 하는지 알아보기 위한 것입니다. 여러분이 각각의 문항에 얼마나 동의하는지 혹은 동의하지 않는지, 다음 평정 척도를 사용하여 표시하십시오.

1	2	3	4	5	6	7
매우 동의하지 않는다	동의하지 않는다	약간 동의하지 않는다	보통이다	약간 동의한다	동의한다	매우 동의한다

- ① ② ③ ④ ⑤ ⑥ ⑦ 1. 나는 내 애인에게 속 깊은 감정을 드러내지 않으려고 한다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 2. 나는 내 애인이 나를 떠날까봐 걱정한다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 3. 나는 내 애인과 가까워지는 것이 매우 편안하다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 4. 나는 나의 인간관계에 대해 많이 걱정한다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 5. 나는 내 애인이 나에게 가까워지려고 하면 멀리 달아난다.
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- ① ② ③ ④ ⑤ ⑥ ⑦ 6. 나는 내가 애인에 대해 마음쓰는 만큼 그들이 나에게 대해서 마음쓰지 않을까봐 걱정한다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 7. 나는 내 애인이 지나치게 가까워지기를 원하면 불편해진다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 8. 나는 내 애인을 잃을까봐 많이 걱정한다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 9. 나는 내 애인에게 나를 드러내는 게 편안하지 않다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 10. 나는 내 애인이 나에게 대해 느끼는 감정이 내 감정만큼 절실하기를 바란다.

- ① ② ③ ④ ⑤ ⑥ ⑦ 11. 나는 내 애인에게 가까워지고 싶지만, 계속 거리를 둔다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 12. 나는 종종 내 애인에게 완전히 빠져들기 원하기 때문에, 그들이 질려 멀어진다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 13. 나는 내 애인이 내게 너무 가까워지려고 하면 불안하다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 14. 나는 홀로 남겨지는 것이 걱정된다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 15. 나는 나만의 생각이나 감정을 내 애인과 나누는 게 편안하다.

- ① ② ③ ④ ⑤ ⑥ ⑦ 16. 나는 때로 사람들과 지나치게 가까워지려고 해서, 그들이 때때로 멀어진다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 17. 나는 내 애인과 너무 가까워지는 것은 피하려고 애쓴다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 18. 나는 내 애인이 나를 사랑한다는 확신이 필요하다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 19. 나는 내 애인과 가까워지는 게 별로 어렵지 않다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 20. 때때로, 내 애인이 더 많은 감정을 표현하고 관계에 좀 더 충실하도록 내가 강요한다고 느낀다.

- ① ② ③ ④ ⑤ ⑥ ⑦ 21. 나는 내 애인에게 기대는 게 불편하다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 22. 나는 내 애인이 나를 떠날까봐 걱정하지는 않는다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 23. 나는 내 애인과 너무 친밀해지고 싶지는 않다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 24. 내 애인이 나에게 관심을 보이지 않는 것 같으면, 나는 기분이 나쁘고 화가 난다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 25. 나는 내 애인에게 거의 모든 것을 이야기한다.

- ① ② ③ ④ ⑤ ⑥ ⑦ 26. 내 애인은 내가 바라는 것만큼 가까워지기를 원하지 않는다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 27. 나는 대개 내 애인과 문제나 걱정을 상의한다.

- ① ② ③ ④ ⑤ ⑥ ⑦ 28. 나는 사귀는 사람이 없을 때, 약간 불안하고 안정감이 없다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 29. 나는 내 애인에게 의지하는 게 편안하다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 30. 내가 원하는 만큼 내 애인이 함께 시간을 보내지 않을 때 괴롭다.

- ① ② ③ ④ ⑤ ⑥ ⑦ 31. 나는 내 애인에게 위로, 충고, 또는 도움을 구하는 것을 꺼리지 않는다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 32. 내가 필요할 때 내 애인이 함께 하지 않으면 좌절한다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 33. 내가 힘들 때, 내 애인에게 기대는 것이 도움이 된다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 34. 애인이 나를 존중하지 않으면, 나는 나 자신이 부끄럽다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 35. 나는 내 애인에게 안심이나 위로 등 많은 도움을 청한다.
- ① ② ③ ④ ⑤ ⑥ ⑦ 36. 내 애인이 나와 함께 시간을 보내지 않을 때 화가 난다.

여러분의 애인 (배우자, 남자친구, 여자친구 포함)과의 관계를 생각하면서 다음 문항에 응답하십시오. 다음 문항들에 대해 얼마나 동의합니까? 다음 척도를 사용하여 응답해 주십시오.

