Empirical Research Paper

Who Do We Turn to and What Do We Get? Cultural Differences in Attachment Structure and Function Among East Asian and Western Individuals

Minjoo Joo[1] , Susan E. Cross[2], and Sun W. Park[3]

Abstract

To whom do we turn for support in times of need, and what does the support from close others convey? The present research investigated how the structure and function of attachment differ for individuals in East Asian and Western cultures. In three studies, using survey and daily diary data, we examined the role of the romantic partner as an attachment figure, and the consequences of receiving responsive support in close relationships among individuals in Korea and the United States. As expected, the role of the romantic partner as an attachment figure was less emphasized for Koreans compared with U.S. participants. Also, responsive support from close others was more strongly linked to affiliation-related end states (i.e., in-group agency) for Koreans than U.S. individuals. The present research demonstrates the need to consider nuanced cultural influences in the attachment literature for the broader application of the theory.

Keywords

culture, ethnicity, adult attachment, close relationships, social support

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Paul and his wife, Jane, are happily married, but Paul sometimes reaches out to people other than Jane for support. Paul is strongly attached to his parents; when his wife has a conflict with his parents, he often takes his parents' side. Many Americans might consider Paul immature for not having achieved independence from his parents, which is thought to be the foundation of healthy romantic relationships; they might deem his marriage fragile because of his distant attitude toward his partner. However, what if the moral ideals for individuals and relationships in Paul's culture are different from those of Americans?

Attachment theory has been one of the most influential theories of close relationships and has served as the basis for understanding interpersonal relationships and personality development (Simpson & Rholes, 2015). It is crucial to take a cultural perspective when examining attachment because the formation of attachment bonds intersects with cultural ideals of self and relationships (Keller & Bard, 2017). For instance, in East Asian cultures, interdependent self-construal is prevalent; individuals are viewed as fundamentally connected to close others and ingroup members. In contrast, independent self-construal represents a prevalent model of self in Western cultural contexts, in which individuals are seen as bounded entities, independent of each other (Markus & Kitayama, 1991). In addition, the degree to which

individuals perceive their chances of meeting new people and choosing new relationships (Yuki & Schug, 2012) has been identified as a crucial socioecological factor that shapes individuals' relationship experiences. East Asian individuals tend to have low relational mobility, which makes it difficult for individuals to create new ties or isolate the self from interpersonal conflicts (Li et al., 2015). Low relational mobility, in addition to the interdependent self-construal, leads East Asians to develop a sense of being rooted in dense and overlapping networks, prioritizing the maintenance of social harmony (Markus & Kitayama, 1991). In contrast, Western individuals tend to have high relational mobility; they are relatively free agents who can choose and arrange their own social ties based on their personal preferences (Li et al., 2015; Yuki & Schug, 2012).

Despite fundamental differences in self and relationality, little research has been conducted on the relationship between

[1]Duke Kunshan University, China
[2]Iowa State University, USA
[3]Korea University, Korea

Corresponding Author:
Minjoo Joo, Division of Social Sciences, Duke Kunshan University, No. 8 Duke Avenue, Kunshan, Jiangsu 215316, China.
Email: mj263@duke.edu

cultural models and attachment in adult relationships (for work with children, see Keller & Bard, 2017). Among those studies, most focused on the distribution of attachment styles across cultural contexts. For example, adults from East Asian cultural contexts tend to be more anxious and avoidant in their romantic attachment styles compared to those in Western cultures (e.g., Agishtein & Brumbaugh, 2013; Chopik & Edelstein, 2014; Wei et al., 2004). However, it is crucial to examine the role of culture in attachment, beyond levels of attachment styles. The matter is particularly pressing considering the impressive applications of attachment theory in social policies, legal settings, and counseling contexts (Morelli et al., 2017). Without cultural knowledge, it remains unclear whether certain dynamics (e.g., prioritizing one's romantic partner over other relationships) are functional or not in the culture. In the current research, we examine the question of who people choose to turn to for care, understanding, and validation in times of need (i.e., attachment network structure), and the consequences of receiving effective partner support (i.e., attachment function) among members of East Asian and Western cultures.

To Whom Do You Turn? The Centrality of Romantic Partner in the Attachment Network

According to attachment theory, close others provide the support that fulfills one's needs, which is the major reason that humans develop close emotional intimacy with significant others, particularly with parents and romantic partners (Bowlby, 1982; Hazan & Shaver, 1994). People are predisposed to resist separation from attachment figures (i.e., proximity-seeking), to turn to them for comfort and assistance in times of hardship (i.e., safe haven function), and to seek them out for the individual's growth, exploration, and goal pursuit (Fraley, 2019). Therefore, the degree to which one seeks support from a particular person shows how much one is attached to the person (Kammrath et al., 2020).

Attachment theory assumes individuals have a primary support provider, and the dyadic relationship with that person is at the heart of their attachment system. During childhood, the mother–child dyad serves as the primary basis of the child's development (Bowlby, 1969). The idea of a hierarchy in the attachment system in which a specific relationship is most central transfers over to adult relationships, with one's romantic partner taking the place of the mother (Brumbaugh & Fraley, 2006). In Western societies, gaining psychological independence from one's parents during early adulthood is a critical developmental task in becoming a well-functioning individual (Erikson, 1968). Once the person enters adulthood, the bond with one's romantic partner is generally deemed to be the most important of social bonds; it is prioritized over any other social ties, including the one with one's parents (Salter & Adams, 2012; Wu et al., 2016).

For instance, spouses' loyalty to their partner, rather than to their parents, in conflict situations is considered healthy (Coontz, 2013). Such emphasis on the priority of the marriage relationship exemplifies the common assumption of "sacred couples" in Western culture. That is, the privacy and intimacy between romantic partners need to be protected and are of greater importance than any other social responsibilities or obligations (Shweder et al., 1995). Taken together, the model of an ideal monogamous romantic relationship in Western cultures is one in which a person places one's romantic partner at the center of one's social ties and primarily turns to him or her in times of emotional and practical needs (Hazan & Shaver, 1987).

For East Asians, in contrast, the relationship with one's romantic partner may not be as "sacred" as in Western contexts and may be better understood by taking a holistic approach rather than focusing on romantic dyads (Morelli et al., 2017). Because East Asian individuals highly value maintaining good relationships with family members and facilitating group solidarity, natal family relationships remain crucial throughout their lives (Hsu, 1975). Individuals in East Asian contexts may even subordinate their romantic relationships to their family relationships (Yeh & Bedford, 2019). Indeed, marriage in East Asian countries is considered the joining of two extended families rather than of two individuals. For example, family approval of the romantic partner is a factor in relationship quality and intention to marry for East Asians, but not for Westerners (Zhang & Kline, 2009). Furthermore, the strong bond with parents may linger throughout one's life in East Asian cultures. For instance, the strongest bond for Japanese adults continued to be the one with their mother, not with the romantic partner (Kōdansha, 1983 as cited in Rothbaum et al., 2000). Also, East Asians are more likely than their Western counterparts to choose to help their mothers over their spouses in both hypothetical life-or-death and everyday situations (Wu et al., 2016). In summary, the relationship between East Asian couples may not have the same centrality in the attachment network as is found among Western couples. Compared with Western individuals, East Asian individuals may be more likely to utilize other social ties, such as familial ties, as the source of support, rather than their romantic partner.

What Does Support From Close Others Convey? Functions of Attachment in Two Cultures

Attachment figures provide support for individuals to develop and perform as well-functioning adults in society. For instance, a romantic partner's confirmation of one's ideal self can help one attain the goal of becoming that ideal self (Rusbult et al., 2009). Caring relationships with close others provide grounds for individuals' well-being and help them become socially competent adults (Feeney & Collins, 2015).

However, what constitutes social competence differs across cultures. In accordance with the cultural differences in self-construal, the definition of social competence in Western contexts is linked to facets of individuation from others, such as self-expression, self-efficacy, autonomy, and independence (Arriaga et al., 2018; Feeney & Collins, 2015). Because the meaning of social competence is related to independence, a secure and caring adult relationship may convey individuality-promoting outcomes in Western cultures. Indeed, in Western cultural contexts, emotional support from the romantic partner has been linked to individuation-related processes such as enhanced self-esteem, self-actualization, and self-bolstering against negative feedback (Deci et al., 2006; Feeney & Collins, 2015).

