# Ethnic and Cultural Variations in Anger Regulation and Attachment Patterns Among Korean American and European American Male Batterers

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This study examined relationships among ethnicity, self-construals, and 2 risk factors for marital violence (anger, insecure attachment) in Korean American and European American male batterers. Korean (vs. European) American batterers experienced more anger and controlled their anger less. Independent self-construal was positively associated with anger experience and anger control and mediated the influence of ethnicity on anger control. Korean batterers were less independent, and less independent batterers controlled their anger less. Korean batterers' attachment styles were more avoidant and less anxious. Independent and interdependent self-construals were negatively associated with anxious and avoidant attachment, respectively. Independent self-construal mediated the influence of ethnicity on avoidant attachment. Clinical severity and adherence to traditional gender roles may help explain these ethnic and cultural variations. • anger regulation • attachment • batterers • ethnicity • self-construals

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The problem of domestic violence has garnered increasing public attention during the past three decades. National surveys have documented that approximately 1.8 million women in the United States are physically beaten by their husbands each year (Straus & Gelles, 1990). However, some populations have remained "hidden" to both researchers and clinicians. Asian Americans are one such group, particularly in the area of wife battering. There is some evidence suggesting that wife battering is a significant concern in the Asian American community (e.g., see review by Lum, 1998). For example, using a snowball sampling method as well as local directories in the Chicago area, Song (1996) found that 60% of the Korean immigrant women sampled in her survey (N = 150) reported being abused by her partner in the past year. Tran (1997) reported a lifetime prevalence rate of 53% for domestic violence among Vietnamese female refugees and immigrants (N = 30) in Boston, as well as a current prevalence rate of 37%. Although this research has provided evidence that the problem of marital violence certainly exists among Asian Americans, no studies have examined ethnic differences between Asian Americans and European Americans with respect to risk characteristics associated with battering. Specifically, no studies have linked the specific risk characteristics under investigation with marital violence among Korean Americans. Moreover, no studies have investigated cultural variables that may underlie ethnic variations in these risk characteristics. The present study was designed to address these issues by focusing on risk characteristics and possible culturally based mediators of these factors by sampling from a clinical population of Korean American and European American male batterers.

Increasingly, research attention has shifted away from focusing on female victims of intimate partner abuse to characteristics of the male batterers in efforts to understand mechanisms that trigger husband-towife violence (Holtzworth-Munroe, Meehan, Herron, Rehman, & Stuart, 2000; Hotaling & Sugarman, 1986). This shift has resulted in male batterer typologies (e.g., Holtzworth-Munroe & Stuart, 1994) and studies of risk factors for violence among male batterers (e.g., Hotaling & Sugarman, 1986). Anger regulation and problematic attachment patterns stand out as two sets of predictors specific to marital violence. The relationship between marital violence and each of these two domains (anger and attachment) is grounded both in theory and in empirical studies.

Theoretically, anger has been closely tied to aggression. The frustrationaggression hypothesis (Berkowitz, 1989) postulates that frustrating, stressful, or painful events or conditions will lead to increased negative affect or emotional arousal (such as anger), which in turn produces hostile aggression. Berkowitz further specified that aggressive inclinations are generated only to the extent that frustrations (aversive events) produce negative affect, thus underscoring the importance of the experience and regulation of anger. Empirically, male batterers have been shown to report higher levels of anger and hostility than their nonviolent counterparts (see review by Holtzworth-Munroe, Bates, Smutzler, & Sandin, 1997). Their anger and hostility appear to be in response to marital conflicts, wife rejection (e.g., possible abandonment by the wife), or jealousy. Despite the robust linkage between anger and marital violence, one limitation in this area of research has been psychometric and conceptual problems associated with the assessment of anger (Eckhardt, Barbour, & Stuart, 1997). To provide a more articulated examination of anger as a multifaceted phenomenon, the present study investigated three dimensions: anger experience, anger expression, and anger control.

Attachment theory is also rich in implications for marital violence. Bowlby (1988) suggested that violent spouses have an insecure attachment to their partners, which then leads to a fear of losing their spouse. This fear may result in extreme behaviors such as violence. Others since Bowlby have

examined the link between attachment style and intimate partner abuse, finding that violent men tend to report a disrupted attachment to their spouses, an overdependence on their spouses, or a preoccupation with their spouses (Dutton, Saunders, Starzomski, & Bartholomew, 1994; Murphy, Meyer, & O'Leary, 1994). Male batterers have also been shown to display more attachment problems than nonviolent men, and various insecure attachment patterns have been associated with a greater likelihood of violent behaviors (Babcock, Jacobson, Gottman, & Yerington, 2000; Bowlby, 1988; Dutton et al., 1994; Holtzworth-Munroe, Stuart, & Hutchinson, 1997; Murphy et al., 1994). Holtzworth-Munroe et al. (1997) found that abusive men (compared with satisfied and dissatisfied nonviolent married men) report higher preoccupation with their wives, higher interpersonal jealousy, and a higher spouse-specific dependency. Other researchers (Dutton et al., 1994) have also found that composite attachment scores (anxious and avoidant) were significantly correlated with other abuse-related characteristics, including borderline personality organization, anger, jealousy, and trauma symptoms. In sum, attachment style appears to be quite salient in identifying (and treating) maritally violent male batterers and therefore warrants further exploration as an important risk factor associated with battering.

Similar to the anger assessment literature, the literature on adult attachment styles includes a great deal of work related to conceptualizing and measuring attachment patterns (e.g., Bartholomew & Shaver, 1998; Griffin & Bartholomew, 1994; Hazan & Shaver, 1994). The present study focused on two robust dimensions of problematic attachment among male batterers and their intimate partners: anxiety and avoidance. These two attachment dimensions have been identified in previous research as underlying a four-category conceptual model of adult attachment (Griffin & Bartholomew, 1994) and have been used successfully in describing relational patterns (anxious and avoidant) among different types of male batterers (Dutton et al., 1994).