여러분이 현재 결혼했거나 누군가를 사귀고 있다면, 현재 배우자, 남자친구 혹은 여자친구와의 관계를 생각하면서 응답해 주십시오. 여러분이 과거에 사귀 경험은 있지만 현재 누군가를 사귀고 있지 않다면, 과거의 관계 중에서 여러분에게 가장 중요했고 의미있었던 관계에 대해 생각하면서 응답해 주십시오.

- | | | | |
|-------------|----------|----------|----------|
| 1 | 2 | 3 | 4 |
| 매우 동의하지 않는다 | 동의하지 않는다 | 동의한다 | 매우 동의한다 |
- ① ② ③ ④ 1. 정말 필요할 때, 내 애인은 나를 도와준다.
- ① ② ③ ④ 2. 나는 애인과 사적인 가까운 관계가 없다고 느낀다.
- ① ② ③ ④ 3. 스트레스 상황에서 애인에게 지도를 구하기 어렵다.
- ① ② ③ ④ 4. 내 애인은 움을 받고자 나에게 의지한다.
- ① ② ③ ④ 5. 애인은 나와 같은 친목 활동을 즐긴다.

- ① ② ③ ④ 6. 내 애인은 나를 유능하게 보지 않는다.
- ① ② ③ ④ 7. 나는 내 애인의 행복에 책임을 느낀다.
- ① ② ③ ④ 8. 나는 애인과 태도나 신념을 공유한다고 느낀다.
- ① ② ③ ④ 9. 내 애인이 내 기술과 능력을 존중한다고 생각하지 않는다.
- ① ② ③ ④ 10. 나에게 무언가 잘못되었을 때, 애인은 나를 도와주지 않을 것이다.

- ① ② ③ ④ 11. 애인과의 관계에서 정서적 안정감과 행복감을 느낀다.
- ① ② ③ ④ 12. 내 인생의 중요한 결정에 대해서 애인에게 이야기 할 수 있다.
- ① ② ③ ④ 13. 애인은 내 능력과 기술을 알아준다.
- ① ② ③ ④ 14. 관심사나 걱정거리를 애인과 함께 나눌 수 없다.
- ① ② ③ ④ 15. 애인은 자신의 행복을 위해 나에게 의지하지 않는다.

- ① ② ③ ④ 16. 나에게 문제가 있을 때, 애인은 조언을 구할 수 있는 믿을만한 사람이다.
- ① ② ③ ④ 17. 적어도 내 애인과는 강한 정서적 유대감을 느낀다.
- ① ② ③ ④ 18. 정말로 필요할 때, 내 애인에게 도움을 구하며 의지할 수 없다.
- ① ② ③ ④ 19. 문제에 대해서 애인과 편안하게 얘기할 수 없다.
- ① ② ③ ④ 20. 애인은 내 재능과 능력을 칭찬해 준다.

- ① ② ③ ④ 21. 나는 애인과 친밀감이 부족하다.
- ① ② ③ ④ 22. 애인은 내가 하는 일을 같이하기를 좋아하지 않는다.
- ① ② ③ ④ 23. 위급할 때 애인에게 의지할 수 있다.
- ① ② ③ ④ 24. 애인은 내가 돌봐주기를 바라지 않는다.

다음 진술문은 **낭만적 관계 (배우자, 남자친구, 여자친구와의 관계)** 에서 여러분의 감정이나 행동에 관한 것입니다. 여러분이 각 진술문에 얼마나 동의하는지 동의하지 않는지, 다음 척도를 사용하여 응답해 주십시오.

여러분이 현재 결혼했거나 누군가를 사귀고 있다면, 현재 배우자, 남자친구 혹은 여자친구와의 관계를 생각하면서 응답해 주십시오. **여러분이 과거에 사귄 경험은 있지만 현재 누군가를 사귀고 있지 않다면**, 과거의 관계 중에서 여러분에게 가장 중요했고 의미있었던 관계에 대해 생각하면서 응답해 주십시오.

- | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| | 매우 | 동의하지 | 동의하지않는 | 동의하는 | 동의한다 | 매우 동의한다 |
| | 동의하지 않는다 | 않는다 | 편이다 | 편이다 | | |
- ① ② ③ ④ ⑤ ⑥ 1. 애인이 안아주기를 원하는 것 같을 때, 기쁜 마음으로 포옹해 준다.
 - ① ② ③ ④ ⑤ ⑥ 2. 애인이 걱정이 있거나 심란해 할 때, 지지하고 위로해 주기위해 더 가까이 다가간다.
 - ① ② ③ ④ ⑤ ⑥ 3. 애인이 위로를 받으려고 안아달라고 하는 것 같으면, 때때로 거리를 둔다.

① ② ③ ④ ⑤ ⑥ 4. 애인이 신체적으로 지지와 위로를 표현해 주기를 원할 때, 안아주는 것이 편안하다.

① ② ③ ④ ⑤ ⑥ 5. 애인이 나에게 포옹이나 키스를 원해서 다가오면, 때때로 밀어낸다.

① ② ③ ④ ⑤ ⑥ 6. 애인이 울거나 힘들어 할 때, 나의 첫 반응은 안거나 어루만져 주는 것이다.

① ② ③ ④ ⑤ ⑥ 7. 애인이 울거나 정서적으로 혼란할 때, 때때로 마음이 물러나는 것 같다.

① ② ③ ④ ⑤ ⑥ 8. 애인이 요구가 많고 나에게 매달리는 것을 좋아하지 않는다.

① ② ③ ④ ⑤ ⑥ 9. 애인의 필요나 감정이 나와 다른 경우에까지도 매우 잘 인식한다.

① ② ③ ④ ⑤ ⑥ 10. 도움이나 지지를 원하는 애인의 비언어적인 신호에 매우 주의를 기울인다.

① ② ③ ④ ⑤ ⑥ 11. 애인이 언제 위로를 원하는지, 말하지 않아도 항상 알아차릴 수 있다.

① ② ③ ④ ⑤ ⑥ 12. 애인이 심란해 하고 걱정하는 것을 깨닫지 못하는 경우가 너무 많다.

① ② ③ ④ ⑤ ⑥ 13. 때때로, 애인의 감정 상태를 나타내는 미세한 신호를 놓친다.

① ② ③ ④ ⑤ ⑥ 14. 애인이 언제 나의 도움이나 지지를 필요로 하는지 또 언제 혼자 일을 처리하고 싶어 하는지 잘 안다.

① ② ③ ④ ⑤ ⑥ 15. 애인의 필요나 감정에 ‘주과수 맞추는’ 것을 그다지 잘 하지 못한다.

① ② ③ ④ ⑤ ⑥ 16. 때때로 도움이나 이해를 구하는 애인의 신호를 ‘놓치거나’ 혹은 ‘잘못 해석한다.’

① ② ③ ④ ⑤ ⑥ 17. 애인을 도우려고 할 때, 지나치게 주도적인 경향이 있다.

① ② ③ ④ ⑤ ⑥ 18. 애인이 문제를 해결하는 것을 도울 때, ‘통제’ 하기보다는 ‘협조’한다.

① ② ③ ④ ⑤ ⑥ 19. 애인에게 도움을 줄 때, 일을 ‘내 방식’대로 하고 싶어하는 것 같다.

① ② ③ ④ ⑤ ⑥ 20. 애인이 문제를 해결하는 것을 ‘통제’하지 않고 도울 수 있다.

① ② ③ ④ ⑤ ⑥ 21. 스스로 문제를 해결하려는 애인의 노력에 항상 지지적이다.

① ② ③ ④ ⑤ ⑥ 22. 애인이 문제를 이야기하면, 때때로 문제를 해결하려는 본인의 시도를 지나치게 비난한다.

① ② ③ ④ ⑤ ⑥ 23. 스스로 결정하고 문제를 해결하는 애인의 능력을 항상 존중한다.

최근 한 달 동안 당신이 경험했던 스트레스와 관련하여 다음에 열거된 행동을 그 때에 어느 정도로 하였는지 1 점에서 3 점 까지 표시해 주십시오.

1
전혀 하지 않음

2
조금 했음

3
많이 했음

- ① ② ③ 1. 애인에게 감정을 털어놓았습니까?
- ① ② ③ 2. 애인이 하는 위로나 이해의 말들을 받아들였습니까?
- ① ② ③ 3. 문제에 대해 말하는 것이 기분이 나아지는데 도움이 되기 때문에 애인에게 내가 겪은 문제 상황을 이야기했습니까?
- ① ② ③ 4. 애인에게 문제에 대한 걱정이나 두려움에 대해 상의했습니까?
- ① ② ③ 5. 이야기하는 것만으로도 해결책을 떠올리는데 도움이 될 것이라는 생각으로 애인에게 당신의 문제 상황에 대해 이야기했습니까?