In contrast, East Asians may feel uncomfortable receiving support that leads to individuation because it may disturb social harmony. Compared with Westerners, Asians were less likely to provide social support to enhance the recipient's self-esteem (J. M. Chen et al., 2012). East Asians also experienced less self-esteem enhancement from social support (Tasfiliz et al., 2018). Rather, interdependence is favored in East Asian cultural contexts and being socially competent also means being able to foster interdependence and maintain harmony with others. Here, relationships may function to help individuals with affiliation-enhancing processes such as fitting in, loyalty to the group, and sensitivity to social norms and cues. Support from close others can be the basis for enhancing one's interdependence and connectedness to one's in-group (i.e., validating and encouraging one's belongingness to the group). Indeed, Du et al. (2013) demonstrated that affirming one's value within one's in-group (i.e., relational self-esteem) rather than validating one's individual self-worth (i.e., personal self-esteem) was most effective in coping with mortality salience for Chinese participants. In contrast, for Austrian participants, affirming personal rather than relational self-esteem was the most effective strategy. Considering that East Asians seem to benefit more from affiliation with groups rather than from individuation processes, attachment figures may tend to provide support that allows their close others to enhance their belongingness and affiliation.

In the current research, we focused on responsiveness as the index of effective attachment support provision (Arriaga et al., 2018; Bowlby, 1982). Responsiveness is the extent to which partners effectively attend to and support each other's needs and goals; individuals who perceive their partners to be responsive feel accepted, understood, and secure (Reis et al., 2004). Specifically, we focused on perceived partner responsiveness, because this captures the subjective experience of receiving the support, rather than what was intended or delivered. Because of possible cultural differences in the types of support that are effective, or in scripts about social support, using perceived responsiveness is the most suitable approach for capturing individual experiences of effective social support.

Effective support from one's close others leads to various outcomes related to affiliation and individuation processes. For this research, we focused on personal agency and in-group agency. Specifically, personal agency refers to one's ability to control one's actions and to influence the external world as well as a sense of autonomy, competence, and mastery (Haggard & Tsakiris, 2009). The personal agency has been strongly associated with individuals' psychological well-being and mental health (Adler, 2012). Individuals can also attain the feeling of agency from other people or groups when they feel responsible for, and in control of, their group's action (Kitayama et al., 2004; Swann et al., 2010). Feelings of agency about one's in-group fosters interdependence by motivating individuals to act according to the collective goal of the group (Swann et al., 2010). In the current study, we refer to the feeling of agency about one's in-group as *in-group agency* and focus on it as an individual outcome of the support process.

The Present Research

Researchers have called for models of attachment in which cultural variation in socialization goals, ethnotheories, and practices are taken into account (Keller & Joscha, 2013). To address this issue, we investigated ways in which attachment structure and function differ between members of East Asian and Western cultures. The first aim was to examine how the structure of attachment differs across cultures by investigating who individuals seek support from in times of need. Although the romantic relationship is important for East Asians, the interdependent nature of self-construal and social norms, such as the emphasis on family obligation, would influence them to depend on other relationships as well. Hence, we expected a cultural difference in the attachment structure between members of East Asian and Western cultures such that the romantic partner is less likely to be central in one's attachment network among members of an East Asian cultural group than members of a Western cultural group (Hypothesis 1).

The second aim of this research was to investigate cultural differences in the function of attachment. Because the meaning of social competence differs between Western and East Asian societies, we expected the function of effective support in East Asian cultural contexts to be different from its function in Western cultural contexts. Specifically, we expected the link between perceived responsiveness from close others and personal agency to be weaker (Hypothesis 2a) and that of in-group agency to be stronger (Hypothesis 2b) among the members of East Asian cultures compared with the members of Western cultures. See Figure 1 for the hypothesized model.
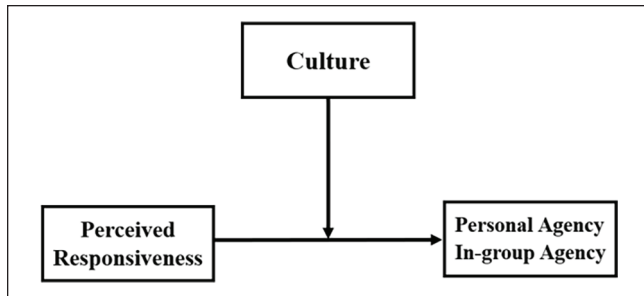
Figure 1. Theoretical Model for Hypothesis 2a and 2b.

Study 1 provides a starting point as we examined the centrality of the romantic relationship to attachment for Korean and U.S. participants. Study 2 used a community sample from Korea and the United States to examine how responsive attachment support predicts culturally valued aspects of agency, in addition to replicating results from Study 1. Finally, Study 3 addresses both structure and function of attachment among young adults in Korea and the United States, using a daily diary method. This approach allowed us to assess behavior on specific occasions rather than relying on less reliable retrospective self-reports. It is one of very few studies using a daily diary method to examine cross-cultural differences in dynamics in close relationships. Furthermore, this approach enables a comparison of the extent to which various relationships serve attachment functions, which is a novel and comprehensive method to investigate the structure of attachment network.

We describe how sample size is determined and the data exclusion criteria in each study. All analysis code, research materials, and measures are available at https://osf.io/9surx/. We report all measures, and exclusions in these studies. Data files are not posted due to privacy concerns. Study designs and data analyses were not pre-registered.

Study 1

In Study 1, we examined whether Koreans are less likely to rely on a romantic partner in times of need compared with U.S. individuals (Hypothesis 1). We recruited community samples and asked participants to nominate one person they are most likely to rely on for attachment functions.

Method

Participants. We recruited 335 Korean participants (166 women) and 151 U.S. participants (78 women) through the use of research companies. Participants took part in an online survey consisting of various questionnaires related to close relationships. Among U.S. participants, 121 were European Americans (see Supplementary materials for further details). Because this study was part of a larger study with different

hypotheses, the sample size was not determined a priori. Sensitivity power analysis was conducted for the main analysis. We recruited participants who were in dating relationships at the time of the survey, with an age range of 20 to 39 years, for Korean participants, $M_{age} = 28.75$, $SD = 4.63$; for U.S. participants, $M_{age} = 28.14$, $SD = 5.07$; $t(484) = 1.30$, $p = .19$, $d = 0.13$. The length of the relationships was similar across the two cultures, for Korean participants, $M_{relationship\ length} = 25.21$ months, $SD = 24.55$; for U.S. participants, $M_{relationship\ length} = 22.19$ months, $SD = 22.10$; $t(479) = 1.28$, $p = .20$, $d = 0.13$.

Measures

Attachment Functions. We used a revised version of the WHOTO scale, which is an attachment function measure (Fraley & Davis, 1997) that has been used to determine who people turn to for three attachment components. Participants were asked about the person they want to spend time with and do not like to be away from (i.e., proximity seeking); the person they want to be with and get advice from in times of difficulties (i.e., safe haven); and the person they want to share the good news with and feel they can always count on (i.e., secure base). Participants were given six questions measuring attachment functions and nominated the person who serves best in each of the roles (e.g., *Who is the person you most like to spend time with?*; for all questions, see Table 1), and they provided the name of, and their relationship with, each person. The relationship of the person with participants was then coded into one of three categories for descriptive analysis: *parents, romantic partner*, and *others.* Table 1 describes participants' responses in detail.

Results and Discussion

We expected Korean participants to be less attached to their romantic partners compared with their U.S. counterparts (Hypothesis 1). To investigate this hypothesis, we recoded the answers to each item in WHOTO following previous studies (Fraley & Davis, 1997). Score 1 was assigned if participants selected their romantic partner for one or both WHOTO items for an attachment function. If their first choice was anyone else for both items, 0 was assigned. This enables participants to get a minimum score of 0, in which case the romantic partner does not serve any attachment functions, and a maximum score of 3, in which case their romantic partner serves all 3 functions. As expected, Korean participants turned to their romantic partner for attachment needs less frequently than did U.S. participants, $M_{Korea} = 1.65$, $SD = 1.12$ and $M_{US} = 2.12$, $SD = 0.93$, $t(331.11) = -5.47$, $p < .001$, $d = -0.47$.[1] The results of Study 1 support Hypotheses 1 and provide initial support for the cultural difference in centrality of the romantic relationship with attachment in Korea and the United States.[2]

Table 1. Frequencies of Turning to Each Relationship for Attachment Functions Among Korean and U.S. Participants (Responses to WHOTO Scale; Study 1).