Not only are the constructs of anger and attachment of theoretical interest within the context of intimate partner abuse, but they also are phenomena amenable to a cultural analysis. Previous work has demonstrated cultural variations in both emotions (for a review, see Mesquita & Frijda, 1992) and attachment processes (e.g., Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000). In the present study, a self-construal framework was used to examine cultural variations in anger and attachment patterns among Korean American and European American male batterers. Moreover, the culturally based construct of self-construal provided a means to explain or "unpack" potential ethnic differences in these risk factors as recommended by Betancourt and López (1993).

## Influence of Self-Construals on Emotion and Attachment

Markus and Kitayama (1991) have proposed that *independent* and *interdependent* selfconstruals have significant implications for emotion, cognition, and motivation. An independent self-construal is prevalent in Western cultures, in which individuals are assumed to be autonomous and to have a unique set of internal attributes that regulate behavior and represent the core self. In contrast, the interdependent view of self, prevalent in many non-Western cultures, emphasizes connectedness with other people. The self becomes meaningful only in the larger context of social relationships.

Self-construals are thought to play a pivotal role in the experience, expression, and regulation of emotions. Several empirical studies (Matsumoto, Kudoh, Scherer, & Wallbott, 1988; Miyake, Campos, Kagan, & Bradshaw, 1986; Stipek, Weiner, & Li, 1989) have provided converging support for the idea that emotional experience and regulation are influenced by cultural norms related to self-construals. Further, Markus and Kitayama (1991) argued that ego-focused emotions (e.g., anger, pride, frustration)defined as those that refer to the individual's internal attributes-are more frequently expressed, and perhaps experienced, by individuals with independent self-construals. In contrast, other-focused emotions (e.g., sympathy and shame) have the other as the primary referent and promote an interdependent orientation. Thus, according to Markus and Kitayama's self-construal framework, it would be expected that Asian Americans (in this case, Korean Americans), who come from cultures that tend to espouse interdependent self-construals, would be less inclined to become angry and more inclined to control anger because anger is an egofocused emotion. At the same time, much of the research comparing Asians and European Americans has focused on certain Asian ethnic groups, often using samples from Japan and China. Less is known about the emotion regulation of Koreans and Korean Americans compared with European Americans. On the basis of previous findings, the present study investigated possible relationships among ethnicity, self-construals, and three aspects of anger (anger experience, expression, and control). Using a statistical test of mediation, we also examined whether potential ethnic differences in these three aspects of anger could be explained by self-construals.

Cross-cultural (both intracultural and intercultural) differences in attachment patterns have been established in the developmental research literature, particularly between European and Asian countries (see van IJzendoorn & Kroonenberg, 1988, for a meta-analysis). Other cross-cultural research has invoked Markus and Kitayama's (1991) construct of self-construals to conceptualize cultural differences in children's attachment styles, attachment-related behaviors and emotions, and patterns of interpersonal conflict (Mizuta, Zahn-Waxler, Cole, & Hiruma, 1996; Zahn-Waxler, Friedman, Cole, Mizuta, & Hiruma, 1996) in the United States and Japan. Although the construct of self-construal has been used as a framework for understanding crosscultural differences in children's attachment styles, this type of analysis has not yet been conducted among adults. In the present study, we investigated possible ethnic and cultural variations in male batterers' attachment styles and whether or not potential ethnic differences might be mediated by self-construal.

The present study also controlled for other variables related to battering. Given the impact of immigration-related stressors on levels of violence (Song, 1996), this study included assessments of (marital and occupational/economic) stress. In addition, we controlled for history of violence in the family of origin and alcohol abuse, both of which are well-established correlates of intimate partner abuse (Hastings & Hamberger, 1997; Van Haslett, Morrison, & Bellack, 1985). Finally, unlike previous studies of husband-to-wife violence, the present investigation compared two ethnically different groups to capture ethnic and cultural variations in risk factors related to battering.

On the basis of previous theoretical and empirical work as discussed earlier, the following hypotheses were tested in the present study: First, anger and attachment styles were hypothesized to be salient risk factors for marital violence in this sample of Korean American male batterers. Second, Korean American male batterers were hypothesized to experience less anger, control their anger more, and express anger less than their European American counterparts. Self-construals were expected to mediate these ethnic differences. Third, both Korean American and European American male batterers were hypothesized to display insecure attachment styles. Because there are mixed findings in the literature regarding avoidant and anxious attachment in batterers, and very little work has been conducted on ethnic and self-construal differences in adult attachment styles, no specific hypotheses were generated. Rather, attachment style was examined in an exploratory manner with respect to ethnicity and self-construals.

#### Method

#### Participants and Procedure

Participants were 52 Korean American and 50 European American court-referred adult men attending batterers' treatment programs in southern California. These men averaged 40.7 years of age (SD = 9.8). The Korean American men had, on average, spent only 33.6% of their lives in the United States (length of United States residency: M = 14.1years, SD = 7.3). Compared with norms based on a national probability sample (Straus, Gelles, & Steinmetz, 1980), these batterers (N = 102) ranked in the 92nd percentile in physical violence scores from the Conflict Tactics Scale. Eight communitybased agencies gave permission to survey the men participating in their county-approved treatment programs. The Korean American sample was recruited from two agencies that primarily serve the Korean American community, and the European American sample was recruited from six programs in the same geographic vicinity. Participation was strictly voluntary, confidential, anonymous, and based on informed consent. Questionnaires were administered in groups of approximately 8-15 men. In each packet, the demographic measure appeared first, but the rest of the questionnaires were administered in a random sequence to control for possible order effects. The procedure lasted about 45 to 60 min.