-
- ① ② ③ 6. 기분이 나아지도록 하기 위해 애인을 찾아갔습니까?
 - ① ② ③ 7. 문제에 대한 당신의 기분이 나아지도록 애인에게 도움을 구하였습니까?
 - ① ② ③ 8. 애인에게 상황을 변화시킬 수 있는 방법에 대해 조언을 구하였습니까?
 - ① ② ③ 9. 애인이 비슷한 문제를 경험한 경우, 당신을 이해해 주거나 위로해 주었을 때, 그것을 받아들였습니까?
 - ① ② ③ 10. 애인의 도움을 받아들였습니까?
 - ① ② ③ 11. 애인이 문제 상황에 대해 당신을 안심시켜 주기를 바랬습니까?

감 * 사 * 합 * 니 * 다 !!!

APPENDIX C. ECRS-K Factor Analysis

Appendix C-1.

Table 15. Summary of Fit Indices for Confirmatory Factor Analyses of ECRS-K

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Two factor – 36 items	2773.64***	593	.61	.56	.60	.66	.63	.66	.10 (.096-.103)
Two factor – 13 items	251.48***	64	.89	.85	.90	.93	.91	.93	.09 (.077-.100)
Three factor – 15 items	185.09***	87	.94	.92	.94	.97	.96	.97	.06 (.044-.066)
Four factor- 17 items	261.13***	113	.92	.89	.92	.96	.95	.95	.06 (.050-.069)

Note. N=373 ***p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation.

Appendix C-2.

Table 16. Items of Each Factor in Three Different Models of ECRS-K

Models	Items			
	Factor 1	Factor2	Factor 3	Factor 4
Two factor model	3, 5, 7, 13, 15, 17, 23, 25		2, 6, 8, 14, 22	
Three factor model	5, 7, 13, 17, 23	27, 29, 31, 33, 35	2, 6, 8, 14, 22	
Four factor model	5, 7, 13, 17, 23	27, 29, 31, 33, 35	2, 6, 8, 22	30, 32, 36

Note. Factor 1= Proximity Avoidance; Factor 2= Safe Haven; Factor 3=Abandonment Anxiety; Factor 4= Unavailability Anxiety.

Appendix C-3.