Attachment functions	Support provider	Korea (%)	United States (%)
Who is the person you most like to spend time with?	Romantic partner	55.5	75.5
	Parents	21.8	16.6
	Others	17.6	3.3
Who is the person you don't like to be away from?	Romantic partner	41.5	72.2
	Parents	31.9	18.5
	Others	21.8	2.6
Who is the person you want to be with when you are feeling upset or down?	Romantic partner	55.2	68.2
	Parents	7.5	24.5
	Others	28.4	1.4
Who is the person you would count on for advice?	Romantic partner	18.8	29.8
	Parents	34.0	61.6
	Others	40.3	3.9
Who is the person you would want to tell first if you achieved something good?	Romantic partner	34.3	51.0
	Parents	40.9	43.0
	Others	20.0	2.0
Who is the person you can always count on?	Romantic partner	22.1	33.1
	Parents	42.7	53.6
	Others	29.3	6.6

Note. Percentages do not add up to 100% because of missing data or unqualified responses.

Study 2

Study 1 provided initial support for a cultural difference in attachment structure, but the question of who "others" are in WHOTO responses remains. In Study 2, we aimed to replicate the result of Study 1 as well as further break down who individuals turn to other than parents and the romantic partner for attachment functions. More importantly, in Study 2, we investigated cultural differences in the function of effective support (Hypothesis 2a and 2b) for Korean and U.S. participants, using community samples from each culture. We expected effective support for Korean participants to be less related to the enhancement of personal agency but more related to the in-group agency than for U.S. participants.

Method

Participants. A-priori power analysis was conducted, assuming a small effect size ($f^2 = 0.02$) with a power of 0.8, which resulted in a sample size of 395. Accordingly, we recruited 217 Korean individuals and 200 U.S. participants using research companies. Six of the U.S. participants failed the attention check, so the final sample consisted of 411 participants (217 Koreans). Of the 194 Korean participants, 50.7% were men ($N = 110$), 67.3% were married ($N = 146$), 69.1% were cohabiting with their romantic partner, and the mean age (SD) was 44.23 (13.57), ranging from 20 to 79 years old. Of the 200 U.S. participants, 48.5% were men ($N = 94$), 63.4% were married ($N = 123$), 85.1% were cohabiting with their romantic partner, 82.5% were European Americans ($N = 160$), and the mean age (SD) was 44.15 (14.82), ranging from 20 to 69 years old. Further sample characteristics are presented in supplementary materials.

No cultural difference was observed in age, $t(409) = -0.51$, $p = .96$, marital status, $\chi^2(1) = .68$, $p = .24$, or relationship length in months, M_{Korea} (SD) = 171.02 (152.45), M_{US} (SD) = 174.74 (154.37); $t(409) = 0.25$, $p = .81$. U.S. participants were higher in social economic status, M_{Korea} (SD) = 3.71 (1.14), M_{US} (SD) = 3.92 (1.03); $t(409) = 1.98$, $p = .049$, and were more likely to live with their romantic partners, $\chi^2(1) = 14.51$ $p < .001$, than Korean participants.

Measures
Attachment Functions. We used the same WHOTO measure to examine attachment structure as in Study 1. For all questions, participants provided their relationship with each person (romantic partner, mother, father, sibling, child, other family member, friend, and other). See Table 2 for detailed responses.

Perceived Responsiveness. We examined perceived responsiveness from close others using an eight-item perceived responsiveness scale (Crasta et al., 2021). Participants were asked to think about their attachment figures from the WHOTO measure and indicated how much these people care for, understand, and appreciate them (e.g., "They usually try to see where I'm coming from"). Participants used a 5-point Likert-type scale (1 = *not at all* to 5 = *a lot*; α_{Korea} = .92, α_{US} = .93).

Table 2. Frequencies of Turning to Each Relationship for Attachment Functions Among Korean and U.S. Participants (Responses to WHOTO Scale; Study 2).

Attachment functions	Support provider	Korea (%)	United States (%)
Who is the person you most like to spend time with?	Romantic partner	76.0	84.0
	Mother	10.1	2.1
	Father	0.0	0.0
	Sibling	0.5	2.1
	Child	10.6	7.7
	Other family member	0.0	0.0
	Friend	2.8	3.6
	Others	0.0	0.5
Who is the person you don't like to be away from?	Romantic partner	61.8	79.9
	Mother	15.7	2.6
	Father	0.0	1.0
	Sibling	0.0	1.0
	Child	19.4	8.2
	Other family member	0.5	3.6
	Friend	1.8	1.0
	Others	0.9	2.6
Who is the person you want to be with when you are feeling upset or down?	Romantic partner	59.9	80.4
	Mother	5.1	4.6
	Father	0.5	0.5
	Sibling	2.8	2.1
	Child	0.0	0.0
	Other family member	9.2	2.6
	Friend	16.1	6.7
	Others	6.5	3.1
Who is the person you would count on for advice?	Romantic partner	54.4	56.2
	Mother	13.8	10.3
	Father	5.1	6.2
	Sibling	7.8	7.7
	Child	3.2	0.5
	Other family member	0.9	2.1
	Friend	13.4	14.9
	Others	1.4	2.1
Who is the person you would want to tell first if you achieved something good?	Romantic partner	69.1	83.0
	Mother	17.5	8.2
	Father	0.5	2.6
	Sibling	1.8	2.6
	Child	8.8	0.5
	Other family member	0.5	0.0
	Friend	1.4	1.5
	Others	0.5	1.5
Who is the person you can always count on?	Romantic partner	61.3	68.6
	Mother	24.4	11.9
	Father	2.3	3.6
	Sibling	2.8	3.6
	Child	5.5	1.0
	Other family member	0.5	2.1
	Friend	0.9	5.7
	Others	2.3	3.6

Personal Agency. To examine personal agency, we used an eight-item autonomy measure from the Basic Psychological Needs Satisfaction scale (Van Der Kaap-Deeder et al., 2020; for example, "I feel like I can pretty much be myself in my daily situations"). Participants used a 5-point Likert-type scale ($1 =$ *strongly disagree* to $5 =$ *strongly agree*; $\alpha_{Korea} = .76$, $\alpha_{US} = .82$).

Table 3. Descriptive Statistics (Study 2).

Variables	1	2	3	M (SD) Korea	M (SD) United States	T	d
1. Responsiveness	—	.28***	.38***	4.10 (0.61)	4.49 (0.57)	6.70***	0.68
2. Autonomy	.48***	—	.29***	3.37 (0.58)	3.89 (0.69)	8.34***	0.81
3. Ingroup Agency	.09	.19	—	3.59 (0.66)	2.45 (0.85)	−15.03***	−1.50

Note. Correlations for the U.S. sample are below the diagonal, and they are above the diagonal for the Korean sample.
***p < .001.

Table 4. Regression Analysis for Agency Outcomes (Study 2).

Variables	Autonomy B	SE	95% CI	ΔR²	In-group agency B	SE	95% CI	ΔR²
Constant	1.01**	0.36			1.73***			
Gender	0.03	0.06			−0.02	0.07		
SES (Socioeconomic Status)	0.05	0.03			0.12**	0.03		
Cohabitation	0.02	0.07			−0.13	0.09		
Culture	0.95	0.43			−0.08	0.54		
Responsiveness	0.56***	0.07			0.09	0.09		
Culture × Responsiveness	−0.30**	0.10	[−0.50, −0.11]	0.02	0.31**	0.12	[0.07, 0.55]	0.01
Simple effects								
Responsiveness								
Korea	0.26***	0.07	[0.13, 0.39]		0.40***	0.08	[0.24, 0.56]	
United States	0.56***	0.07	[0.42, 0.71]		0.09	0.09	[−0.09, 0.27]	

Note. Culture is coded as 0 (*United States*) and 1 (*Korea*). CI = confidence interval; SE = standard error.
**p < .01. ***p < .001.

In-Group Agency. We measured in-group agency using a six-item agency measure (Swann et al., 2010; for example, "I feel responsible for what happens to my social groups"). Participants used a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*; α_{Korea} = .88 α_{US} = .90).

Covariates. We included gender, cohabitation with the partner, and SES (Socioeconomic Status) as covariates as they differ in two cultural groups. Gender was coded as 0 = *men*, 1 = *wome*n, cohabitation was coded as 0 = *not living with the partner* and 1 = *living with the partner*.

Results and Discussion

We established measurement invariances of measures across cultures (see Supplementary Material). Descriptive statistics and correlations are reported in Table 3. Korean participants reported lower perceived responsiveness from close others, lower autonomy, and higher in-group agency compared with U.S. participants (*ds* > 0.68, *ps* <.001).

Attachment to the romantic partner was coded using the same method as in Study 1. As expected, Korean participants turned to their romantic partner for attachment needs less frequently than did U.S. participants, M_{Korea} = 2.28, *SD* = 1.04 and M_{US} = 2.59, *SD* = 0.79, *t*(399.18) = 3.43, *p* < .001,

d = 0.34.[3] We also coded for attachment to other relationships (see Supplementary Table 1). Compared with U.S. participants, Korean participants were more likely to rely on their mother (*d* = −0.37) and child (*d* = −0.43) and less likely to rely on other family members (*d* = 0.26) for attachment functions.