#### Measures

All questionnaires were offered in both English and Korean depending on the participant's language preference. [Note: All 52 of the Korean American men chose the Korean language survey.] For measures that did not have an already existing Korean translation, the back-translation method (Brislin, 1970) was used to translate them from English to Korean until there were no significant variations in meaning.

DEMOGRAPHIC BACKGROUND. Age, ethnicity, length of United States residency, educa-

tional level, occupational status, monthly income, and violence in the family of origin (two items—witnessing parental violence and physical abuse as a child) were assessed. Length of United States residency was used as a proxy for acculturation level; length of residency has been cited as an indicator of the cultural transitions of recent Asian immigrants (e.g., Moritsugu & Sue, 1983; Nicassio, 1985; Uba, 1994; Ying, 1996).

SOCIOECONOMIC STATUS. The Nam–Powers socioeconomic status scores (Miller, 1991; Nam & Powers, 1983) are based on the education and income of occupations from the 1970 United States Census. Scores range from 0 to 100, with 100 being the most lucrative and prestigious socioeconomic status level. In the present study, occupations were grouped into seven categories representing the full range of scores. The Nam–Powers has demonstrated strong concurrent validity with the Duncan Socioeconomic Index (r =.97) and adequate reliability from 1950 to 1980, with correlation coefficients ranging from .85 to .97 (Miller, 1991).

PSYCHOSOCIAL STRESS. The Hispanic Stress Inventory (HSI; Cervantes, Padilla, & Salgado de Snyder, 1991) was modified to assess psychosocial stress. The HSI is applicable to both immigrant and nonimmigrant groups and has demonstrated strong psychometric properties (Cervantes et al., 1991). Respondents indicated the extent to which a specific stressful situation made them feel worried or tense in the past 3 months using a 5-point Likert scale ranging from 1 (not at all worried/tense) to 5 (extremely worried/tense). Participants' responses were summed to create index scores for marital (13 items) and occupational/economic stress (10 items), respectively. Sample items from these subscales are "My spouse and I have disagreed on how to bring up our children" and "My income has not been sufficient to support my family or myself." Internal consistency was adequate with Cronbach's alphas as follows: for marital stress, .88 (Korean) and .55 (English); for occupational/economic stress, .78 (Korean) and .62 (English).

ALCOHOL USE. The 13-item Short Michigan Alcohol Screening Test (S-MAST; Selzer, Vinokar, & Von Rooijen, 1975) is a widely used measure of alcohol abuse. Respondents indicated their alcohol use and its consequences through "yes" or "no" responses based on lifetime occurrence. The S-MAST has demonstrated concurrent validity and good internal consistency with alphas ranging from .83 to .95 (Selzer et al., 1975) and has been shown to be reliable and valid with clinical samples (Kaplan, Kanas, Pokorny, & Lively, 1974). Both the English (e.g., Harburg et al., 1988) and Korean (e.g., Chang & Cheon, 1985) versions of the S-MAST have been validated in prior studies. In the present study, internal consistency was adequate with Cronbach's alphas of .78 (Korean) and .83 (English).

SELF-CONSTRUALS. The revised, 30-item Self-Construal Scale (SCS; T. Singelis, personal communication, September 26, 2000) contains two 15-item subscales assessing interdependent and independent self-construals, respectively, with a 7-point Likert-type response format ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item assessing interdependent self-construal is "My happiness depends on the happiness of those around me." A sample item assessing independent self-construal is "I enjoy being unique and different from others in many respects." Levels of interdependence and independence are represented by the mean of the 15 items from the corresponding subscale. The revised SCS has demonstrated adequate internal consistency (T. Singelis, personal communication, September 26, 2000) and has also been used in a previous study with Asian and Caucasian subsamples (Kwan, Bond, & Singelis, 1997). The SCS displayed adequate internal consistency in the present study, with Cronbach's alphas as follows: for independent self-construal, .80 (Korean) and .72 (English); for interdependent self-construal, .81 (Korean) and .74 (English). The independent and interdependent subscales were used as indicators of culturally based self-construals in the regression analyses.

ANGER. A modified version of the State-Trait Anger Expression Inventory (STAXI-2; Spielberger, 1999) was used to assess anger experience, anger expression, and anger control because of its strong psychometric properties and conceptual clarity (Eckhardt et al., 1997). The Trait Anger scale (10 items) assessed the general disposition toward, and frequency of, experiencing anger (hereinafter referred to as Anger Experience). The Anger Expression-Out scale (8 items) assessed the degree to which an individual exhibited anger outwardly through verbally or physically aggressive behaviors. The Anger Control scale (16 items) was a summed composite of the Anger Control-In and Anger Control-Out subscales, which measured the reduction of suppressed anger and control over outward anger expression (Spielberger, 1999). The two anger control subscale scores were combined because they were correlated (r = .70, p < .001), and all items loaded onto one factor in a confirmatory factor analysis. The internal consistency of the factor-derived STAXI-2 subscales has been reported to be adequate with reliability alphas of .80 and higher (Spielberger, Reheiser, & Sydeman, 1995). Concurrent validity has been established with clinical outcomes (Deffenbacher, Demm, & Brandon, 1986). The original STAXI has been administered successfully in Korean samples (e.g., Chon, Hahn, Lee, & Spielberger, 1998). In the present study, internal consistency was strong, with Cronbach's alphas as follows: Anger Experience = .85 (Korean) and .82 (English); Anger Expression = .64 (Korean) and .72 (English); and Anger Control = .92 (Korean) and .90 (English). The sum scores from the Anger Experience, Anger Expression, and Anger Control subscales were used as dependent variables in the regression analyses.

