

INTIMATE PARTNER VIOLENCE
AMONG ASIAN WOMEN IN INTERRACIAL RELATIONSHIPS:
AN INVESTIGATION OF RISK FACTORS
USING U.S. NATIONAL REPRESENTATIVE DATA

by

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(Under the Direction of Larry G. Nackerud)

ABSTRACT

The problem of intimate partner violence (IPV) has been examined across ethnic groups, but little is known about this issue among interracial couples. The little empirical research that exists on IPV involving interracial couples has tended to bypass Asian in the United States. This study examined the characteristics and correlates of IPV in intermarried/cohabiting Asian women using the National Latino and Asian American Study (NLAAS), which had a cross-sectional design. The purpose of this study was to investigate the characteristics of Asian intermarried women associated with immigration and IPV-related factors and to determine the IPV risk factors for this population in the United States.

The results revealed that IPV rates were not significantly different between Asian women in same-race relationship and Asian women in interracial relationship for both minor and severe IPV. Asian women in interracial relationships were younger, were more educated in high school and college level, were less likely to be in the workforce, had

higher self-rated physical and mental health, had more family and friends support, were more likely to immigrated in younger age, were more likely to born in the U.S., more likely to have more parents born in the U.S., more likely to be a later immigration generation, more proficient in English, and more likely to be discriminated than Asian women in same-race relationship. Friends support, generation, acculturative stress, and gender roles (couple both responsible for chores) were the predictors of total IPV among Asian women in intra-racial relationship and the everyday discrimination were the only predictor of total IPV among Asian women in interracial relationship.

Although not all hypotheses were confirmed, valuable information was obtained, which helped fill the knowledge gap in the research literature on both partner violence and interracial relationship. This study provided a better understanding of Asian interracial couples and their unique characteristics that are associated with immigration and IPV-related factors.

INDEX WORDS: Intimate partner violence, Interracial relationship, Asian American, Immigrants, Risk factors, Intersectional domestic violence theory

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DEDICATION

To my amazing family

For their love, faith, understanding, and relentless support

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CHAPTER 1

INTRODUCTION

Problem Statement

In the United States it was only four decades ago that laws banned two people of different races from getting married. California was one of the first states to eliminate laws prohibiting interracial marriage in 1948 and since then the other states, one by one, started to eliminate the laws as well. Finally, in 1967 the United States Supreme Court ordered all such laws to be terminated as they were declared to be unconstitutional (Kennedy, 2003).

The number of interracial marriages in the United States between 1970 and 2000 increased from 300,000 to 1.5 million (Pollard & O'Hare, 1999). A research study showed that in 2008 out of all new marriages in the United States, 14.6% were between spouses of a different race or ethnicity from one another; that is six times higher than the rate in the 1960s and double the rate in 1980 (Passel, Wang, & Taylor, 2010). Among all the people who were married in 2008, Asians had the highest rate of marrying outside their race or ethnicity group; 30% of Asians, followed by 26% of Hispanics, 16% of Blacks, and 9% of Whites in the United States marry outside their respective racial background (Passel et al., 2010). One of the most common interracial combinations is Asian-White, especially between Asian women and White men. In fact, currently more than 40% of Asian women are now “marrying out.” As the rate of interracial marriage steadily increased, the perception of interracial marriage dramatically changed and the

social acceptance of those relationships increased as well (Lee & Edmonston, 2005b). However, still many of these couples continue to experience discrimination and prejudice.

The growing literature describes challenges faced by these couples. Researchers found that interracial couples tend to have a lack of formal and informal social support. There is evidence that interracial couples often receive less support from family and friends due to their relationship and are frequently ostracized from their original families or their partner's families (Gaines, 2001). Baltas and Steptoe (2000) reported that 45% of Turkish-British couples experienced either initial or continual difficulties with acceptance of their marriage from their families. They further stated that not receiving family acceptance had more significant influence on marital dissatisfaction than the influences from the factors associated with acculturative stress (Baltas & Steptoe, 2000). Since social support has consistently been found to be beneficial to a happy marriage (Ren, 1997), interracial couples may be starting out at a disadvantage.

In addition, studies show that interracial couples have higher rates of marital dissatisfaction, instability, divorce rate, and marital conflict than the same-race couples. Fu and her colleagues (2001) revealed that interracial married couples reported lower marital happiness than same-race couples. Bramlett and Mosher (2002) found that 41% of interracial couples divorced by the 10th year of marriage, compared to only 31% of same-race couples. Their findings imply that, although entering an interracial marriage tends to carry less social stigma than just staying cohabitant, these relationships are less likely to remain intact. Heaton's (2002) analysis using national survey data showed that after controlling for social and demographic background characteristics, interracial

marriages were 13% more likely than same-race marriages to end in divorce. Using a similar list of controls, Kreider (2000) reported that interracial marriages tend to have shorter durations, but she concluded that factors such as age at marriage and educational level have a greater impact on whether a marriage dissolves than couple-level racial dissimilarity. Park (1928) asserted that due to racial prejudice, an intimate relationship with someone of another race marginalizes the couple in both of their respective cultures. Marginalized individuals who are alienated from two cultures may lack a meaningful social relationship, thus contributing to the couple's increased distress, conflicts, and instability.

However, these challenges that interracial couples experience, such as less social support, higher psychological distress, discrimination, and marital conflict, are also the factors that have identified as risk factors for intimate partner violence. It is possible that the interracial couples may be at a greater risk of intimate partner violence (IPV) than the same-race couple.

Significance of Study

The previous section discussed the growth in the interracially married population, the challenges that they experience in their relationships, and that interracial couples can be a potential risk group for IPV. In this section the significance of the study is described.

The problem of IPV has been examined across ethnic groups, but little is known about this issue among interracial couples; research regarding IPV among interracial marriages is almost non-existent. Currently, there are only a few studies that specifically examine violence in interracial relationships. Utilizing census data, Hattery (2009) examined the way the race and gender dynamics shape IPV. Hattery found that African

American men's probability for perpetrating violence is two to four times higher when they are in interracial relationships than when they are in intraracial relationships, whereas the reverse is true for White men. She explained that the race and gender composition of the couple mirrors the race and gender hierarchies in the United States. Because the power in their intimate relationships is in line with the structures of societal power in which these relationships are embedded, the imbalance between the gender role authority and the racial power and privilege may contribute to stress and ultimately violence in the relationship. However, her analysis was limited to White and African-American racial composition. Therefore, the study findings may not be generalizable to the other race and ethnicity groups, since each of the racial/ethnicity groups have a different hierarchical stance in the society. As her point of the study is about the race and gender composition of the couple mirroring the race and gender hierarchies in the United States, we cannot assume the dynamics among the other racial groups will be the same.

Intermarriage varies widely across racial/ethnic groups. Prior research may have oversimplified this comparison by not attending to the specific racial/ethnic characteristics of couples. The rise in interracial marriages by Asians and Hispanics has diversified the picture of the "typical interracial couple" that had previously been dominated by the experience of White/Black couples (Lee & Edmonston, 2005a). It is important to recognize that significant differences exist within the ethnic subgroups. The differences between ethnic subgroups range from, but are not limited to, identity values, acculturation level, and immigration patterns. It is not yet known whether there are significant trends of IPV when partners are of different ethnicities, or among the different

ethnic pairings. Identification of predictors of IPV is crucial to prevention. Interracial relationships may present unique dynamics and considerations for IPV.

More recently, Fusco (2010) analyzed the data from police-reports on IPV events among interracial couples. She found that interracial couples were more likely to have a history of IPV, to engage in mutual assault, and to result in perpetrator arrest than ethnic minority same-racial couples. In addition, she showed that victims of IPV in interracial couples were more likely to have resulting injuries. It is important to note, though, that these studies either include selective racial composition in their analysis or use non-representative samples to the general interracial population in the United States.

The little empirical research that exists on IPV involving interracial couples has tended to bypass Asian in the United States. Since, to my knowledge, there has been no study assessing IPV among Asian interracial couples, this study focused on a particular race/ethnic group, Asians. The current study used the data from the sample of Asian Americans in the National Latino and Asian American Study (NLAAS) project. The NLAAS core sampling procedure resulted in a nationally representative household sample of Latinos and Asian Americans. Thus, this study hopefully provides the first national analysis of IPV among Asian interracial couples, including prevalence and the factors associated with IPV.

Much remains to be understood about the IPV among interracial couples, especially ethnic minority groups such as Asians. In the present study the researcher aimed to address this gap by investigating the risk of IPV in Asian interracial couples using two frameworks. First, an ecological framework was employed in this study. Included in the model as risk factors of Asian women's partner abuse are the following: at the societal

level, gender role; at the community level, immigration related-stressors such as experience of discrimination, the lack of friends and family support, and low socioeconomic status; at the relationship level, interracial relationship status; finally, at the individual level, acculturative stress, immigration generation status, and ethnic identity. Second, an intersectionality conceptual framework was used. This framework promotes greater emphasis on multilayered variations within a group as opposed to the traditional focus on variations between groups which all too often stifles a holistic multidimensional understanding of one's lived experiences (Lockhart & Danis, 2010). A woman's lived experiences reflect the complex, irreducible realities that result when multiple social, political, cultural, and experiential axes of differentiation interact in shaping our lived experiences (Collins, 2000). In other words, an intersectional perspective suggests that to fully understand the oppression of women, one must understand the multidimensional, socially constructed categorization that influenced the experiences of women in general, but specifically, those experienced by each woman who is a survivor of intimate partner violence. Throughout the next chapter, the researcher explored each layer of identities of the current study population—as women, as people in an interracial relationship, as Asian minority, and as immigrants—in order to view their multilayered detentions from those identities.

The study was undertaken to hopefully provide a better understanding about Asian interracial couples and their unique characteristics associated with immigration and IPV-related factors. Investigating interracial relationships was intended to shed light on questions of the role of ethnicity in IPV.

Purpose of the Study

The purpose of this study was to investigate the characteristics of Asian intermarried women associated with immigration and IPV related factors and to determine the IPV risk factors for this population in the United States. Based on the theoretical framework and the empirical studies previously mentioned, the following research questions were formulated for this study.

Question 1: How prevalent is IPV (minor and severe) among Asian women in an interracial relationship?

Question 2: Are there differences in IPV rate (minor and severe) between Asian women in interracial relationships and those in same-race relationships?

Question 3: What are characteristics of Asian women in the interracial relationship in comparison to those of Asian women in same-race relationships?

Question 4: Which factors (age, household income, education, family support, friends support, immigration generation status, everyday discrimination, acculturative stress, gender role, ethnic identity, interracial relationship status) influence IPV among Asian women?

Question 5: How do the IPV risk factors differ by Asian women's interracial status?

Question 6: How does the prediction of experience of IPV differ when immigration-related factors and a interracial relationship-related factor were added in the model?

Organization of the Dissertation Chapters

This dissertation consists of five chapters. The first chapter presented the foundation of the study, a discussion of the reasons Asian interracial couples might be at a greater risk of intimate partner violence, the significance of the study, and the purpose of the study including research questions. The second chapter is a review of the relevant literature on interracial marriage and intimate partner violence, focusing on the lives of Asian immigrants, as well as theories explaining intimate partner violence. The chapter also further articulates the conceptual framework for the study. The third chapter describes the study design and method used in the study. The study employed a cross-sectional quantitative research design using national representative secondary data, NLAAS. The fourth chapter includes a presentation of the results of the analysis in relation to the research questions and the hypotheses. In the fifth chapter I articulate my interpretations of the key findings and present implications for social work practice, and recommendations for future research studies.

CHAPTER 2

LITERATURE REVIEW

In this chapter, the present study, which purpose was to examine the risk factors associated with intimate partner violence among Asian interracial couples, was located within the context of previous research literature to enhance our comprehension and the scope of IPV on marginalized populations. To provide context for the proposed study, this literature review was comprised of four sections. First, I provided an overview of research studies focused on the interracial relationship, which includes a brief history of interracial relationship in the United States, demographical trends, and challenges interracial couples face. Second, I discussed the research literatures on intimate partner violence including the factors associated with IPV. Third, I synthesized existing literature on intimate partner violence among interracial couples. Finally, I reviewed theoretical perspectives on IPV, feminist theory (e.g., radical feminist theory and intersectional domestic violence theory) and ecological theory, and provided theoretical and conceptual framework for the study.

The literature reviewed in this chapter was obtained through keyword searches in Google Scholar, the University of Georgia Libraries System Catalog, Social Work Abstracts, Social Services Abstracts, and Sociological Abstracts, Psych Info and EBSCO. Different descriptors and their combinations were used to guide the keyword searches, and these included Asian American, immigrants, interracial marriage, interracial

relationship, domestic violence, intimate partner violence, violence against women, intersectionality theory, feminist theory, ecological theory, and domestic violence theory.

Research on Interracial Couples

Brief History of Interracial Relationships in the United States

When slavery replaced indentured servitude as the primary source of labor in the upper regions of the South during the last decades of the seventeenth century, Whites began to work in close contact with Blacks. In some cases, coworkers became intimate and blurred the color line (Moran, 2003). Anti-miscegenation laws, laws that forbade marrying across racial lines, became a way to draw a distinction between Black and White, slaves and free. The Chesapeake colonies, now Maryland and Virginia, were the first to enact statutes that punished Whites for racial mixing. In Virginia, the law instructed that a White spouse be banished from the colony within three months of an interracial wedding. This penalty was increased to six months in jail in 1705. In Maryland, if a White woman married a Black man she became a slave to her husband's master (Fryer, 2007).

Over time, bans on interracial marriage and corresponding social taboos were also directed at Asian groups like Chinese, Japanese, and Filipinos-especially in Western states (Fryer, 2007). Antimiscegenation laws were part of a larger anti-Asian movement that eventually led to the Page Law of 1875 that effectively almost eliminated Chinese women from immigrating to the U.S. In a way, these laws made interracial relationships inevitable. Because Asian men were no longer able to bring their wives over to the U.S., those who wanted to get married had no other choice but to socialize with non-Asians

(Le, 2012). However, miscegenation has always been legal for Native Americans and Hispanics (Fryer, 2007).

After World War II however, the gender dynamics of this interracial process experienced a turnaround. U.S. servicemen who fought and were stationed overseas in Asian countries began coming home with Asian "war brides." Data show that from 1945 into the 1970s, thousands of young women from China, Japan, South Korea, the Philippines, and later Vietnam came to the U.S. as war brides each year. Further, after the passage of the 1965 Immigration Act, many of these Asian war brides eventually helped to expand the Asian American community by sponsoring their family and other relatives to immigrate to the U.S. (Le, 2012).

It was not until 1967, during the height of the Civil Rights Movement, that the U.S. Supreme Court ruled in the *Loving v. Virginia* case that such laws were unconstitutional. At that time, 38 states in the U.S. had formal laws on their books that prohibited non-Whites from marrying Whites. As such, one could argue that it is only been in recent years that interracial marriages have become common in American society.

Demographical Trend in Interracial Marriage

This subsection describes the demographical trend of interracial marriages in the United States. Interracial marriages are on the rise in the U.S. Rate of intermarriages among newlyweds in the U.S more than doubled between 1980 (6.7%) and 2008 (14.6%). However, different groups experienced different trends. The rate more than doubled among Whites and nearly tripled among Blacks. But the rates for both Hispanics and Asians were nearly identical in 2008 and 1980 (Passel et al., 2010). National attitudes

about interethnic marriage also changed during this time period. In 2002, 65% of the U.S. population approved of interethnic marriage compared with 43% in 1983 (Carroll, 2007).

There are several factors that contributed to the dramatic rise in the number of marriages between individuals from different cultural backgrounds. First, with the elimination of anti-miscegenation laws in 1967, individuals were finally legally free to marry outside of their race. Second, the revision of U.S immigration laws since 1965 has resulted in a steady increase in the number of non-European immigrations to the United States, with Asians currently comprising the largest group of legal immigrants (Lee & Fernandez, 1998). This rise in non-White immigrants entering the country has increased opportunities for individuals from different racial and ethnic backgrounds to form relationships. Third, the presence of the U.S military in Asia during WWII and during the Vietnam and Korean wars led to a surge in the number of marriages between American soldiers and Asian women (Spickard, 1991). Finally, the increase in international travel and cross-cultural communication of the past few decades has created more possibilities for relationships between individuals from different cultural backgrounds to form (Cottrell, 1990).

In 1880, interracial marriages among Whites and Blacks or Asians were extremely rare. During 20th century, the share of White male-Black female marriages remained under 0.1 percent until the recent years. White female-Black male unions increased from .10 percent in 1970 to .45 percent in 2000 (Fryer, 2007).

White intermarriages with Asians follow a very different pattern. White male-Asian female matches were quite rare from 1880-1960. In 1960, this level was rising dramatically. These marriages continued to increase nearly ten-fold over the next 40

years, and today are the most common interracial marriage. White female marriages with Asian men followed a similar, though less pronounced, trajectory (Fryer, 2007).

Black males and females have similar trends of miscegenation across the twentieth century, though the level of interracial mixing is quite different. Rates of interracial marriage between Blacks and other racial groups remained flat from 1880 to 1970. Between 1970 and 2000, Black men exhibited an almost six-fold increase in intermarriage with Whites. Currently, almost six percent of Black male marriages are with Whites and roughly three percent of Black female marriages are to White men. Black men and women are equally unlikely to marry Asians. However, the fact that Black-Asian intermarriage occurs so rarely could theoretically be due to their relatively small shares of the population (Fryer, 2007).

Previous studies show that Whites with high educational attainment are more likely to marry with an Asian (Liang & Ito, 1999). This is true for both females and males. Also, overall intermarriages in the United States shifted from being more concentrated in individuals with lower levels of education to being more concentrated in those with higher levels of education (Fryer, 2007). Nativity and immigration status are highly associated with the likelihood of interracial marriage between Asian and Whites. Studies found that native born minorities are more likely to out marry than foreign born individuals (Qian, Blair, & Ruf, 2001). Also, people with a long duration in the U.S. are more likely to out marry compared to people with a short immigration history (Jacobs & Labov, 2002b).

Challenges that Interracial Couples Face

The increasing number of scholarly publications on interracial relationships tended to confirm the challenges faced by those couples. The amount of research focused on interracial couples has been in flux over the years. There was an increase in scholarly interest on the topic during the late 1960's and 1970's, which can most likely be attributed to the Supreme Court decision in 1967 to legalize interracial marriage (Kalmijn, 1993). However, the scholarly interest in interracial unions rapidly declined after that period.

Since the late 1970's, those scholars who have continued to explore this line of research have focused on the differences between interracial and intra-racial couples and the difficulties interracial couples face (Yancey, 2009). The conventional wisdom is that interracial marriages are less likely to succeed than same-race marriage. In general, research supports the notion that cultural homogamy is linked to more satisfying and stable marriages. For examples, interracial marriages are characterized by more stress, less stability, less support from friends and families, and more likely to end in dissolution than interracial marriages.

Researchers have found family and societal pressures to be a major factor in the large number of interracial couple divorces. Studies show 41% of interracial couples divorce after 10 years while only 31% of intra-racial couples divorce after 10 years (Bratter & King, 2008). Higher divorce rates for interracial couples can most likely be attributed to external factors such as family, peers, and society. A lack of support from family, peers, and society can place immense strain on a couple who is trying to form a life together and create a shared identity. Parental objection has been found to be the

leading factor in interracial relationship dissolution (Wang, Kao, & Joyner, 2006). It has been found that interracial couples and all minority groups were less likely to introduce their partner to friends and family (Vaquera & Kao, 2005). Fear of not gaining acceptance from family and friends has had a negative impact on interracial couples in the past.

Bratter and King (2008) compared the likelihood of divorce for interracial couples to that of same-race couples. Comparisons across marriage cohorts reveal that, overall, interracial couples have higher rates of divorce, particularly for those marrying during the late- 1980s. They also found race and gender variation. Compared to White same-race couples, White female -Black male, and White female-Asian male marriages were more prone to divorce; while, those involving non-White female-White male and Hispanics-non Hispanic couples had similar or lower risks of divorce.

However, contrary to the findings from many other previous studies Zhang and Van Hook (2009) found that after controlling for couple characteristics, the risk of divorce or separation among interracial couples was similar to the monoracial couples. Although marital dissolution was found to be strongly associated with race or ethnicity, the results failed to provide evidence that interracial marriage itself is associated with an elevated risk of marital dissolution.

Maneker and Rankin (1987) noted that marriages of Black husbands and White wives were not only of shorter duration; they also had fewer children or none at all. The spouses in a Black husband-White wife dyad also ranked higher in education, with the Black husband having more education than the Black husband of a Black wife.

Scholars have suggested that intermarried couples experience poor marital quality due to cultural differences between spouses and antagonism from the socio-cultural context. Broman (2005) found that Black and White spouses behave differently. This difference is more negative for Blacks than for Whites so Blacks experience lower marital quality than do Whites. Older people reported higher marital quality than younger people and financial satisfaction was related to higher marital quality. Also, a larger number of children decreased marital quality. Broman (1993) also showed there were gender differences in marital quality by race with Black women significantly more likely to be dissatisfied with their marriages and being more likely to characterize their spouse as having affairs, hitting, pushing or slapping, and wasting money.