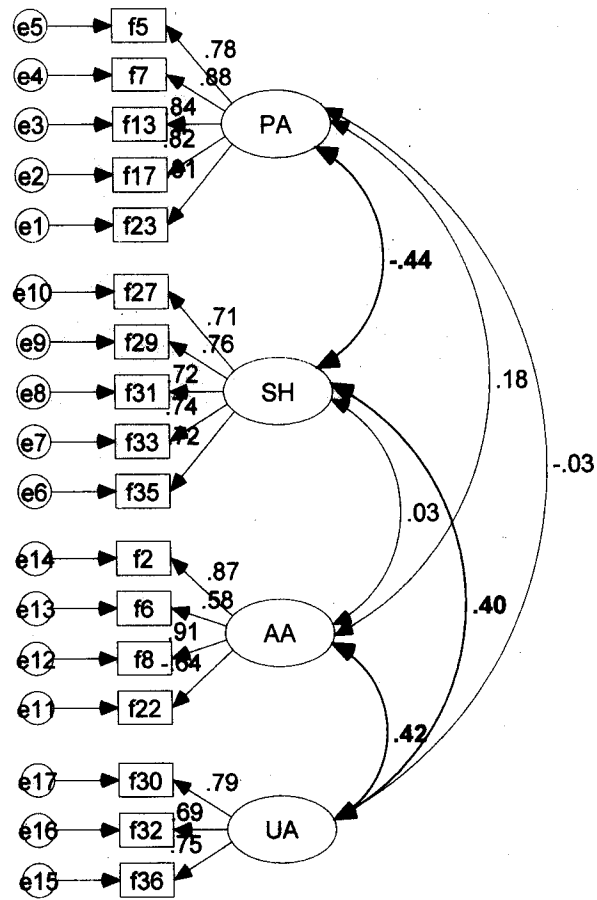


Figure 6. Four Factor Model of ECRS-K

Appendix C-4.
Table 17. Items and Factor Loadings of ECRS-K

	Factor loadings			
	F1	F2	F3	F4
1. I prefer not to show a partner how I feel deep down				
3. I am very comfortable being close to romantic partners				
5. Just when my partner starts to get close to me, I find myself pulling away	.78			
7. I get uncomfortable when a romantic partner wants to be very close	.88			
9. I don't feel comfortable opening up to romantic partners				
11. I want to get close to my partners, but I keep pulling back		.84		
13. I am nervous when partners get close to me				
15. I feel comfortable sharing my private thoughts and feelings with my partner	.82			
17. I try to avoid getting too close to my partner				
19. I find it relatively easy to get close to my partner				
21. I find it difficult to allow myself to depend on romantic partners	.81			
23. I prefer not to be too close to romantic partners				
25. I tell my partner just about everything		.71		
27. I usually discuss my problems and concerns with my partner				
29. I feel comfortable depending on romantic partners			.76	
31. I don't mind asking romantic partners for comfort, advice, or help		.72		
33. It helps to turn to my romantic partner in times of need		.74		
35. I turn to my partner for many things, including comfort and reassurance		.72		

APPENDIX D. SPS-K Factor Analysis

Appendix D-1.

Table 18. Summary of Fit Indices for Confirmatory Factor Analyses of SPS-K-O (Perceived Social Support from others)

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Six factor - 24 items	929.47***	246	.85	.81	.81	.86	.84	.85	.07 (.069-.080)
Six factor - 22 items	708.47***	203	.85	.82	.83	.87	.85	.87	.08 (.070-.081)
Five factor -18 items	600.59***	130	.86	.82	.85	.88	.86	.88	.09 (.078-.092)

Note. N=503 ***p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation. In the six-factor model with 22 items, item number 5 and 7 were deleted. In the five-factor model with 18 items, item numbers 4, 5, 7, 8, 24, and 22 were deleted.

Appendix D-2

Table 19. Summary of Fit Indices for Confirmatory Factor Analyses of SPS-K-P (Perceived Social Support from partner)

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Six factor-24 items	813.93***	246	.81	.77	.81	.86	.84	.86	.08 (.072-.084)
Six factor-22 items	651.02***	203	.84	.80	.84	.89	.87	.88	.08 (.070-.083)
Five factor-18 items	424.01***	130	.87	.84	.87	.91	.89	.91	.08 (.068-.083)

Note. N=380 ***p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation. In the six-factor model with 22 items, item number 5 and 7 were deleted. In the five-factor model with 18 items, item numbers 4, 5, 7, 8, 14, and 22 were deleted.

Appendix C-3.
Table 20. Items and Factor Loadings of SPS

Factor/ Item #	Factor Loadings	
	SPS-K-O	SPS-K-P
Factor 1: Alliance		
1. There are people I can depend on to help me if I really need it	.65	.64
10. If something went wrong, no one would come to my assistance	-.63	-.68
18. There is no one I can depend on for aid if I really need it	-.76	-.74
23. There are people I can count on in an emergency	.68	.67
Factor 2: Attachment		
2. I feel that I do not have close personal relationships with other people	-.56	-.55
11. I have close relationships that provide me with a sense of emotional security and well-being	.64	.75
17. I feel a strong emotional bond with at least one other person	.62	.79
21. I lack a feeling of intimacy with another person	-.51	-.70
Factor 3: Guidance		
3. There is no one I can turn to for guidance in times of stress	-.58	-.58
12. There is someone I could talk to about important decisions in my life	.71	.66
16. There is trustworthy person I could turn to for advice if I were having problems	.73	.73
19. There is not one I feel comfortable talking about problems with	-.70	-.77

Appendix C-3.
Table 20. Items and Factor Loadings of SPS (continued)

Factor/ Item #	Factor Loadings	
	SPS-K-O	SPS-K-P
Factor 4: Opportunity of nurturance		
4. There are people who depend on me for help	.57	.33
7. I feel personally responsible for the well-being of another person	.21	.42
15. There is no one who really relies on me for their well-being	-.68	-.71
24. No one needs me to care for them	-.67	-.64
Factor 5: Social integration		
5. There are people who enjoy the same social activities I do	.44	.45
8. I feel part of a group of people who share my attitude and beliefs	.33	.61
14. There is no one who shares my interests and concerns	-.55	-.64
22. There is no one who likes to do the things I do	-.45	-.66
Factor 6: Reassurance of worth		
6. Other people do not view me as competent	-.56	-.72
9. I do not think that other people respect my skills and abilities	-.64	-.67
13. I have relationships where my competence and skills are recognized	.70	.78
20. There are people who admire my talents and abilities	.68	.77

APPENDIX E. RAS-K Factor Analysis

Appendix E-1.