ATTACHMENT STYLES. The Relationship Scales Questionnaire (RSQ; Griffin & Bar-

tholomew, 1994) is a 30-item scale measuring adult attachment. Two underlying dimensions that represent the positivity/ negativity of a person's self-model (Anxiety) and other-model (Avoidance) were identified through principal-axis factor analyses with varimax rotation, as confirmed by previous research (Bartholomew & Horowitz, 1991; Bartholomew & Shaver, 1998; Griffin & Bartholomew, 1994). Anxious attachment is associated with a degree of anxiety and dependence on the approval of intimate others. Avoidant attachment is associated with avoidance of intimacy based on negative expectations of others' availability and support. Items from the Avoidant subscale initially reflected comfort with intimacy and were reverse scored to reflect the avoidance dimension. Items that lowered internal consistency of each subscale were eliminated (three items were dropped from the Avoidance subscale, one item from the Anxiety subscale). Subscale scores were derived by calculating the mean of subscale items. Internal consistency for both subscales was adequate, with Cronbach's alphas of .87 (Korean and English) for the Anxiety subscale (16 items) and .85 (Korean) and .68 (English) for the Avoidance subscale (10 items). These two dimensions were used as dependent variables in the regression analyses.

## Plan of Analysis

Hierarchical multiple regression analyses were used to determine the relationship among ethnicity, self-construal, and three dimensions of anger. In the first step, the previously identified control variables were entered. In the second step, ethnicity (dummy coded using European Americans as a reference group) was entered to account for any ethnic differences in anger between Korean and European American batterers. In the third step, interdependent and independent self-construals were entered to test for cultural effects over and above the effect of ethnicity. An alpha level of .05 was used. A statistical test for mediation (Baron & Kenny, 1986; Holmbeck, 1997) was conducted to see whether selfconstruals were actually mediating the effect of ethnicity on the dependent variables. The same sequence of analyses was used to examine attachment patterns.

#### Results

#### Sample Characteristics

Zero-order correlations, means, and standard deviations are reported for all study variables (see Table 1). No significant differences emerged between the two ethnic groups on demographic variables, except for percentage of life spent in the United States (European American male batterers = 98.6%; Korean batterers, 33.6%), t(100) =-26.72, p < .001. Ethnic differences were also found on two independent variables. European American male batterers tended to have stronger independent self-construals than Korean American batterers, t(100) =-5.21, p < .001, whereas Korean Americans experienced greater occupational/ economic stress than their European American counterparts, t(100) = 2.50, p < .05.

## Relationship Between Anger and Attachment Variables and Level of Physical Violence

Although the marital violence literature has established evidence for the association between anger and insecure attachment and physical violence as risk factors for European American male batterers, it is unclear whether this relationship holds for ethnic minority populations, including Korean Americans. To test whether the anger and attachment variables were associated with actual levels of physical violence for these Korean American male batterers, we conducted correlational analyses. As shown in Table 2, both anger and attachment were significantly associated with physical violence in this sample of Korean American male batterers. Specifically, anger expression (r = .40, p < .01) and anxious attachment (r = .42, p < .01) were significantly cor-

Variable	Ι	0	ς	4	Ŋ	9	7	8	6	0I	11	12	13
1. Anger experience	I												
2. Anger expression	.53***												
3. Anger control	20*	19											
4. Anxious attachment	.37***	.34***	00.										
5. Avoidant attachment	12	15	41***	11									
6. Ethnicity $(0 = \text{European})$													
American) 7 Self-construals:	.13	04	22*	24*	.29**								
Independent	*06	14	41***	05	- 44**	- 46***	I						
8. Self-construals:	Ĩ					1							
Interdependent	.16	.05	.22*	.12	36***	.17	.32**	Ι					
9. Alcohol use	.27**	.26*	11	.24*	.07	.13	07	.07	I				
10. Occupational/economic													
stress	.32**	.28**	04	.17	20*	.24*	.11	.33**	.10				
11. Marital stress	.21*	.17	.02	.23*	24*	II.	.14	.27**	00.	.62***			
12. Physical abuse history	$.46^{***}$	.28**	08	.28**	03	.01	.05	.10	.34**	.17	.08	Ι	
13. Witness parent abuse	.23*	60.	.11	.14	15	12	60.	.13	.17	.05	.04	.39***	
Total sample $(N = 102)$													
M	19.07	14.92	46.90	2.24	2.75	NA	4.58	4.69	3.26	13.62	19.98	1.65	1.66
SD	4.98	3.35	9.19	0.72	0.77	NA	0.90	0.80	2.97	4.37	6.91	0.96	1.01
Korean American $(n = 52)$													
M	19.69	14.81	44.96	2.07	2.97	NA	4.17	4.82	3.63	14.65	20.75	1.65	1.54
SD	5.02	2.97	9.28	0.65	0.84	NA	0.85	0.79	2.92	4.97	8.27	0.99	0.92
European American $(n = 50)$													
M	18.42	15.04	48.92	2.41	2.52	NA	5.00	4.55	2.88	12.54	19.18	1.64	1.78
SD	4.90	3.73	8.73	0.76	0.62	NA	0.75	0.80	2.99	3.37	5.10	0.94	1.09

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Note. NA = not applicable.  $\label{eq:notation} *p < .05. \ **p < .01. \ ***p < .001.$ 

Variable	1	2	3	4	5	6
1. Physical violence	_					
2. Anger experience	.21	_				
3. Anger expression	.40**	.57***	_			
4. Anger control	12	06	09	_		
5. Anxious attachment	.42**	.35*	.44**	.07		
6. Avoidant attachment	11	36**	20	33*	23	_

TABLE 2 Zero-Order Correlations Between Physical Violence (Minor and Severe) and Anger andAttachment Among Korean American Male Batterers (n = 43)

p < .05. p < .01. p < .001.

related with physical violence, as measured by the Conflict Tactics Scale (Gelles & Straus, 1988).

