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# Prevalence and Correlates of Intimate Partner Violence Among Young, Middle, and Older Women of Korean Descent in California

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#### **Abstract**

This research examined the prevalence and correlates of intimate partner violence (IPV) among younger, middle-aged, and older Korean American women. Data were drawn from telephone interviews of a population-based, representative probability sample (N= 592) of female adults of Korean descent residing in California, with a completion rate of 70%. Data were grouped by age. In each group, psychological aggression was the most common type of IPV in the past year, followed by a moderate form of sexual coercion, while physical assault and injury were infrequent. Immigration stress was associated with psychological aggression in all three groups, and partner alcohol use was associated in none. Other predictors varied by group. Results suggest that psychological abuse is a serious issue, and that women's life stage is an important consideration in IPV among Korean Americans. Findings, which sometimes diverged from those of prior studies of this population, merit further investigation.

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intimate pa	artner viole	ence; family	violence; Kor	ean; immigration	on stress	

Intimate partner violence (IPV) is defined as intentional emotional, psychological, physical, sexual, or economic abuse or threats of abuse involving an intimate adult partner (Centers for Disease Control [CDC], 2006; U.S. Department of Justice, 2008). IPV usually begins with emotional abuse and may progress to physical or sexual abuse (CDC, 2006). Each year in the United States, 2 to 4 million females are victims of IPV (Guth & Pachter, 2000). Despite the significance of this public health issue, scant research exists on risk factors for IPV among ethnic/racial minority women, including women of Korean descent (Tran & Des Jardins, 2000). Moreover, few studies have examined differences in IPV rates and correlates among women of different ages, in spite of research suggesting that life stage is important in understanding IPV (Mouton et al., 2004). Korean women's experiences with IPV are important to examine for four reasons: (a) globally, Korea has one of the highest rates of IPV – 38% of currently married women had been physically assaulted by their husbands in the previous year (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002); (b) Korean immigrants are a rapidly growing new immigrant group in the U.S. (Sohn, 2004); (c) stressors associated with immigration are posited to increase family tension (Choi & Dancy, 2009; Lee, 2003); and (d) post-immigration changes in women's power in intimate relationships may lead to increased conflict for couples, thereby increasing women's risk of violence (Kim & Sung, 2000). This study examines the prevalence and predictors of IPV in a probability sample of Korean adult women residing in California. Approximately one-third of all Korean Americans currently reside in California (Yu, 2002).

## **Intimate Partner Violence in Korean Immigrants**

Studies of IPV rates among Korean women are limited and have often been based on nonprobability samples. In one study, researchers found that 72.8% of a convenience sample of 136 Korean immigrant women experienced psychological aggression during their lifetime (Lee, 2007). The literature points to a variety of potential correlates of IPV among Korean women residing in the U.S. In this study, we considered cultural traditions, immigration strain, couple power structure, social support, alcohol use, and whether correlates might vary by age.

The traditional Korean Confucian family living in Korea has strictly defined gender roles and expectations. Husbands are the financial providers and unilaterally govern the wife and the children, while wives are obedient, complete expected household tasks, and maintain family harmony at all costs (Choi & Harwood, 2004). Women who cause family discord are potential victims of spousal physical punishment (Yim, 1979). In the U.S., immigrant Korean men tend to retain a patriarchal ideology (Min, 2001; Sung, 2004), but traditional gender roles are challenged as many women share the economic burden with their husbands (Kim & Sung, 2000; Min, 2001). According to the 2000 U.S. Census, 52.8% of Korean American women participate in the labor force (U.S. Census Bureau, 2004). Women's economic participation diminishes their capacity to perform traditional household tasks (Kim & Hurh, 1998), thereby undermining existing gender structures within the family and threatening family harmony.

An asymmetrical power structure in couple relationships is associated with the risk for violence (Coleman & Straus, 1986; Gerber, 1991; Kim & Emery, 2003; Kim & Sung, 2000). The male dominant power structure is associated with lower education in Korean American households (Kim & Sung). Moreover, changes in power dynamics between men and women that occur after immigration increase the risk of marital conflict and partner abuse among recently immigrated couples (Hyman, Guruge, & Mason, 2004). Higher life stress has been found to be associated with a greater rate of physically assaulting wives among a probability sample of Korean American men (Kim & Sung). Supportive social networks may help

immigrants to cope with the psychological distress associated with relocating to a new country (Kuo & Tsai, 1986).

Individuals with alcohol problems are also much more likely to perpetrate IPV (Leonard 2005; Stuart et al., 2006). Alcohol abuse may facilitate partner abuse (Connor & Ackerly, 1994) and is associated with more violent forms of wife battering (Roberts, 1988) and greater likelihood of injury (Brecklin, 2002). Alcohol-related violence is a serious concern in the Korean community, both in Korea and in the U.S. Permissive attitudes toward male drinking prevail in Korean society (Lee, Lim, Hwang, Chae, & Park, 2010; Park, Oh, & Lee, 1998; Rhee, 1997). Reportedly, alcohol abuse is often the cause of separation and divorce among Korean couples (Rhee) and may contribute to IPV among Korean couples (Rhee; Song-Kim, 1992; Yamamoto, Rhee, & Chang, 1994). This is especially true when other stressors lead to an increase in alcohol abuse.