Table 21. Summary of Fit Indices for Confirmatory Factor Analyses of RAS-K

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Sample with partner	46.70***	14	.95	.90	.93	.95	.93	.95	.10 (.068-.131)
Sample with --Romantic experience	31.21**	14	.98	.96	.97	.99	.98	.99	.06 (.029-.083)

Note. Sample with partner N=241; sample with romantic experience N=393. ***p<.01 **p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation.

Appendix E-2.

Table 22. Factor Loadings of RAS-K

Factor/ Items	
1. How well does your partner meet your needs?	.71 (.74)
2. In general, how satisfied are you with your relationship?	.78 (.81)
3. How good is your relationship compared to most?	.77 (.77)
4. How often do you wish you hadn't gotten in this relationship?	.67 (.64)
5. To what extent has your relationship met your original expectations?	.71 (.71)
6. How much do you love your partner?	.62 (.71)
7. How many problems are there in your relationship?	.59 (.54)

Note. N=241; participants who had current partners (N=393; participants who had romantic experience)

APPENDIX F. CGQ-K Factor Analysis

Appendix F-1.
Table 23. Summary of Fit Indices for Confirmatory Factor Analyses of CGQ-K Four Factor Model

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Four factor - 32 items	1953.81***	458	.67	.63	.61	.67	.64	.66	.09 (.090 - .099)
Four factor - 16 items	317.36***	98	.90	.86	.86	.90	.87	.90	.08 (.069 - .088)

Note. N=367 ***p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation.

APPENDIX F-2.

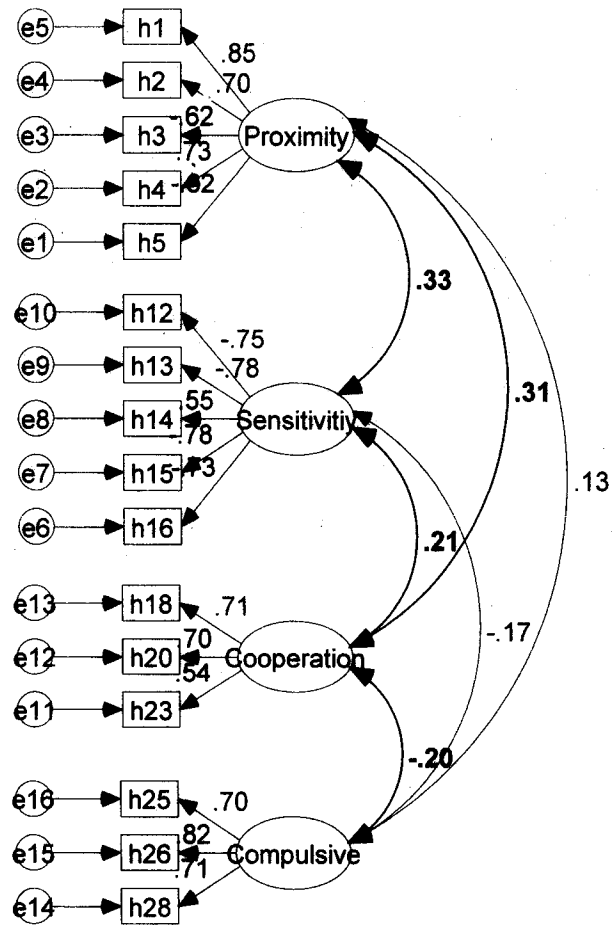


Figure 7. Factor Model of CGQ-K

Appendix F-3
 Table 24. Standard Regression Weight Estimates of CGQ-K

Factor/ Items	F1	F2	F3	F4
Factor 1: Proximity vs. Distance				
1. When my partner seems to want or need a hug, I am glad to provide it.		.85		
2. When my partner is troubled or upset, I move closer to provide support or comfort.	.70			
3. I sometimes draw away from my partner's attempts to get a reassuring hug from me	-.62			
4. I feel comfortable holding my partner	.73			
when s/he needs physical signs of support and reassurance.	-.62			
5. I sometimes push my partner when s/he reaches out for a needed hug or kiss.				
6. When my partner cries or is distressed, my first impulse is to hold or touch him/her.				
7. When my partner is crying or emotionally upset, I sometimes feel like withdrawing.				
8. I don't like it when my partner is needy and clings to me.				
Factor 2: Sensitivity vs. Insensitivity				
9. I'm very good at recognizing my partner's needs and feelings, even when they're different from my own.				
10. I am very attentive to my partner's nonverbal signals for help and support.				
11. I can always tell when my partner needs comforting, even when s/he doesn't ask for it.		-.75		
12. Too often, I don't realize when my partner is upset or worried about something.		-.78		
13. I sometimes miss the subtle signs that show how my partner is feeling.				
14. I'm good at knowing when my partner needs my help or support and when s/he would rather handle things alone.			.55	
15. I'm not very good at 'tuning in' to my partner's needs and feelings.		-.78		
16. I sometimes 'miss' or 'misread' my partner's signals for help and understanding.		-.73		