To test Hypothesis 2a, we regressed autonomy on perceived responsiveness, culture, the interaction between responsiveness and culture, and the covariates (see Table 4). Consistent with Hypothesis 2, compared with Korean participants, U.S. participants who perceived their close others to be highly responsive were more likely to have high autonomy, $B (SE)_{Korea}$ = 0.26 (0.07); $B (SE)_{US}$ = 0.56 (0.07). Next, to test Hypothesis 2b, we regressed in-group agency on perceived responsiveness, culture, the interaction between responsiveness and culture, and the covariates (see Table 4). As expected, perceived responsiveness was more strongly linked to in-group agency among Koreans, *B* (*SE*) = 0.40 (0.08), than among U.S. participants, *B* (*SE*) = 0.09 (0.09).

We found the expected cultural differences in attachment structure. Participants from the United States were more likely to rely on the romantic partner compared with those from Korea. Furthermore, Korean participants were more likely to rely on some immediate family members (i.e., their mother and child) but less on extended family members. The

result provides further support for our hypothesis about cultural differences in the attachment structure.

Consistent with the hypotheses, perceiving high responsiveness from close others predicted personal agency more strongly among U.S. participants than among Korean participants. Furthermore, as expected, Korean participants who perceived high responsiveness were more likely than U.S. participants to have high in-group agency. Hence, the function of support of close others seems to be geared toward facilitating what is valued in each culture.

There were several limitations to Study 1 and 2. In Study 1, we used a measure that does not capture who people turn to in situations in which they can choose multiple support providers, as is often the case in daily life. For instance, individuals can turn to both their romantic partner and their mother when a stressor occurs. Furthermore, the WHOTO measure has been criticized for not providing useful criteria for identifying attachment figures (Rosenthal & Kobak, 2010). For instance, safe haven items tap who individuals turn to in non-emergency situations for comfort. However, the attachment system is activated by emergency situations such as danger or threat to the self or the attachment figure (Goldberg et al., 1999; Kobak & Madsen, 2008), unlike the support network that can be influenced by various factors such as trust or accessibility (Small & Sukhu, 2016). Study 3 addressed these limitations.

Study 3

In Study 3, we examined both hypotheses about cultural differences in attachment by conducting a daily-diary study in Korea and the United States. To overcome the limitations of Studies 1 and 2, in Study 3, participants were allowed to choose everyone they received support from. This enabled us to determine the relative importance of the romantic relationship compared with other close relationships within each culture. Moreover, we measured the impact of the negative event and supporter selection on a daily basis so that attachment bonds could be revealed through the preference for a particular supporter in threatening or stressful situations (Mikulincer et al., 2000; Rosenthal & Kobak, 2010). By using such enacted measure of individuals' attachment networks, we could examine in-the-moment support provision. Finally, measuring day-to-day fluctuations in partner responsiveness and agency outcomes enabled us to test whether the occasions in which an individual perceives higher responsiveness are also occasions when that person experiences higher agency.

Method

Participants and Procedures. With a small effect size (d = 0.2), α = .05, and intraclass correlation ranging from .2 to .4 (Bolger & Laurenceau, 2013), 320 participants were needed to achieve a power of 0.8. We aimed for a sample size of at least 400 and collected a total of 460 participants. We recruited 218 participants (116 women) in Korea and 242 participants (126 women) in the United States. The final sample consisted of 201 Korean participants (105 women) and 215 U.S. participants (116 women). To take part in the study, participants had to be at least 18 years old and must have been in an ongoing romantic relationship for a minimum of 3 months. We only recruited people who had not lived abroad for more than 3 years and who had at least one living parent at the time of the survey. Both the intake survey and the diary surveys were conducted online. Metric invariances of measures were established across cultures (see Supplementary Material).

Intake Session

Network Generator. Following Kammrath et al. (2020), we asked participants to indicate people in their lives from whom they seek support. Participants were told that support is "any behavior in which you are seeking help or support from another person. Your need could be something tangible, like a ride home from work, or something intangible, like advice, comfort, or someone to listen." We asked participants to indicate at least 12 people in their lives to whom they usually look for support and to list their initials, gender, and relationship with the participants. We coded the relationships into the following categories: Romantic partner, mother, father, family members (siblings and extended family), best friends, and others (friends and other relationships).

Attachment Network. To identify attachment figures, we used a modified bull's-eye method, in which participants were presented with three concentric circles surrounding a dot that represents the self (Rowe & Carnelley, 2005). We asked participants to situate the people in the network generator into the diagram. Participants were instructed that "The inner circle is for individuals that you feel so close to that it is hard to imagine your life without them." People who are placed in the innermost circle by the participants were considered as attachment figures (Kammrath et al., 2020).

Self-Construal (Self Expression vs Harmony). To investigate a possible mechanism, we measured the self-expression vs. harmony dimension of self-construal using a 7-point Likert-type scale (1= *strongly disagree*, 7= *strongly agree*; α_{Korea} = .83 α_{US} = .85; Vignoles et al., 2016) Participants responded to questions like "Other people's wishes have an important influence on the choices I make."

Daily Diary Measures

Negative Events. As has been done in previous studies (Gable et al., 2012), we asked participants to describe the worst thing that happened to them on that day. We asked them to indicate everyone that they shared the event with, among the people in the individuals' support network obtained in the intake session.

Negative Event Impact. For each negative event, participants rated the degree to which they experienced stress (1 = *none*, 7 = *extreme*), and also rated how important the event was to them (1 = *not important at all*, 7 = *extremely important*) using a 7-point Likert-type scale. We computed the index for negative event impact by averaging these two scores.

Perceived Responsiveness from Close Others. We measured the perceived responsiveness of the partner and parents in cases in which the participant indicated sharing the event with them, using a three-item measure of responsiveness (e.g., "When I told my partner/parents about the concern, my partner/parents understood me"; Reis et al., 2004). Participants received questions about parents' responsiveness if they chose mother, father, or both. To create a single index of perceived responsiveness from close others, we used the mean score when participants shared the event with both parents and the partner.

Agency. Personal agency was measured using four items (e.g., "Today, I felt like I was free to do things my own way"; B. Chen et al., 2015).[4] We measured in-group agency using two items taken from a group agency measure (Swann et al., 2010; See supplementary materials for the full measures).

Results

Sample Characteristics. The majority of U.S. participants identified as European American (194 people; 90%). Korean participants were older ($M = 24.43$, $SD = 2.70$) than the U.S. participants, $M = 19.73$, $SD = 1.67$; $t(329.51) = 21.17$, $p < .001$, $d = 2.09$. The average length of relationship was shorter among the Korean participants ($M = 17.47$ months, $SD = 15.72$) than those in the United States, $M = 23.25$ months, $SD = 19.66$; $t(266.58) = -3.23$, $p = .003$, $d = -0.32$.[5] Twelve Korean participants (6%) and 33 U.S. participants (15%) reported cohabiting with their romantic partner. A total of 109 Koreans (54.2%) and 83 U.S. participants (38.6%) reported cohabiting with their parents. See Supplementary Material Table 2 for further details on the sample characteristics.

Daily Diary Descriptive Statistics. Descriptive statistics for the intake survey are presented in Table 5, and the daily diary measures are described in Table 6. On average, participants provided 11.37 surveys ($SD = 2.96$), completing 81% of 14-day diaries. Cultural differences in daily agency were analyzed using multilevel modeling with diary data nested within participants. Agency variables were regressed onto cultural groups (*United States* = 0, *Korea* = 1). Korean participants reported higher levels of daily in-group agency, B (SE) = 0.42 (0.12), $p < .001$, $d = 0.45$, but reported lower personal agency scores, B (SE) = -0.37 (0.09), $p < .001$, $d = -0.39$, compared with U.S. participants.

Support Network Structure Hypotheses. We expected Korean participants to be less attached to their romantic partner compared with the U.S. participants (Hypothesis 1). To examine this hypothesis, we first investigated cultural differences in attachment structures reflected in the bull's eye task (see Table 5). As expected, Korean participants (88%) were less likely to place their romantic partner in the center of the bull's eye compared with U.S. participants, 97%; χ^2 (1) = 13.00, $p < .001$, $d = -0.36$. No cultural difference emerged for the placement of mothers (Korea = 92.5%, United States = 90%) or fathers (Korea = 78%, United States = 75%; $ps > .25$, $ds > -0.08$). Interestingly, Korean participants were also less likely to place other relationships in the innermost circle compared with U.S. participants (siblings, other family members, and best friends; $ds > -.33$).