The current study used a population-based probability sample of Korean immigrant women to test the predictors of IPV commonly identified in the Korean American literature. While national data have shown that age is negatively related to IPV (Kim & Cho, 1992; Suitor, Pillemar, & Straus, 1990), researchers have not examined whether the factors associated with IPV vary according to the woman's age. The current assessment, with its substantial sample size and wide age range of respondents, offered the opportunity to look at whether the common predictors of IPV in female Korean Americans were invariant by age group.

## Method Sample

Data were drawn from a 2006–2007 health survey by telephone of California female adults of Korean descent. The sample was drawn randomly from a list of telephone numbers associated with Korean surnames. The numbers were purchased from a commercial firm and included both listed and unlisted numbers that were derived from a variety of sources including white pages, membership lists, subscriptions, warrantee information, and other sources. The final sample (N= 592) approximated census demographics for women of Korean descent in California. Data collection procedures were approved by the Institutional Review Board of San Diego State University. Although information regarding available support services was prepared for participants who requested help, no participant made such a request.

The survey instrument was translated and then back translated by bilingual project staff and co-investigators. Two focus groups representing a variety of ages and acculturation levels were conducted to assess the translation and cultural interpretation of all survey questions. Closely supervised, bilingual professional interviewers conducted interviews with the female Korean adult (aged 18 and over) who had the most recent birthday (Frey, 1989). Up to seven callbacks were made to each number at different times and days of the week, and 70% of the eligible respondents contacted completed interviews. Most of the interviews were conducted in the Korean language (85%) as determined by preference of participants.

#### Measures

**Intimate partner violence**—The revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) is the instrument most widely used to assess intimate partner aggression (Straus, 2007). Questions about 39 events occurring within the past year or ever comprise five subscales (negotiation, physical assault, psychological aggression, sexual coercion, and injury). Questions are in two forms for each event: (a) how often the event happened to the respondent, and (b) how often the event happened to the partner. In

our survey, due to limitations on length, the negotiation subscale was omitted, as were questions about abuse perpetration, which left 33 items in four subscales about abuse experienced by the woman.

Immigration stress—The Demands of Immigration Scale (DIS; Aroian, Norris, Tran, & Schappler-Morris, 1998) was used to assess stress related to immigration. It consists of 22 items that assess the level of distress experienced in six domains: (a) loss, (b) novelty, (c) occupational adjustment, (d) language accommodation, (e) discrimination, and (f) not feeling at home in the receiving country. Wording of the items is provided in the Appendix. Each item is rated on a scale of 1 to 4, with a higher score indicating a higher level of stress. A composite measure was formed by computing the mean, producing reliability of  $\alpha = 0.885$ . The DIS showed high internal consistency in a sample of adult Taiwanese-Chinese immigrants to the U.S. (Tsai, 2002). The DIS also demonstrated reliability and validity within the current sample of female Korean immigrants (Ding et al., 2011).

**Social support**—Social support was measured using the Interpersonal Support Evaluation List (Cohen, Mermelstein, Kamarck, & Hoberman, 1985). The four 10-item subscales (true/false question format) assess the perceived availability of: (a) material aid (tangible support); (b) someone to talk to about one's problems (appraisal support); (c) a positive comparison when comparing one's self with others (self-esteem support); and (d) people one can do things with (belonging support). Items were scaled by summing the number of answers that indicated support. The scale was divided into quintiles  $(1 = low \ level \ of \ support, 5 = high)$  to constrain skewness. Reliability was  $\alpha = 0.784$ .

**Alcohol use**—Questions assessed whether the respondent's spouse/partner regularly drinks alcohol at least once a week (yes/no) or has a problem with drinking too much alcohol (yes/no).

**Acculturation**—The Suinn-Lew Asian Self-Identity Acculturation to U.S. Society Scale (Suinn, Khoo, & Ahuna, 1995; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) was adapted for telephone administration and used to measure acculturation. Eleven items measured aspects of cultural preferences involving language; music; food; self-identification including how persons identified with the U.S. and Korea; father's identification; and social linkages including ethnicity of peers and preferred associations. The scale also incorporated the proportion of years lived in the U.S. and years of schooling completed in the U.S. After conversion to a common metric (*z*-scores), the items were summed, with higher values indicating greater acculturation ( $\alpha = 0.869$ ). Total acculturation scores ranged from -0.83 to +1.95, and due to a strong positive skew, were divided into quintiles (1 = low,  $5 = high\ level$  of acculturation).