Chan and Smith (1996) compared the marital quality of Asian-White marriages to that of same-race Asian and same-race White marriages. Self-reports of both spouses in interracial and same-race marriages were used to measure their marital happiness and instability. The researchers controlled for education level, age at marriage, age at the time of the interview, age differences between spouses, number of marriages, number of children, place of residence, employment status, and religious homogamy/heterogamy. Their overall findings suggest that there is an interactive effect of race and gender on the marital happiness and perceived instability of intermarried husbands and wives. There was no significant difference between the marital quality of White male-Asian female unions and that of same-race Asian and White couples. Only Asian males-White female marital partners perceived lower marital happiness and stability than those in same-race marriages. However, the major weakness was the small sample size of Asian-White couples (N=27) in the study. Due to public opposition toward those who date

interracially, couples have been found to alter how they act and communicate their care for one another in public as a way to avoid discrimination and stares (Vaquera & Kao, 2005). Interracial couples have been found to be less likely to expose themselves in public and avoid going certain places due to fear of discrimination. The majority of interracial couples have reported experiencing stares, negative comments, slurs, or mistreatment in public places (Jean, 1998). In a qualitative study, through the use of in-depth interview with interracial couples, Hibbler and Shiness (2002) found that the interracial couples felt socially isolated in various aspects of daily life, including work, family, and leisure primarily due to race and racism.

Psychological health is another challenge that interracial couples face. Using a national database Bratter and Eschbach (2006) found that interracial marriage is associated with increases in severe distress for Native American men, White women, and for Hispanic men and women married to non-White spouses, compared to endogamous members of the same groups. Also, higher rates of distress are observed for intermarried persons with African American or Native American husbands or wives, and for women with Hispanic husbands. (Bratter & Eschbach, 2006)

The wider socio-cultural environment may influence how couples express and negotiate cultural differences in a number of ways. For instance, the degree of support that intermarried couples receive from their immediate social networks as well as acceptance from the larger society can influence how well intercultural couples manage their differences (Zebroski, 1999). Power relations between different racial and ethnic groups in the surrounding society also may shape how intercultural couples negotiate differences. When one spouse comes from a minority group, he or she may have less

power to negotiate cultural differences in the marriage. Racial and ethnic diversity in the larger society also could affect how couples handle differences. For example, Hawaii is often mentioned as a uniquely multicultural society in which intermarriage is quite frequent. Perhaps living in such an environment is conducive to the accommodation of cultural differences among intermarried couples. The larger sociocultural context also can affect the ways intermarried couples negotiate potentially incompatible gender role expectations. Residing in an egalitarian culture may encourage spouses from more traditional cultural backgrounds to conform to the more egalitarian expectations of the host society. (Refsing, 1998)

Gender and culture combinations of couples may provide a more complimentary fit than others. Couples in which the wife comes from a less egalitarian culture than the husband may have more success handling cultural differences in gender role expectations than couples in which the wife comes from a more egalitarian culture than the husband. For instance, Refsing (1998) compared couples in which the wife was Japanese and the husband was Danish to couples in which the husband was Japanese and the wife was Danish. Although she found that both types of couples had difficulties negotiating conflicting gender role expectations and culturally distinct gender identities, she found that more difficulties were encountered when the wife was Danish and the husband was Japanese.

However, other scholars have pointed out that not all intermarried couples experience cultural differences or marital strain (Strauss, 1954). It is not clear today that this conventional wisdom is true for the following reasons. First, social norms governing intergroup relations are in flux. Second, interracial and interethnic marriages are

becoming more prevalent, and more diverse in racial and ethnic composition. Third, recent studies of the psychological health of individuals in multiracial circumstances raise questions about both the assumption that such experiences are always stressful, and the assumption that this stress is internalized as psychological distress (Root, 1996).

In fact, some intermarried couples may function even better than same-race couples. For example, in a study of marriage between American serviceman and Japanese war brides Strauss suggested, some Japanese-American marriages are likely to be quite stable and to involve fewer major stresses than marriages between native Americans (Strauss, 1954). He argued that a severe social selection process among these intermarried couples resulted in a high degree of compatibility between spouses. Even when intermarried couples do encounter cultural differences, they may work to consciously negotiate those differences and create their own set of family norms and values, which are often an amalgamation of the two cultures of origin (Breger & Hill, 1998).

Research on Intimate Partner Violence

Incidence of Intimate Partner Violence by Race/Ethnic Groups

Researchers who pay attention to rates of IPV across racial and ethnic lines note that IPV has no boundaries. Women of all racial and ethnic groups are at risk for being the victim of IPV. Analysis from the National Violence Against Women Survey found that Black women are more likely to report certain forms of IPV and furthermore, the types of violence that Black women are more likely to experience are the more severe, near lethal forms of IPV (Hattery & Smith, 2003). Hispanic couples are reported to have higher risks for IPV relative to White couples (Hattery, 2009). Black and Hispanic

couples also have higher rates than Whites of severe acts of IPV (Caetano, Field, Ramisetty-Mikler, & McGrath, 2005). Black couples are more likely than White and Hispanic couples to engage in mutual partner violence (Caetano et al., 2005), although similar risks for mutual IPV have also been reported across ethnic groups (Field & Caetano, 2004).

African Americans. Intimate partner violence among African Americans has been well documented (Hampton, Oliver, & Magarian, 2003; Oliver, 2000; West, 2004). Consistent with previous research, African American women were somewhat more likely than White women to be assaulted by an intimate partner (Tjaden & Thoennes, 2000a). Both Black men and women sustained and inflicted abuse. According to the National Crime Victimization Survey, between 1993 and 1998 Blacks were victimized by intimate partners at significantly higher rates than person of other races. More specifically, Black women experienced intimate partner victimization at a rate 35 percent higher than that of White women. Black husbands were also abused, with rates approximately 62 percent higher than that of White husbands (Rennison, Welchans, & Statistics, 2000). The National Alcohol Survey provided further evidence of this racial pattern. Black couples reported the highest rate (23%) of male-to-female partner violence, followed by Hispanic couples (17%), and White couples (11%). Female-to-male partner violence followed a similar pattern. Black couples reported a higher rate (30%) than their Hispanic (21%) and White (15%) counterparts (Cunradi, Caetano, Clark, & Schafer, 1999). Caution should be used when interpreting these gender differences. When rates of severe violence were considered, Black women were frequent victims of wife battering (Ronald C. Kessler, Molnar, Feurer, & Appelbaum, 2001). In fact, in 1997 homicide by intimate partners was

the leading cause of death for African American women between the age of fifteen and twenty-four (National Center for Health Statistics, 1997). Black women may be using aggression as a form of self-defense in retaliation for the abuse perpetrated against them.

Hispanic Americans. According to previous research, when compared to White, Hispanics reported both higher and lower rates of partner violence (West, 2004). More recently, higher rates were reported by Latinos. For example, Hispanic couples reported both male-to-female (17%) and female-to-male (21%) partner violence which are higher than the rates for White couples (11% and 15%, respectively) (Cunradi et al., 1999). Similarly, based on the National Alcohol and Family Violence Survey (NAFVS), Hispanic husbands were more likely than White husbands to inflict wife assaults that were both minor (16% vs. 12%), and severe (Jasinski & Kantor, 2001). However, when researchers considered the experiences of battered women, Latinas and White women reported comparable rates of severe violence, defined as beatings or threats with weapons (West et al, 1998).

When ethnic group differences were investigated, researchers discovered important differences. In a large sample of ethnically diverse women who were recruited from community hospitals, Central American and Cuban American women were least likely to be abused, followed by Mexican American women. Puerto Rican women reported the highest rates of partner abuse (Torres et al., 2000). A similar pattern was discovered when researchers used the National Alcohol and Family Violence Survey. When severe violence was considered, Mexican American husbands born in the United States were more likely to admit to wife assault than either Puerto Rican or Mexican husbands born in Mexico. No Cuban husbands reported wife battering. Although not

statistically significant, these patterns illustrate the importance of investigating ethnic group differences (Jasinski, 1998).

Asian American. Although domestic violence researchers have been criticized for neglecting the experiences of Asian Americans (West, 1998), in the recent year they started to pay more attention to this populations. According to the National Violence Against Women Survey, physical assault was reported by 12 percent of women who identified as Asian/Pacific Islander (n=133). This is significantly lower than the rate of Native American, mixed race, and Black women. The researcher concluded the lower intimate partner victimization rates found among Asian/Pacific Islander women may be an artifact of underreporting (Tjaden & Thoennes, 2000b). This political gag order had been attributed to traditional Asian values that emphasized close family ties and harmony. In addition, stereotypes, which characterize Asians as “model minorities,” make some survivors and community members reluctant to discuss this problem (Yick, 2000).

Past research has also been limited by ethnic lumping and small sample size. Although both these methodological problems continue to exist, researchers have begun to use larger samples to investigate intimate violence in Asian groups. For example, violence in South Asian families, such as Bangladeshi, Indians, and Pakistani, has come to the attention of investigators. Dasgupta (2000) cited a study conducted in Boston with 160 highly educated, professional South Asian women between the ages of 18 and 62. Nearly one-third had experienced physical abuse in their present relationship. Yoshihama (1999) discovered similarly high rates of abuse when she conducted face-to-face interviews with 211 women of Japanese descent. Approximately 50 percent of the

respondents had experienced some form of physical partner violence during their lifetimes. Another researcher used telephone directories to identify and interview approximately 250 Chinese American (Yick, 2000) and Korean American families (Kim and Sung, 2000). In both ethnic groups, almost 20 percent reported minor violence and 8 percent experienced severe violence.

Native Americans. Previous research on the Native American population also has been limited by ethnic lumping and small sample size (West, 1998). These methodological problems continue to exist; however, the few available studies indicated that partner violence is a serious problem in this population. Based on the NVAW survey, 30 percent of Native American/Alaska Native women (n=88) had been physically assaulted by a male partner. Although not significantly higher, these women reported more victimization than their African American and White women counterparts (Tjaden & Thoennes, 2000b).

Considering tribal and regional differences has enhanced our understanding of domestic violence among Native Americans. For example, severe victimization has been found among Native women in rural Alaska (Shepherd, 2001) and Native American women on the Apache and Hualapai reservations (Hamby, 2000). A larger study was conducted at an Indian Health Service comprehensive health care facility. Among the 341 Navajo women who completed the survey, 52 percent had reported at least one episode of domestic violence, with verbal and physical abuse most frequently reported. Almost one-third of the physical abuse was categorized as severe violence (Fairchild et al. 1998).

Factors Associated with Intimate Partner Violence

Social Support. With regard to social support, a number of studies found that less social support increased women's risk of victimization of abuse by an intimate partner (Jasinski & Williams, 1998). Van Wyk and his colleague (2003) proposed that less social support leads to greater spousal abuse for women, stating that "the greater the frequency of interaction with acquaintances that are not considered to be close, the lower the likelihood of partner violence" (p.423).

In a study examining the relationship between acculturation and intimate partner violence among Latinas, Garcia, Hurwitz, and Kraus (2005) conducted a cross sectional survey with 464 women at five public health care clinics throughout Los Angeles County between 1998 and 2000. Social and cultural variables in this study included social support from families, social support from friends, marital status, and acculturation. For social support, the respondents were asked if they had depended on their family and friends for help, advice, or friendship. Their findings were that those who had low or no family and friends support had a higher prevalence of intimate partner violence.

Acculturation/Generation. The relationship of acculturation to spousal abuse has been examined by studies on ethnic groups, specifically Latinas but the findings have been mixed. Based on the National Alcohol and Family Violence Survey, highly acculturated Hispanic American husbands were more likely to assault their wives. More specifically, after controlling for age, poverty, and education, third-generation Hispanic husbands were almost three times as likely to beat their wives compared to Hispanic husbands who were born outside the United States (Jasinski, 1998). Similarly, abused Latinas reported higher levels of acculturation, as measured by preference for the English

language (Torres et al. 2000). Researchers suggested that highly acculturated Hispanics may experience more stressful lives due to the contrast between the reality of their poverty and their desire to share in the affluence which they were around them, which in turn can lead to frustration. Embracing the cultural values of U.S. society does not protect against racial discrimination. In fact, perceptions of discrimination may increase with longer residence in the United States. As a result, some Latinos may feel alienated from the larger society, which may contribute to frustration and stress, and ultimately conflict and violence (Jasinski, 1998).

On the other hand, there are studies that showed intimate partner violence most commonly occurred among less acculturated couples, particularly if they are recent immigrants. Gondolf (1999) found in his study that first-generation immigrants had the highest rate of violence. Several factors may contribute, as well as complicate, intimate violence in these families. Initially, immigrants may be optimistic about moving to the United States, a “land of opportunity.” However, upon arriving they may find themselves economically and socially marginalized. Recent arrivals, particularly if they come from rural areas, may lack education and job skills that are transferable to the U.S. economy. Consequently, they are often impoverished, which is a risk factor for abuse. Second, isolation can create an environment that both fosters and conceals family violence. Recent immigrants must often adapt to a new country without support from family members and friends. The absence of this support network can increase family stress and decrease the likelihood of intervention in cases of abuse. Battered immigrant women may be further silenced by fear of deportation, especially if they or their partners are undocumented workers, have limited access to social services, lack of English language

skills, and are faced with oppressive legal policies, which require extensive documentation of abuse.

There are studies supporting the idea that intimate partner violence occurs the most frequently among medium acculturation group. The National Alcohol Survey included a broader measure of acculturation. For example, participants' were asked about their ease of social relationship with Anglos and Hispanics preference for Hispanic media and music, and their proportion of Hispanic friends, church members, and neighbors. Based on their score, Latino participants' were categorized as low, medium, and high in acculturation level. Overall rates of male-to-female Hispanic partner violence were highest among men in the medium acculturation group followed by those in the low and high acculturation group.

Similarly, Caetano et al. (2000) examined rates of acculturation, alcohol consumption, and intimate partner violence among 527 Hispanic married and cohabiting couples in the 48 contiguous United States. Acculturation was assessed using such information as the daily use of and ability to speak, read, and write English and Spanish; preferences for media including books, radio, and television in English or Spanish; the ethnicity of people with whom respondents interacted with at church, at parties, and in the neighborhood; and a series of questions about values thought to be characteristic of the Hispanic lifestyle. For the analysis, respondents' scored on the acculturation level were divided into three groups, based on low, medium, and high level of acculturation. The result showed that the highest rate of intimate partner violence among male respondents was the medium acculturation level, followed by the higher acculturation group. The ones who were less acculturated reported lower rates of IPV. The authors

speculated that individuals in the medium range had lost connection with their country of origin and had not yet adopted the values associated with the U.S. culture. Without a strong identification to either culture, these couples may be vulnerable to anxiety, stress, conflict, and potentially violence (Caetano et al., 2000).

In another five year longitudinal study examining the association between acculturation, drinking and IPV among 387 Hispanic couples in the U.S., Caetano, Ramisetty-Mikler, & McGrath (2004) found that socio-demographic factors, drinking, impulsivity, and family history of violence were all predictors of IPV, but that acculturation did not have a significant impact on IPV. In fact, the medium acculturation group reported the highest rates of IPV, but associations were not statistically significant in the multivariate analysis. They pointed out that there are interaction effects between acculturation and characteristics such as gender, age, birthplace, and generational status (Caetano et al, 2004). Therefore, examining interaction effects between these variables might be useful to understand the relationship between acculturation and spousal abuse.

Gender Roles. Guided by feminist explanations of violence against women, researchers have assessed the relationship between patriarchal ideology and wife assault, and speculated that the acceptance of traditional gender roles is a primary reason for violence against women (Smith, 1990; Sugarman & Frankel, 1996). Smith (1990) conducted a test of the feminist hypothesis using a survey of 604 Toronto women to assess their male partners' patriarchal beliefs and approval of violence, which, in combination with socio-demographic variables such as husbands' education and occupations, consequently could predict wife assault. Husbands' patriarchal beliefs and attitude were measured using the themes of obedience, respect, loyalty, dependency,

sexual access, and sexual fidelity. The result showed that the husband's patriarchal beliefs and approval of violence were positively related to wife assault and negatively related to the socioeconomic variables. The study supported feminist theory with the finding that the husband who held more traditional gender role attitude was more likely to use violence against their wives.

Cross-cultural and ethnographic studies of spousal violence against women show that male-to-female abuse is less likely to occur in societies where women have strong and close bonds to their families or coworkers. On the contrary, spousal violence is more likely to occur when males dominate all aspects of family life (Kruttschnitt, 1996).

Discrimination. Stueve and O'Donnell (2008) examined the interrelationships between urban young adult women's experiences of discrimination and their involvement in intimate partner violence (IPV). The study data included a sample of 550 urban African American and Latina women recruited from economically distressed middle schools and followed them into young adulthood, over approximately 7 years. The study results indicated that discrimination is significantly associated with physical and emotional IPV victimization and perpetration, controlling for socio-demographic characteristics, including ethnic identity formation, and early adolescent risk behaviors.

Alcohol abuse. By using large nationally representative samples more research has begun to investigate the link between drinking and domestic violence. Although substance abusers were not oversampled, these studies are valuable because they oversampled ethnic groups where they asked detailed questions on alcohol use and abuse. As a result, complex associations have been discovered among intimate partner violence, substance abuse, and ethnicity. Based on the National Alcohol and Family Violence

Survey, a large study designed to measure the links between alcohol and family violence, the association between wife abuse and drinking was influenced by work stress, related to being laid off, fired, or unemployed. Among Hispanic men, work stress was linked to increased levels of both drinking and wife abuse. In contrast, White men who experienced work stress were more likely to drink, but not batter their wives (Jasinski et al., 1997).

Intricate associations also were discovered when researchers used the National Alcohol Survey. Ethnic differences in the link between alcohol related problems and intimate partner violence remained after controlling for socio-demographic factors, psychosocial variables (childhood victimization, impulsivity), and alcohol consumption. When compared to Black couples without drinking problems, Black couples with either male or female alcohol problems were substantially more likely to report wife abuse. Conversely, although White couples with either male or female alcohol problems were at a twofold risk of wife battering, these associations were not significant. Similarly, male and female alcohol problems were not predictive of wife beating among Hispanics (Cunradi et al., 1999). However, when the level of acculturation was considered, the association between alcohol used and intimate partner violence became more complex. For example, medium and highly acculturated Hispanic women who drank report the highest occurrences of intimate partner abuse (Caetano et al., 2000). Taken together, the association between alcohol and intimate partner violence among various ethnic groups is complex and sometimes difficult to interpret.

Asians and Intimate Partner Violence

In the United States, research on minority women and IPV is relatively sparse, with existing studies focusing mostly on the White-Black dichotomy. Recent studies have included the Latino populations. Asian women, however, lag far behind the rest of the minorities as a focus of IPV research. According to the US Census, the term ‘Asian’ includes persons from the Far East, South East Asia and the Indian sub-continent. This includes but is not limited to immigrants from various countries such as China, India, Nepal, Sri Lanka, Japan, Korea, Malaysia, Singapore, Pakistan, Bangladesh, Philippines, Thailand, and Vietnam. Asians are, therefore, not a homogenous group and consist of persons from different countries, ethnicities, languages, customs and values that will ultimately impact the experience of IPV in different ways. IPV research with a nationally representative sample, such as the National Violence Against Women Survey (Tjaden & Thoennes, 2000b), has disregarded such differences combining Asians together with Pacific Islanders as representing one category.

According to Nguyen (2007) there are several commonalities in the experience of partner abuse across the different Asian groups. In the Cambodian, Indonesian, Korean, Japanese, India, Vietnamese and Chinese communities in America, upholding the family name and reputation is primary above all else. In Asian culture, the family and not the individual is given primary importance. Actions of individuals impact not only themselves but also the nuclear as well as extended families (Davis, 2000). Hence, negative aspects such as abuse are not to be shared with outsiders thereby minimizing public shame. In collective cultures, like Asian communities, where the individual represents the family, guilt and shame takes on a different meaning than in individualistic

societies (Nguyen, 2007). Asian culture emphasizes denial of self, loyalty and consideration of the good of the family, which in turn results in IPV being viewed as a taboo and shameful subject that is often minimized and suppressed.

Difficulties in recruiting participants and conducting IPV research have been reported across the different Asian communities (Nguyen, 2007). A disadvantage of such sparse research among minority and immigrant Asian communities is that research findings of majority women are extended to minority women. What sparse qualitative research that exists among the various Asian communities suggest that the IPV experiences of minority and immigrant women are very different from majority women and are complicated by culture and immigration specific factors. A bulk of earlier IPV research on majority women in the US was for the most part dominated by the traditional feminist theory. This theoretical orientation focused solely on gender roles to explain differences in power, privilege and control (Bogard, 1988). Scholars involved in IPV research with minority and immigrant women strongly criticize radical feminist theory as being inadequate in comprehensively explaining the experiences of abuse women (Kasturirangan, Krishnan, & Riger, 2004).

Recently, researchers have moved towards a more satisfactory approach described as the race, class, gender perspective and the structure perspective (Sokoloff & Dupont, 2005). This theoretical orientation suggests that factors such as immigration status, culture, class religion and ethnicity interact with gender to produce a unique set of circumstances that must be addressed to understand how IPV impacts ethnic minorities. For example, a women might experience power differential owing to her gender, her dependent immigrant status, and because her culture frowns upon sharing family

problems to outsiders. The latter two components more than her gender role socialization may influence whether or not she seeks treatment for IPV related injuries and whether she will admit to the real reason for her injuries. Incorporating this new theoretical orientation that takes into account cultural and immigration factors may help in understanding and uncovering the unique experiences of ethnic minorities suffering abuse at the hands of an intimate partner. There is a vital need for more research to investigate how IPV affects the different Asian ethnic minorities.