### Anger Experience

Results from the regression analysis indicated that the overall model explained 35% of the variance in participants' anger experience, F(8, 93) = 6.28, p < .001 (see Table 3). In the first step, the previously described control variables were entered as planned. In the second step, the addition of ethnicity did not contribute to a significant increase in explained variance beyond that of the

TABLE 3 Results of Hierarchical Regression Analyses for Anger Experience, Anger Expression, and Anger Control

	Aı	nger exp	erience	Anger expression			Anger control		
Variable	В	SEB	β	В	SEB	β	В	SEB	β
Step 1									
Âlcohol use	0.20	0.15	0.12	0.19	0.11	0.17	-0.31	0.33	-0.10
Occupational/economic stress	0.25	0.13	0.22*	0.17	0.09	0.22	-0.10	0.27	-0.05
Marital stress	0.03	0.08	0.04	0.01	0.06	0.01	0.06	0.17	0.05
Physical abuse as a child	1.87	0.51	0.36***	0.69	0.38	0.20	-1.08	1.10	-0.11
Wittnessing parental violence	0.27	0.46	0.06	-0.09	0.34	-0.03	1.54	0.99	0.17
Step 2									
Âlcohol use	0.18	0.16	0.11	0.21	0.11	0.19	-0.23	0.33	-0.07
Occupational/economic stress	0.23	0.13	0.20	0.20	0.09	0.26*	0.01	0.27	0.01
Marital stress	0.03	0.08	0.05	0.00	0.06	0.01	0.05	0.17	0.04
Physical abuse as a child	1.88	0.51	0.36***	0.68	0.37	0.20	-1.12	1.09	-0.12
Witnessing parental violence	0.32	0.47	0.07	-0.16	0.34	-0.05	1.28	0.99	0.14
Ethnicity $(0 = \text{Euro. Am.})$	0.65	0.90	0.07	-0.86	0.65	-0.13	-3.56	1.90	-0.20
Step 3									
Âlcohol use	0.20	0.15	0.12	0.22	0.11	0.19	-0.21	0.31	-0.07
Occupational/economic stress	0.19	0.13	0.17	0.19	0.10	0.25*	-0.19	0.26	-0.09
Marital stress	0.02	0.08	0.03	0.00	0.06	0.01	-0.01	0.16	-0.01
Physical abuse as a child	1.86	0.50	0.36***	0.67	0.38	0.19	-1.17	1.01	-0.12
Witnessing parental violence	0.36	0.46	0.07	-0.12	0.34	-0.04	1.06	0.93	0.12
Ethnicity $(0 = \text{Euro. Am.})$	2.25	1.05	0.23*	-0.37	0.79	-0.06	-0.72	2.14	-0.04
Independent self-construal	1.65	0.59	0.30**	0.47	0.45	0.13	3.47	1.20	0.34*
Interdependent self-construal	-0.55	0.61	-0.09	-0.38	0.46	-0.09	1.79	1.24	0.16

Note. Anger experience:  $R^2 = .29$  for Step 1 (p < .001);  $\Delta R^2 = .00$  for Step 2 (ns);  $\Delta R^2 = .05$  for Step 3 (p < .05). Anger expression:  $R^2 = .16$  for Step 1 (p < .01);  $\Delta R^2 = .02$  for Step 2 (ns);  $\Delta R^2 = .01$  for Step 3 (ns). Anger control:  $R^2 = .04$  for Step 1 (ns);  $\Delta R^2 = .03$  for Step 2 (ns);  $\Delta R^2 = .01$  for Step 3 (ns). Anger control:  $R^2 = .04$  for Step 1 (ns);  $\Delta R^2 = .03$  for Step 2 (ns);  $\Delta R^2 = .001$ ).

 $\label{eq:posterior} \dagger p = .06. \quad *p < .05. \quad **p < .01. \quad ***p < .001.$ 

control variables ( $\Delta R^2 = .00, p > .05$ ). In the third step, the addition of self-construals explained additional variance in anger experience ( $\Delta R^2 = .05, p < .05$ ). Individuals with a stronger independent self-construal ( $\beta = .30, p < .01$ ) experienced anger more frequently. Ethnicity ( $\beta = .23, p < .05$ ) also emerged as a significant correlate of anger experience in the final step, with Korean American male batterers experiencing more anger. Physical abuse as a child was also a significant correlate of anger experience in the final model.

#### Anger Expression Through Abusive Behaviors

The overall model explained 19% of the variance in anger expression through abusive behaviors, F(8, 93) = 2.68, p < .05 (see Table 3). In the first step, the control variables were entered as planned. In the second step, ethnicity did not contribute to a significant increase in explained variance in anger expression ( $\Delta R^2 = .02$ , p > .05). In the third step, self-construals did not contribute to additional explained variance in anger expression. Occupational/economic stress emerged as a significant correlate of anger expression in the second and third steps of the regression analyses.

#### Anger Control

The final model explained 22% of the variance in anger control, F(8, 93) = 3.18, p < .01(see Table 3). In the second step, ethnicity contributed additional variance beyond that of the control variables in anger control at a trend level ( $\Delta R^2 = .03$ , p = .06). European American male batterers attempted to control their anger more frequently than their Korean American counterparts ( $\beta = -.20$ , p = .06). In the third step, self-construals contributed to additional explained variance in anger control ( $\Delta R^2 = .14$ , p =.001). Individuals with a stronger independent self-construal were significantly more likely to control their anger ( $\beta = .34$ , p < .01) than those with a weaker independent self-construal.