**Marital power structure**—The distribution of power between marital partners was assessed by five questions about who has the final say in decision-making on five issues: (a) buying a car, (b) having a child, (c) buying a house, (d) choice of job by either adult, and (e) whether either adult should work or not. Responses ranged from 1 = self only to 5 = partner only. Following the procedure developed by Wolfe (1959), as detailed in Coleman and Straus (1986), the five questions were used to compute a decision power index and a shared power index. Cross-classified scores on the two indices were then used to compute four categories of marital power: (a) male dominant, (b) female dominant, (c) divided power, and (d) equalitarian. A dummy variable was also created, coded 1 if male dominant and 0 otherwise.

**Demographics**—Education was measured as the years of total education completed in both Korea and the U.S. once overlap had been eliminated. Employment status was coded 1 if working outside the home and 0 otherwise. Marital status was coded 1 if currently married or cohabitating and 0 otherwise. Household income was excluded from analyses due to the high frequency of persons (45%) either refusing to report or not knowing income levels.

#### **Analysis**

Statistics were computed using SPSS version 15.0 (2006). Women who reported not having had a partner in the past year (n = 97) and thus not at risk of IPV in that time period were excluded from correlational and multivariate analyses. Exploratory multivariate analyses revealed that age was significantly negatively correlated with psychological aggression. Since interest was in understanding how predictors of abuse might vary according to age, we computed three age groupings: (a) under 40, (b) 40–54, and (c) 55 and over. This partition maintained adequate subsample size yet included a reasonably wide range of ages in each category. Prior year variances in physical assault, sexual coercion, and injury within age categories were too sparse for any of these variables to be used as dependent variables in regression analyses.

#### Results

## **Respondent Characteristics**

Table 1 gives demographic data for the full sample (N= 592), which was comprised almost entirely of immigrants born in Korea. Ages ranged from 18 to 82 years (M= 46.1, SD= 14.4). Current age was positively correlated with age at immigration (r= 0.741, p< .001). Because 87.5% of the sample were either married, divorced/separated, or widowed, we infer that the majority of the intimate partners of these women were male, though gender of the partner was not assessed. Rates of IPV in the past year for the full sample were: physical assault 1.8%, psychological aggression 23.9%, sexual coercion 15.4%, and injury 1.1%.

#### **Descriptive Statistics for Independent and Dependent Variables**

Interest in this study focused on experiences within age cohorts. Table 2 shows the percentages by age of IPV, marital power structures, employment status, partner alcohol use, education, acculturation, social support, and immigration stress among respondents who had a partner in the past year (n = 495). The most common type of marital structure in each age group was equalitarian, though the frequency of this type of relationship declined (nonsignificantly) with age. The youngest group had the lowest percentage of male dominant and the highest percentage of female dominant family structures. Close to 40% of the women were employed outside the home, with the highest rate of employment occurring in the middle age group. A third of the sample reported partner drinking, although the oldest women reported much less partner drinking (19.2%) than others. Only 3.9% overall reported partners with a drinking problem, and the rate did not differ significantly by group. Acculturation and social support levels were highest in the under 40 age group. Immigration stress level was similar across groups.

Very small percentages of women in all age groups reported physical assault (2.0% overall) or injury (1.2% overall) during the past year. Within each age group, psychological aggression (27.4% overall) was the most common form of violence in the past year, and sexual coercion (17.3% overall) was the second most common, with the lowest rates of each form occurring in the oldest age group. The variance on the sexual coercion subscale was almost entirely due to a single item: "My partner insisted on sex when I did not want to (but did not use physical force)." Only 1% of women with a partner in the past year reported any of the more serious forms of coercion in which the partner used force or threats to gain

sexual compliance, although one participant reported 365 instances of such abuse. The low rates of physical assault and injury in all age groups and the low rate of sexual coercion in the oldest group (6.7%) offered inadequate variance for regression analysis. Thus, the relatively high prevalence of reports of psychological aggression in the past year that occurred across all age groups led us to focus on this form of abuse in the multivariate analyses.

#### **Multivariate Analyses**

Within each age group, correlations between psychological aggression and behavioral variables were used to screen the latter for inclusion in the multivariate regression analyses. Partner problem drinking was not useable due to insufficient variance. Partner weekly drinking was dropped due to a low correlation with psychological aggression. The demographic variables were retained as covariates in the regression models, since they help to determine the social setting in which behavior occurs (Ashford & LeCroy, 2010; Hovell, Wahlgren, & Adams, 2009; McLeroy, Bibeau, Steckler, & Glanz, 1988). Analyses were based on respondents who reported having partners during the prior year (n = 495).

Table 3 shows the final multiple logistic regression model of psychological aggression for each age group. All estimated odds in Table 3 are  $\,$  1, indicating that for all variables in all age groups, the direction of association with abuse was positive, regardless of level of significance. In the text, we note near-significant (p < .10) as well as significant (p < .05) effects.