Intimate Partner Violence in Interracial Couples

Despite these growing trends in interracial marriage, only a few studies have focused specifically on intimate partner violence (IPV) in interracial couples. There is some evidence to suggest that interracial households are at elevated risk for IPV.

Mercy and Saltzman (1989) analyzed incident rates of spousal homicide, a lethal form of IPV, using Federal Bureau of Investigation's Supplemental Homicide Reports (FBI-SHR) from 1976 to 1985. They found that spouse homicide incidence rates were 7.7 times higher in Black-White union interracial marriages relative to Black and White intra-racial marriages. The patterns in this risk varied by race and sex. White husbands, White wives, and Black wives were at greater risk of being killed by a spouse in an interracial than an intra-racial marriage, whereas Black husbands were at less risk.

Hattery (2009) conducted a study using national survey data containing Black and White interracial and intra-racial couples. The result showed that White women who are in relationships with Black men face a higher probability of experiencing physical IPV than Black women in relationships with Black men. In other words, Black men are significantly more likely to engage in physical IPV when they are in interracial rather

than intra-racial relationships. In contrast, Black women's probability for experiencing physical IPV is very low when they are in relationships with White men. In other words, White men are significantly less likely to perpetuate physical IPV when they are in interracial relationships with Black women than when they are in intra-racial relationships. Regarding this result, Hattery (2009) explained that the race and gender composition of the couples mirrors the race and gender hierarchies present in the United States (Zweigenhaft & Domhoff, 2006). Because the power in their intimate relationships is in line with the structures of societal power in which these relationships are embedded, White men in interracial relationship are more likely to feel comfortable with the gendered distribution of power in their relationship and therefore do not need to use violence to assert their masculinity and power over their female partners.

Fusco (2010) used county police reports from the Northeast area to examine IPV among White and ethnic minority interracial and same-race couples. Interracial couples had significantly high rates of domestic violence arrest compared to both White and ethnic minority same-race couples. Mutual assaults was 1.5 times more likely in interracial couples compared to ethnic minority couples, and twice as likely as in White couples. However, Fusco looked at all interracial couples and all ethnic minorities as a group.

Recently, Chartier and Caetano (2012) examined occurrences of IPV across interethnic and intra-ethnic couples using national survey data. The races/ethnicities included in the analysis were White, Black, and Hispanic but not Asian. Prevalence rates for any occurrence of IPV and acts of severe IPV were higher for interethnic couples relative to intra-ethnic couples. Most occurrences of IPV for interethnic couples were

mutual. Factors predicting IPV among interethnic couples included marital status, couples' age, male alcohol problems, and female impulsivity. They concluded that interethnic couples may be at greater risk for IPV than intra-ethnic couples because of their younger age, binge drinking, and alcohol problems.

Table 1. Studies Examining the Intimate Partner Violence among Interracial Couples

Study	Subjects	Data	Result
Mercy & Saltzman, 1989	Black, White	FBI Supplemental Homicide Reports	Interracial marriage is in greater risk than intra-racial marriage.
Hattery, 2009	Black, White	National Survey Data	Black husband-White wife couples have greater risk of IPV than Black same-race couples. White husband-Black wife couples have less risk of IPV than White same-race couples.
Fusco, 2010	White, Minority	County Police Report	Interracial couples had high rates of domestic violence arrests compared to both White and ethnic minority intra-racial couples.
Chartier & Caetano, 2012	White, Black, Hispanic	National Survey Data	IPV were more prevalent and sever among interethnic couples than the intra-racial couples.

Theoretical Perspectives

Intimate partner violence (IPV) began to draw attention as a serious social problem in the early 1970s and continues to be a serious problem in the United States. Prior to this, academicians did not study this phenomenon, despite historical records indicating that husbands assaulted their wives (Loseke, 1989). Several IPV theories have been proposed over the years and offer different explanatory frameworks for conceptualizing IPV. Each of these theories has influenced IPV research and many have found some degree of empirical support. However, the extent to which IPV theories have

aided in understanding the populations within Asian intermarried couples remains largely unknown.

This following section explicated a conceptual framework for understanding IPV among Asian inter-race and same-race couples. In this section, a few theoretical perspectives that help us understand the phenomenon of intimate partner violence are discussed. Two types of feminist theory, radical feminist theory and intersectionality theory, and ecological model are presented in the following sections, along with the contribution of each to the conceptual framework of this study.

Feminist Theory

Feminist theory is not a unified theory; it is a wide-ranging system of ideas about social structures and their impact on human experiences developed from a woman-centered perspective. There are different types of feminist theories (i.e., cultural, liberal, Marxian, socialist, womanist feminist theories, etc.) two of which, radical and intersectionality, are explored here.

Radical Feminist Theory. The radical feminist perspective focuses primarily on the concept of patriarchy (Dobash & Dobash, 1979) and the social institutions that help maintain it. Feminist analyses of violence against women center on the structure of relationships in a patriarchal culture, on power, and on gender (Bograd & Yllo, 1988). The main factors that contribute to violence against women include the historically male-dominated social structure and socialization practices teaching men and women gender-specific roles (Smith, 1990). According to researchers, the traditional marriage is the mechanism by which patriarchy is maintained (Yllo & Straus, 1990). Feminist explanations of violence also focus on the relationship between this cultural ideology of

male dominance and structural forces that limit women's access to resources. Violence against women, therefore, is a result of the subordinate position women occupy in the social structure, and this subordination is the cultural legacy of the traditional family. In other words, violence against women is one manifestation of a system of male dominance that has existed historically and across cultures (Yllo & Straus, 1990).

Violence becomes a method by which to maintain social control and male power over women. Support for the relationship between male dominance and violence comes from cross-cultural research that has found less violence in more egalitarian societies (Levinson, 1989). Similarly, other researchers working from feminist perspectives suggest that marital violence stems from inequality in marriage and marriage-like relationships (Schechter, 1988). Support for feminist theory stems from descriptive, correlational research examining the relationship between men's endorsements of patriarchal values and their respective rates of physical violence against their partners. Results from some of these studies indicate that families are at a greater risk for experiencing IPV when husbands hold traditional sex-role attitudes and when there are greater discrepancies between the husbands' and wives' acceptance of patriarchal values (Leonard & Senchak, 1996; Smith, 1990).

Patriarchy has been conceptualized on two levels: macro and micro. On the macro level, patriarchy is male domination, reinforced through existing economic, social, and political structures (Schechter, 1982). Using census and other secondary data, Yllo (1983) defined patriarchy by ranking women's status in 30 different U.S. states along economic, educational, political, and legal dimensions. Findings indicated that the level of violence was highest in those states where women's status was the lowest; however, in those states

where women's status was highest, the level of violence was still comparable to those states where women's status was low. Yllo (1983) postulated that in states where women's status is low, women have minimal options and resources, and consequently, they feel they have no other recourses but to tolerate the violence. However, in states where women's status is high, men may feel more threatened and use force to maintain their dominant position.

Intersectional Domestic Violence Theory. Through development of the concept of intersectionality, Crenshaw (1991) proposed that domestic violence is but one form of oppression and social control. We exist in social contexts created by the intersections of systems of power (for example, race, class, gender, and sexual orientation) and oppression (prejudice, class stratification, gender inequality, and heterosexist bias). In practice, social dimensions are not merely abstract descriptions as they are suffused with evaluations that have social consequences.

In this framework, IPV is not a monolithic phenomenon. Intersectionality colors the meaning and nature of domestic violence—how it is experienced by self and responded to by others, how personal and social consequences are represented, and how and whether escape and safety can be obtained (Bograd, 1999). Most theories of IPV do not address such intersections. An implicit assumption of theories and practice is that IPV poses a central threat to the boundaries and protected inner space of the family. With the exception of gender inequality, other social dimensions are usually defined as stressors, rather than as key explanatory factors of the violence, and so primary attention is paid to intrapsychic, interpersonal, or intrafamilial dynamics (Bograd, 1999).

From this perspective, intersectionality suggests that no dimension, such as gender inequality, is privileged as an explanatory construct of domestic violence, and gender inequality itself is modified by its intersection with other systems of power and oppression. So, for example, while all men who batter exercise some form of patriarchal control, men's relationship to patriarchy differ in patterned ways depending on where they are socially located. While all women are vulnerable to battering, a battered woman may judge herself and be judged by others differently if she is White or Black, poor or wealthy, a prostitute or a housewife, a citizen or an undocumented immigrant (Bograd, 1999).

Crenshaw (1994) and Collins (2000) contended that social and cultural patterns of oppression are not only interrelated but are bound together and influenced by the intersectional systems of society, such as race, gender, socioeconomic status, and ethnicity. Therefore, simple acknowledgment that a woman lives in a sexist society is insufficient information to describe her experience; instead, it is essential to know the total dimensions of her reality, including, for example, her cultural orientation, race, age, socioeconomic status, and so on. Moreover, intersectionality suggests that the woman consequently experiences discrete forms of expressed oppression, shaped by interactional relationships among and between these categorical factors (Lockhart & Danis, 2010).

An intersectionality analysis does not seek to simply add categories to one another (e.g., gender, race, class, sexuality) but instead strives to understand what is created and experienced at the intersection of two or more axes of oppression (Brewer, 1993; Zerai, 2000). In so doing, it recognizes the multidimensional and relational nature of social

locations and places lived, experiences, social forces, and overlapping systems of discrimination and subordination at the center of analysis (Olena et al., 2010).

Ecological Model

The ecological perspective proposed by Bronfenbrenner (1977) suggests that human behavior can best be understood by studying both the internal development of individuals as well as their immediate and distant environments. Bronfenbrenner (1993) defined human development ecology as “the scientific study of the progressive, mutual accommodation, throughout the life course, between active, growing, highly complex biopsychological organisms and the changing properties of the immediate settings in which the developing person lives, as the process is affected by the relations between these settings, and by the larger contexts in which the settings are embedded” (p. 7). In other words, a person’s behavior is a function of the interaction of the person’s traits and abilities with the environment (Klein & White, 1996).

Bronfenbrenner posited five levels of environmental systems: micro-, meso-, exo-, macro- and chrono-systems. The microsystem is a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given face-to-face setting. Particular physical, social, and symbolic features of the developing person are sustained in their activities, and progressively interact with the immediate environment (Bronfenbrenner et al., 1993). The next nested structure, the mesosystem, is comprised of the linkages and processes taking place between two or more micro settings containing the developing person. The exosystem is comprised of the linkages and processes taking place between two or more external settings. At least one of those settings does not contain the developing person. Although events occur in the setting where the person is

not included, the events indirectly influence the person's life (Bronfenbrenner et al., 1993). The macrosystem consists of the overarching pattern of the micro-, meso-, and exosystems. The macrosystem is embedded in a given culture, subculture, or other extended social structure. The given culture can be represented by belief systems, resources, hazards, lifestyles, opportunity structures, life course options, and patterns of social interchange (Bronfenbrenner et al., 1993).

Lastly, the chronosystem consists of those patterns that influence developmental change over time (Bronfenbrenner, 1986). There are two types of transitional events in the chronosystem: normative and non-normative events. Normative events are characterized as events that are universal and take place in an orderly procession in people's lives (e.g., starting school, puberty, entering the job market, starting a family, and retirement). Non-normative events tend to be more stressful than normative events because they are unexpected events (e.g., death of a family member, illness or disability, divorce, job loss, moving, or winning the sweepstakes) (Bronfenbrenner, 1986). The ecological framework provides four fundamental ideas about marriage: (a) that marriages are interpersonal systems; (b) that spouses' personality shape their individual and collective efforts to maintain a successful marriage; (c) that marriage relationships are dynamic so that they change in context and evolve over time; and (d) that marital unions are embedded in a social context (Huston, 2000).

Bronfenbrenner's ecological model is useful in studying violence against women. Heise, Ellsberg, and Gottemoeller (1999) used the ecological framework to explain and integrate the origins of gender-based violence. They posited four sub-systems in their work: society, community, relationship, and individual. According to this model, at the

outermost circle, the societal level, society reflects the general views and attitudes that permeate the culture at large. At this level, male entitlement/ownership of women, masculine aggression and dominance, rigid gender roles, acceptance of interpersonal violence, and acceptance of physical chastisement are important factors that predict violence against women (Heise et al., 1999). The community level represents the institutions and social structures of the workplace, neighborhood, social networks, and identity groups. In this level, women's low socioeconomic status and isolation from families, and men's delinquent peer associations are linked to violence against women (Heise et al., 1999). The relationship level represents the immediate context in which abuse takes place. Male dominance in the family, male control of decision-making, and marital conflict are strong predictors of partner abuse (Heise et al., 1999). Lastly, the individual level, the innermost circle, represents the biological and personal history that each individual brings to the relationship, including gender identity, witnessing marital violence as a child, being abused as a child, the experience of an absent or rejecting father, and husbands' use of alcohol (Heise et al., 1999).

Ecological theory is concerned with an adoptive, evolutionary view of human beings in constant interchange with all elements of their environment (Germain & Gitterman, 1980). The idea that person and environment are inseparable and must be considered jointly is the theory's primary assumption (Bronfenbrenner, 1989). Another key assumption of the ecological perspective is that person and environment mutually influence each other. Transactions, or exchanges between a person and his or her environment, bring about change within the person-environment unit. This principle of mutual influence is referred to as reciprocal causality. Interest is not in the additive

effects of person plus environment, but in their interactive, cumulative effects (Greene, 1999). Another concept central to the ecological perspective is goodness-of-fit.

Goodness-of-fit refers to the extent to which there is a match between an individual's adaptive needs and the qualities of his or her environment over time (Greene, 1999).

Ability to Explain the Problem

Radical feminist theory's explanations for violence against women tend to focus on the concept of patriarchy as the primary factor responsible for violence against women. This narrow focus, however, has often been criticized (Gelles, 1999). Although feminists have argued that other theoretical frameworks ignore gender in their explanations, at the same time, they have been criticized for their exclusive focus on gender. Critics have argued, for example, that the single-variable approach is insufficient as an explanation. In addition, Dutton (1994) argued that broad statements regarding male privilege and male dominance are too simplistic because they ignore differences among men. Moreover, Dutton (1994) suggested that because feminist explanations argue that structural patriarchy causes violence, the explanatory power of this perspective is limited. The reason is that it is an ecological fallacy to assume that macro-structural factors can predict individual thoughts or actions. Other critics of the feminist perspective have argued that this framework cannot account for violence by women (Dutton, 1994). Despite the fact that the feminist perspective does not offer a total, integrated framework for understanding IPV, it cannot be overlooked. While insufficient by itself, it is an important ingredient in any theoretical explanation of IPV.

Using intersectionality as a framework helps us recognize and understand multiple categorical identifiers and uncover the various forms of discrimination and

oppression that result from the interactional combination of these categorical identities so that we can work competently with women in domestic violence situations (Symington, 2004). Through this framework, we can examine and describe the ways in which various socially and culturally constructed categories interact on multiple levels and how these intersections contribute to unique experiences of oppression and marginalization, as well as privilege in society (Symington, 2004). Also, an intersectionality conceptual framework enhances one's understanding of and cultural competence with diverse communities in general, and women survivors of IPV in particular.

The intersectionality approach to IPV supports the use of culturally competent services for both victims and perpetrators. Both cross-cultural and multicultural IPV studies make it clear that there is no one-size-fits-all explanation for IPV and that, consequently, solutions must reflect these differences (Campbell, 1999). Strategies based on the experiences of women who do not share the same class and race backgrounds will be of limited utility for those whose lives are shaped by a different set of obstacles (Crenshaw, 1994). Similarly, battered women who have different religious backgrounds, sexual orientations, and nations of origin require different interventions as well.

The ecological model integrates and organizes the different domains of contributing factors of unidimensional models into multidimensional approaches recognizing the complex and multifaceted nature of intimate partner violence. The ecological model can guide intimate partner violence research and practice because its multilevel structure provides a systematic framework and allows for many different ways to view patterns of relationships and the context of intimate partner violence. However, these strengths of the ecological model have resulted in a limitation, a lack of explanatory

depth. The ecological model does not explain the processes by which a large number of potential contributing factors interact to lead to intimate partner violence. It fails to explain why the system levels are ecologically nested, which specific factors cause intimate partner violence, and how each affects the others, limiting the opportunity for empirical validation.

It is not surprising, then, that one of the most persistent criticisms of the ecological perspective is its failure to provide any meaningful direction as to how concrete human problems can be resolved. The theoretical constructs of biological ecology are known to have very strong explanatory power, but they were never intended to be employed as action theories designed to inform practice (Greene, 2000).

The ecological model offers practitioners a framework for multi-level intervention that is perhaps the most useful description of the change effort. Based on the diverse and comprehensive nature of the ecological model, a multi-component treatment paradigm is proposed for combating IPV. Using the flexibility of the ecological approach, specific attention may be paid to various levels of each causal model outlined above. This builds upon the person in the environment perspective of social work practice and incorporates a systems approach to change, impacting at the micro, meso, and macro levels (Dwyer, Smokowski, Bricout, & Wodarski, 1995).

Recognizing the complexity of IPV, ecological theory integrates explanatory variables from varying levels of analysis, thus creating a synthesized approach for both explanation and intervention. The ecological model seeks to integrate aspects of the psychological, socio-psychological, and feminist theories into a holistic framework. In this way, an intervention might be offering the battering husband anger management

skills training (psychological), job search assistance (sociological) and family therapy to analyze his dysfunctional paternal role (feminist) all at the same time (Dwyer et al., 1995). Since each individual case will have its own unique blend of causal factors, a flexible, comprehensive approach adds power and applicability to the intervention. In this way, psychological, sociological and socio-structural factors may all be utilized in the assessment and treatment of domestic violence. It is also noteworthy that the ecological paradigm serves variously victims and perpetrators. Both could benefit from supportive treatment and skills training in order to eradicate the abusive situation to the fullest extent possible (Dwyer et al., 1995).

While ecological model offers a comprehensive medium for theorizing about IPV, the absence of a commonly accepted explanatory theory has several implications. Supporters of the theories outlined above spend considerable time and energy defending the efficacy of their particular vision and advocating for its perspective. This serves to diffuse the power of their effort, justifying explanations rather than addressing solutions. Of greater significance, without a unifying theory explaining IPV, strategies for intervention and prevention tend to become fragmented and less effective. Given the magnitude of the problem, it is critical for researchers and practitioners to maximize and consolidate their efforts (Dwyer et al., 1995)

Theoretical Conceptual Framework for This Study

This section discusses the theoretical conceptual framework for the study. In the above section, I selected theories that are most relevant to the issue of IPV, and discussed major tenets, underlying epistemological assumptions, and their strengths and weaknesses. The models described above have contributed to our understanding of the

etiology of intimate partner violence. While all of the major theories are useful, the theories that I believe best suit my research are the intersectional domestic violence theory and the ecological model.

Although radical feminist theory gives us great insight regarding structural factors such as gender inequality, imbalance of power between men and women, and sexism stemming from society's patriarchal beliefs as the main causes of IPV, its narrow focus is insufficient as an explanation. As critics have suggested, this is an oversimplification of a very complex problem. Especially when dealing with a marginalized population, the IPV issue may not be mainly caused by gender inequality or power imbalance. Radical feminist theory can only deal with part of the issue.

Consider, for example, a low income Asian immigrant female non-English-speaking domestic worker, who is physically and financially abused by a husband who is a naturalized U.S citizen. These intersecting multilayered identities, female, poor, racial minority, foreign citizen, non-native language speaker, put her in a greater risk of intimate partner abuse. The intersectionality conceptual framework replaces dichotomous, binary thinking about power by focusing on specific contexts, distinct experiences, and the qualitative aspects of equality, discrimination, and justice, permitting us to work simultaneously on behalf of ourselves and others (Symington, 2004).

Figure 1 illustrates the multiple identities that Asian intermarried women have and listed inside each circle are the associated IPV risk factors. The top circle represents the average woman who live in the U.S. and lists the demographical factors. The left circle represents the identity of minority immigrants in the U.S. and the related risk

factors are listed in the circle. As developed in the diagram, adding another marginalized identity, in this case being a minority immigrant, would increase the risk of IPV. The right circle represents the identity of a person in an interracial relationship. Again, the third circle will add additional a risk factor to this marginalized person. It is the intersectionality of her multilayered identities (female, racial minority, immigrant, intermarried) that place her in a vulnerable position to incur abuse and oppression.