In addition, a mediation effect was established for anger control, as specified by Baron and Kenny (1986). Results of the Goodman I version of the Sobel test indicated that the effect of ethnicity on anger control was reduced when independent selfconstrual was also part of the regression equation (test statistic = -3.08, p < .01). That is, ethnicity alone does not sufficiently explain these batterers level of anger control. Rather, it is ethnicity filtered through selfconstrual that accounts for anger control. Korean American batterers tended to have a *weaker* independent self-construal, which was associated with *less* anger control.

#### Anxious Attachment

The overall model explained 28% of the variance in an anxious attachment pattern, F(8, 93) = 4.43, p < .001 (see Table 4). In the second step, ethnicity contributed to additional explained variance in anxious attachment beyond that of the control variables  $(\Delta R^2 = .09, p < .01)$ . Specifically, European American batterers ( $\beta = -.31$ , p < .01) were more likely to endorse an anxious attachment style than Korean Americans. In the third step, self-construals did not account for a significant amount of variation in an anxious attachment pattern beyond ethnicity ( $\Delta R^2 = .04, p > .05$ ). However, independent self-construal ( $\beta = -.24, p < .05$ ) was significantly and negatively associated with anxious attachment, whereas interdependent self-construal was not (thus resulting in the nonsignificant  $\Delta R^2$ ). Other significant correlates of anxious attachment in the final model included ethnicity and alcohol use.

#### Avoidant Attachment

The overall model explained 32% of the variance in an avoidant attachment pattern, F(8, 93) = 5.54, p < .001 (see Table 4). In the second step, ethnicity contributed to a significant increase in explained variance in avoidant attachment ( $\Delta R^2 = .10$ , p = .001). Korean American batterers tended to have a more avoidant attachment style than their

		Anxiou	\$	Avoidant		
Variable	В	SEB	β	В	SEB	β
Step 1						
Alcohol use	0.04	0.02	0.17	0.03	0.03	0.10
Occupational/economic stress	0.00	0.02	-0.02	-0.02	0.02	-0.10
Marital stress	0.02	0.01	0.23	-0.02	0.01	-0.18
Physical abuse as a child	0.15	0.08	0.20	0.02	0.09	0.03
Witnessing parental violence	0.02	0.07	0.03	-0.12	0.08	-0.16
Step 2						
Alcohol use	0.05	0.02	0.22*	0.01	0.03	0.06
Occupational/economic stress	0.01	0.02	0.06	-0.02	0.02	-0.19
Marital stress	0.02	0.01	0.21	-0.02	0.01	-0.16
Physical abuse as a child	0.14	0.08	0.19	0.03	0.09	0.04
Witnessing parental violence	-0.01	0.07	-0.02	-0.09	0.08	-0.11
Ethnicity $(0 = European American)$	-0.44	0.14	-0.31**	0.51	0.15	0.33*
Step 3						
Alcohol use	0.05	0.02	0.21*	0.01	0.02	0.05
Occupational/economic stress	0.01	0.02	0.07	-0.02	0.02	-0.09
Marital stress	0.02	0.01	0.22	-0.01	0.01	-0.12
Physical abuse as a child	0.14	0.08	0.19	0.03	0.08	0.04
Witnessing parenteral violence	-0.02	0.07	-0.03	-0.06	0.07	-0.08
Ethnicity $(0 = European American)$	-0.65	0.16	$-0.45^{***}$	0.40	0.17	0.26*
Independent self-construal	-0.20	0.09	-0.24*	-0.17	0.09	-0.20
Interdependent self-construal	0.15	0.09	0.17	-0.26	0.10	-0.27*

TABLE 4 Results of Hierarchical Regression Analyses for Anxious and Avoidant Attachment

*Note.* Anxious:  $R^2 = .15$  for Step 1 (p < .01);  $\Delta R^2 = .09$  for Step 2 (p < .01);  $\Delta R^2 = .04$  for Step 3 (*ns*). Avoidant:  $R^2 = .09$  for Step 1 (*ns*);  $\Delta R^2 = .10$  for Step 2 (p = .001);  $\Delta R^2 = .13$  for Step 3 (p < .001).

\*p < .05. \*\*p < .01. \*\*\*p < .001.

European American counterparts. In the third step, self-construals added a significant portion to the variance in avoidant attachment style explained by the model ( $\Delta R^2 = .13$ , p < .001), above and beyond the effects of ethnicity. Specifically, a *weaker* interdependent self-construal ( $\beta = -.27$ , p < .01) was associated with a *more* avoidant attachment pattern.

In addition, a mediation effect was found whereby an independent self-construal helped to explain the influence of ethnicity on avoidant attachment. Results of the Goodman I test indicated that the effect of ethnicity on avoidant attachment was reduced significantly when independent selfconstrual was also part of the regression equation (test statistic = 2.67, p < .01). Specifically, Korean American batterers tended to have a *weaker* independent self-construal, which was, in turn, related to a *more* avoidant attachment style.

#### Discussion

The present study is the first in the domestic violence literature to have examined ethnic and culturally based variations related to male batterers' emotion regulation and attachment styles. A synthesis of the risk factor research and batterer typologies from the domestic violence literature as well as a culturally based self-construal analysis from the social psychological literature allowed for a theory-driven, empirical examination of correlates of marital violence (i.e., emotion regulation and attachment patterns) among male batterers from two ethnic groups. Ethnic and cultural variations were found for anger experience, anger control, anxious attachment, and avoidant attachment. A statistical test of mediation served as a method of "unpacking" ethnicity, and in two instances, a mediation effect was detected. Specifically, an independent self-construal was the mediator between ethnicity and anger control as well as between ethnicity and avoidant attachment. These results shed new light on potential cultural variables (i.e., selfconstruals) underlying ethnic differences in emotion regulation and attachment styles among Korean American and European American male batterers.