Immigration stress was the only factor associated with psychological abuse for all three groups. Among women in the 55 and over group, the association between stress and abuse was particularly strong assessed by the odds ratio of 4.6, and stress was the only significant variable for this group. When partner drinking was included as a predictor in regression analyses, despite failing the bivariate screen, it did not approach significance in any age group. For the 40–54 age group, women in male dominant families, in which the male partner tends to have final say in important family decisions, had a 2.4 times greater odds of abuse than women of the same age group in other types of marital power structure. Male dominance failed to reach significance in the other groups.

Among women under 40, the odds of psychological abuse were nearly 3 times higher for those employed outside the home versus those not employed. For each unit increase in social support, the odds of psychological abuse grew by a factor of 2, and for each unit increase in immigration stress, the odds grew by a factor of nearly 3. Both acculturation (p = .058) and education (p = .072) were nearly significantly related to psychological abuse in this age group.

One of the liabilities of the odds ratio is that it gives the change in odds for a one unit change in the value of the independent variable. For the dichotomous variables, one unit is the entire range of the variable, while for a continuous variable such as education, one unit is only a single year of schooling, which ranged from 0 to 27 years in this sample. For this reason, Table 3 includes a column indicating the change in predicted probability ( $\Delta$ pr) of abuse when each variable is moved from 0.5 *SD*s below the mean to 0.5 *SD*s above the mean, and all other variables are fixed at their means (Long & Freese, 2006). This provides a common metric for comparing within an age group the relative strength of association of each predictor variable with abuse. For example, among women in the under 40 age category, a one standard deviation unit increase around the mean value of social support results in a 0.197 (19.7%) increase in the probability of abuse, while the same one standard deviation change in employment results in a 0.112 (11.2%) increase in the probability of abuse.

Though social support was unrelated to psychological aggression in the two older groups, within the under 40 group, it was associated with an even higher probability of abuse ( $\Delta pr = 0.197$ ) than was immigration stress ( $\Delta pr = 0.145$ ). This contrasts with the assessment presented above for the youngest women based on odds ratios of the two factors. To more closely examine social support, four additional regression analyses were run for the under 40 group, replacing the total support variable with each of the four support subscales in turn. Two of the subscales tangible support and belonging support were almost entirely responsible for the association with abuse.

## **Discussion**

The differential associations by age between predictors and psychological abuse that we have presented for this sample of Korean immigrant women represent, in effect, statistical interactions, and illustrate the hazard of analyzing abuse outcomes using simple linear models of age. Age groups may be proxy markers for social/cultural conditions unique to specific age cohorts. Though age may be one of the most important variables in accounting for IPV, looking at other variables in this way may reveal additional information concerning abuse. In our regression analyses of psychological abuse in the past year, immigration stress was the only significant correlate common to all three age groups; other significant and near significant predictors varied by age. Thus, for Korean women, location in the lifespan seems to matter when it comes to IPV. This finding is consistent with an approach to conceptualizing IPV that takes into consideration women's life stage (U.S. Department of Health and Human Services, 2009).

#### Prevalence of IPV in the Past Year

Psychological aggression was the most prevalent form of abuse reported in the sample. Psychological aggression is often the first type of abuse that occurs between intimate partners (CDC, 2006) and is predictive of subsequent physical aggression (Murphy & O'Leary, 1989). However, a growing body of research has suggested that psychological abuse itself may be as detrimental as physical abuse (Follingstad, Rutledge, Berg, Hause, & Polek, 1990; Tolman, 1999). Psychological aggression may also represent successful threat of physical violence or other major harm, such as financial destitution if divorced, which makes overt physical control unnecessary. In light of these considerations, the rate of psychological abuse in our sample should not be dismissed as inconsequential.

Sexual coercion has not previously been reported for Korean Americans, so the finding of a substantial overall rate of this form of IPV is important, even though almost none of our respondents reported the more severe types of coerced sex. The rate of sexual abuse was considerably higher for the young and middle-aged groups than for women 55 and older. It could be that younger women are more attuned to the illegitimacy of sexual coercion due to better education about healthy sexual relations, and feel more comfortable reporting its occurrence. Alternatively, the difference could reflect a decline with age of male interest in sexual control.

Although physical assault is the most commonly measured and reported form of IPV, only 1.8% of women in the full sample reported physical assault in the past year. Other studies of Koreans in the U.S. have reported the prevalence of physical assault to be 18–30% (Kim & Sung, 2000; Lee, 2007). The National Violence Against Women Survey put the annual rate of physical assault of women aged 18 and older by an intimate partner at 4.4%, while the 1975 and 1985 National Family Violence Surveys found annual rates of physical assaults of 11–12% for married/cohabiting women (Tjaden & Thoennes, 2000). The Conflict Tactics Scale was used to assess abuse in each of the studies just mentioned. While disparate

estimates of IPV prevalence may result in part from differences in methodologies (Tjaden & Thoennes), the low rate of physical assault in our sample remains puzzling.