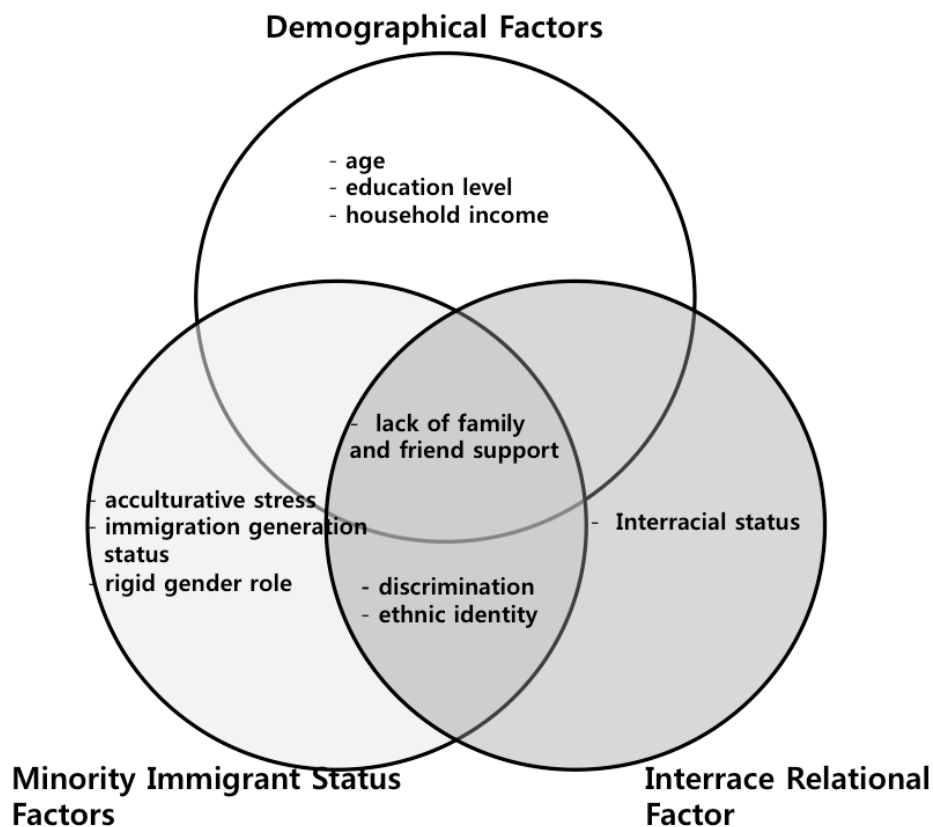


Figure 1. *Multiple identity and risk factors of Asian intermarried women guided by intersectionality theory*

Today, more emphasis is being placed on the use of multidimensional models of intimate partner violence. Combinations of theories originally developed within a specific discipline are being used to develop a more complete explanation of the problem of

intimate partner violence. Well-developed, integrated explanations of violence against women might contain both social factors and individual or relational characteristics. The ecological model integrates and organizes the different domains of contributing factors of unidimensional models into multidimensional approaches recognizing the complex and multifaceted nature of intimate partner violence. Its multilevel structure provides a systematic framework and allows for many different ways to view patterns of relationships and the context of intimate partner violence. Thus, through the ecological framework, all the known risk factors can be integrated into individual, relational, community, and societal levels.

The boxes on the Figure 2 illustrate the factors that are associated with an Asian woman's experience of intimate partner violence. At the societal level, gender role; at the community level, immigration related-stressors such as experience of discrimination, the lack of friends and family support, and low socioeconomic status; at the relationship level, interracial relationship status; finally, at the individual level, acculturative stress, immigration generation status, and ethnic identity were included on the model as risk factors of Asian women's partner abuse.

Theories on the causes of violence against women provide a framework for understanding and responding to this phenomenon. Thus, the more integrated and encompassing the theoretical model, the more valid it will be for the purpose of predicting violence and aiding practitioners and policy makers (Renzetti, Edleson, & Bergen, 2001). Acknowledging the existence of multiple risk factors is an important step in understanding the dynamics of violence against women. In addition, a greater awareness of the complexities of the patterns of violent relationships will improve

targeting by intervention programs and, thus, also improve allocation of funding and other resources (Renzetti et al., 2001).

The ecological model can be a systematic framework to identify what risk factors contribute to IPV at each ecological level, and the intersectionality theory can provide a more in-depth understanding of the intersectional factors such as racial combination and class.

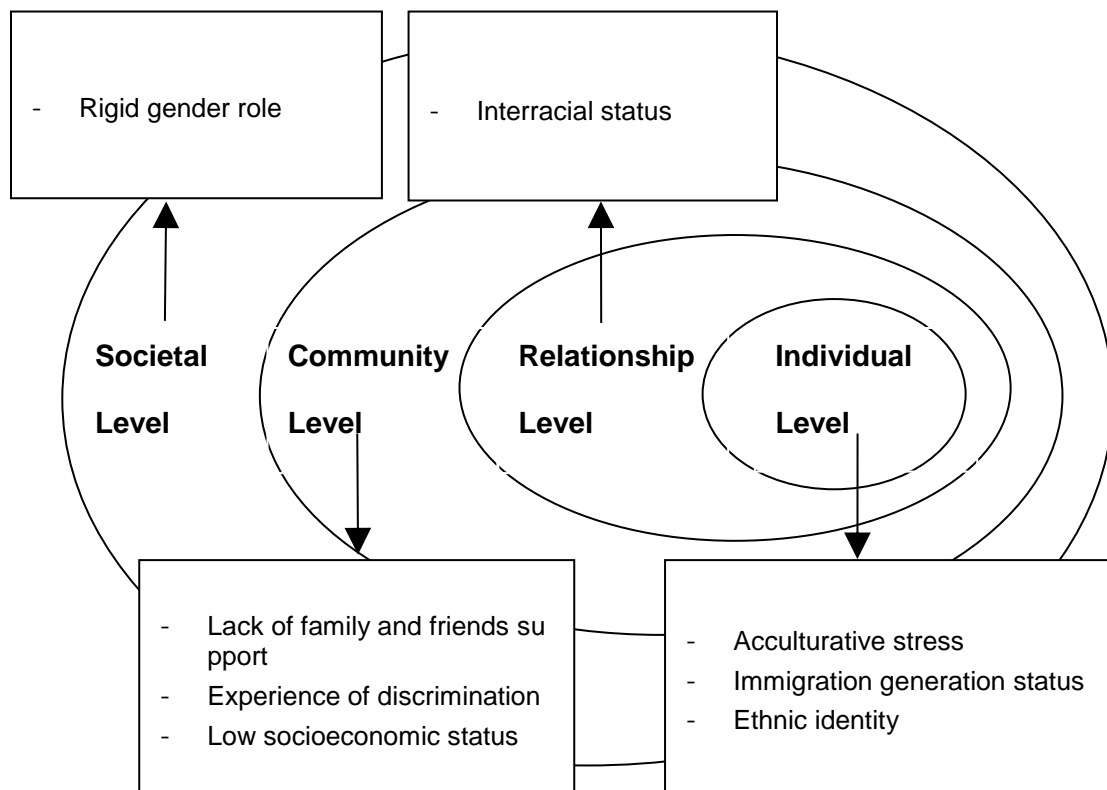


Figure 2. Ecological framework showing factors associated with the experience of IPV of Asian women

CHAPTER 3

METHOD

This chapter delineates the research design and methods that were used to understand the intimate partner violence (IPV) among Asian interracial couples, either married or cohabitating. This study employed a quantitative research design using national representative secondary data. There are both advantages and disadvantages of utilizing secondary data. One of the advantages is that using secondary data analysis does not require a data collection instrument, participant informed consent, or expenses for postage and staff. Therefore, it is less expensive and faster than creating and conducting an original survey (Salahu-din, 2003).

Another major advantage of conducting a secondary analysis is that researchers have access to much more comprehensive datasets like the National Latino and Asian American Study (NLAAS) dataset, which contains a sample that is both large and nationally representative. It would be impossible for the researcher to gather such a sample from an original survey, especially with a hard-to-reach-population such as a minority or stigmatized population, as is the case in the current study. A large sample size makes it possible to employ sophisticated multivariable statistical techniques for analyzing relationships among many variables simultaneously and thus ferreting out the relative explanatory power of each variable when the other variables are controlled (Rubin, Babbie, & Lee, 2008). In contrast, when researchers conduct an original survey study, finding and gathering data from members of hidden or hard-to-locate populations

can be very difficult and sometimes beyond their means. With such populations, it is often the case that a non-probability sampling method is employed with a small sample size, which will limit its representativeness. This is evident from the previous literature on interracial marriage. Other than the studies that used secondary data, most of the studies that have been conducted by individual researchers doing original survey studies used non-random samples (Fong & Yung, 1995; Imamura, 1990; Jeong & Schumm, 1990; Zebroski, 1999). Secondary data analysis of the work of top-flight professionals can also be beneficial. In the current study, NLAAS data were generated by studies that received a well-funded federal research grant, making it feasible to implement a rigorous sampling approach. On the other hand, one of the weaknesses to using available data is that the current research is being conducted for a purpose that differs from the intent of the original research. Therefore, information that is needed may not be available (Salahudin, 2003). In the NLAAS dataset, some of the information regarding measurements, reliability, and validity was absent. Another weakness of using secondary data is the lack of maximum fit between the concepts that the primary study measured and each of the concepts that are the focus of the current study. In other words, the researcher who is using secondary data is unable to conceptualize and operationalize the concepts and measure all the variables to best fit the purpose of the study. For example, the way in which the outcome variable for the current study, intimate partner violence, was measured could not include certain aspects of the concept. Basing research on an analysis of data that already exists obviously limits the analysis to what existed previously. Typically, IPV includes four types of behavior: physical abuse, sexual abuse, threats, and emotional abuse. One of the most frequently used measurements is Straus's Revised

Conflict Tactics Scales (CTS2) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). However, the NLAAS data uses a modified version of the CTS2, which only includes physical abuse and only measures the severity and frequency at the ordinal level.

Research Questions and Hypotheses

Based on the theoretical framework and the empirical studies mentioned in the previous chapter, the following research questions and specific hypotheses were formulated for the study.

Question 1: How prevalent is IPV (minor and severe) among Asian women in an interracial relationship?

Question 2: Are there differences in IPV rate (minor and severe) between Asian women in interracial relationships and those in same-race relationships?

Hypothesis 1. An Asian woman in an interracial relationship is more likely to experience IPV than an Asian woman in a same-race relationship.

Question 3: What are characteristics of Asian women in the interracial relationship like in comparison to those of Asian women in same-race relationships?

Hypothesis 2. An Asian woman in an interracial relationship is likely to be younger than an Asian woman in a same-race relationship.

Hypothesis 3. An Asian woman in an interracial relationship is likely to have higher household income than an Asian woman in a same-race relationship.

Hypothesis 4. An Asian woman in an interracial relationship is likely to have more education than an Asian woman in a same-race relationship.

Hypothesis 5. An Asian woman in an interracial relationship is likely to more family support than an Asian woman in a same-race relationship.

Hypothesis 6. An Asian woman in an interracial relationship is likely to have friend support than an Asian woman in a same-race relationship.

Hypothesis 7. An Asian woman in an interracial relationship is likely to have later immigration generation status than an Asian woman in a same-race relationship.

Hypothesis 8. An Asian woman in an interracial relationship is likely to experience more discrimination than an Asian woman in a same-race relationship.

Hypothesis 9. An Asian woman in an interracial relationship is more likely to experience IPV than an Asian woman in a same-race relationship.

Question 4: Which factors (age, household income, education, family support, friends support, immigration generation status, everyday discrimination, acculturative stress, gender role, ethnic identity, interracial relationship status) influence IPV among Asian women?

Question 5: How does the IPV risk factors differ by Asian women's interracial status

Question 6: How does the prediction of experience of IPV differ by including immigration-related factors and by a interracial relationship-related factor.

Research Design

The current study analyzed existing data from the National Latino and Asian American Study (NLAAS), which had a cross-sectional design. The NLAAS is part of the Collaborative Psychiatric Epidemiology Surveys funded primarily by the National Institute of Mental Health. This work was conducted by the Survey Research Center of the Institute for Social Research at the University of Michigan (M Alegria, Jackson, Kessler, & Takeuchi, 2007). A cross-sectional correlational design is utilized to

investigate a problem by taking a cross section of the population at one point in time; it is appropriate when no intervention or treatment is applied (Rubin et al., 2008), as is the case in this study. Although not an experimental design, this design will allow for the testing of associations between IPV risk factors and IPV among Asian intermarried couples. Secondary analysis is a form of research in which data collected and processed in one study are reanalyzed in a subsequent study. Often, the subsequent study is conducted by a different researcher and often for a different purpose (Rubin et al., 2008).

Target Population

The story of interracial relationship in the United States is not so simple. What is often left out of these discussions of interracial relationships is that mass waves of immigration started coinciding with the *Loving v. Virginia* anti-miscegenation ruling in the late 1960s. In focusing on Black-White interracial couples, scholarly and popular interests fail to factor in how the recent immigration patterns impact interracial marriages. First, Black-White couples represent only eight percent of all interracial couples in the United States (Lee & Edmonston, 2005a). The majority of interracial couples involve a partner from either Asia or Latin America, usually as a direct result of post-1960 immigration. Second, the rate of intermarriage increase between Whites and Blacks is minimal, while the rate of intermarriage increase involving Asian and Hispanic accounts for most of the growth in intermarriage from 1990 to 2000 (Lee & Edmonston, 2005a). The retreat from intermarriage largely reflects the growth in the immigrant population; increasing shares of natives are marrying their foreign-born counterparts (Qian & Lichter, 2007). Therefore, the current study was mainly focused on the Asian

immigrant population. Also, we can further complicate discussion of intermarriage by bringing in less formal relationships such as cohabitation.

In the United States, we have witnessed enormous changes in the realm of marriage and family, including a rising divorce rate, growing numbers of women entering the workforce, and increasing non-marital cohabitation and non-marital reproduction. In terms of this study, cohabitating couples are a crucial demographic component of intermarriage. The number of cohabiting couples has been on the rise for decades and now composes nine percent of all couples in the United States (Simmons & O'Connell, 2003). Furthermore, a look at race and ethnicity show that cohabiting couples are twice as likely as married couples to be interracial or interethnic (Fields, 2004; Landale, Oropesa, & Bradatan, 2006; Simmons & O'Connell, 2003). To not include cohabiting couples in studies of intermarriage clearly biases our sample in important ways. The lack of research on cohabitation has left us with little knowledge of the phenomenon. For the above reasons, the target population for this study was Asian married/cohabiting women. Further, the selection criteria for the study included the following characteristics: (1) female, (2) identified herself as Asian, (3) 18 or older, (4) married or cohabitating with significant others, and (5) residing in the United States. The samples that met the criteria were selected from the NLAAS dataset using four variables: gender, marital status, respondent's race, and spouse's race. Based on the criteria, the total sample size for the current study analysis was $N = 504$.

Sample and Sampling Procedures

Heeringa et al. (2004) detailed the sampling plan for the NLAAS. In brief, the survey populations for the NLAAS study included all Latino and Asian American adults

who resided in households in all 50 states and Washington, DC. Latinos were divided into four strata of interest: Mexican, Puerto Rican, Cuban, and all other Latinos. The Asian American survey population was also stratified based on eligible adults' ancestry or national origin: Chinese, Filipino, Vietnamese, and all other Asians. Specifically, participants described their main ethnic origins as including at least one of the following countries: (a) Afghanistan, (b) Bangladesh, (c) Bhutan, (d) Brunei, (e) Burma or Myanmar, (f) Cambodia, (g) China, (h) Federated States of Micronesia, (i) Guam, (j) Hong Kong, (k) India, (l) Indonesia, (m) Japan, (n) Laos, (o) Malaysia, (p) Mongolia, (q) Nepal, (r) North Korea, (s) Pakistan, (t) Philippines, (u) Singapore, (v) South Korea, (w) Sri Lanka, (x) Taiwan, (y) Thailand, and (z) Vietnam. This stratification of the NLAAS survey populations relied on self-reports by household members at the time of the household screening. In cases where a member of the survey population reported belonging to more than one Latino or Asian American target population, the following order of priority was used to assign individuals to a single group for the purpose of the stratified sample selection: Vietnamese; Cuban; Filipino; Puerto Rican; Chinese; Mexican; other Asian; and other Latino. Institutionalized persons including individuals in prisons, jails, nursing homes, and long-term medical or dependent care facilities were excluded from the study populations. Military personnel living in civilian housing were eligible for the study, but due to security restrictions residents of housing located on a military base or military reservation were excluded. Participants were recruited using two sampling methods: (1) core sampling based on multistage stratified area probability designs, resulting in nationally representative household samples; and (2) high-density supplemental sampling to oversample geographic areas with greater than 5% residential

density for individual national origin groups of interest in the NLAAS. Weighting corrections were constructed to take into account joint probabilities of selection under the different components of the sampling design (Gavin et al., 2009).

Data Collection Procedure

This subsection describes the data collection procedure of the original NLAAS dataset and the application procedure by which access to the secondary data NLAAS was gained.

The data collection of the NLAAS dataset was conducted by the University of Michigan's Institute for Social Research between May 2002 and November 2003. Briefly, a total of 275 interviewers conducted extensive face-to-face interviews with 4,649 eligible adult participants in one of 5 languages (English, Spanish, Tagalog, Vietnamese, and Chinese). The primary mode of survey administration was computer-assisted personal interviewing at the homes of the participants, which was supplemented by telephone interviewing to reduce costs.

The interviewers were recruited and trained considering language preference of household for the NLAAS data collection. The training sessions consisted of five main components: (1) instruction on household eligibility and respondent selection procedures; (2) questionnaire training, which included a section-by-section review of each module of the questionnaire, followed by question and answer sessions and two-hour practice sessions; (3) computer training and practice sessions; (4) review of interview procedures and study materials; and (5) mock interviews in which interviewing and administrative tasks were integrated to model realistic interviewing experiences. To better convey the content and to engage the training participants, trainers used a variety of formats,

including large and small group lectures, round-robin practice sessions, mock interviews and one-on-one help sessions. Participants were given homework assignments, which the trainers reviewed to identify interviewers who were having problems with the computer hardware or software. For later trainings, experienced interviewers served as trainers for the two days of general interviewer training. The new interviewers benefited from the descriptions of the experiences of these interviewers, who were able to provide tested and concrete suggestions on how best to handle all aspects of the job. The NLAAS provided training in sensitivity to cultural, racial, and socioeconomic diversity that would be encountered while conducting face-to-face interviews. Additional training was also provided on how to interview on sensitive or potentially embarrassing topics. Finally, because some of the questionnaire topics covered subjects that could reveal information of potential harm to the respondents or others, interviewers were trained on their legal obligations and on how to handle these rare but critical situations (Heeringa et al., 2004).

The mean interview length was 2.7 hours, and the median interview length was 2.4 hours. At the completion of the interview, participants received a \$50 to \$150 incentive; the amount increased over the data collection time period to increase the response rate (Miscally, 2009). In addition, the NLAAS instrument was translated into Chinese (Mandarin or Cantonese), Tagalog, and Vietnamese (Margarita Alegria et al., 2004). Furthermore, Chinese, Filipino, and Vietnamese participants could complete the interview in English or Chinese (Mandarin or Cantonese), Tagalog, or Vietnamese respectively. The majority (72.00%) of participants in the overall sample completed the interview in English (Takeuchi et al., 2007). In terms of subgroups, English was the language of the interview for 99.00% of "Other" Asians, 87.00% of Filipinos, 47.00% of

Chinese, and 22.00% of Vietnamese. These steps reduced potential selection bias resulting from the exclusion of Asian Americans who did not speak English or spoke English poorly. The NLAAS project involved a significant amount of screening. For the project, 3,620 main respondents and 1,029 second adult interviews were completed. The weighted response rate for NLAAS was 75.7% among the main respondents (77.6% for Latinos, 69.3% for Asians). For second respondents, the final response rate was 80.3% (82.4% for Latinos, 73.7% for Asians) (Heeringa et al., 2004).

Additionally, permission was secured from the University of Georgia Institutional Review Board (IRB) to conduct the current study. After the IRB approval, the researcher submitted an application describing the research proposal, data security plan and academic status as a Ph.D. candidate in order to gain access of the NLAAS data. In the application the chair of the dissertation committee served as principal investigator and the researcher was a supplemental researcher. The application required signed agreement for the use of sensitive data, an individual security pledge, and an approved IRB review document. Once the application was approved the researcher was able to gain access to the data.

Measurement Development

This section elaborates on the specific variables for each attribute, how they were measured, and whether or not they were considered dependent, independent, or control variables. It took several steps to develop the measures. While some NLAAS questions became individual variables, other items contributed to the development of a scale or variable resulting from an algorithm.

Socio-demographic Variables

Socio-demographical variables for Asian women include age, educational level, household income, and employment status. Age was an interval variable with a range of 18 to 95 years. Years of education were an ordinal variable with the values of 1 (0 to 11 years), 2 (12 years), 3 (13 to 15 years), and 4 (16 years or more). Household income was an interval variable with a range of \$0 to \$200,000. Work status was a categorical variable with the values of 1 (employed), 2 (unemployed), and 3 (not in labor force).

Interracial Marriage Status

Interracial marriage status was developed using two variables, participant's race and spouse/partner's race. First, the race/ethnicity was categorized into four groups Asian, Latino, Black, White, and others as shown in Table 2. The respondents who had an Asian spouse/partner were categorized as same-race couples and the respondents who had a spouse/partner of Hispanic, Black, White, or other race were categorized as interracial couples.

Table 2. Racial Categories of Respondent and their Spouse

Respondent's Race		Spouse's Race	
Asian	Vietnamese	Asian	Vietnamese
	Filipino		Filipino
	Chinese		Chinese
	all other Asian		all other Asian
		Hispanic	Cuban
			Puerto Rican
			Mexican
			all other Hispanic
		Black	Afro-Caribbean
			African American
		White	Non-Latino White
		Other race	all others

Intimate Partner Violence

The questions were prefaced with a statement that people handle disagreements in different ways, followed by two stems inquiring whether the respondent's partner ever did any of the following in the course of their current relationship. Respondents were presented with two lists representing (a) minor violence (pushed, grabbed or shoved, threw something, slapped or hit) or (b) severe violence (kicked, bit or hit with a fist, beat up, choked, burned or scalded, threatened with a knife or gun). These indicators of violence were collectively taken from the physical assault items of the Conflict Tactics Scales (CTS), a widely used, valid, and reliable measure of family violence (Straus, 1979; Straus et al., 1996). They rated how often they engaged in any of these behaviors, using a 4-point rating scale (often, sometimes, rarely, never). Responses were also recoded as present (often, sometimes, rarely) or absent (never) to create dichotomous measures of minor and severe violence for the calculation of IPV rate.