Table 24. Standard Regression Weight Estimates of CGQ-K (continued)

Factor/ Items	F1	F2	F3	F4
Factor 3: Cooperation vs. Control				
17. I tend to be too domineering when trying to help my partner.				
18. When helping my partner solve a problem, I am much more 'cooperative' than 'controlling'		.71		
19. When I help my partner with something, I tend to want to do things 'my way'.				
20. I can help my partner work out his/her problems without 'taking control'.		.70		
21. I am always supportive of my partner's own efforts to solve his/her problems.				
22. When my partner tells me about a problem, I sometimes go too far in criticizing his/her own attempts to deal with it.				
23. I always respect my partner's ability to make his/her own decisions and solve his/her own problems.				
24. I often end up telling my partner what to do when s/he is trying to make a decision.		.54		
Factor 4: Compulsive Caregiving				
25. I tend to get overinvolved in my partner's problems and difficulties.			.71	
26. I frequently get too 'wrapped up' in my partner's problems and need.				.82
27. I tend to take on my partners' problems and then feel burdened by them.				
28. I create problems by taking on my partner's troubles as if they were my own.				.72
29. I help my partner without becoming overinvolved in his/her problems.				
30. When necessary, I can say 'no' to my partner's requests for help without feeling guilty.				
31. I can easily keep myself from becoming overly concerned about or overly protective of my partner.				
32. When it's important, I take care of my own needs before I try to take care of my partner's.				

APPENDIX G. PSS-K Factor Analysis

Appendix G-1.
Table 25. Summary of Fit Indices for Confirmatory Factor Analyses of PSS-K

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
One factor - 14 items	907.97***	77	.71	.61	.57	.59	.51	.58	.15 (.137-.154)
One factor - 6 items	29.83	9	.98	.96	.97	.98	.97	.98	.06 (.038-.092)

Note. N=510 ***p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation.

Appendix G-2.
Table 26. Factor Loadings of PSS-K

Items	
1. How often have you been upset because of something that happened unexpectedly?	.62
2. How often have you felt you were unable to control the important things in your life?	.68
3. How often have you felt nervous and "stressed"?	.64
4. How often have you dealt successfully with irritating life hassels?	
5. How often have you felt that you were effectively coping with important changes that were occurring in your life?	
6. How often have you felt confident about your ability to handle your personal problems?	
7. How often have you felt that things were going your way?	
8. How often have you found that you could not cope with all the things that you had to do?	.64
9. How often have you been able to control irritations in your life?	
10. How often have you felt that you were on top of things?	74
11. How often have you been angered because of things that were outside of your control?	
12. How often have you found yourself thinking about things that you have to accomplish?	
13. How often have you been able to control the way you spend your time?	
14. How often have you felt difficulties were piling up so high that you could not overcome them?	.71

APPENDIX H. Social Support Seeking CSI-K Factor Analysis

Appendix H-1.

Table 27. Summary of Fit Indices for Confirmatory Factor Analyses of CSI-K

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
One factor -11 item	178.24***	44	.88	.82	.87	.90	.87	.90	.11 (.093-.126)

Note. N=374. ***p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation.

Appendix H-2.

Table 28. Factor Loadings of SSS (Social Support Seeking) from CSI-K

Items	
Last one month....	.71
2. Accepted sympathy and understanding from your partner?	.71
3. Talked to your partner about the situation because talking about it helped you to feel better?	.79
7. Went to your partner to feel better about the problem?	

Note. A few sample items with high loadings are presented, since Dr. Amirkhan requested not to present whole scale in the public.