### **Correlates of Psychological Aggression**

Two types of social support were responsible for the strong positive association of support with psychological aggression for women in the under 40 age group: (a) *tangible support*, or the availability of people who can provide material aid, such as a ride to the doctor or the airport, help with chores when one is ill, or a loan of money; and (b) *belonging support*, or knowing people with whom one can do things such as see a movie, have lunch, or just talk to when lonely. The positive association was surprising since social support is often considered protective against IPV (e.g., Lee, 2005). But although clinical experience suggests that a woman's social support network may counter an abuser's attempts to keep her isolated, thereby helping her to escape from a violent relationship, we could find no empirical evidence that having strong social support helps prevent IPV. It is possible that those with a history of abuse are more likely to seek out social support, but due to the cross-sectional nature of our data, the temporal order of support and abuse in our sample cannot be known.

Research concerning immigrant adjustment outside of IPV has shown that immigrants' social support systems may not be consistently supportive or offer the kind of support desired (Menjivar, 1997; Usita, 2005). If members of the woman's support network hold traditional values, support may even be provided for dysfunctional behavior, such as submissively acquiescing to the unreasonable demands of an abusive husband. If the woman is isolated or highly dependent on her partner, then the partner might be her main source of social support. Unfortunately, the measure in our study did not identify the source of social support.

Immigration stress was the only significant predictor of psychological aggression in the past year for women in all three age groups after controlling for acculturation level. Lee (2007) measured stress resulting from immigration on a scale developed expressly from the literature on the acculturation process of Korean immigrants (Shin, 1995); however, contrary to our findings, she reported that stress experienced by her sample of Korean immigrant women was not predictive of victimization (either physical assault or psychological aggression), as measured by the CTS2. Kim and Sung (2000) used a more general measure of stress experienced by the husband or partner, a modified version of the Holmes and Rahe Stressful Life Events Scale (Holmes & Rahe, 1967), and found that more highly stressed Korean American husbands physically assaulted their wives at a higher rate than less stressed husbands. However, they did not investigate psychological aggression.

An advantage of the Demands of Immigration Scale used in our study is that all 22 questions assess stressors related specifically to the immigrant situation. Unfortunately, we do not have a report of stress by the husband or partner. Like Lee (2007), we hoped that our assessment of the wife's stress would serve as an adequate indicator of the stress experienced by both partners, but this may not be the case. In fact, the same acculturation dynamics that can result in a gap in cultural values between spouses may also differentially affect the stress each partner experiences due to immigration. A disadvantage of the Demands of Immigration Scale is that it does not capture intrafamilial stresses, although these may be of critical importance. For example, if the wife caters to her husband's needs, his stress level may be quite low, while her stress as a supportive wife under threat of abuse should she step out of her traditional role might be very high. Exploration of factors that mediate or moderate immigration stress among Koreans is needed.

A number of sources have suggested that the patriarchal tradition in Korean culture, with its roots in Confucianism, contributes to the occurrence of IPV (e.g., Kim & Sung, 2001; Rhee 1997). The impact on IPV of patriarchal values in traditional Korean culture has been examined in several studies that have viewed those values as particularly manifested in a male dominant type of marital power structure. The finding in the original study by Coleman and Straus (1986) that the frequency of family violence varied according to marital power structure, has been substantiated in Chinese (Tang, 1999), Korean (Kim & Emery, 2003), and Korean American samples (Kim & Sung, 2000).

Marital power was more frequently equalitarian in our sample (67%) than in the Kim and Sung (2000) sample (31%). This may help account for our finding that the male dominant type was associated with IPV only for women in the 40–54 age category. Women in this age group reported the highest percentage of employment (48%). The wife's employment outside the home, if not in a family business, could provoke resentment by the husband of her increased independence from traditional conceptions of appropriate gender roles. Changing status differentials between husbands and wives as wives move into the workforce may lead to reactive attempts by the husband to re-assert his authority through intimidation or violence. This reasoning points to a possible interaction between male dominance and wife's employment. However, tests for interaction between these two factors in the regression models did not identify a significant effect (results not shown).

Unexpectedly, acculturation, education, and employment were significant or near-significant predictors of IPV for the under 40 age group. However, these are all measures of the respondent, so if they indicate a disparity with the partner's employment, education, and acculturation, it would make sense for all to be positively related to her IPV victimization. If he is still clinging to traditional values while she is becoming more like mainstream American women on these three measures, then the status disparity would constitute a threat to his hegemony in the family. He might aggressively try to re-impose the traditional role of subservient housewife. Perhaps this dynamic was evident only for the under 40 age group, because these women are more likely to have young children, making the conflict of new cultural values and engagements with the traditional familial responsibilities of motherhood more pronounced.

#### **Implications for Clinical Practice**

In our study, the woman's current age had a strong positive correlation with her age at immigration. Women who immigrate at an older age may more often leave their home country to reunite with family members in the U.S. and have fewer family expectations placed upon them, fewer bilingual language skills, and fewer social outlets than women who immigrate at a younger age. It is reasonable to expect that such differences by age in life experiences could influence marital relations. Indeed, in our sample, immigration stress was most strongly predictive of abuse in the oldest age group. Clinicians working with Korean American women should consider the potential interplay of clients' stage of life circumstances with risk factors for IPV. However, it should be emphasized that our findings regarding age are preliminary, and must be confirmed or refuted by further study.