Generation

Generation was an ordinal variable based on an algorithm using three variables: age at immigration, country where born, and number of parents who were born in the US. The generation variable has a response of four options: 1 (first generation), 2 (1.5 generation), 3 (second generation), and 4 (third generation). Respondents who were not born in the US and who immigrated to the US at the age of 18 or after were labeled as first generation. Respondents who were not born in the US and immigrated to the US before the age of 18 were labeled as 1.5 generation. Respondents who were born in the US and who had only one or no parents born in the US were labeled as second generation. Respondents who were born in the US and who had both parents born in the

US were labeled as third generation. This algorithm was a modified version of the one that was used by the NLAAS investigators (Gee, Spencer, Chen, Yip, & Takeuchi, 2007).

Table 3. Criteria of Variable ‘Immigration Generation Status’

Generation	Criteria		
	Country where born	Age at immigration	Number of parents who were born in the U.S.
First generation	not born in the US	18 or after	N/A
1.5 generation	not born in the US	before 18	N/A
Second generation	born in the US	N/A	none or one
Third generation	born in the US	N/A	both

Mental Health

Mental health was measured as with a one-item self-rated scale with the response options of 1(poor), 2 (fair), 3(good), 4(very good), and 5(excellent): “How would you rate your overall mental health?”

Gender Roles: Most Responsibility for Chores

In order to measure the rigidity of gender roles, the current study used a proxy variable asking, “who has the most responsibility for doing chores in your household?” This variable (most responsibility for chores) had a response of five options: 1 (only you), 2 (mostly you and sometimes your spouse/partner), 3 (both about the same), 4 (mostly your spouse/partner and sometimes you), and 5(only your spouse). These five options were categorized into three groups: respondent (options 1 and 2), both the same (option 3), and spouse (options 4 and 5).

English Language Proficiency

The English language proficiency scale was used as a proxy to measure the construct of acculturation. This scale assesses respondents' ability to speak, read, and write in English (Felix-Ortiz, Newcomb, & Myers, 1994). Each item has 4-point scale with the possible response range from 1 (poor) to 4(excellent). The items are summed and the higher scores indicate higher level of proficiency. The possible score ranges from 3 to 12.

The following three items were used to measure English Language Proficiency:

1. How well do you speak English?
2. How well do you read English?
3. How well do you write English?

Everyday Discrimination

Everyday discrimination was measured by an existing scale (Williams, Yu, Jackson, & Anderson, 1997). It represented the collection of “routine experiences of unfair treatment” (Margarita Alegria et al., 2004). The nine items were taken from the Detroit Area Study (DAS) (Williams et al., 1997). The scale has been used extensively in the mental health field (Mays & Cochran, 2001; Mays, Cochran, & Barnes, 2007; Mossakowski, 2003). During the interview, the nine items were introduced with the question, “In your day-to-day life how often have any of the following things happened to you?” Each item had a 6-point scale with the following values: 1 (almost every day), 2 (at least once a week), 3 (a few times a month), 4 (a few times a year), 5 (less than once a year), and 6 (never). The items were reverse scored and then summed; higher scores represented higher levels of everyday discrimination. Scores had a possible range of 9 to 54.

The current study was limited in that participants may have underreported everyday discrimination due to recall bias, resulting in a bias toward the null. Drawing from the work of other researchers, S. P. Harrell (2000) noted that individuals tend to identify discrimination accurately. Yet, they may not say anything out of fear of invalidation from others, and they tend to report discrimination when they perceive it to be explicit (versus implicit), heavy (versus light), and directed at their group (versus at themselves).

The items were as follows:

1. You are treated with less courtesy than other people.
2. You are treated with less respect than other people.
3. You receive poorer service than other people at restaurants or stores.
4. People act as if they think you are not smart.
5. People act as if they are afraid of you.
6. People act as if they think you are dishonest.
7. People act as if you are not as good as they are.
8. You are called names or insulted.
9. You are threatened or harassed.

Family Cultural Conflict

Family cultural conflict was an existing scale (Cervantes, Padilla, & Salgado de Snyder, 1991). It represented the “issues of cultural and intergenerational conflict between the respondents and their families” (Margarita Alegria et al., 2004). During the interview, five items were introduced with the statement, “Please tell me how frequently the following situations have occurred to you.” The items were drawn from a subscale of the Hispanic Stress Inventory (HSI) (Cervantes et al., 1991). Cultural specificity of the

HSI has been proven for those of a Hispanic cultural background through extensive psychometric testing (Cervantes et al., 1991). In the NLAAS, five items from the Family/Culture Stress subscale of the HSI were selected to develop the Family Cultural Conflict scale. Higher scores represent greater levels of family cultural conflict as compared to lower scores. Each item had a 3-point scale with the following values: 1 (hardly ever or never), 2 (sometimes), and 3 (often). The items were summed; higher scores represented higher levels of family cultural conflict. Scores had a possible range of 5 to 15. A limitation is that the present study did not find any published articles in which this measure was used with samples of Asian American adults. Thus, whether the measure of family cultural conflict has been validated with this target population is unknown.

The items were as follows:

1. You have felt that being too close to your family interfered with your own goals.
2. Because you have different customs, you have had arguments with other members of your family.
3. Because of the lack of family unity, you have felt lonely and isolated.
4. You have felt that family relations are becoming less important for people that you are close to.
5. Your personal goals have been in conflict with your family.

Friend Support

Friend confident support was measured using a revised version of an existing scale presented by NLAAS investigators who studied Latino Americans, age 18 or older (G. Canino, Vega, Sribney, Warner, & Alegria, 2008; Norah E. Mulvaney-Day, Alegría, &

Sribney, 2007). The items had no introductory statement. The first item had a 5-point Likert scale ranging from 1 (most every day) to 5 (less than once a month), and the other two items had a 4-point Likert scale with the value ranging from 1 (a lot) to 4 (not at all). All the items were reverse scored and then summed; higher scores represented higher levels of friend confidant support. Scores had a possible range of 3 to 13. The friend confidant support scale had a couple of limitations. It was a revised version of an existing scale. Moreover, the present study did not find any published articles in which this measure was used with samples of Asian American adults.

The items were as follows:

1. How often do you talk on the phone or get together with friends?
2. How much can you rely on your friends for help if you have a serious problem?
3. How much can you open up to your friends if you need to talk about your worries?

Family Support

To measure family confidant support, this study used a revised version of an existing scale presented by NLAAS investigators who studied Latino Americans age 18 or older (G. Canino et al., 2008; Norah E. Mulvaney-Day et al., 2007). During the interview, the two items were introduced with the statement, “The next few questions are about your social life not including your husband/wife/partner.” The first item had 5-point Likert scale ranging from 1 (most every day) to 5 (less than once a month), and the other two items had a 4-point Likert scale with the value ranging from 1 (a lot) to 4 (not at all). All the items were reverse scored and then summed; higher scores represented higher levels of friend confidant support. Scores had a possible range of 3 to 13. The family confidant support scale had a couple of limitations. It was a revised version of an

existing scale. Moreover, the present study did not find any published articles in which this measure was used with samples of Asian American adults.

The items were as follows:

1. (How/Not including your (husband/wife/partner), how) often do you talk on the phone or get together with family or relatives who do not live with you?
2. How much can you rely on relatives who do not live with you for help if you have a serious problem?
3. How much can you open up to relatives who do not live with you if you need to talk about your worries?

Ethnic Identity

Ethnic identity was a revised version of an existing scale presented by NLAAS investigators who also looked at Asian Americans ages 18 or older (F. E. Harrell, Lee, Califf, Pryor, & Rosati, 1984) During interviewing, the following items had no introductory statement. The three items had a 4-point likert scale with the value ranging from 1 (very closely) to 4 (not at all). All the items were reverse scored and then summed; higher scores represented higher levels of ethnic identification. Total scores ranged from 3 to 12. A limitation of the ethnic identity measure is that it measured ethnic identity according to a “narrow” concept (Mossakowski, 2003). Thus, participants may have underreported it, resulting in a bias toward the null. In addition, the scale was a revised version of an existing scale, thus comparisons between the present study and other studies should be made with caution.

The items were as follows:

1. How closely do you identify with other people who are of the same racial and ethnic descent as yourself?
2. How close do you feel, in your ideas and feelings about things, to other people of the same racial and ethnic descent?
3. If you could choose, how much time would you like to spend with other people who are of your same racial and ethnic group?

Table 4 presented the overview of all the measures that was used in the current study analyses. The table includes number of items, level of measurements, and possible range.

Table 4. Overview of Measures

Measure	Number of item	Level of measurement	Possible range
Age	1	Interval	18-85
Year of Education	1	Ordinal	1=0 to 11 years 2=12 years 3=13 to 15 years 4=16 or more years
Household Income	1	Interval	\$0-\$200K
Work Status	1	Nominal	1=employed 2=unemployed 3=not in labor force
Region	1	Nominal	1=North 2=Midwest 3=South 4=West
Country of Origin	1	Nominal	1=Vietnamese 2=Filipino 3=Chinese 4=all other Asian
Year in the U.S.	1	Ordinal	1=U.S. Born 2=Less than 5 years 3=5-10 years 4=11-20 years 5=More than 20 years
Age at immigration	1	Ordinal	1=U.S. Born 2=Less than 5 years 3=13-17 years

Country Born	1	Nominal	4=18-34 years 5=35 years 1=United States 2=Others
Number of Parent born in the U.S	1	Ordinal	1=none 2=one 3=two
Generation	1	Ordinal	1=First generation 2=1.5 generation 3=Second generation 4=Third generation
English Proficiency	3	Interval	1-4
Everyday Discrimination	9	Interval	9-54
Acculturative Stress	9	Interval	0-9
Gender Role (Responsible for chores)	1	Nominal	1=Respondent 2=Both the same 3=Spouse/Partner
Frequency Attend Religious Service	1	Ordinal	1=Never 2=Less than once a month 3=1 to 3 times a month 4=about once a week 5=more than once a week
Self-rated Physical Health	1	Ordinal	1-5
Self-rated Mental Health	1	Ordinal	1-5
Marital Satisfaction	1	Ordinal	0-10
Family Support	3	Interval	3-13
Friends Support	3	Interval	3-13
Family Cultural Conflict	5	Interval	1-3
Ethnic Identity	3	Interval	1-4
Interracial Status	1	Nominal	0=have same race spouse/partner 1=have inter-race spouse/partner

Data Analysis

Adjustment for a Complex Survey Sampling Design

For the analysis of the current study, Stata/SE Version 12.0 was used. This software enabled adjustment for the complex sampling design of the NLAAS during the calculation of (a) point estimates and (b) standard errors using Taylor series linearization for hypothesis testing. To adjust for the complex sampling design of the NLAAS, the

beginning of the Stata analysis issued the following program command: “svyset SECLUSTER (pweight = NLAASWGT), strata(SESTRAT)” followed by “svy, subpop(variable):”. The former part of this program command provided information about the primary stage units, strata, and weights. The latter part of the command set a target subpopulation for the analysis of the study. If the present study indicated that the data were unweighted, the Stata analysis did not use the prefix and thus did not adjust for the complex sampling design. In general, the results from statistical testing were “significant” if the p-value was at or below 0.05.

Data analysis and statistical procedure

This section discusses the data analysis plans for the current study. In order to address the research questions mentioned above, the analytic approach to the study involves the following steps: using STATA/SE version 12.0, statistical data analysis entailed three analytic procedures, namely univariate analysis, bivariate analysis and multivariate analysis. The first analytic procedure that was performed was univariate analysis to examine the distribution of cases on a single variable. Frequencies, means, and standard deviation were used to summarize specific variables to shed light on the demographic characteristics of the study population. Also, the analyses allow the answering of Research Question 1 concerning quantifying the IPV rate, both minor and severe, for our study population. Although univariate analysis is useful in describing the properties of single variables, it does not inform us about the connections between the variables (Rubin et al., 2008). To this end, the second analytic procedure was bivariate analysis.

Bivariate analysis examines relationships between two variables (Rubin et al., 2008). Independent t-test, analysis of the variable (ANOVA), Chi-square test, and simple logistic regression were used to answer Questions 2 and 3. Independent t-tests and ANOVA were used to compare the characteristics between Asian women in interracial relationship and those who are in same-race relationship. Chi-square tests were used to assess the difference in IPV rate by Asian women's interracial status. Simple logistic regression was used to evaluate the relationships between each IPV risk factors and IPV in order to gain a preliminary understanding of the relationships. Independent variables were age, education, household income, family support, friend support, immigration generation status, everyday discrimination, acculturation stress, gender role, ethnic identity, interracial status, and dependent variable were minor IPV and severe IPV. Simple logistic regression was chosen because the dependent variables were dichotomous while the independent variables were both continuous and categorical. Logistic regression not only evaluates the relationship between a categorical dependent variable and an independent variable, but assesses how well an independent variable or a set of predictors explain the dependent variable by specifying the probabilities of particular outcomes (Elliott & Woodward, 2007; Mertler & Vannatta, 2002; Pallant & Manual, 2007). The researcher extended the analyses further to investigate the relative contribution of the risk factors on IPV through multivariate regression.

Thus, the third analytic procedure was multivariate analysis to examine the relationship between independent variables and a dependent variable while controlling for the effects of one or more extraneous or moderating variable(s) (Rubin et al., 2008). Multiple logistic regressions were performed to answer Question 4, 5, and 6. First, age,

education, household income, family support, friend support, immigration generation status, everyday discrimination, acculturation stress, gender role, ethnic identity, interracial status were entered as independent variables, into a multiple logistic regression model to assess their relative influence on IPV among Asian women. Then, two multiple logistic regressions were performed separately to see if there is a difference in the risk factors by Asian women's interracial status, those who are in interracial relationship and those who are in intra-racial relationship, on total IPV. Lastly, three consecutive multiple logistic regressions were performed to assess and to compare the contribution of each set of predictors on IPV experience of Asian women. Socio-demographic factors were entered in the first model; immigration related factors were added in the second model; interracial relational factor was added in the third model.

Limitations of the Study

This subsection discusses the limitations of the secondary data analysis study. In terms of the internal validity issue, the NLAAS study is limited by the fact that respondents are only surveyed at one point in time. It is impossible to establish causality with these cross-sectional data. Also, there are several issues regarding external validity that may need to be examined, despite the fact that the NLAAS data were collected by a prestigious research institute with experts from various fields using complex and rigorous sampling methods. The relatively low response rate may have caused the non-response bias. The weighted response rate for Asians on the NLAAS was 69.3% for the main respondents and 73.7% for second respondents (Heeringa et al., 2004). These are below the 80.00% threshold recommended by the Office of Management and Budget (2006). In addition, the NLAAS sampling procedure had limitations that could have affected the

distributions of the demographic characteristics of the Asian American sample. Another limitation is that, the long interview time, an average of 2.7 hours, and the sensitivity of the questions may have caused participants to experience burden and that may have caused bias in their responses. Whether the measures have adequate validity and reliability among Asian American target populations is unknown. A literature review found no studies examining some of the measures used in the current study among Asian American adults. In an attempt to reduce the potential selection bias, the NLAAS instruments were translated and interviews were available in five different languages. Nonetheless, there were still other Asian Americans, such as Koreans, who did not speak English or any of the languages that were available for the study, and these Asian Americans could not be included in the study. Lastly, after the first six months of data collection, the NLAAS began sampling two individuals in the same household. Thus, of the 2,095 participants, 484 were the second respondent in a household. This decision could have led to intrahousehold correlation, which will be examined in analyses outside the current study. The NLAAS database did not contain an indicator showing which participants came from the same households; thus, the current study's analysis could not be adjusted for this bias (Miscally, 2009).

Conclusions should be considered within the context of the limitations described above. Still, the present study hopefully provides an initial understanding of the risk and protective factors for intimate partner violence among intermarried Asian women.

CHAPTER 4

RESULTS

This chapter contains five sections. The first section presents a descriptive analysis: the characteristics of the study sample and the estimation of the rate of intimate partner violence. The second section reports bivariate analysis: the characteristics comparison of the two group interracial relationship and same-race relationship, the simple logistic regression of each IPV risk factors on minor and severe IPV. The third section presents multivariate analysis: an multiple logistic regression of the IPV risk factors on intimate partner violence among Asian women, multiple logistic regressions of IPV risk factors on IPV by Asian women's interracial relational status, model comparison of the influence of three factors, socio-demographic factors, immigration factors, and interracial relationship status, on IPV. The last section presents the research questions outlined in chapter three with the respective results.

The main study variables were divided into three categories (blocks): (1) Demographical variables – age, education, and household income; (2) Minority immigrant related factors, in particular, family and friends support, generation, everyday discrimination, acculturative stress, and gender role, and ethnic identity; (3) Interracial relationship related factor – interracial relationship status. In some cases, continuous variables were collapsed into categories to allow for a more meaningful representation of the patterns in the data (Babbie, Halley, & Zaino, 2007). STATA was used to run the

analyses. The conventional alpha value of .05 was used to evaluate statistical significance.

Descriptive Analysis

Characteristics of the Study Sample

Table 5 presents demographic characteristics of the study sample, which were Asian married or cohabiting women living in the U.S. The average age was 42 years (SE=1.31) with a range of 18 to 85. Regarding educational attainment, 82% were at least high school graduates, and 64% were educated at the college level or higher. The participants with household yearly income of less than \$20,000 were 36.23%, \$20,000 to less than \$40,000 were 26.16%, \$40,000 to less than \$60,000 were 16.42%, and \$60,000 or over were about 11.29%. With regard to employment status, 56.56% of the

Table 5. Demographic Characteristics of The Study Sample

Variable	Value	Unweighted Count	Estimated Proportion (SE)	Mean (SE)
Age	Range 18 - 85			41.78 (1.31)
Year of Education	0 -11 years	123	16.99% (.032)	
	12 years	134	19.12% (.017)	
	13-15 years	167	22.35% (.018)	
	16+ years	305	41.54% (.044)	
Household Income	Range \$0 – \$200K (Topcode)			39,813.47 (2491.96)
	\$0 – \$19,999	290	36.23% (.039)	
	\$20K – \$39,999	186	26.16% (.024)	
	\$40K - \$59,999	104	16.42% (.019)	
	\$60K - \$79,999	72	9.88% (.014)	
	\$80K and higher	77	11.29% (.020)	
Work Status	Employed	430	56.56% (.013)	
	Unemployed	56	7.57% (.006)	
	Not in Labor	243	35.87% (.013)	
Region	North	53	15.88% (.016)	
	Midwest	27	7.00% (.025)	
	South	55	9.44% (.017)	
	West	594	67.68% (.030)	

participants reported that they were employed, 7.57% reported unemployed, and 35.87% reported not in the labor force. The vast majority of the study participants resided in the

West (67.68%), followed by the North (15.88%) region, the South (9.44%), and the Midwest (7%).

In addition to the demographical characteristics shown above, Table 6 provided characteristics related to immigration and interracial relationship status.

Immigration Status. With regard to country of origin, 30% of the participants were Chinese, followed by Filipino (22%) and Vietnamese (14%), and 33% were from another Asian ancestry. More than 65% of the participants were either born in the U.S. or had resided more than 20 years in the U.S., 19% had resided in the U.S. for 11 to 20 years, and only 15% had resided in the U.S. for less than 10 years. Approximately 64% of the participants immigrated to the U.S. after they became adults, and 36% of the participants were either born in the U.S. or immigrated to the U.S. before they became 18. Only 20% of the participants were born in the U.S., while the other 80% were born outside the U.S.

Immigration Generation Status. The majority of the participants (80%) were either first or 1.5 generation, meaning that they were not born in the U.S. and immigrated to the U.S. at some point in their lives, and only 20% were second or third generation, meaning that they were born in the U.S. and at least one of the partners were born in the U.S.

English Proficiency. Only about 16% of the participants considered their English speaking, reading, and writing skill to be poor, and the rest of the participants considered their English skill to be at least at a fair level. The average English proficiency score was 2.80, which is close to good level.

Everyday Discrimination. In regard to the question of how frequently participants

experience discrimination in a possible range of 9 to 54, the mean score was 15.65 (SE=0.31), which indicates that the average participant experienced discrimination less than once a year for some of the question items. The internal consistency of the everyday discrimination scales was adequate. Table 8 showed that Cronbach's alpha for the scale was 0.8972. The distribution of the everyday discrimination scale was non-normal; skewness was 1.10, indicating the distribution was skewed to the right and the kurtosis was 5.09, indicating a sharper peaked distribution. Everyday discrimination has been used by other studies, including other NLAAS analyses. These studies focus on adults ages 18 or older, Asian Americans ages 18 or older, and Filipino Americans ages 18 or older (Gee, Delva, & Takeuchi, 2007; Gee, Ryan, Laflamme, & Holt, 2006; Gee, Spencer, et al., 2007; Ronald C Kessler, Mickelson, & Williams, 1999; Mossakowski, 2003; Noh & Kaspar, 2003). In the current study, everyday discrimination had a positive, moderate relationship with perceived discrimination ($r = 0.4373$, $p = 0.000$). Other research has found a similar association. For example, the correlation between lifetime major discrimination and chronic daily discrimination was positive and moderate for a study examining adult ages 18 or older ($r = 0.44$, $p < 0.001$) (Ronald C Kessler et al., 1999).