We further examined cultural differences in attachment to the romantic partner by comparing the preference for the romantic partner as a supporter over other relationships in times of impactful negative events. We conducted a multigroup analysis using Mplus with the models described in Figures 2 and 3. We examined the impact of negative events as the predictor of support-seeking from the romantic partner, mother, father, family members (siblings and extended family), best friends, and others (friends and other relationships). Support-seeking was coded as 1 (*sought support*) and 0 (*did not seek support*). Gender, age, and cohabitation with the romantic partner or the parent were included as covariates.

The results are described in Figures 2 and 3 (also see Supplementary Table 4). The model fit indices indicated a reasonably good fit of the model, χ^2 (df) = 61.03 (51), $p = .12$, comparative fit index = 0.97, root mean square error of approximation = 0.01. We examined the centrality of the romantic partner in the support network in each culture by testing whether the path from the negative event impact score to support-seeking from the romantic partner was significantly different from those of other relationships; we imposed equality constraints between paths for the romantic partner and other paths using model test function in Mplus. Consistent with our expectation, the tendency for Korean participants to seek support from their romantic partner for highly impactful negative events was not significantly different from the tendency for them to seek support from other relationships, Wald (df) = 1.85 (4), $p = .76$. In contrast, the tendency for U.S. participant to rely on their romantic partner was significantly higher compared with that of other relationships, Wald (df) = 21.43 (4), $p < .001$. Furthermore, we examined this difference for each relationship separately, by imposing equality constraints between the path for the romantic partner and that for other relationships. Among Koreans, no difference emerged in the path for the partner and that of others (*Wald*s < 1.36, *p*s > .24). However, we found that the path for the romantic partner was significantly stronger compared with those for others among U.S. participants (*Wald*s > 4.21, *p*s < .04). This indicates the centrality

Table 5. Intake Survey Descriptive Statistics (Study 3).

| Variables | Scale/ range | Korea (N = 201) | | | | United States (N = 215) | | | | t | χ^2 | d |
		Frequency	Percentage	M	SD	Frequency	Percentage	M	SD			
Support Network Size	11–20			14.76	3.24			13.88	2.60	3.04**		0.30
Bull's Eye Size	0–17			4.89	2.32			6.10	2.23	−5.43***		−0.53
Attachment Figure (Bull's Eye)												
Romantic Partner		177	88.1			209	97.2				13.00***	−0.36
Mother		185	92.5			192	90.1				0.72	0.08
Father		150	78.1			158	74.5				0.40	0.06
Sibling		75	37.3			122	56.7				15.73***	−0.40
Extended Family		18	9.0			66	30.7				30.47***	−0.56
Best Friends		136	67.7			176	81.9				11.17**	−0.33
Others		87	43.3			129	60.0				11.63**	−0.34
Self-construal (Self-expression vs. Harmony)	1–7			4.09	1.13			3.70	1.31	−3.30**		1.23

Note. Attachment figure indicates individuals included in the innermost circle in the Bull's eye.
**$p < .01$. ***$p < .001$.

Table 6. Daily Diary Descriptive Statistics (Study 3).

| Daily variables | Scale/ range | Korea (N = 2,213) | | | United States (N = 2,517) | | | B (SE) | Cohen's d |
		M	$SD_{between}$	SD_{within}	M	$SD_{between}$	SD_{within}		
Number of Diaries	4–14	11.01	2.84		11.71	3.04			
Average Number of Supporters per Day (Total Number of Support Seeking/ Number of Total Diaries)	1–20	1.59	1.01	1.04	1.61	0.80	1.10	−0.03 (0.09)	−0.03
Negative Event Impact	1–7	4.46	1.51	1.01	3.76	1.61	0.99	−0.69 (0.09)***	1.56
Ingroup Agency	1–7	4.50	1.09	0.99	4.08	1.30	1.01	0.42 (0.12)***	0.45
Personal Agency	1–7	4.83	0.98	0.96	5.09	1.09	1.10	−0.37 (0.09)***	−0.39

Note. B and SE is from the multi-level regression accounting for the nesting effect with culture included as a predictor variable. Culture is coded as 0 (US) and 1 (Korea). SE = standard error.
***$p < .001$.

of the participants' romantic partner in their support network for impactful negative events among the U.S. individuals, but not among Koreans. This finding replicates the data from the bull's-eye task in which Americans were more likely to include their romantic partner in the innermost circle, representing their centrality in their attachment network.[6]

Support Function Hypotheses. To examine cultural differences in the function of effective social support, we conducted multi-level regression accounting for the nested structure of diaries within an individual. We expected that the link between perceived responsiveness from close others and in-group agency would be stronger among Korean participants compared with U.S. participants. The opposite pattern was hypothesized for personal agency. We computed within-individual

and between-individual level perceived responsiveness. The variation within-person represents the fluctuation around the person's typical perceived responsiveness, and the variation between persons reflects individual differences in perceived responsiveness. Within-person effects provide more critical information than between-person effects as they reflect variations that occur within a person free from the individual differences within each group. We entered within-individual level perceived responsiveness, between-individual level perceived responsiveness, culture, the interaction of culture × within-individual level perceived responsiveness, and interaction of culture × between-individual level perceived responsiveness as predictor variables and agency as a dependent variable. Gender, age, SES, and negative event impact were included as covariates.
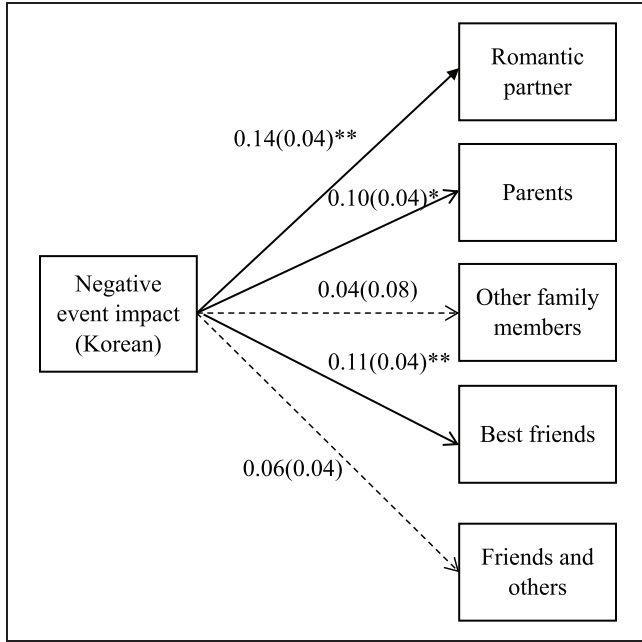
Figure 2. Results of Path Analysis From Negative Event Impact to Support Seeking From Each Relationship in Korea (Study 3). **p < .01. ***p < .001.
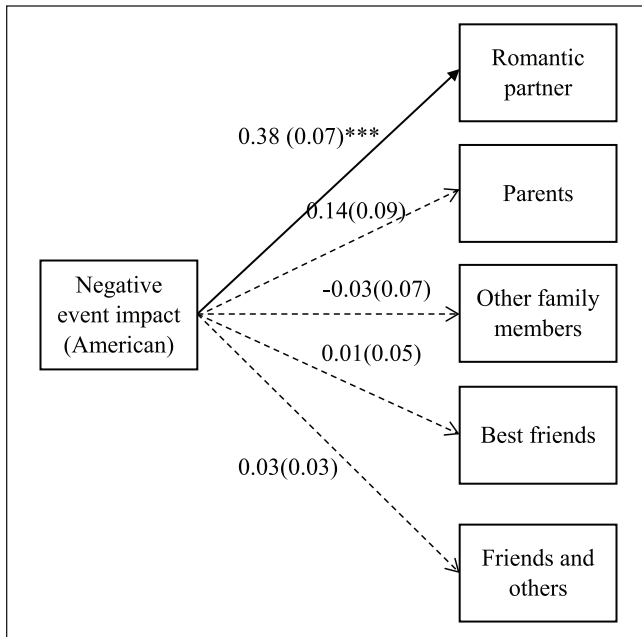

Figure 3. Results of Path Analysis From Negative Event Impact to Support Seeking From Each Relationship in United States (Study 3) ***p < .001.

Results are presented in Table 7. For personal agency, the expected pattern did not emerge; there was no cultural difference in the relation between within- or between-level perceived responsiveness and personal agency ($|Bs| < 0.05$ $ps > 16$).