In light of the study hypotheses, we first determined that anger and attachment styles are salient correlates of marital violence in this sample of Korean American male batterers, as expected. Specifically, anger expression and anxious attachment were found to be significantly associated with higher levels of physical violence among Korean American male batterers. These findings are consistent with those of studies on the general U.S. population (e.g., Barbour, Eckhardt, Davison, & Kassinove, 1998; Dutton et al., 1994; Maiuro, Cahn, & Vitaliano, 1988; see review by Holtzworth-Munroe, Bates, et al., 1997) that show that anger and attachment are significantly associated with higher levels of physical violence among male batterers. The present results are the first to empirically demonstrate this association between physical violence and different components of anger and attachment patterns, respectively, in an Asian American sample of male batterers.

Next, we had hypothesized ethnic differences in anger experience, anger expression, and anger control and that selfconstruals would mediate these ethnic differences. These hypotheses were partially supported. Ethnic differences were found, but not in the expected direction. It is interesting to note that an ethnic difference emerged in anger experience, after accounting for self-construals, with Korean Americans experiencing more anger than their European American counterparts; those with a strong independent self-construal also tended to experience more anger. In addition, a trend toward an ethnic difference appeared for anger control, with Korean Americans controlling their anger

*less* than European Americans. This trend toward ethnic differences in anger control was mediated by an independent selfconstrual. Neither ethnicity nor self-construals were significantly associated with anger expression.

Two explanations are posited for the pattern of findings from the present study. First, Korean American men may have reported more anger experience, less control over their anger, and more psychosocial stress because they are a more clinically severe group of batterers than their European American counterparts. Data from the present study revealed ethnic differences on psychosocial stress, with the Korean American male batterers experiencing higher levels of occupational/economic stress. These men may face many stressors and frustrations related to immigration and adaptation to a new culture (Shon & Ja, 1982). This stress may then lead to more anger, as predicted by Berkowitz's (1989) frustrationaggression hypothesis.

Given the social stigma attached to reporting incidents of abuse as well as facesaving concerns in the Asian American community (Lum, 1998), partners of batterers may not seek help from social service agencies or report abuse to local police until it becomes very severe, relying on such external sources of support only as "the last resort" (e.g., Dasgupta & Warrier, 1996; Song, 1996). The general psychopathology literature confirms this pattern of greater psychological disturbance among Asian Americans compared with non-Asian Americans due to delayed help-seeking and underutilization of mental health services (Flaskerud, 1986; Sue & McKinney, 1975). A lack of knowledge of available services, greater tolerance of the abuse, and cultural values related to the acceptance of one's fate may also contribute to the delayed help-seeking and silence around battering (Huisman, 1996; Lum, 1998; Song, 1996).

Second, the set of anger-related results may be explained by adherence to more tra-

ditional gender role expectations among the Korean American batterers in this sample. According to sample demographics, these Korean men had spent, on average, only 34% of their lives in the United States. Given their lower acculturation levels (compared with the European American men), the Korean men may hold more traditional gender role expectations. From the results of the regression analyses, it is clear that selfconstruals and ethnicity do not account for all of the variance in anger experience, anger expression, and anger control. Gender role expectations, then, may contribute to some of that unexplained variance that was not accounted for by self-construals and may help explain ethnic differences in anger experience and anger control. Adherence to rigid sex roles and power differentials between the sexes are common themes in the Asian American domestic violence literature (Dasgupta & Warrier, 1996; Ho, 1990; Huisman, 1996; Song, 1996; Tran, 1997). Although this second explanation is speculative in nature because the present study did not explicitly assess gender role expectations, this question may prove to be a fruitful area for future research.

Finally, we had hypothesized that both Korean American and European American male batterers would display insecure attachment, and the relationships between attachment styles and ethnicity and selfconstruals, respectively, were examined in an exploratory manner. Korean American batterers manifested a more avoidant and less anxious attachment style,<sup>1</sup> which places them in the dismissing category of the fourcategory model of adult attachment proposed by Bartholomew and Horowitz (1991). European American batterers, on the other hand, fell into the preoccupied category in this model, because they displayed a less avoidant and more anxious attachment style. This latter finding is consistent with previous research that has found that European American male batterers tend to be anxiously attached (Dutton et al., 1994; Holtzworth-Munroe, Stuart, et al.,

1997). These findings point to clinically significant ethnic differences in batterers that align with distinct patterns of adult attachment (i.e., as described by the four-category model developed by Bartholomew & Horowitz, 1991).

Male batterers with a weaker independent self-construal displayed a significantly more anxious attachment style, whereas those with a weaker interdependent selfconstrual displayed a significantly more avoidant attachment style. In other words, a negative association was found between independent self-construal and anxious attachment, as well as between interdependent self-construal and avoidant attachment. A mediation effect was found for avoidant attachment, in which Korean American male batterers were found to be more avoidant, and this ethnic effect was explained by a weaker independent self-construal. This is the first time that ethnic and cultural variations in attachment styles among adult male batterers have been empirically studied and reported in the domestic violence literature. Replication of these results in future studies would provide more support for these findings.

<sup>&</sup>lt;sup>1</sup>The present results were partially replicated in a sample of undergraduates from a large West Coast university (J. Hart, personal communication, August 29, 2002). A marginal trend was found toward higher scores on Avoidant (p = .10) and Anxious (p = .12) attachment styles for Korean American students (n =50, M = 3.31) compared with their European American (n = 661, M = 3.11) counterparts. When Asian American students (n = 758) were examined as a group, they scored higher on both the Avoidant (3.24, p < .01) and Anxious (3.32, p = .001) attachment dimensions than European American students (Anxiety = 3.15, Avoidance = 3.11). Although the effect was robust given the large sample size, mean differences were relatively small. This suggests that Korean American batterers are relatively more dismissing (higher on avoidance, lower on anxiety) while the tendency among Asian American undergraduate students seems to be relatively more fearful (high on both avoidance and anxiety) compared with their European American counterparts.