Acculturative Stress. Acculturative stress was a 9 items scale. The mean score was 2.52 (SE=0.111) in a possible range of 0 to 9. The internal consistency reliability of the scale was almost adequate (Cronbach's alpha = 0.69). The distribution of the scale was close to normal. The skewness was 0.92 and the kurtosis was 3.59.

Gender role. The question of who is mostly responsible for chores was asked as a proxy variable to measure gender role rigidity. Over 60% of the Asian married/cohabiting

women reported that they do most of the chores in their household between themselves and their spouse/partner, and 35% of the participants indicated that the respondents and their husband do the chores evenly. Only a small portion of the participants, less than 1%, reported that their spouses/partners are mostly responsible for the chores in their household.

Frequency Attend Religious Service. Only 18% of the participants never attended religious service, and among the 82% who attended religious services, 43% of the participants attended religious service at least once a week.

Self-rated Physical Health. Approximately 80% of the participants rated their own physical health as good or better, and about 20% of them rated their physical health as less than good (fair or poor).

Self-rated Mental Health. Regarding mental health, only 12% of the participants rated their mental health as poor or fair, and the majority (88%) rated their own mental health as good or better.

Marital Satisfaction. In a possible range of 0 to 10, less than 3% of the participants rated their current marriage/relationship as less than 5, and over 80% of the participants rated their current marriage/relationship as 8 or higher. The average score was 8.54 (SE=0.122).

Family Support. Family support was a 3-items scale. The mean score was 9.01 (SE=0.14) in a possible range of 3 to 13, and Cronbach's alpha for the scale was 0.713. Skewness was -0.40, indicating the distribution was slightly skewed to the left, and the Kurtosis was 2.27, indicating that the central peak was slightly lower than the normal distribution. Family support has been used by other NLAAS analyses focusing on Latino

Americans ages 18 or older (Glorisa Canino, Vega, Sribney, Warner, & Alegría, 2008; Norah E Mulvaney-Day, Alegria, & Sribney, 2007). Mulvaney-Day, Alegria, & Sribney (2007) found a positive and significant association between family support and friends support ($r = 0.28$, $p < .001$). Likewise, the current study found a positive and significant association between family support and friends support among Asian Married/cohabiting females ($r = 0.45$, $p = .000$).

Friends Support. Friends support was a 3-items scale, and the mean score was 8.79 (SE=0.12) in a possible range of 3 to 13. The internal consistency reliability was adequate (Cronbach's alphas = 0.770). The distribution of the scale was slightly skewed to the left, and the central peak was slightly lower than the normal distribution (skewness = -0.29, kurtosis = 2.11). Friend support has been used by other NLAAS analyses focusing on Latino Americans ages 18 or older (Glorisa Canino et al., 2008; Norah E Mulvaney-Day et al., 2007). Mulvaney-Day, Alegria, & Sribney (2007) found a weak and non-significant relationship between friend support and family cultural conflict among a sample of Latino Americans ages 18 or older ($r = -0.01$). Likewise, the current study found a weak and non-significant relationship between friend support and family cultural conflict among Asian Married/cohabiting females ($r = 0.05$).

Family Cultural Conflict. Table 6 presents the descriptive statistics for the family cultural conflict scale, which has 5 items with a mean score of 1.28 (SE=0.017) in a possible range of 1 to 3. Internal consistency of the scale was good (Cronbach's alpha=0.80); however, the distribution was non-normal (skewness=1.76, kurtosis=5.92).

Ethnic Identity. Ethnic identity was a 3-items scale with a mean score of 3.35 (SE=0.026) in a possible range of 1 to 4. The Cronbach's alpha for the scale was 0.722,

which was acceptable. The distribution was skewed to the left, and the central peak was higher and sharper than the normal distribution (skewness=-1.04, kurtosis=4.10).

Table 6. Immigration and Interracial Relationship Status-related Characteristics of the Study Sample

Variable	Value	Unweighted count	Estimated Proportion (SE) (Weighted)	Mean (SE)
Country of Origin	Vietnamese	188	14.36% (.015)	
	Filipino	177	22.48% (.026)	
	Chinese	211	30.21% (.036)	
	All Other Asian	153	32.94% (.021)	
Years in the U.S.	U.S. Born	251	40.99% (.045)	
	Less than 5 years	62	6.75% (.016)	
	5-10 years	72	8.89% (.015)	
	11-20 years	140	18.88% (.029)	
Age at Immigration	More than 20 years	202	24.49% (.021)	
	U.S. Born	140	19.88% (.026)	
	Less than 12 years	76	12.21% (.008)	
	13-17 years	34	3.74% (.006)	
Country Born	18-34 years	329	44.16% (.021)	
	35 + years	150	20.01% (.011)	
	United States	140	19.88% (.026)	
Number of Parents born in the U.S.	Other	589	80.12% (.026)	
	None	634	86.28% (.015)	
Generation	One	38	5.56% (.006)	
	Two	56	8.16% (.012)	
	First generation	329	44.16% (.021)	
English Proficiency	1.5 generation	260	35.96% (.013)	
	Second generation	86	12.00% (.019)	
	Third generation	54	7.88% (.011)	
	Range 1-4	727		2.81 (0.058)
Everyday Discrimination	Range 9-54	729		15.65 (0.312)
	Range 0-9	476		2.52 (0.111)
Acculturative Stress	Respondent	300	61.42% (.018)	
	Both the same	185	34.68% (.021)	
	Spouse/Partner	21	0.39% (.011)	
Gender Role (Responsible for chores)	Never	103	17.62% (.026)	2.93 (0.084)
	Less than once a month	184	26.42% (.021)	
	One to three times a month	77	0.14% (.016)	
	About once a week	181	29.18% (.025)	
Frequency Attend Religious Services	More than once a week	72	12.77% (.014)	
	Range 1-5	729		3.40 (0.074)
	Poor	28	2.59 (.008)	
	Fair	118	17.02 (.020)	
	Good	246	34.45 (.014)	
Self-rated Physical Health	Very Good	224	30.01 (.012)	
	Excellent	113	14.93 (.020)	
	Range 1-5	729		3.72 (0.057)
	Poor	17	1.68 (.006)	
Self-rated Mental Health	Fair	76	10.42 (.012)	
	Good	207	28.84 (.017)	

	Very Good	241	32.67 (.014)	
	Excellent	188	26.37 (.021)	
Marital Satisfaction	Range 0-10	502		8.54 (0.122)
Family Support	Range 3-13	724		9.01 (0.136)
Friend Support	Range 3-13	724		8.79 (0.124)
Family Cultural Conflict	Range 1-3	727		1.28 (0.017)
Ethnic Identity	Range 1-4	728		3.35 (0.026)

Estimated Proportion of Asian women in the U.S. population

Table 7 described the estimated proportion of Asian women in the U.S. population by IPV rate. According to this study results more than 10% of Asian married/cohabiting women living in the United States have experienced minor IPV in their lifetime, and roughly 2% of the Asian married/cohabiting women living in the United States have experienced severe IPV in their lifetime.

Table 7 Estimated Proportion of Asian women in the U.S. population by IPV rate (N=505)

Type of IPV	Design <i>df</i>	Unweighted count	Estimated Proportion (Weighted)	Linearized SE	<i>CI</i> _{.95}	DEFF	DEFT (Design Effect)
Minor IPV	24	59	10.53%	.024	(.0563, .1542)	1.75	1.32
Severe IPV	24	10	1.71%	.005	(.0052, .0290)	0.57	0.75
Total IPV	24	59	10.53%	.024	(.0563, .1542)	1.75	1.32

Table 8 described the estimated proportion of Asian women in the U.S. population by couples' racial composition. The estimated proportion of Asian wife & Asian husband couples were roughly 70% out of all Asian marriage/cohabiting couples in the U.S. And the second largest group was Asian wife & other race husband (16.29%). Asian wife & White husband comprised 9.99%, followed by Asian wife & Black husband (3.79%) and Asian wife & Hispanic husband (0.18).

Table 8 Estimated Proportion of Asian women in the U.S. population by couple's racial composition (N=506)

Spouses' Race	Design <i>df</i>	Unweighted count	Estimated Proportion	Linearized SE	<i>CI</i> _{.95}	DEFF	DEFT (Design Effect)
Asian	24	373	69.75%	.031	(.6338, .7610)	1.31	1.14
Hispanic	24	1	0.18%	.002	(-.0019, .0055)	.52	.73
Black	24	10	3.79%	.006	(.0265, .0492)	.24	.49
White	24	57	9.99%	.014	(.0720, .1278)	.59	.76
Others	24	65	16.29%	.027	(.1072, .2185)	1.55	1.24

Table 9 Independent Variables Scales' Reliability

Scale	Cronbach's Alpha	N of Items
Family Support	0.7129	3
Friends Support	0.7701	3
Language Proficiency	0.9655	3
Perceived Discrimination	0.8407	3
Social Desirability	0.7334	10
Family Pride	0.9080	7
Family Cohesion	0.8060	3
Everyday Discrimination	0.8972	9
Acculturative Stress	0.6878	9
Ethnic Identity	0.7221	3
Family Cultural Conflict	0.8003	5

Bivariate Analysis

In order to examine the difference in IPV rate by interracial status, chi-square tests were conducted. Table 10 showed the results of the cross-tabulation between interracial status and minor IPV. Although a larger percentage of participants who had an interracial spouse/partner had experience minor IPV, the chi-square test was not significant, $X^2(1)=7.46$, $F(1,24)=2.53$, $p=0.1248$. Table 11 showed the results of the cross-tabulation between interracial status and severe IPV. The results showed there was no relationship between interracial status and minor IPV, $X^2(1)=0.76$, $F(1,24)=0.44$, $p=0.5113$.

Table 10. Cross-tabulation of Minor Interracial Partner Violence by Interracial Relational Status

Interracial Relational Status	Proportion (SE)		Total
	Minor IPV Not occurred	Minor IPV Occurred	
		N	
	90.94% (.0215)	9.06% (.0215)	100%
	n=336	n=36	n=372
Interrace	86.09% (.0419)	13.91% (.0419)	100%
	n=110	n=23	n=133
Total	89.47% (.0237)	10.53% (.0237)	100%
	n=446	n=59	n=505

Pearson: Uncorrected $\chi^2(1)=7.4565$, $F(1,24)=2.5299$, $p=0.1248$

Table 11. Cross-tabulation of Severe Interracial Partner Violence by Interracial Relational Status

Interracial Relational Status	Proportion (SE)		Total
	Severe IPV Not occurred	Severe IPV Occurred	
		N	
Same-race	98.49% (.0074)	1.51% (.0074)	100%
	n=366	n=6	n=372
Interrace	97.83% (.0066)	2.17% (.0066)	100%
	n=128	n=4	n=132
Total	98.29% (.0058)	1.71% (.0058)	100%
	n=494	n=10	n=504

Pearson: Uncorrected $\chi^2(1)=0.7594$, $F(1,24)=0.4445$, $p=0.5113$

Comparison of the characteristics of Asian women in intra-racial relationships and Asian women interracial relationships

Table 12 presented the results comparing the characteristics between the two groups, Asian women in same-race relationships and Asian women in interracial relationships. The t-test and chi-square analyses were conducted to determine the group differences between the two groups. First, there were significant group differences in age; the results showed that the women in a same-race relationship were significantly older than the women in an interracial relationship ($t=5.23$, $p=.000$). Second, a chi-square analysis found a significant difference in education between the two groups ($X^2(3)=$

32.88, $p = .035$). More women in interracial relationships had an education level of college or below, while more women in same-race relationships had an education level of graduate school or higher. Third, in terms of work status, there were significant group differences between the two groups. Statistically, more women in same-race relationships were employed than women in interracial relationships, while more women in the interracial women were unemployed or not in the labor force ($X^2(2)=39.36, p=.003$). Fourth, concerning self-rated physical health and self-rated mental health, women in interracial relationships scored significantly higher in both physical and mental health. Fifth, regarding family and friends support, the results showed that women in interracial relationships were getting significantly more support from both family and friends. Sixth, in terms of country of origin, more women from Vietnamese, Filipino and Chinese tends to be in a same-race relationship while more women from “all other Asian” tend to be in the interracial relationship. Regarding generation, significantly more women in the same-race relationship were first or 1.5th generation and more women in the interracial relationship were second or third generation. In terms of English proficiency, the results revealed that women in the interracial relationship have more proficiency in English than the women in the same-race relationship. Lastly, regarding everyday discrimination, women in the interracial relationship scored higher than the women in the same-race relationship. No statistical differences between the two groups were found for household income, region, frequency attend religious service, marital satisfaction, year in the U.S., acculturative stress, gender role, family cultural conflict, and ethnic identity.

Table 12. Comparison of characteristics between Asian women in same-race relationship and interracial relationship (weighted)

	Women in Same-race Relationship			Women in Interracial Relationship			Significant Test
	N	Estimated proportion (SE)	Mean (SE)	N	Estimated proportion (SE)	Mean (SE)	
Age			45.71 (0.926)			37.20 (2.111)	$t=5.23$ ($p=.000$)
Education							$X^2(3)=32.88$ ($p=.035$)
0 -11 years	66	16.49% (.050)		20	17.37% (.036)		
12 years	57	15.05 (.023)		29	25.67% (.040)		
13-15 years	77	21.97% (.026)		37	24.37% (.024)		
16+ years	173	46.49% (.052)		47	32.58% (.037)		
Household Income			40100.99 (3022.669)			46018.68 (3731.333)	$t=-2.04$ ($p=.053$)
Work Status							$X^2(2)=39.36$ ($p=.003$)
Employed	237	62.9% (.018)		68	44.92% (.056)		
Unemployed	25	6.74% (.007)		11	10.19% (.017)		
Not in Labor	111	30.35% (.019)		54	44.88% (.049)		
Region							$X^2(3)=22.89$ ($p=.417$)
North	26	15.01% (.025)		10	18.32% (.085)		
Midwest	15	8.05% (.034)		4	3.63% (.020)		
South	32	9.58% (.024)		12	16.08% (.025)		
West	300	67.36% (.041)		10	61.97% (.086)		
Frequency Attend Religious Services				7			$X^2(4)=19.15$ ($p=.578$)
Never	53	16.74% (.044)		14	11.17% (.049)		
Less than once a month	76	23.35% (.02)		47	31.23% (.050)		
One to three times a month	32	15.09% (.023)		24	18.2% (.031)		
About once a week	105	32.46% (.044)		31	30.63% (.030)		
More than once a week	31	12.38% (.044)		12	8.77% (.042)		
Self-rated Physical Health			3.27 (.075)			3.70 (.109)	$t=-4.05$ ($p=.000$)

Self-rated Mental Health			3.61 (.081)			4.02 (.080)	$t=-3.10$ ($p=.005$)
Marital Satisfaction			8.50 (.141)			8.61 (.107)	$t=-0.97$ ($p=.340$)
Family Support			2.87 (.067)			3.28 (.059)	$t=-4.16$ ($p=.000$)
Friend Support			2.65 (.085)			3.11 (.089)	$t=-3.07$ ($p=.005$)
Country of Origin							$X^2(3)=369.31$ ($p=.000$)
Vietnamese	132	22.04% (.028)		9	2.58% (.005)		
Filipino	79	22.44% (.042)		38	20.69% (.063)		
Chinese	124	36.73% (.051)		13	8.54% (.019)		
All Other Asian	38	18.79% (.027)		73	68.2% (.059)		
Year in the U.S.							$X^2(4)=14.71$ ($p=.324$)
U.S. Born	128	38.67% (.049)		43	42.4% (.067)		
Less than 5 years	39	8.36% (.025)		6	3.33% (.014)		
5-10 years	35	8.33% (.015)		17	10.57% (.033)		
11-20 years	65	19.12% (.028)		31	20.52% (.063)		
More than 20 years	105	25.52% (.035)		36	23.18% (.036)		
Age at Immigration							$X^2(4)=137.26$ ($p=.002$)
U.S. Born	31	8.79% (.022)		36	24.6% (.070)		
Less than 12 years	23	6.05% (.013)		15	12.87% (.028)		
13-17 years	14	2.77% (.010)		4	3.06% (.016)		
18-34 years	203	54.92% (.019)		70	53.42% (.097)		
35 + years	102	27.48% (.022)		8	6.04% (.024)		
Country Born							$X^2(1) = 63.44$ ($p=.011$)
United States	31	8.79% (.022)		36	24.6% (.070)		
Other	342	91.21% (.022)		97	75.4% (.070)		
Number of Parent born in the U.S							$X^2(2)=138.63$ ($p=.000$)
None	352	95.47% (.011)		98	74.62% (.071)		
One	6	1.04% (.005)		15	10.66% (.029)		
Two	14	3.48% (.010)		20	14.71% (.048)		
Generation							$X^2(3) = 78.96$ ($p=.024$)
First generation	203	54.92% (.019)		70	53.42% (.097)		

1.5 generation	139	36.3% (.030)	27	21.98% (.05)		
Second generation	17	5.31% (.017)	18	11.19% (.028)		
Third generation	14	3.48% (.010)	18	13.41% (.045)		
English Proficiency					2.37 (.091)	3.42 (.052) $t=-10.16 (p=.000)$
Everyday Discrimination					1.63 (.029)	1.84 (.057) $t=-3.68 (p=.001)$
Acculturative Stress					2.63 (.020)	2.30 (.024) $t=0.82 (p=.420)$
Gender Role (Responsible for chores)						$X^2(2)=9.46 (p=.237)$
Respondent	220	59.95% (.021)	80	64.82% (.045)		
Both the same	135	35.17% (.028)	50	33.55% (.041)		
Spouse/Partner	18	4.88% (.014)	3	1.63% (.008)		
Family Cultural Conflict					1.30 (.019)	1.27 (.032) $t=0.80 (p=.432)$
Ethnic Identity					3.35 (.030)	3.38 (.032) $t=-0.90 (p=.376)$
Childhood Abuse						$X^2(1)=3.28 (p=.503)$
Not occurred	147	93.88% (.033)	38	96.81% (.02)		
Occurred	8	6.12% (.033)	2	3.19% (.02)		
Witness of Parental Violence						$X^2(1)=16.92 (p=.088)$
Not occurred	87	99.27% (.005)	30	94.94% (.050)		
Occurred	2	0.73% (.005)	1	5.06% (.050)		

Table 13 and Table 14 presented the simple logistic regression of IPV risk factor on minor and severe IPV. The only statistically significant predictor of minor IPV was everyday discrimination. As everyday discrimination increased, the odds of minor IPV increased by 4.68% (95% CI = .221~.991). However, none of the factors among the predictors were statistically significant in predicting sever IPV.

Table 13 Simple Logistic Regression of IPV Risk Factors on Minor IPV

Predictor	Odds Ratio	Coef.	SE	t	p	95% C.I.
Age	.996	-.003	.008	0.701	0.561	-.156 ~ .281
Education	.989	-.010	.138	-0.08	0.940	-.296 ~ .275
Household income	.773	-.256	.166	-1.55	0.135	-.599 ~ .085
Family Support	.703	-.351	.224	-1.57	0.130	-.814 ~ .111
Friend Support	.987	-.012	.127	-0.10	0.924	-.276 ~ .251
Generation	1.439	.364	.240	1.52	0.142	-.131 ~ .859
Everyday Discrimination **	1.940	.662	.186	3.56	0.002	.278 ~ 1.04
Acculturative Stress	3.422	1.230	1.054	1.17	0.255	-.946 ~ 3.407
Most Responsible for Chores (Both the same)	.344	-1.064	.579	-1.84	0.079	-2.261 ~ .131
Most Responsible for Chores (Husband)	2.129	.755	.785	0.96	0.345	-.864 ~ 2.376
Ethnic Identity	1.400	.336	.289	1.17	0.255	-.259 ~ .933
Interrace Status (Interracial relationship)	1.623	.484	.306	1.58	0.127	-.1486 ~ 1.117

Table 14 Simple Logistic Regression of IPV Risk Factors on Severe IPV

Predictor	Odds Ratio	Coef.	SE	t	p	95% C.I.
Age	1.016	.0166	.019	0.84	0.408	-.024 ~ .057
Education	1.827	.602	.384	1.57	0.130	-.1898 ~ 1.395
Household income	1.547	.436	.343	1.27	0.216	-.271 ~ 1.144
Family Support	.981	-.018	.382	-0.05	0.961	-.807 ~ .769
Friend Support	.751	-.286	.398	-0.72	0.480	-1.109 ~ .536
Generation	.852	-.159	.452	-0.35	0.727	-1.094 ~ .774
Everyday Discrimination	1.543	.434	.391	1.11	0.278	-.372 ~ 1.241
Acculturative Stress	.055	-2.89	3.250	-0.89	0.382	-9.601 ~ 3.817
Most Responsible for Chores (Both the same)						
Most Responsible for Chores (Husband)	1.898	.641	1.177	0.54	0.591	-1.788 ~ 3.070
Ethnic Identity	2.721		1.930	1.41	0.17	.629 ~ 11.768
Interrace Status (Interracial relationship)	1.443	.366	.553	0.66	0.514	-.775 ~ 1.508

Addressing Assumptions

Multicollinearity. Before proceeding to the multiple logistic regression analyses, bivariate correlations among the predictor variables and the values of variance inflation factor (VIF) were checked to examine the existence of multicollinearity. Multicollinearity is a condition where independent variables are strongly correlated with each other. When multicollinearity exists in a model, high standard error and low t statistics, unexpected changes in coefficient magnitudes or signs, or non-significant coefficients despite a high R-square can be detected. Table 15 presented correlations matrixes of the predictors that were included in the study model. Correlation r ranged from 0.002 to 0.447. No variables yielded a relationship greater than .7 suggesting absence of multicollinearity (Tabachnick & Fidell, 2007).