Another tentative message to professionals with Korean immigrant clients of all ages is that stresses related to immigration should be ameliorated insofar as possible. Programs that assist immigrants in navigating transportation, healthcare, education, and financial agencies in the U.S. should help alleviate stress in the family and might reduce aggression. More broadly, some IPV reduction strategies based on the received wisdom from previous research on Korean Americans or on the wider body of research – such as curbing partners' drinking, educating clients and their partners about the drawbacks of patriarchal rule, or building clients' social support networks – did not find support in the current investigation.

Still, we caution that we analyzed *associations*, from which it is inappropriate to infer causation or the direction of causation between the various measures and IPV.

Finally, clinicians working in traditional Korean enclaves in the U.S. may have difficulty convincing a woman who has experienced IPV to take some measure of action. The social norms of the Korean community may permit verbal aggression by her spouse, especially if behind closed doors, and the victim could have difficulty finding someone in her community to assist her. Descriptive information collected during our interview (not reported here) revealed that many women who experienced IPV had reached out to another Korean woman who empathized with her but essentially told her to do nothing about the problem. Community clinic staff might make IPV-related reading materials available in waiting rooms and routinely discuss with all patients how to obtain help for IPV. Even patients who have not been involved in abusive relationships would then be better prepared when another Korean woman seeks her advice.

#### Strengths and Limitations

The current study is the first to assess IPV among a representative sample of women of Korean descent outside of Korea. The rigorous probabilistic sampling procedure, impressively low refusal rate for telephone interviewing, and correspondence with state census parameters for Koreans reduces the likelihood of serious sampling bias. The relatively large sample in this study afforded power to investigate how predictors of intimate partner violence might differ according to age.

However, the study has several important weaknesses. The measure of abuse was self-reported; actual rates of abuse are likely to be higher since women often do not report abuse (CDC, 2006; U.S. Department of Justice, 2008). All respondents were female; there were no data from their partners. The cross-sectional data do not provide strong evidence for temporal order of variables. Because other studies have typically focused on physical assault, correlates of psychological aggression in our study are not readily comparable to correlates found in many studies of IPV. Perhaps the greatest weakness is the secondary nature of the analysis. Data were drawn from a survey of a broad range of Korean women's health issues in California. The interviewing time allotted to IPV-related questions constrained the number of available measures. As a result, complex contingencies between partners and within their respective social networks as each person acculturates were underspecified. Extant ecological models offering well-specified concepts could inform the measurement of more detailed contingencies in future studies.

## Conclusion

Several points emerged from this study: (a) although physical assault was infrequent, rates of psychological aggression and sexual coercion were sufficiently high to be of concern; (b) regardless of a woman's age or acculturation level, stresses specifically related to the Korean immigrant experience appear to be linked to psychological aggression by her intimate partner; and (c) other measures associated with psychological aggression varied considerably depending on age group, suggesting the influence of factors specific to the woman's life stage and age cohort culture. Thus, the social/cultural environment, especially as determined by age, seems to play an important role in moderating correlates of abuse.

The literature on Korean IPV is not large, but it paints a somewhat consistent picture of the probable causes of IPV in Korean families in the U.S. A volatile mixture of patriarchal values, alcohol use, and the particular stresses to which an immigrant population is subject all contribute to IPV. The current study provided limited support for this model, which is challenged first by the comparatively low rate of physical assault reported. While the role of

immigration stress was affirmed, alcohol use by the partner was not a factor. The influence of patriarchal values, at least as operationalized by the measure of male dominance in the family's power structure, was evident in only one of the three age groups. The discrepancies with prior studies point to the need for further examination of the prevalence and correlates of IPV among Korean women.

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## **Appendix**

## The Demands of Immigration Scale

	Mean	<u>SD</u>
a. I miss the people I left behind in my original country.	2.773	1.075
b. When I think of my past life, I feel emotional and sentimental.	2.447	1.058
c. When I think of my original country, I get teary.	1.821	0.925
d. I feel sad when I think of special places back home.	1.925	0.975
e. I need advice from people who are more experienced than I to know how to live here.	2.123	1.014
f. I must learn how certain tasks are handled, such as renting an apartment.	1.784	0.952
g. I am always facing new situations and circumstances.	2.041	0.994
h. I have to depend on other people to show or teach me how things are done.	1.861	0.971
i. I am disadvantaged in getting a good job.	2.286	1.213
j. My work status is lower than what it used to be.	1.947	1.082
k. I cannot compete with Americans for work in my fields.	2.209	1.223
l. The work credentials I had in my original country are not accepted.	2.634	1.177
m. Americans have a hard time understanding my accent.	2.514	1.099
n. I have difficulty doing ordinary things because of a language barrier.	2.358	1.100
o. Talking in English takes a lot of effort.	2.358	1.089
p. As an immigrant, I am treated as a second-class citizen.	2.197	0.980
q. Americans don't think I really belong in their country.	1.995	0.943
r. Americans treat me as an outsider.	1.993	0.921
s. People with foreign accents are treated with less respect.	2.345	1.005
t. I do not feel at home.	1.565	0.866
u. Even though I live here, it does not feel like my country.	1.803	1.060
v. I do not feel that this is my true home.	1.603	0.932

Response Choices: Disagree Strongly = 1; Disagree = 2; Agree = 3; Agree Strongly = 4.