As expected, there was culture $\times$ within-level perceived responsiveness interaction for in-group agency. Korean participants who perceived high within-level responsiveness from close others were more likely to feel high in-group agency compared with U.S. participants, B (SE) = 0.06 (0.04), $p = .03$, 95% CI = [0.01 0.15]. Breaking down the interaction, Korean participants who perceived responsiveness from close others on the day were more likely to feel in-group agency on the same day, B (SE) = 0.14 (0.03), $p < .001$, 95% CI = [0.08, 0.19]. This tendency was weaker among U.S. participants, B (SE) = 0.07 (0.02), $p = .005$, 95% CI = [0.02, 0.11]. No cultural difference emerged for the effect of between-level perceived responsiveness on in-group agency.

Self-Construal as a Mediator. We ran an exploratory analysis to examine if self-construal is a possible mechanism behind the cultural difference that emerged in the relation between responsiveness and in-group agency. Because self-construal was measured in the intake session, we examined moderated mediation analysis at the between-individual level, using PROCESS (Hayes, 2017). We computed average perceived responsiveness and in-group agency for each individual and entered perceived responsiveness as a predictor, culture as a moderator, self-construal as a mediator, and in-group agency as the dependent variable, along with the same covariates. The index of moderated mediation was significant $b(SE) = -.02(.01)$, 95% CI [−.05, .00], indicating that the observed moderating effect of culture was driven by the difference in self-construal (see Supplementary Table 11).[7]

Discussion

As expected in Hypothesis 1, although the romantic partner was an important attachment figure in both cultural groups, they were more so among U.S. individuals than Koreans. Korean participants were less likely to include the romantic partner as an attachment figure in the bull's eye task, compared to U.S. participants. Moreover, we observed the centrality of the romantic partner in individuals' attachment networks in the United States but not in Korea; the tendency to seek support from the romantic partner for highly impactful negative events was higher than the tendency to seek support from other relationships for U.S. participants but not for Korean participants.

The results of the study provide partial support for Hypothesis 2. In contrast to our hypothesis, the results suggested that responsive support from close others was similarly important for the personal agency of members of both cultural groups. However, as expected, perceived responsiveness from close others was more strongly linked to in-group agency for Koreans than U.S. participants. Furthermore, the exploratory analysis suggests that self-construal, specifically the emphasis on harmony, may account for this difference. That is, the reason why Korean individuals show a stronger link between perceived responsiveness and in-group

Table 7. Regression Analysis of the Link Between Responsiveness and Agency (Study 3).

Variables	Personal agency			In-group agency		
	B	*SE*	95% CI	*B*	*SE*	95% CI
Intercept	0.22	0.33		−0.07	0.34	
Time	−0.01*	0.00		0.01*	0.00	
Gender	0.02	0.04		0.02	0.04	
Age	−0.00	0.01		0.00	0.01	
Event Impact	−0.01***	0.00		−0.00*	0.0	
SES (Socioeconomic Status)	0.03	0.15		0.04	0.17	
Group or Personal Agency (Between)	0.98***	0.02		1.01***	0.02	
Culture	0.11*	0.05		0.02	0.06	
Responsiveness (Between)	0.06*	0.02		0.03	0.03	
Responsiveness (Within)	0.13***	0.02		0.06**	0.02	
Culture × Responsiveness (Between)	**−0.05**	**0.04**	**[−0.12, 0.02]**	−0.03	0.04	**[−0.11, 0.05]**
Culture × Responsiveness (Within)	**0.04**	**0.03**	**[−0.02, 0.11]**	0.08*	0.04	**[0.01, 0.16]**
Korea						
Responsiveness (Between)	0.01	0.03	[−0.05, 0.08]	−0.01	0.03	[−0.08, 0.06]
Responsiveness (Within)	0.17***	0.02	[0.13, 0.22]	0.14***	0.03	[0.08, 0.19]
United States						
Responsiveness (Between)	0.06*	0.03	[0.01, 0.11]	0.03	0.03	[−0.03, 0.08]
Responsiveness (Within)	0.13***	0.02	[0.09, 0.17]	0.07**	0.02	[0.02, 0.11]

Note. Culture was coded as 0 (*United States*) or 1 (Korea). Gender was coded as 0 (Male) or 1 (Female). CI = confidence interval; *SE* = standard error.
*$p < .05$. **$p < .01$. ***$p < .001$.

agency may be due to their orientation to prioritize harmony over one's own self-expression.

General Discussion

Researchers have relied mainly on Western ideals to provide answers to the questions of to whom people look for help in difficult situations, and what they get from the support. In Western cultural contexts, the romantic partner is viewed as the primary attachment figure. Furthermore, it has been implicitly assumed in many theories that support in close relationships could enhance personal agency and individuation from others (Deci et al., 2006). However, it remains unclear whether these assumptions apply to East Asian individuals. The present research aimed to examine the degree to which these assumptions around attachment structure and function apply to East Asians. With Korean and U.S. participants, we have investigated the centrality of the romantic partner in the attachment network (Hypothesis 1; Studies 1–3), and the relation between responsive support and daily outcomes of personal and in-group agency (Hypothesis 2; Studies 2 and 3).

Cultural Similarities in Attachment Structure and Function

Across the studies, we found that attachment structure and function had important commonalities across the two cultural groups. For example, throughout all three studies, a pattern of relying on the romantic partner as a major source of support emerged, across culture and gender. The placement of the romantic partner at the core of one's safety net implies the importance of that relationship even in East Asian culture in which family relationships are emphasized. This result speaks to the similarity across these cultures in transference from parents to the romantic partner as the general trend, despite the differences to be discussed in the next section.

We also found that responsive support from close others had similar functions for individuals from Korea and the United States: those who perceived responsive support from their close others, including from the romantic partner, had higher personal agency in both cultural groups. This may reflect similarities across cultures in valuing self-expression and personal achievement. Behaviors tied to self-expression are not always pitted against those fulfilling harmony (e.g., exploring new interests). It could be that independence-oriented values are similarly important in both cultures, and only when it conflicts with interdependence-oriented goals, the different patterns across two cultural groups occur. This finding highlights the crucial role of close others in establishing independence across Western and East Asian cultures.

Despite these similarities, the current studies provide important insights into the nuanced ways that culture plays a role in attachment structure and function. The differences and their implications are discussed below.

Cultural Differences in Attachment Structure

The results of the present studies indicate that Korean adults are less attached to their romantic partners compared with European American individuals, as shown by varied measures. We used assessments that are traditionally used, such as WHOTO (Study 1 and 2) and Bull's Eye (Study 3). We also introduced an approach of enacted measures of individuals' attachment networks, which let us examine in-the-moment support provision rather than relying on individuals' perceptions (Study 3). Weaker attachment to the romantic partner among East Asians, compared with Westerners, carries several implications in the literature.

One implication of this work involves the possibility that attachment structure may differ among the members of two cultures, particularly those in early adulthood. Researchers have emphasized the need to examine attachment from a culturally-bound indigenous perspective (i.e., using an *emic* approach) rather than using criteria created in Western cultures to examine attachment in other cultures (Keller & Joscha, 2013). The current study indicates the need to question the centrality of the romantic partner as the injunctive norm. For example, "being too attached" to parents communicates immaturity for adults in Western cultures (Haws & Mallinckrodt, 1998). The results of the current studies challenge the validity of this assumption; the transference of attachment from parents to partner may not be as normative, or may be slower, in individuals' development in East Asian cultures.

Our study provides valuable insights into one's attachment in various relationships. The most common way to study adult attachment has been to focus on a dyadic interaction with one attachment figure, usually the mother or the romantic partner (Morelli et al., 2017). However, attachment bonds may be better understood as a network because individuals tend to develop emotional intimacy in various relationships, especially in a transition period such as early adulthood (Trinke & Bartholomew, 1997). This would especially be true for individuals in East Asian contexts, who have attachment ties that are similar in strength for multiple relationship partners (as shown in Study 3). Thus, the importance of considering relational ties holistically may be more important for East Asians compared to Western individuals.

Relatedly, in Studies 1 and 2, Korean participants' secure base needs seemed to be spread out across relationships compared with U.S. participants' needs, which are centered around the romantic partner. In part, these results align with previous studies that found that East Asian individuals were less likely to seek explicit social support (e.g., emotional comfort) compared with Western counterparts (Kim et al., 2008) because of concerns that support seeking may have negative relational consequences (Taylor et al., 2004). It could be that East Asians' high relational concerns restrain them from forming strong attachments with many people, resulting in secure base function spread out across multiple relationship partners.