Table 15. Correlation Matrixes of Predictor Variables

	1	2	3	4	5	6	7	8	9	10
1	1									
2	-.026 (.486)	1								
3	.005 (.889)	-.049 (.180)	1							
4	-.090* (.016)	-.031 (.399)	.037 (.315)	1						
5	-.350* (.000)	.027 (.046)	.007 (.842)	.447* (.000)	1					
6	.069 (.062)	-.036 (.331)	-.044 (.236)	.126* (.000)	.224* (.000)	1				
7	-.231* (.000)	.018 (.635)	.003 (.935)	.144* (.000)	.267* (.000)	.180* (.000)	1			
8	.015 (.741)	-.076 (.098)	.051 (.268)	-.054 (.236)	-.051 (.267)	-.024 (.602)	-.002 (.966)	1		
10	-.019 (.604)	-.006 (.868)	-.029 (.624)	.065 (.076)	.052 (.157)	-.012 (.755)	.023 (.534)	.023 (.613)	1	
11	.264* (.000)	.009 (.847)	-.048 (.284)	.163* (.000)	.248* (.000)	.155* (.000)	.209* (.000)	.088 (.109)	.090* (.042)	1

Note. 1 = age; 2 = household income; 3 = education; 4 = family support; 5 = friends support; 6 = generation; 7 = everyday discrimination; 8 = acculturation stress; 9 = ethnic identity; 10 = interracial status

Another way of checking multicollinearity is to check by running a regression having each of the predictor variables as the dependent against all the other predictors to examine how much of the variable's effect is independent of other predictors. After each regression tolerance values were manually computed using the formula $1-R^2$ and the variance inflation factor (VIF) by $1/\text{tolerance}$. Less than 10 VIF values indicate there are no risks for multicollinearity (Stevens, 2001). As shown on Table 16 all VIF values for the predictors were less than 2, which indicates absence of multicollinearity consistent to the result from the bivariate correlation.

Table 16. Tolerance and VIF

Predictor	Tolerance	VIF
Age	.83665602	1.1952343
Household Income	.94689117	1.0560876
Education	.91486366	1.0930590
Family Support	.69389094	1.4411487
Friends Support	.61670347	1.6215248
Acculturative Stress	.95131302	1.0511787
Generation	.89529307	1.1169527
Everyday Discrimination	.87422491	1.1438704
Ethnic Identity	.86516977	1.1558425
Interracial Relationship Status	.83870393	1.1923159

Skewness and Kurtosis. Table 17 presents skewness and kurtosis statistics for each independent variable. If skewness is positive, the data are positively skewed or skewed right, meaning that the right tail of the distribution is longer than the left. If skewness is negative, the data are negatively skewed or skewed left, meaning that the left tail is longer. The rule of thumb for skewness is that if levels of skew are less than $|2|$, the variable is approximately normally distributed.

The height and sharpness of the peak relative to the rest of the data are measured by a number called kurtosis. Higher values indicate a higher, sharper peak; lower values indicate a lower, less distinct peak. The reference standard is a normal distribution, which

has a kurtosis of 3. A distribution with kurtosis < 3 is called platykurtic; Compared to a normal distribution, its central peak is lower and broader, and its tails are shorter and thinner. A distribution with kurtosis > 3 is called leptokurtic; Compared to a normal distribution, its central peak is higher and sharper, and its tails are longer and fatter. On the basis of this guideline, there is no problematic item in terms of skewness, and everyday discrimination, and ethnic identity had more higher and sharper peaked than the normal distribution (leptokurtic).

Table 17 Independent variables' Skewness and Kurtosis

Predictor	Skewness	Kurtosis
Age	0.54	2.73
Household Income	-0.80	3.83
Education	-0.50	1.82
Family Support	-0.40	2.27
Friends Support	-0.29	2.11
Acculturative Stress	0.92	3.59
Generation	0.95	3.06
Everyday Discrimination	1.10	5.09
Ethnic Identity	-1.04	4.10

Multivariate Analysis

Factors influencing IPV among Asian married/cohabiting women

Due to the small sample size of the occurred cases of sever IPV the researcher was unable to perform multiple logistic regression analysis to analyze the relationship between IPV risk factors and the experience of severe IPV among Asian married/cohabiting women. The rule of thumb of the minimum sample size to conduct logistic regression is at least 10 cases per candidate independent variable (F. E. Harrell et al., 1984). When looking at a binary outcome such as logistic regression, the number of cases represents the number of observations in the rarer of the two binary levels. In the current analysis the outcome variable, the severe IPV's occurrence rate was only less than

2% of the total sample size, which did not meet the minimum requirement of the sample size to conduct the multiple logistic analysis for severe IPV.

Table 18 presents the results of multiple logistic regression analysis analyzed the relationship between IPV risk factors and the experience of total IPV among Asian married/cohabiting women ($F(12, 13)=8.39, df=24, P>F=0.000$).

The result showed that among the predictors included in the model household income, family support, friends support, generation, everyday discrimination, acculturative stress, most responsible for chores: respondent and husband both the same, and ethnic identity were significant predictor of the total IPV among Asian married/cohabiting women.

As household income increased, the odds of total IPV decreased after controlling for the other predictors ($OR=.768, 95\% CI = 0.60, 0.97$). As family support increased, the odds of minor IPV decreased after controlling for the other predictors ($OR=.468, 95\% CI = .221\sim.991$). A 1-unit increase in friends support decreases the odds of minor IPV by 19% after controlling for the other predictors ($95\% CI = 1.139, 3.229$). As generation increased, the odds of total IPV increased after controlling for the other predictors ($OR = 1.482, 95\% CI = 1.016, 2,162$). A 1-unit increase in everyday discrimination the odds of total IPV increase by 2.283 after controlling for the other predictors ($95\% CI = 1.199, 4.348$). Everyday discrimination was a positively significant predictor of total IPV. A 1-unit increase in everyday discrimination increases the odds of total IPV by 228.3% after controlling for the other predictor ($95\% CI = 1.199, 4.348$). Acculturative stress was a significant positive predictor of minor IPV ($OR=21.848, 95\% CI = 2.901, 164.519$). The participants who answers that their husband/partner and she are doing chores equally had

a negatively significant relationship with total IPV. The participants who reported that their husband/partner and she are doing chores equally were 0.169 times less likely to experience total IPV than the participants who reported that she is one who is most responsible with doing chores in her household after controlling for the other predictors (95% CI=0.047, 0.605). Ethnic identity was a significant positive predictor of total IPV. As a level of ethnic identity increased, the odds of experiencing a total IPV increased after controlling for the other predictors (OR=3.601, 95% CI=1.353, 9.583).

Table 18. Multiple Logistic Regression of IPV Risk Factors on total IPV with Asian married/cohabiting women using svy command (n=317), F(12, 13)=8.39, df=24, P>F=0.000

Predictor	Odds Ratio	S.E.	t	p	95% C.I.
Age	1.012	.014	0.88	.388	.982~1.043
Education	.979	.193	-0.11	.916	.651~1.471
Household income*	.768	.088	-2.28	.032	.605~.975
Family Support*	.468	.170	-2.09	.048	.221~.991
Friend Support*	1.918	.484	2.58	.016	1.139~3.229
Generation*	1.482	.271	2.15	.042	1.016~2.162
Everyday Discrimination*	2.283	.712	2.65	.014	1.199~4.348
Acculturative Stress**	21.848	21.372	3.15	.004	2.901~164.519
Most Responsible for Chores: Respondent	Reference Category				
Most Responsible for Chores: Both the same**	.169	.104	-2.88	.008	.047~.605
Most Responsible for Chores: Husband	3.409	2.901	1.44	.162	.588~19.746
Ethnic Identity*	3.601	1.707	2.70	.012	1.353~9.583
Interrace Status (Interracial relationship)	1.603	.612	1.24	.228	.729~3.526
Constants	.000	.000	-4.50	.000	.000~.015

Note. * p<0.05, **p<0.01, ***p<0.001

Dummy variables codes: Most responsible for chores: Both the same (Respondent=0, Both the same=1), Most responsible for chores: Husband (Respondent=0, Husband=1), Interracial Status (Same-race=0, Interracial=1).

Differences in IPV risk factors by interracial status

Table 19 presents multiple logistic regression analysis of IPV risk factors on total IPV among Asian women in intra-racial relationship and Table 20 presents multiple logistic regression analysis of IPV risk factors on total IPV among Asian women in interracial relationship.

Table 19. Multiple Logistic Regression of IPV Risk Factors on total IPV among Asian Women in Intra-racial Relationship using svy command (n=233), F(11, 13)=14.14, df=23, P>F=0.000

Predictor	Odds Ratio	S.E.	t	p	95% C.I.
Age	1.014	.017	0.82	0.421	.978 ~ 1.051
Education	.704	.175	-1.41	0.172	.421 ~ 1.178
Household income	.792	.161	-1.15	0.264	.519 ~ 1.206
Family Support	.419	.246	-1.48	0.153	.124 ~ 1.416
Friend Support*	2.800	1.207	2.39	0.026	1.147 ~ 6.832
Generation*	1.481	.278	2.09	0.047	1.004 ~ 2.184
Everyday Discrimination	1.361	.458	0.92	0.369	.678 ~ 2.731
Acculturative Stress**	27.120	23.408	3.82	0.001	4.548 ~ 161.709
Most Responsible for Chores: Respondent	Reference Category				
Most Responsible for Chores: Both the same**	.105	.073	-3.23	0.004	.024 ~ .445
Most Responsible for Chores: Husband	2.429	2.304	0.94	0.359	.341 ~ 17.292
Ethnic Identity	2.450	1.185	1.85	0.077	.900 ~ 6.667
Constants	.005	.009	-3.25	0.004	.000 ~ .154

Note. * p<0.05, **p<0.01, ***p<0.001

Dummy variables codes: Most responsible for chores: Both the same (Respondent=0, Both the same=1), Most responsible for chores: Husband (Respondent=0, Husband=1).

The analysis with the Asian women intra-racial relationship showed that friends support, generation, acculturative stress, and gender role (most responsible for chores: both the same) were significant predictor of the IPV experience. As friend support increased, the odds of experiencing IPV increases after controlling for the other predictors (OR=2.8, 95% CI=1.147, 6.832). As generation increased, the odds of minor IPV decreased after controlling for the other predictors (OR=1.481, 95% CI = 1.004, 2.184.). As acculturation stress increased, the odds of total IPV increased after controlling for the other predictors (OR = 27.120, 95% CI = 4.548, 161.709). While the odds ratio is statistically significant, the confidence interval suggests that the magnitude of the effect could be anywhere from a 4.5-fold increase to a 161.7-fold increase. A larger study is needed to generate a more precise estimate of effect. Asian women who do household chores equally with their husbands are 90% less likely to experience IPV than Asian women who do household chores mostly by themselves, adjusted for other predictors

(OR=.105, 95% CI = .024, .445).

The analysis with the Asian women in interracial relationship showed that everyday discrimination was the only significant predictor of the IPV experience. When holding all other variables constant, for each unit increase in everyday discrimination the odds of experiencing IPV increased by 349.7% (95% CI=1.335, 9.158). However, it should be noted that this analysis may not had enough statistical power due to the relatively small sample size of the Asian women in interracial relationships. Thus, this association should be interpreted with caution.

Table 20. Multiple Logistic Regression of IPV Risk Factors on total IPV among Asian Women in Interracial Relationship using svy command (n=84), $F(11, 7)=3.66$, $df=23$, $P>F=0.047$

Predictor	Odds Ratio	S.E.	t	p	95% C.I.
Age	1.018	.0256	0.74	0.471	.966 ~ 1.074
Education	1.708	.602	1.52	0.147	.812 ~ 3.595
Household income	.931	.225	-0.29	0.775	.559 ~ 1.553
Family Support	.460	.227	-1.57	0.136	.162 ~ 1.308
Friend Support	.967	.376	-0.09	0.933	.425 ~ 2.197
Generation	1.700	.583	1.55	0.140	.824 ~ 3.506
Everyday Discrimination*	3.497	1.595	2.74	0.014	1.335 ~ 9.158
Acculturative Stress	38.417	132.394	1.06	0.305	.0267~55234.29
Most Responsible for Chores: Respondent	Reference category				
Most Responsible for Chores: Both the same	.208	.259	-1.26	0.224	.0150 ~ 2.874
Most Responsible for Chores: Husband	5.433	9.960	0.92	0.369	.113 ~ 259.975
Ethnic Identity	4.517	3.556	1.92	0.072	.858 ~ 23.777
Constants	.000	.000	-2.23	0.040	.000 ~ .566

Note. * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Dummy variables codes: Most responsible for chores: Both the same (Respondent=0, Both the same=1), Most responsible for chores: Husband (Respondent=0, Husband=1).

Comparison of the models by adding immigration and interracial status factors

The next analyses involved comparison of the three models in order to evaluate which model better fit and which model better predicts IPV among Asian women. Due to the small sample size, of the occurred incident cases in severe IPV the researcher were unable to perform the analyses of interracial Asian women risk factors separately on

Table 21. Comparison of the three multiple logistic regression models for Interracial Asian Women Risk Factors on total IPV using pweight with robust cluster command

Predictor	Odds Ratio	Robust S.E.	z	p	95% C.I.
Model 1 (Control Variables) N= 482, Pseudo R ² = 0.0137					
Age	.998	.001	-0.66	0.507	.995 ~ 1.002
Education**	1.000	.074	-2.65	0.008	.639 ~ .935
Household income	.773	.033	0.03	0.977	.936 ~ 1.069
Model 2 (Adding Minority Immigration factors) N= 318, Pseudo R ² = 0.2185					
Age	1.012	.016	0.75	0.453	.980 ~ 1.045
Education	0.955	.135	-0.32	0.748	.722 ~ 1.262
Household income*	.788	.057	-3.23	0.001	.682 ~ .910
Family Support***	.465	.108	-3.28	0.001	.294 ~ .735
Friend Support***	2.009	.440	3.18	0.001	1.306 ~ 3.089
Generation**	1.534	.136	4.80	0.000	1.288 ~ 1.826
Everyday Discrimination***	2.393	.795	2.63	0.009	1.248 ~ 4.591
Acculturative Stress*	21.020	26.666	2.40	0.016	1.749 ~ 252.608
Most Responsible for Chores (Both the same)***	.165	.015	-	0.000	.136 ~ .199
Most Responsible for Chores (Husband)	3.305	3.572	1.11	0.249	.397 ~ 27.492
Ethnic Identity***	3.840	1.580	3.27	0.001	1.713 ~ 8.604
Model 3 (Adding Interracial Relational factor) N= 317, Pseudo R ² = 0.2232					
Age	1.012	.020	0.62	0.402	.972 ~ 1.054
Education	1.034	.191	0.18	0.876	.720 ~ 1.486
Household income***	.763	.055	-3.69	0.009	.662 ~ .881
Family Support**	.461	.103	-3.43	0.001	.296 ~ .717
Friend Support***	2.114	.276	5.73	0.000	1.636 ~ 2.731
Generation***	1.554	.173	3.95	0.000	1.248 ~ 1.934
Everyday Discrimination***	2.612	.512	4.89	0.007	1.778 ~ 3.837
Acculturative Stress*	20.135	26.858	2.25	0.029	1.474 ~ 275.027
Most Responsible for Chores (Both the same)***	.1542	.010	-26.95	0.000	.134 ~ .176
Most Responsible for Chores (Husband)	2.717	2.843	0.96	0.242	.349 ~ 21.121
Ethnic Identity***	3.206	.822	4.54	0.001	1.939 ~ 5.301
Interrace Status (Interracial relationship)	1.501	.417	1.46	0.143	.871 ~ 2.588

minor and severe IPV. Model 1 includes coefficients for socio-demographic factors alone; Model 2 adds minority immigration factors from Model 1; Model 3 includes socio-demographic and minority immigration factors as well as interracial relational factor. Among the socio-demographic factors included in Model 1 – age, education, and household income – only education was significant predictor of the total IPV. The pseudo R² for the model 1 was .0137. When the immigration factors – family support, friends

support, generation, everyday discrimination, acculturative stress, most responsible for chores, and ethnic identity – were added to the Model 1, household income, family support, friends support, generation, everyday discrimination, acculturative stress, most responsible for chores: both the same, ethnic identity were significant predictor of the total IPV. The pseudo R^2 for the Model 2 was .2185 and there was a significant increase in Pseudo R^2 when immigration factors were added from the Model 1. However, there was only a small increase in Pseudo R^2 when the interracial relational factor was added from the Model 2. The Pseudo R^2 of the full model, Model 3, was .2232. The results showed that immigration related factors better predicted IPV among Asian women yet interracial relational factor had little influence on IPV

Summary of the Results

Based on each of the research questions, various hypotheses were tested for each of the models. This Table 21 presents each research question and summarizes the results from the analyses.

Table 22. Summary of the Results

Research Questions	Results
Question 1: How prevalent is IPV (minor and severe) among Asian women in an interracial relationship?	Minor IPV rate was 10.53% and severe IPV rate was 1.71%.
Question 2: Are there differences in IPV rate (minor and severe) between Asian women in interracial relationships and those in same-race relationships?	IPV rates were not significantly different between Asian women in same-race relationship and Asian women in interracial relationship for both minor and severe IPV.
Question 3: What are characteristics of Asian women in the interracial relationship like in comparison to those of Asian women in same-race relationships?	Asian women in interracial relationships were younger, were more educated in high school and college level, were less likely to be in the workforce, had higher self-rated physical and mental health, had more family and friends support, were more likely to immigrated in younger age, were more likely to born in the U.S., more likely to have more parents born in the U.S., more likely to be a later immigration generation, more proficient in English, and more likely to be discriminated than Asian women in same-race relationship.
Question 4: Which factors (age, household income, education, family support, friends support, immigration generation status, everyday discrimination, acculturative stress, gender role, ethnic identity, interracial relationship status) influence IPV among Asian women?	Household income, family support, friend support, generation, everyday discrimination, acculturative stress, gender role (couple both responsible for chores), and ethnic identity were the predictors for the total IPV among Asian women.
Question 5: How does the IPV risk factors differ from Asian women in interracial relationships and Asian women in intra-race relationships?	Friends support, generation, acculturative stress, and gender role (couple both responsible for chores) were the predictors of total IPV among Asian women in intra-racial relationship and the everyday discrimination were the only predictor of total IPV among Asian women in interracial relationship.
Question 6: How does the prediction of experience of IPV differ when immigration-related factors and an interracial relationship-related factor were added to the model?	There was a significant increase in Pseudo R ² when immigration factors were added from the first model, which only included socio-demographical factors (Model 2). However, there was only a small increase in Pseudo R ² when interracial factor was added from the second model, which included both socio-demographical factors and immigration factors (Model 3).

CHAPTER 5

DISCUSSION AND CONCLUSION

The research on intimate partner violence has striven to provide culturally competent and responsive service for couples with diverse ethnic and cultural backgrounds. Nevertheless, a thorough review of the literature demonstrated that there has been no study assessing IPV among Asian interracial couples. The little empirical research that exists on IPV involving interracial couples has tended to bypass Asian immigrants in the United States. This study was the first to investigate intimate partner abuse in the lives of Asian interracial couples and the first to empirically assess the prevalence and risk factors among Asian interracial couples in the United States at a national level.

The purpose of this study was to investigate the characteristics of Asian intermarried women associated with immigration and IPV-related factors and to determine the IPV risk factors for this population in the United States. Specifically, the study aimed to (a) estimate the prevalence of IPV among Asian women who are intermarried, (b) explore the characteristics of the Asian intermarried women in comparison to Asian intra-married women, and (c) examine the theory-driven and empirically based IPV risk factors among these Asian women. This study represents one of the earliest attempts to empirically assess intimate partner abuse among Asian intermarried women, and it is, therefore, largely exploratory.

This chapter first summarizes the major findings and then discusses them in light

of the existing literature. Next, implications for social work practice are suggested. Finally, followed by limitations of the study, recommendations for further research are addressed.

Major Findings and Discussions

Percentages of Asian women in the U.S. by their spousal racial background

Since the current study used NLASS, a national representative dataset, it was possible to estimate the percentages of Asian women in the U.S. population by their spouse's racial background. Out of all Asian women's marriages/cohabitations in the U.S., 70% of women were estimated to have an Asian spouse/partner, while 30% of women had a spouse/partner from a different racial background. In other words, 70% of Asian women were in an intra-racial relationship, while 30% of the women were in an interracial relationship. The study result is consistent with the Pew Research Center's national survey result indicating among all newlyweds in 2008, 31% of Asians married someone whose race or ethnicity was different from their own (Passel et al., 2010).