 $\label{eq:Table 1} \textbf{Table 1}$  Demographic Characteristics of the Full Sample, N=592

Age (years)       46.1       14.4       592         Years resident in Korea       28.3       13.4       592         Years resident in U.S       17.5       10.1       592         Years education in Korea       12.6       4.8       582         Years education in U.S.       2.5       4.5       580         Percent         Born in Korea       96.3%       591         Parents born in Korea       99.3%       590         Interviewed in Korean only       85.1%       592         Employed full or part-time       37.5%       592         Marital Status       591       591         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134				
Years resident in Korea       28.3       13.4       592         Years resident in U.S       17.5       10.1       592         Years education in Korea       12.6       4.8       582         Years education in U.S.       2.5       4.5       580         Percent         Born in Korea       96.3%       591         Parents born in Korea       99.3%       590         Interviewed in Korean only       85.1%       592         Employed full or part-time       37.5%       592         Marital Status       591       591         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134		M	SD	n
Years resident in U.S       17.5       10.1       592         Years education in Korea       12.6       4.8       582         Years education in U.S.       2.5       4.5       580         Percent         Born in Korea       96.3%       591         Parents born in Korea       99.3%       590         Interviewed in Korean only       85.1%       592         Employed full or part-time       37.5%       592         Marital Status       591         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Age (years)	46.1	14.4	592
Years education in Korea       12.6       4.8       582         Years education in U.S.       2.5       4.5       580         Percent       Percent       591         Born in Korea       99.3%       590         Interviewed in Korean only       85.1%       592         Employed full or part-time       37.5%       592         Marital Status       591       73         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Years resident in Korea	28.3	13.4	592
Years education in U.S.     2.5     4.5     580       Percent     Percent     591       Born in Korea     96.3%     591       Parents born in Korea     99.3%     590       Interviewed in Korean only     85.1%     592       Employed full or part-time     37.5%     592       Marital Status     591       Single     12.4%     73       Married     78.0%     461       Cohabitating     0.2%     1       Divorced/Separated     3.6%     21       Widowed     5.9%     35       Age     592       18 to 30     11.7%     69       30 to 39     22.6%     134	Years resident in U.S	17.5	10.1	592
Percent           Born in Korea         96.3%         591           Parents born in Korea         99.3%         590           Interviewed in Korean only         85.1%         592           Employed full or part-time         37.5%         592           Marital Status         591         73           Single         12.4%         73           Married         78.0%         461           Cohabitating         0.2%         1           Divorced/Separated         3.6%         21           Widowed         5.9%         35           Age         592           18 to 30         11.7%         69           30 to 39         22.6%         134	Years education in Korea	12.6	4.8	582
Born in Korea       96.3%       591         Parents born in Korea       99.3%       590         Interviewed in Korean only       85.1%       592         Employed full or part-time       37.5%       592         Marital Status       591         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Years education in U.S.	2.5	4.5	580
Parents born in Korea       99.3%       590         Interviewed in Korean only       85.1%       592         Employed full or part-time       37.5%       592         Marital Status       591         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134		Percent		
Interviewed in Korean only       85.1%       592         Employed full or part-time       37.5%       592         Marital Status       591         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Born in Korea	96.3%		591
Employed full or part-time       37.5%       592         Marital Status       591         Single       12.4%       73         Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Parents born in Korea	99.3%		590
Marital Status     591       Single     12.4%     73       Married     78.0%     461       Cohabitating     0.2%     1       Divorced/Separated     3.6%     21       Widowed     5.9%     35       Age     592       18 to 30     11.7%     69       30 to 39     22.6%     134	Interviewed in Korean only	85.1%		592
Single     12.4%     73       Married     78.0%     461       Cohabitating     0.2%     1       Divorced/Separated     3.6%     21       Widowed     5.9%     35       Age     592       18 to 30     11.7%     69       30 to 39     22.6%     134	Employed full or part-time	37.5%		592
Married       78.0%       461         Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Marital Status			591
Cohabitating       0.2%       1         Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Single	12.4%		73
Divorced/Separated       3.6%       21         Widowed       5.9%       35         Age       592         18 to 30       11.7%       69         30 to 39       22.6%       134	Married	78.0%		461
Widowed     5.9%     35       Age     592       18 to 30     11.7%     69       30 to 39     22.6%     134	Cohabitating	0.2%		1
Age 592 18 to 30 11.7% 69 30 to 39 22.6% 134	Divorced/Separated	3.6%		21
18 to 30 11.7% 69 30 to 39 22.6% 134	Widowed	5.9%		35
30 to 39 22.6% 134	Age			592
=======================================	18 to 30	11.7%		69
40 to 49 31 3% 185	30 to 39	22.6%		134
70.07/ 21.3/0 103	40 to 49	31.3%		185
50 to 59 16.7% 99	50 to 59	16.7%		99
60 to 69 10.0% 59	60 to 69	10.0%		59
70 and older 7.8% 46	70 and older	7.8%		46