Cultural Differences in Attachment Functions

Around the world, individuals strive to give their best support to close others in times of need. Yet, what close relationships shall offer in times of difficulty, has been majorly conceptualized based on Western ideals. Previous cross-cultural studies found that East Asian individuals were more inclined to construe the ideal person as one who fosters social harmony and fitting-in (i.e., interdependence), in contrast to Western individuals who are more motivated to achieve the end state of independence, such as self-reliance and personal control (Kitayama et al., 2004). The current studies confirm and extend the literature by examining the manifestation of such cultural differences in the context of attachment function using enacted measures. Indeed, cultural variation emerged in attachment functions in both Study 2 and 3: perceived responsiveness from close others tended to be more critical among Korean participants than American individuals for their in-group agency. Furthermore, exploratory analyses in Study 3 reveal that this cultural difference may be explained by the higher endorsement of harmony (vs. self-expression) among East Asians compared with Western individuals. The current study demonstrates the need to broaden our understanding of the nuanced ways that culture influences attachment support functions.

Theoretical Implications, Limitations, and Conclusion

The current research carries implications for attachment theory and existing cultural theories by examining potentially diverging predictions and boundary conditions of these theories. The results suggest the focus on dyadic relationships may hinder the identification of important aspects of attachment. Indeed, some argue that attachment theorists "struggle with fully integrating multiple attachments into theory" because the emphasis on dyadic relationships as opposed to collective relationships is intertwined with philosophical beliefs about personhood (Morelli et al., 2017, p. 166). In line with such critiques, the current study shows the importance of examining other attachment ties, especially for East Asian individuals. It also demonstrates the need to consider culturally valued outcomes (e.g., in-group agency) that have been emphasized in cultural theories. However, some of our findings support the generalizability of attachment theory in that they demonstrate the expected pattern of transference as well as the critical importance of attachment support for personal agency in both cultures. This suggests the need to further examine the boundary conditions of theorized attachment structure and function among diverse populations to bring about practical benefits for individuals in need of social connections and support.

There are several limitations to these studies. First, we base the models tested throughout Study 1 and 2 on cross-sectional data. Also, although Study 3 applied a daily dairy method, some may consider it problematic that we obtained

predictor variables (e.g., perceived responsiveness) and dependent variables (e.g., agency) at the same point in time. However, predictors were based on retrospection of what had happened on the day. In contrast, dependent variables were momentary ratings at the end of the day, which provides some grounds for causal inference (Wang & Anderson, 2016). Future studies should investigate the mechanisms behind cultural differences in attachment and support-selection processes, and use other designs, such as experiments, to further investigate the causal relationships. We acknowledge that the generalizability of these results may be limited as Korean samples from the current study do not represent East Asian populations, and we recommend replication among other cultural groups. Further, in Study 3, Koreans were older than the U.S. participants. Given that emotional intimacy with the romantic partner and parents are in flux around the late teen to early 20s, this difference may critically influence attachment networks. Thus, these findings need to be replicated further using similar age groups across the two cultural groups. Extending the study to different age groups such as married couples or elderly couples would also be crucial to unravel cultural differences in attachment networks. Finally, despite the establishment of measurement invariance, such tests are not conclusive of cross-cultural invariance in constructs (Welzel et al., 2021). Moreover, in line with issues that the current article address, the conceptualization of attachment and agency may differ across cultures.

Cultural similarities and differences found in the current studies open the door for additional research and theory on attachment across cultures. If Paul from the introduction sees a therapist in Western culture, s/he may think Paul has attachment issues. However, if Paul is from an East Asian background, his behaviors may reflect cultural competency and functional close relationships. Researchers who consider culturally-derived perspectives of attachment will be able to extend the theory as well as the applications of their findings. For instance, counseling services or policies for facilitating social support for members of marginalized groups can be tailored to specific cultural groups rather than relying on one-size-fits-all protocols.

ORCID iD

Minjoo Joo https://orcid.org/0000-0003-2626-1383

Supplemental Material

Supplemental material is available online with this article.

Notes

1. The sensitivity power analysis in the honor sample for an alpha of .05 (one-tailed), power of .80, and revealed a minimum d of .24 for the comparison of the attachment to the romantic partner in Korean and United States (Faul et al., 2009).
2. When we conducted the chi-square analysis for each attachment function with the romantic partner = 1 and others = 0, we found that compared with Korean participants, U.S. participants were more likely to rely on romantic partner for proximity seeking, $\chi^2(1) = 26.228$, $p < .001$, secure base, $\chi^2(1) = 12.50$, $p < .001$, and safe haven function, $\chi^2(1) = 8.93$, $p = .004$.
3. When we conducted the chi-square analysis for each attachment function with the *romantic partner* = 1 and *others* = 0, we found that compared with Korean participants, U.S. participants were more likely to rely on their romantic partner for proximity seeking, $\chi^2(1) = 8.08$, $p = .005$, and secure base, $\chi^2(1) = 10.43$, $p = .002$, and they were marginally more likely to do so for the safe haven function, $\chi^2(1) = 3.99$, $p = .06$.
4. In the dissertation that this manuscript is based on, self-esteem and in-group esteem related items were included in the measure of agency. We dropped the items related to self- and in-group esteem as they are conceptually divergent from the feeling of agency.
5. Relationship length data was only collected from 145 U.S. participants (out of 215), so we did not include it as a covariate in our analyses.
6. The results remained consistent after controlling for SES, relationship satisfaction and cohabitation.
7. The same mediated moderation analysis was conducted with residential mobility as the mediator, but the model was not significant.

References

Adler, J. M. (2012). Living into the story: Agency and coherence in a longitudinal study of narrative identity development and mental health over the course of psychotherapy. *Journal of Personality and Social Psychology*, *102*(2), 367–389.

Agishtein, P., & Brumbaugh, C. (2013). Cultural variation in adult attachment: The impact of ethnicity, collectivism, and country of origin. *Journal of Social, Evolutionary, and Cultural Psychology*, *7*(4), 384–405.

Arriaga, X. B., Kumashiro, M., Simpson, J. A., & Overall, N. C. (2018). Revising working models across time: Relationship situations that enhance attachment security. *Personality and Social Psychology Review*, *22*(1), 71–96.

Bolger, N., & Laurenceau, J.-P. (2013). *Intensive longitudinal methods: An introduction to diary and experience sampling research*. Guilford Press.

Bowlby, J. (1969). *Attachment and loss v. 3* (*Vol. 1*).

Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry*, *52*(4), 664–678.

Brumbaugh, C. C., & Fraley, R. C. (2006). Transference and attachment: How do attachment patterns get carried forward from one relationship to the next? *Personality and Social Psychology Bulletin*, *32*(4), 552–560.

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M., Sheldon, K. M., Soenens, B., Van Petegem, S., & Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion*, *39*(2), 216–236.

Crasta, D., Rogge, R. D., Maniaci, M. R., & Reis, H. T. (2021). Toward an optimized measure of perceived partner responsiveness: Development and validation of the perceived responsiveness and insensitivity scale. *Psychological Assessment*, *33*(4), 338.

Chen, J. M., Kim, H. S., Mojaverian, T., & Morling, B. (2012). Culture and social support provision: Who gives what and why. *Personality and Social Psychology Bulletin*, *38*(1), 3–13.

Chopik, W. J., & Edelstein, R. S. (2014). Age differences in romantic attachment around the world. *Social Psychological and Personality Science*, *5*(8), 892–900.

Coontz, S. (2013). *Marriage, a history: From obedience to intimacy or how love conquered marriage* (Vol. 53). Viking.

Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: Mutuality in close friendships. *Personality and Social Psychology Bulletin*, *32*(3), 313–327.

Du, H., Jonas, E., Klackl, J., Agroskin, D., Hui, E. K. P., & Ma, L. (2013). Cultural influences on terror management: Independent and interdependent self-esteem as anxiety buffers. *Journal of Experimental Social Psychology*, *49*(6), 1002–1011.

Erikson, E. H. (1968). *Identity: Youth and crisis* (Issue 7). W. W. Norton.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior research methods*, *41*(4), 1149–1160.

Feeney, B. C., & Collins, N. L. (2015). Thriving through relationships. *Current Opinion in Psychology*, *1*, 22–28.

Fraley, R. C. (2019). Attachment in adulthood: Recent developments, emerging debates, and future directions. *Annual Review of Psychology*, *70*, 401–422.

Fraley, R. C., & Davis, K. E. (1997). Attachment formation and transfer in young adults' close friendships and romantic relationships. *Personal Relationships*, *4*(2), 131–144. https://doi.org/10.1111/j.1475-6811.1997.tb00135.x

Gable, S. L., Gosnell, C. L., Maisel, N. C., & Strachman, A. (2012). Safely testing the alarm: Close others' responses to personal positive events. *Journal of Personality and Social Psychology*, *103*(6), 963–981. https://doi.org/10.1037/a0029488

Goldberg, S., Grusec, J. E., & Jenkins, J. M. (1999). Confidence in protection: Arguments for a narrow definition of attachment. *Journal of Family Psychology*, *13*(4), 475–483. https://doi.org/10.1037/0893-3200.13.4.475

Haggard, P., & Tsakiris, M. (2009). The experience of agency: Feelings, judgments, and responsibility. *Current Directions in Psychological Science*, *18*(4), 242–246. https://doi.org/10.1111/j.1467-8721.2009.01644.x

Haws, W. A., & Mallinckrodt, B. (1998). Separation-individuation from family of origin and marital adjustment of recently married couples. *American Journal of Family Therapy*, *26*(4), 293–306. https://doi.org/10.1080/01926189808251108

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications.

Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*(3), 511–524. https://doi.org/10.1037/0022-3514.52.3.511

Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, *5*(1), 1–22. https://doi.org/10.1207/s15327965pli0501_1

Hsu, F. L. K. (1975). Formation, change, and problems in history of Chinese filial thoughts. In F. L. K. Hsu (Ed.), *The collected papers of Chinese ideological history* (pp. 155–200). Taiwan Student Bookstore.

Kammrath, L. K., Armstrong, B. F., Lane, S. P., Francis, M. K., Clifton, M., McNab, K. M., & Baumgarten, O. M. (2020). What predicts who we approach for social support? Tests of the attachment figure and strong ties hypotheses. *Journal of Personality and Social Psychology*, *118*(3), 481–500. https://doi.org/10.1037/pspi0000189

Keller, H., & Bard, K. (2017). *The cultural nature of attachment*. The MIT Press. https://doi.org/10.7551/mitpress/9780262036900.001.0001

Keller, H., & Joscha, K. (2013). Development the cultural solution of universal developmental tasks. In M. J. Gelfand, C. Chiu, & Y. Hong (Eds.), *Advances in culture and psychology* (pp. 63–116). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199930449.003.0002

Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist*, *63*(6), 518–526. https://doi.org/10.1037/0003-066X

Kitayama, S., Snibbe, A. C., Markus, H. R., & Suzuki, T. (2004). Is there any "free" choice? Self and dissonance in two cultures. *Psychological Science*, *15*(8), 527–533. https://doi.org/10.1111/j.0956-7976.2004.00714.x

Kobak, R., & Madsen, S. (2008). Disruptions in attachment bonds. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 23–47). Guilford New York.

Kōdansha. (1983). *Kodansha encyclopedia of Japan* (Vol. 5). Kodansha.

Li, L. M. W., Adams, G., Kurtiş, T., & Hamamura, T. (2015). Beware of friends: The cultural psychology of relational mobility and cautious intimacy. *Asian Journal of Social Psychology*, *18*(2), 124–133.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224–253. https://doi.org/10.1037/0033-295X.98.2.224

Mikulincer, M., Birnbaum, G., Woddis, D., & Nachmias, O. (2000). Stress and accessibility of proximity-related thoughts: Exploring the normative and intraindividual components of attachment theory. *Journal of Personality and Social Psychology*, *78*(3), 509–523. https://doi.org/10.1037/0022-3514.78.3.509

Morelli, G. A., Chaudhary, N., Gottlieb, A., Keller, H., Murray, M., Quinn, N., Rosabal-Coto, M., Scheidecker, G., Takada, A., & Vicedo, M. (2017). A pluralistic approach to attachment. In H. Keller & K. Bard (Eds.), *The cultural nature of attachment: Contextualizing relationships and development* (pp. 140–169). The MIT Press.

Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study

of intimacy and closeness. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 211–236). Psychology Press.

Rosenthal, N. L., & Kobak, R. (2010). Assessing adolescents' attachment hierarchies: Differences across developmental periods and associations with individual adaptation. *Journal of Research on Adolescence*, *20*(3), 678–706. https://doi.org/10.1111/j.1532-7795.2010.00655.x

Rothbaum, F., Pott, M., Azuma, H., Miyake, K., & Weisz, J. (2000). The development of close relationships in Japan and the United States: Paths of symbiotic harmony and generative tension. *Child Development*, *71*(5), 1121–1142. https://doi.org/10.1111/1467-8624.00214

Rowe, A. C., & Carnelley, K. B. (2005). Preliminary support for the use of a hierarchical mapping technique to examine attachment networks. *Personal Relationships*, *12*(4), 499–519. https://doi.org/10.1111/j.1475-6811.2005.00128.x

Rusbult, C. E., Finkel, E. J., & Kumashiro, M. (2009). The Michelangelo phenomenon. *Current Directions in Psychological Science*, *18*(6), 305–309. https://doi.org/10.1111/j.1467-8721.2009.01657.x

Salter, P. S., & Adams, G. (2012). Mother or wife? *Social Psychology*, *43*(4), 232–242. https://doi.org/10.1027/1864-9335/a000124

Shweder, R. A., Jensen, L. A., & Goldstein, W. M. (1995). Who sleeps by whom revisited: A method for extracting the moral goods implicit in practice. *New Directions for Child and Adolescent Development*, *67*, 21–39.

Simpson, J. A., & Rholes, W. S. (2015). *Attachment theory and research: New directions and emerging themes*. Guilford Publications.

Small, M. L., & Sukhu, C. (2016). Because they were there: Access, deliberation, and the mobilization of networks for support. *Social Networks*, *47*, 73–84. https://doi.org/10.1016/j.socnet.2016.05.002

Swann, W. B., Gómez, Á., Huici, C., Morales, J. F., & Hixon, J. G. (2010). Identity fusion and self-sacrifice: Arousal as a catalyst of pro-group fighting, dying, and helping behavior. *Journal of Personality and Social Psychology*, *99*(5), 824–841. https://doi.org/10.1037/a0020014

Tasfiliz, D., Selcuk, E., Gunaydin, G., Slatcher, R. B., Corriero, E. F., & Ong, A. D. (2018). Patterns of perceived partner responsiveness and well-being in Japan and the United States. *Journal of Family Psychology*, *32*(3), 355–365. https://doi.org/10.1037/fam0000378

Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology*, *87*(3), 354–362. https://doi.org/10.1037/0022-3514.87.3.354

Trinke, S. J., & Bartholomew, K. (1997). Hierarchies of attachment relationships in young adulthood. *Journal of Social and Personal Relationships*, *14*(5), 603–625. https://doi.org/10.1177/0265407597145002

Van Der Kaap-Deeder, J., Soenens, B., Ryan, R., & Vansteenkiste, M. (2020). The Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS).

Vignoles, V. L., Owe, E., Becker, M., Smith, P. B., Easterbrook, M. J., Brown, R., González, R., Didier, N., Carrasco, D., & Cadena, M. P. (2016). Beyond the "east–west" dichotomy: Global variation in cultural models of selfhood. *Journal of Experimental Psychology: General*, *145*(8), 966–1000.

Wang, L., & Anderson, S. F. (2016). Intensive longitudinal methods: An introduction to diary and experience sampling research. *Journal of Educational and Behavioral Statistics*, *41*(6), 653–658. https://doi.org/10.3102/1076998616655019

Wei, M., Russell, D. W., Mallinckrodt, B., & Zakalik, R. A. (2004). Cultural equivalence of adult attachment across four ethnic groups: Factor structure, structured means, and associations with negative mood. *Journal of Counseling Psychology*, *51*(4), 408–417. https://doi.org/10.1037/0022-0167.51.4.408

Welzel, C., Brunkert, L., Kruse, S., & Inglehart, R. F. (2021). Non-invariance? An overstated problem with misconceived causes. *Sociological Methods & Research*, *1*, 33. https://doi.org/10.1177/0049124121995521

Wu, T. F., Cross, S. E., Wu, C. W., Cho, W., & Tey, S. H. (2016). Choosing your mother or your spouse: Close relationship dilemmas in Taiwan and the United States. *Journal of Cross-Cultural Psychology*, *47*(4), 558–580. https://doi.org/10.1177/0022022115625837

Yeh, K. H., & Bedford, O. (2019). The psychology of filial piety and moral decision-making in Chinese people. In L. A. Jensen (Ed.), *The Oxford handbook of moral development: An interdisciplinary perspective* (pp. 385–401). Oxford University Press.

Yuki, M., & Schug, J. (2012). Relational mobility: A socioecological approach to personal relationships. In O. Gillath, G. Adams, & A. Kunkel (Eds.), *Relationship science: Integrating evolutionary, neuroscience, and sociocultural approaches* (pp. 137–151). American Psychological Association. https://doi.org/10.1037/13489-007

Zhang, S., & Kline, S. L. (2009). Can I make my own decision? A cross-cultural study of perceived social network influence in mate selection. *Journal of Cross-Cultural Psychology*, *40*(1), 3–23. https://doi.org/10.1177/0022022108326192