### Clinical Implications

Several clinical implications exist. Because most existing treatment programs for batterers include an anger management component, the present study offers salient information for clinicians working with this population. Moreover, the study points to specific ways in which clinicians can be culturally competent with Korean American batterers. First, it appears that Korean American batterers present with more risk factors than their European American counterparts, especially in the areas of anger experience and anger regulation. This implies a relatively higher level of clinical severity, and clinicians should be aware that Korean American batterers may represent a highneed population. Multiple factors may be involved in explaining the greater degree of clinical severity among Korean American batterers, including delayed help-seeking, lack of knowledge of or access to services, and cultural values related to fate, as described earlier. To address some of these factors, clinicians may need to perform more outreach services for this population to educate them about the availability of batterers' programs, shelters, and other social services for domestic violence. Therapists may also need to address the issue of acculturation level and adherence to traditional gender roles to conduct a culturally sensitive assessment of an Asian American client's anger experience and regulation.

Next, clinicians should be aware of the influence of self-construals on emotion regulation and attachment styles. A stronger independent self-construal was associated with greater anger control as well as a less anxious attachment. This raises an interesting question of whether therapists should consider strengthening batterers' independent self-construal to give their clients a broader, more bicultural repertoire of coping strategies for both emotion regulation and relational patterns. In addition, therapists may also consider strengthening an interdependent self-construal to engender a less avoidant attachment style, particularly for Korean American batterers. For example, clinicians may strengthen an interdependent self-construal by encouraging a selfeffacing bias (see Markus & Kitayama, 1991) and heightening an individual's awareness of, and attention to, their partner's feedback, and decreasing their attention to their own abilities or characteristics. By considering how an individual batterer defines his identity in relation to self and others, especially with regard to anger and attachment with significant others, therapists may use self-construals as an assessment and treatment conceptualization tool.

Finally, clinicians should be alerted that the typical preoccupied or fearful attachment profiles associated with European American batterers may not be generalizable to Korean American batterers. Instead, Korean American batterers showed a more dismissing attachment style (based on their lower anxiety and higher avoidance scores) that calls for different treatment approaches for promoting healthy relational styles. Additionally, Korean American batterers' dismissing attachment style may make it more difficult to engage them in therapy. Thus, the present study's findings point to potential ways in which treatment for male batterers may become more culturally competent by addressing these ethnic variations in attachment styles.

### Study Limitations

The results of the present study should be considered in light of its limitations. First, the study used self-report measures. Social desirability may have affected participants' responses because some variables under investigation were socially sensitive. The men in these treatment programs may have been motivated to appear "good" although anonymity and confidentiality were stressed. Even after controlling for social desirability, however, some studies have found differences in anger levels among different types of batterers (e.g., Hamberger, Lohr, Bonge, & Tolin, 1996; Saunders, 1992). Moreover, it should be noted that despite possible social desirability effects, significant differences were detected in the variables of interest in the present study.

A second limitation was the lack of control groups involving nonbattering men or maritally distressed but nonviolent men. Such control groups of nonviolent men would allow us to see if certain emotion regulation and relational patterns were specific to battering versus marital distress. Future research might address how three groups of men (maritally violent, maritally distressed but nonviolent, and satisfactorily married men) compare on emotion regulation and attachment styles.

A third limitation is one that affects all studies using a correlational design: lack of information on causality or temporal sequence. In the present study, we could not infer that a certain self-construal causes certain ways of expressing or regulating emotions and relating to others. A longitudinal study would help to clarify the direction of any relationships that were observed between the variables of interest. There is also the possibility that attachment styles may serve as a mediator between ethnicity and the emotion regulation variables (e.g., Babcock et al., 2000); again, future research would help answer this question.

A final limitation of the present study is the lack of information about the battering histories of the Korean American and European American men. Specifically, these previous histories of physical violence may differ across ethnic groups (i.e., between the Korean American and European American male batterers). For instance, pathways into the mental health care system or justice system may differ for these groups, particularly based on previous incidents of battering. Although this was not the focus of the present study, future research may explore these questions to see how Korean Americans (or other diverse groups) cope with and address initial as well as multiple incidents of battering.

#### Future Research

The findings from the present study suggest several directions for future research. First, future research should test possible explanations (e.g., cultural values, gender role expectations) of the present findings, which point to important ethnic and cultural variations in correlates of marital violence. For example, it appears that Korean American batterers do not fit the usual attachment profile established with European American batterer samples. Further research may be able to achieve a better understanding of how culture influences the meaning of attachment in diverse groups, and in turn, formulate a more culture-conscious attachment theory (Rothbaum et al., 2000). In addition, the clinical importance of anger as a critical factor in mental health problems needs to be examined in more depth, particularly with respect to the influence of culture on the socialization of emotion regulation strategies. Second, a logical next step would be to examine prospectively the relationship between actual levels of physical violence and the variables investigated in this study (i.e., self-construals, attachment patterns, anger regulation) as well as the interrelationship between various risk factors to elucidate potential mechanisms behind battering. Finally, as the domestic violence literature expands to examine diverse at-risk populations, the domain of historically studied risk factors needs to be expanded as well. Future research should address culturespecific risk factors for different ethnic groups of batterers. Culturally based variables such as acculturative stress, gender role expectations, or primary versus secondary control (Weisz, Rothbaum, & Blackburn, 1984) might be important to consider in their influence on emotional regulation and relational patterns in batterers. By continuing to clarify cultural influences on risk factors for battering, prevention and intervention efforts can be more effective and culturally competent in working with different types of batterers, given the clinical heterogeneity of this population.

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