Note. Numbers in cells are means, standard deviations, and frequencies; or percentages and frequencies.

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Percentages (or Means and Standard Deviations) of Variables by Age Group for Those with a Partner in the Past Year, n = 495

Table 2

		Age Group			
	$18-39 \ (n=165)$	$40-54 \ (n=224)$	55+(n=106)	All $(n = 495)$	d
Violence in the Past Year					
Physical Assault	1.8%	1.8%	2.9%	2.0%	0.793
Psychological Aggression	34.5%	26.3%	18.3%	27.4%	0.013
Sexual Coercion	19.6%	20.5%	%2.9	17.3%	0.005
Injury	%9.0	1.8%	1.0%	1.2%	0.556
Marital Power Structure					
Male Dominant	11.0%	23.9%	24.8%	20.0%	0.005
Female Dominant	9.7%	2.8%	3.0%	5.0%	0.007
Divided	7.6%	%0.9	11.9%	7.8%	0.184
Equalitarian	71.7%	67.4%	60.4%	67.2%	0.176
Employed, Full/Part Time	31.5%	48.2%	26.4%	38.0%	<.001
Partner Drinks Weekly	34.7%	38.4%	19.2%	33.1%	0.002
Partner Has Drinking Problem	1.3%	2.8%	3.8%	3.9%	0.088
	18–39 ( <i>n</i> = 165)	40–54 ( <i>n</i> = 224)	55+(n=106)	All (n = 495)	
	M $SD$	M $SD$	M $SD$	M $SD$	р
Education, Years in Korea & U.S.	15.8 3.0	15.5 2.4	13.9 4.0	15.3 3.1	<.001
Acculturation, $1 = low$ , $5 = high$	3.3 1.5	2.9 1.3	2.5 1.3	2.9 1.4	<.001
Social Support, $1 = low$ , $5 = high$	3.2 1.3	3.0 1.4	2.7 1.3	3.0 1.4	0.004
Immigration Stress, $1 = low$ , $4 = high$	2.0 0.6	2.1 0.6	2.2 0.5	2.1 0.6	0.043

Note. Percentages are of "yes" responses. Each category of Marital Power Structure was tested as a dichotomous variable (1 = named category, 0 = all other categories). p-values are for chi-square or ANOVA tests of difference by age group.

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Table 3

Final Model for Logistic Regression Analysis of Psychological Aggression in the Past Year for Those with an Intimate Partner in the Past Year, by Age Group

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		Age 18	Age $18-39 \ (n = 165)$	[53]			Age 40-	Age $40-54$ ( $n = 224$ )	(74)			Age 55	Age 55+ $(n = 106)$	9	
Variable	d	odds ratio	95% CI	CI	$\Delta pr$	d	odds ratio	%56	$\mathbf{CI}$	$\Delta pr$	d	odds ratio	%56	CI	$\Delta pr$
			Lower	Upper				Lower	Upper				Lower	Upper	
Education, Years	0.076	1.166	0.984	1.381	0.096	0.526	1.050	0.904	1.219	0.021	0.433	1.069	0.905	1.262	0.037
Acculturation, $1 = low$ , $5 = high$	0.058	1.459	0.988	2.154	0.121	0.866	1.027	0.754	1.398	900.0	0.428	1.229	0.738	2.045	0.038
Employed, $1 = yes$ , $0 = no$	0.013	2.943	1.251	6.923	0.112	0.252	1.455	0.765	2.766	0.035	0.382	1.776	0.490	6.436	0.034
Male Dominant Power = 1, $Else = 0$	0.196	2.346	0.644	8.542	0.059	0.013	2.422	1.205	4.864	0.069	0.674	1.330	0.352	5.023	0.016
Social Support, $1 = low$ , $5 = high$	0.000	2.027	1.442	2.847	0.197	0.297	1.131	0.897	1.425	0.031	0.999	1.000	0.661	1.515	0.000
Immigration Stress, $1 = Iow$ , $4 = high$ 0.018	0.018	2.915	1.197	7.098	0.145	0.025	2.153	1.099	4.217	0.078	0.023	4.635	1.238	17.357	0.099

Note. Apr gives the change in predicted probability of psychological aggression as the independent variable changes from 1/2 standard deviation below mean value to 1/2 standard deviation above, while holding each other predictor at its mean value.

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