APPENDIX I. PAQ-K Factor Analysis

Appendix I-1.
Table 29. Summary of Fit Indices for Confirmatory Factor Analyses of PAQ-K

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Two factor – 16 items	412.54***	103	.91	.88	.74	.79	.75	.79	.08 (.069-.084)
Two factor – 6 items	14.45	8	.99	.98	.97	.95	.98	.98	.04 (.000-.072)

Note. N = 515 ***p < .001. GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; NFI = normed fit index; IFI = incremental fit index; TLI = Tucker-Lewis index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation.

Appendix I-2.

Table 30. Factor Loadings of PAQ-K

Factor/ Items	F1	F2
Instrumentality		
1. Not at all independent --very independent		
3. Very passive – very active	.50	
7. Not at all competitive – very competitive		
10. Can Make decisions easily – Has difficulty making decisions		
11. Gives up very easily – Never gives up easily	.94	
12. Not at all self-confident – Very self-confident	.60	
13. Feels very inferior – Feels very superior		
16. Goes to pieces under pressure – Stands up well under pressure		
Expressiveness		
2. Not at all emotional – very emotional		
4. Not at all able to devote self completely to others --able to devote self completely to others		
5. Very rough – very gentle		.52
6. Not at al helpful to others – very helpful to others		.60
8. Not at all kind – very kind		
9. Not at all aware of feelings of others – very aware of feelings of others		
14. Not at all understanding of others – Very understanding of others		
15. Very cold in relations with others – Very warm in relations with others		.58

APPENDIX J. INDCOL-K

Appendix J-1.
Table 31. Summary of Fit Indices for INDCOL-K

	Chi square	df	GFI	AGFI	NFI	IFI	TLI	CFI	RMSEA
Two factor-32 items	1819.11***	463	.79	.76	.51	.59	.55	.58	.08 (.073-.081)
Two factor-10 items	106.35***	34	.96	.94	.91	.94	.92	.94	.07 (.052-.080)

Note. N=497. ***p<.001. GFI=goodness-of-fit index; AGFI=adjusted goodness-of-fit index; NFI=normed fit index; IFI=incremental fit index; TLI=Tucker-Lewis index; CFI=comparative fit index; RMSEA=root-mean-square error of approximation.

Appendix J-2
 Table 32. Factor Loadings of INDCOL-K

Items	F1	F2
Factor 1: Individualism		
1. I prefer to be direct and forthright when discussing with people		
4. Winning is everything	.40	
5. One should live one's life independently of others		
6. What happens to me is my own doing		
8. It annoys me when other people perform better than I do.		.78
10. It is important that I do my job better than others		.54
12. I enjoy working in situations involving competition with others.		
15. I enjoy being unique and different from others in many ways.		
18. I often do "my own thing"		
19. Competition is the law of nature		
21. I am a unique individual		
23. When another person does better than I do, I get tense and aroused.		.82
25. I like my privacy.		
26. Without competition, it is not possible to have a good society.		
32. If I succeed, it is usually because of my ability.		

Table 32. Factor Loadings of INDCOL-K (continued)

Items	F1	F2
Factor 2: Collectivism		
2. My happiness depends very much on the happiness of those around me.		
3. I would do what would please my family, even if I detested that activity.		
7. I usually sacrifice my self-interest for the benefit of my group.		.62
11 I like sharing little things with my neighbors		
13. I would keep my aging parents with us at home.		
14. The well-being of my co-workers is important to me		.58
16. If a relative were in financial difficulty, I would help within my means	.52	
17. Children should feel honored if their parents receive a distinguished award.		
20. If a co-worker gets a prize, I would feel proud.	.63	
22. To me, pleasure is spending time with others.	.60	
24. I would sacrifice an activity that I enjoy very much if my family did not approve it.		
27. Children should be taught to place duty before pleasure		
28. I usually sacrifice my self-interest for the benefit of my group		.65
29. I hate to disagree with others in my group.		
30. Some people emphasize winning: I am not one of them		
31. Before taking a major trip, I consult with most members of my family and many friends.		

VITA

Young-Ju Cho was born January 7, 1974 in South Korea. She graduated from Yonsei University, Seoul, South Korea in 1996 with a Bachelor's Degree in English Language and Literature, and a Minor in Psychology. She earned a Master's degree in Counseling Psychology from Yonsei University in 1998. She completed her post-master internship and residency at Sogang University Counseling Center, Seoul, Korea. She completed her postdoctoral internship at Michigan State University Counseling Center in 2007. Her primary research interests are attachment theory, social support romantic relationships, mentoring relationship, and international students' adjustment and well-being, and counseling process and outcome.