Another study analyzing U.S. Census Bureau data reported the Asian interracial marriage in the U.S. amounted to 14.6% (National Healthy Marriage Resource Center, 2009). This difference can be understood by the fact that the current study sample including cohabiting couples and the fact that many more Asian women marry out compared to Asian men. In fact, Asians have the largest gender gap of all races when it comes to intermarriage.

More specifically, the present study found that among Asian women in interracial relationships, 16% had a partner of *other race* (other than Asian, White, Black, or Hispanic), 10% had a White partner, 4% had a Black partner, and less than 1% had a

Hispanic partner. These findings are also consistent with the findings from the literature, which indicate that Asians marrying Whites comprise the greatest proportion of intermarriages in the United States, more than the proportion of those marrying Blacks and Hispanics (Hwang, Saenz, & Aguirre, 1997). The high proportion of the *other race* category may be due to the fact that as the intermarriage rate increases, the way offspring from interracial marriages define themselves blurs the lines between racial categories.

IPV rate by severity

The study estimated that more than 10% of Asian married/cohabiting women living in the United States have experienced minor IPV in their lifetime, and roughly 2% of the Asian married/cohabiting women living in the United States have experienced severe IPV in their lifetime. The estimation of the study result was similar to the other national survey that revealed 12.8% of Asian women reporting experience of physical assault by an intimate partner at least once during their lifetime, which is significantly lower than other racial and ethnic backgrounds (Whites - 21.3%; African-Americans - 26.3%; Hispanic, of any race - 21.2%; mixed race - 27.0%; and American Indians and Alaskan Natives -30.7%) (Tjaden & Thoennes, 2000a). Researchers have suggested that the low rate for Asian women may be attributed to underreporting that could arise from language and socio-cultural barriers, rather than low occurrence of domestic violence (Tjaden & Thoennes, 2000a). The claim was supported by other community-based studies that point to the high prevalence of domestic violence which range from 20% to 60% in Asian communities (Shin, 1995; Xu, Campbell, & Zhu, 2001; Yamashiro & Matsuoka, 1997; Yick & Agbayani-Siewert, 1997); 41% to 60% of respondents have reported experiencing domestic violence (physical and/or sexual) during their lifetime

(Asian & Pacific Islander Institute on Domestic Violence, 2005). It is estimated that one out of four families in Asian communities in the U.S. are affected by domestic violence (Furiya, 1993). The low incident of IPV reported in the current study may also be due to underreporting rather than the low occurrence of domestic violence. This may be especially true because of the way the IPV was measured in this study; the modified and simplified version of the Straus's Revised Conflict Tactics Scales (CTS2), which only includes physical abuse and only measures the severity and frequency at the ordinal level, was used to measure IPV.

Difference in IPV rate between Asian women in intra-racial relationship vs. interracial relationship

An interesting finding in this study was that there are no difference in the intimate partner violence rate between Asian women in a same-race relationship and Asian women in an interracial relationship in their IPV experience, both minor and severe. As discussed in chapter two, although not extensively, only a few pieces of scholarly literature addressed intimate partner violence among interracial couples in compared to intra-racial couples. Contrary to the findings from the current study, previous studies have suggested that interracial couples are at increased risk for IPV in comparison to intra-racial couples. However, it is important to note that in most of the previous comparison studies of the IPV rate between the intra-racial and interracial relationship, Asian was excluded from the sample or not specified as an independent racial group (e.g., categorized as minority racial group). It may be that Asian interracial couples have different patterns from other racial subgroups and have their own unique aspects with regard to IPV experiences. The present study result implies that previous studies may

have oversimplified this comparison by not giving attention to the specific racial characteristics of couples.

Moreover, when we take a close look at the other interracial studies of IPV, which most did not include Asian in their samples, similar patterns from this present study result were found. In a counter intuitive manner, the result of this study is not contrary to research results reported in the literature. Most recently, Chartier and Caetano (2012) reported the prevalence rate for any occurrence of IPV was highest for interracial couples, followed by Black and Hispanic and then White intra-racial couples. However, this result was only true for the mutual violence between the couples. When we set apart the male-to-female partner violence (MFPV) only as the current study did, in fact, interethnic couples had a smaller percentage of intimate partner violence than White and Hispanic intra-racial couples. The Black intra-racial was the only group that had a lower IPV prevalence than the interracial group. These findings suggested the importance of recognizing the differences that existed in complexity of the IPV (e.g., direction, severity, types of partner violence) and in different racial/ethnic pairing. Further research is needed to understand whether the significant trend in IPV exists for those specific conditions.

Comparison of the characteristics of Asian women in intra-racial relationship and Asian women interracial relationship

A few interesting findings were found in assessing the characteristic of interracial couples in comparison to intra-racial couples. Passel and his colleagues (2010) found that younger adults tend to marry out, and the share declines in a linear fashion as the age of the married adult rises. The study result supports the literature in regards to intermarriage's correlation with age. The study found that Asian women in the interracial

relationship tend to be younger than the Asian women in intra-race relationships.

Previous studies have reported that intermarriage is more common among the middle socioeconomic status and among those who are more educated (holding a college degree or higher) (Jacobs & Labov, 2002a; Passel et al., 2010). Higher education likely increases exposure to individuals from other races/ethnicities and to the idea of marriage outside the culture (Jacobs & Labov, 2002a). The present study found that household income among the Asian women in interracial relationships was slightly higher than those in intra-racial relationships yet not statistically significant. Regarding education, more Asian women in interracial relationship received education at the high school and college level but more Asian women in intra-racial relationships received education at the graduate school level. This inconsistency may be due to the fact that Asians have the highest educational attainment level of all racial groups living in the U.S. and the wide variation in socio-economic status among them (Qian & Lichter, 2001). In terms of work status, the study found that significantly more Asian women in intra-race relationships were in the workforce than the Asian women in the interracial relationships.

An unanticipated finding was that, significantly more Asian women in interracial relationships rated their physical and mental health higher than Asian women in intra-racial relationships. Another unexpected finding was that contrary to previous research, Asian women in interracial relationships reported to have had significantly more family friend support than Asian women in intra-racial relationships. Previous researchers argued that interracial couples tend to have a lack of formal and informal social support. There is evidence that interracial couples often receive less support from family and friends due to their relationship and are frequently ostracized from their original families

or their partner's families (Gaines, 2001). Baltas and Steptoe (2000) reported that 45% of Turkish-British couples experienced either initial or continual difficulties with acceptance of their marriage from their families. They further stated that not receiving family acceptance had more significant influence on marital dissatisfaction than the influences from the factors associated with acculturative stress (Baltas & Steptoe, 2000). It is difficult to explain results of the current study, but a possible explanation may be the increased acceptance of interracial marriage/relationship as interracial marriages become more prevalent. According to the Pew Research Center survey (Passel et al., 2010) most Americans say they approve of interracial or interethnic marriage and not just in theory, but in their own families. More than six-in-ten respondents said it would be fine if a member of their family told them they were going to marry someone from any of three groups other than their own. However, the survey also found some racial and ethnic differences both in how accepting respondents of different racial and ethnic groups are toward intermarriage and in the degree to which intermarriage to a member of each group is accepted. In a survey that tested openness to interracial marriage of their family member, people had the highest accept towards Asian Americans among the racial minority groups for intermarriage (Passel et al., 2010). The gender differences were not tested but it is more likely that people will be even more accepting toward Asian women as opposed to Asian men as the wide prevalence of intermarriage among Asian women continues.

Research has found that individuals who are more acculturated are more likely to marry outside their racial/ethnic group than those who are less so. Therefore, immigration history, immigration status, and English proficiency are factors that affect intermarriage

rates of different Asian ethnic groups (Hwang et al., 1997). It has been demonstrated that marrying out is much more common among native-born adults than among foreign-born (Le, 2009; Passel et al., 2010), and recent evidence suggested that this was also true for Asians (Le, 2009). Passel et al. (2010) reported that for Asians the disparity among native-born and foreign-born is not as great as other minority racial group, but it was still significant; native-born Asians were nearly twice as likely as those who were foreign born to marry a non-Asian. Also, there were sharp gender differences. Among Asian men, the native born were nearly four times as likely as the foreign born to marry out, while among Asian women, the native born were only about 50% more likely than the foreign born to marry a non-Asian. These earlier findings seem to be consistent with the present findings, which showed that more Asian women in interracial relationship were likely to have immigrated in earlier age, to be born in the U.S, and to be a second or third generation (as opposed to first or 1.5) than the Asian women in an intra-racial relationships.

The ability to speak English also plays a role in the likeliness of an interracial relationship. The study result confirmed the previous research that has shown Asian Americans who speak English fluently are more likely to intermarry (Hwang et al., 1997). Also, the study found that Asian women in interracial relationships were experiencing everyday discrimination more frequently than Asian women in intra-racial relationship.

Factors influencing IPV among Asian married/cohabiting women

The current study found that household income, family support, gender role (most responsible for chores: both the same) were negatively associated with IPV experience,

and friends support, immigration generation status, everyday discrimination, acculturative stress, ethnic identity were positively associated with IPV experience among Asian married/cohabiting women. However, interracial status was not statistically significant when holding other risk factors in this model constant.

Differences in IPV risk factors by interracial status

It was interesting to find that the factors, which predict the IPV experience, were quite different for Asian women who are intermarried than with Asian women who are intra-married. For the Asian women who intra-married the data showed that friends support, generation, acculturative stress, and gender role (most responsible for chores: both the same) were significant predictors of the IPV experience, while for the Asian women who intermarried the data showed that everyday discrimination was the only significant predictor of the IPV experience. The findings implies that factors such as immigration status, culture, class, and ethnicity interact with gender to produces a unique set of circumstances that must be addressed to understand how IPV impact ethnic minorities. Considering the fact that Asian women in intra-racial relationship were relatively more recent immigrant than Asian women in interracial relationship it is understandable that acculturative stress and patriarchal Asian cultural have a greater influence on those who are in intra-racial relationship. Regarding the influence of discrimination among Asian women in interracial relationship may be due to that they are be more likely to exposed to the other race and therefore have more chance to experience discrimination. Also, they may be more aware of the issue of racial discrimination.

Models comparison by adding immigration and interracial status factors

Three models were compared to evaluate which model better fit and which model better predicts IPV among Asian women. The study results showed that there was a significant increase in Pseudo R^2 when immigration factors were added from the first model which only included socio-demographical factors. In this model, all of the immigration related factors, family support, friend support, immigration generation status, everyday discrimination, acculturative stress, and gender role were significant predictor of IPV among the Asian women. However, there was only a small increase in Pseudo R^2 when interracial factor was added from the second model, which included both socio-demographical factors and immigration factors. These results suggested that it is the immigration related factors, but not the interracial relational factor, plays a significant explanatory role in predicting IPV experience in Asian women's lives. It may be possible that there are other interracial relational factors, other than the interracial status, that can better predict IPV among Asian women that was not identified in this study.

Implications for Social Work

This study suggests several issues that can be incorporated into social work practice. If these issues can be addressed in further social work practice then this will greatly contribute to the knowledge base about IPV within Asian interracially married/cohabiting women, who were not focused on in previous studies.

As is the case with other social problems, it is appropriate for research and social research practitioners to coordinate their efforts in the realm of IPV. Knowledge and theory propel practice efforts, while the experiences of social workers and other helping professionals furnish data necessary for further inquiry. Recognizing this interrelatedness,

the present theoretical underpinnings of the IPV knowledge base have some intriguing implications for social work practice. These assumptions relate to both the proactive and reactive levels of social work intervention (Dwyer et al., 1995).

While the experience of the Asian and other ethnic groups in America varies according to culture, values, generation, sex, and individual differences, it is clear that the process of acculturation and intermarriage continues at a steadily increasing pace. As interracial marriage increase in the U.S. and people are more accepting towards those marriages, many obstacles have been overcome and barriers broken yet problems remain. The social work practitioner working with individuals, families, and groups must have both expertise and sensitivity to their unique strengths as well as their needs. Research regarding IPV in Asian intermarried couples may contribute to the clinician's ability to isolate specific interventions to serve the needs of this population. In order to design successful prevention and intervention programs, these must be tailored not only to the race of the victims and the offenders but also racial/ethnic composition of the couples (Hattery, 2008).

This study emphasizes the importance of a multidimensional approach in identifying predictors of the incidence of IPV among Asian intermarried women. More attention should be given to clients' cultural characteristics, immigration history, and acculturative stress when clinicians assess Asian intra-married women as their client while discrimination experience needs to be addressed assessing Asian intermarried women as their client in order to explain the causes of IPV and the unique coping behaviors used.

Service providers should acknowledge societal forces that may affect the lives of their minority clients as well as their ability to access resources. Services intending to

address the needs of minority women should attempt to hire staff members that reflect the community, provide language appropriate services, and be open to suggestions from community members concerning ways to make services more accessible (Kasturirangan et al., 2004).

An understanding of the combined impact of racism and sexism on minority women's experiences of domestic violence will result in research that more fully describes women's experiences. Identifying specific aspects of culture and assessing ethnic identification will move research beyond simply grouping people by demographic categories. This knowledge may open opportunities for new prevention and intervention efforts as well as make existing research and services more responsive to women's needs (Kasturirangan et al., 2004).

IPV against women is often experienced within the context of multiple, complex, and competing life issues that confront families grappling with the perils of IPV. One such important life issue is the impact of cultural values, beliefs, rituals, and practices on the prevalence of IPV. Recognizing that IPV affects women of all ages, races, ethnicities, socioeconomic classes, places of origin, acculturative level, discrimination, and gender role it is imperative that social work curricula and education as well as training materials reflect the complex and diverse nature of this major problem frequently addressed by social work practitioners in all fields of practice (Lockhart & Danis, 2010).

Study limitations and Recommendations for the Future Research

The strength of this study is that the findings are based on national representative data, the NLAAS, which was collected by a prestigious research institute with experts

from various fields using complex and rigorous sampling methods. However, like other studies, several limitations need to be considered in this study.

First, one of the weaknesses of this study was that the way in which the outcome variable, intimate partner violence was measured could not include certain aspects of the concept. Basing research on an analysis of data that already exists obviously limits the analysis to what existed previously. Straus's Revised Conflict Tactics Scales (Straus et al., 1996) is one of the most frequently used measurements for identifying intimate partner violence. It measures a total of 39 behaviors and each of these items is divided into five categories: physical assault, injury, psychological aggression, sexual coercion, and negotiation. However, the NLAAS data uses a modified and simplified version of the Straus's CTS2 (Straus et al., 1996). The measure that was used in the current study only includes physical assault among the five categories of the full version of CTS2. The study measurement lists two sets of behaviors by severity, minor and severe, and asks how often did they experience those listed behaviors. Therefore, it is recommended that future studies employ measures that can include all aspects of IPV and can capture the complexity of its nature in order to truly investigate the full scope of the problem.

Second, although the use of a large-scale secondary dataset in the study allows for the inclusion of a relatively large sample size (n=505 of Asian-American women) in the analyses, the sample size was still not large enough to conduct certain analysis. Because of a small percentage of severe IPV detected in the samples, it did have not adequate statistical power to conduct multivariate analyses separately by severity of the IPV, minor and severe, and across interracial couples of different racial composition. Difficulties in recruiting participants and conducting IPV research have been reported across the

different Asian communities (Nguyen, 2007). As it has been seen in the other racial groups, the pattern of IPV experiences for Asian intermarried women may differ from other race/ethnicity interracial groups and are complicated by IPV severity and participant's racial composition. In order to extend the findings from this study, additional research should attempt to include a larger sample size so that more focused analyses can be possible.

Third, though all the measurements in the study showed high levels of reliability, whether some of the measures have adequate validity among Asian American target populations is unknown. A literature review found no studies examining some of the measures used in the current study among Asian American adults. Because validity cannot be proven by a single study, ongoing validation studies are essential.

Third, another limitation of this study is related to the fact that only Asian women with different racial spouses/partners were included in this study. Although this study was intended to focus only on Asian women as a target population, it was still difficult to interpret the result as to how the population compares with other gender and racial compositions. To build on this study, future research with interracial couples could examine gender and ethnicity. A more detailed analysis of IPV across interracial couples of different racial and ethnic compositions may help specify those interracial/interethnic couples that are most at risk for intimate partner violence.

Chapter Summary

This study examined the characteristics and correlates of IPV in intermarried/cohabiting Asian women. Although not all hypotheses were confirmed, valuable information was obtained, which hopefully helps fill the knowledge gap in the

research literature on both partner violence and interracial relationship. This study provided a better understanding of Asian interracial couples and their unique characteristics that are associated with immigration and IPV-related factors.

REFERENCES

- Alegria, M., Jackson, J., Kessler, R., & Takeuchi, D. (2007). Collaborative Psychiatric Epidemiology Surveys (CPES), 2001-2003 [United States]. Computer file ICPSR20240-v5. *Ann Arbor, Mich, Institute for Social Research, Survey Research Center.*
- Alegria, M., Takeuchi, D., Canino, G., Duan, N., Shrout, P., Meng, X.-L., . . . Gong, F. (2004). Considering context, place and culture: the National Latino and Asian American Study. *International Journal of Methods in Psychiatric Research, 13*(4), 208-220.
- Asian & Pacific Islander Institute on Domestic Violence. (2005). Fact sheet: Domestic violence in Asian communities, from http://www.apiahf.org/apidvinstitute/PDF/Fact_Sheet.pdf
- Babbie, E., Halley, F., & Zaino, J. (2007). *Adventures in social research: data analysis using SPSS 14.0 and 15.0 for Windows*: SAGE Publications, Incorporated.
- Baltas, Z., & Steptoe, A. (2000). Migration, culture conflict and psychological well-being among Turkish-British married couples. *Ethnicity & Health, 5*(2), 173-180.
- Bograd, M. (1999). Strengthening domestic violence theories: Intersections of race, class, sexual orientation, and gender. *Journal of Marital and Family Therapy, 25*(3), 275-289.

- Bograd, M., & Yllo, K. (1988). Feminist perspectives on wife abuse. *Feminist perspectives on wife abuse*, 11-26.
- Bramlett, M. D., & Mosher, W. D. (2002). Cohabitation, marriage, divorce, and remarriage in the United States. *National Center for Health Statistics. Vital Health Statistics*, 23(22), 1-93.
- Bratter, J. L., & Eschbach, K. (2006). 'What about the couple?' Interracial marriage and psychological distress. *Social Science Research*, 35(4), 1025-1047.
- Bratter, J. L., & King, R. B. (2008). "But Will It Last?": Marital Instability Among Interracial and Same-Race Couples. *Family Relations*, 57(2), 160-171. doi: 10.1111/j.1741-3729.2008.00491.x
- Breger, R. A., & Hill, R. (1998). *Cross-cultural marriage: Identity and choice* (Vol. 20): Berg Publishers.
- Brewer, R. (1993). Theorizing race, class and gender. *Theorizing black feminisms: the visionary pragmatism of black women*, 13.
- Broman, C. L. (1993). Race differences in marital well-being. *Journal of Marriage and the Family*, 724-732.
- Broman, C. L. (2005). Marital quality in Black and White marriages. *Journal of Family Issues*, 26(4), 431-441.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American psychologist*, 32(7), 513-531.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental psychology*, 22(6), 723-742.

- Bronfenbrenner, U. (1989). Ecological systems theory. *Annals of child development*, 6(1), 87-249.
- Bronfenbrenner, U., Wozniak, R., & Fischer, K. (1993). Development in context: Acting and thinking in specific environments. *Wozniak, RH; Fisher, KW The Ecology of Cognitive Development: Research Models and Fugitive Findings. Hillsdale: Erlbaum.*
- Caetano, R., Field, C. A., Ramisetty-Mikler, S., & McGrath, C. (2005). The 5-year course of intimate partner violence among White, Black, and Hispanic couples in the United States. *Journal of Interpersonal Violence*, 20(9), 1039-1057.
- Campbell, J. (1999). Sanctions and sanctuary: wife battering within cultural contexts. *To have and to hit. Cultural perspectives on wife beating*, 261-285.
- Canino, G., Vega, W. A., Sribney, W. M., Warner, L. A., & Alegria, M. (2008). Social relationships, social assimilation, and substance-use disorders among adult Latinos in the US. *Journal of Drug Issues*, 38(1), 69.
- Canino, G., Vega, W. A., Sribney, W. M., Warner, L. A., & Alegría, M. (2008). Social relationships, social assimilation, and substance use disorders among adult Latinos in the US. *Journal of drug issues*, 38(1), 69-101.
- Carroll, J. (2007). Most Americans approve of interracial marriages. *Princeton, NJ: Gallup News Service (August 16).*
- Cervantes, R. C., Padilla, A. M., & Salgado de Snyder, N. (1991). The Hispanic Stress Inventory: A culturally relevant approach to psychosocial assessment. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 3(3), 438-447.

- Chan, A., & Smith, K. (1996). *A comparison of the marital quality and stability of interracial and same-race marriages.*
- Chartier, K. G., & Caetano, R. (2012). Intimate partner violence and alcohol problems in interethnic and intraethnic couples. *Journal of Interpersonal Violence, 27*(9), 1780-1801.
- Collins, P. H. (2000). Gender, black feminism, and black political economy. *The Annals of the American Academy of Political and Social Science, 568*(1), 41-53.
- Cottrell, A. (1990). Cross-National Marriages: A Review of Literature. *Journal of Comparative Family Studies, 21*(2).
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*(6), 1241-1299.
- Crenshaw, K. (1994). Foreword: Toward a Race-Conscious Pedagogy in Legal Education. *S. Cal. Rev. L. & Women's Stud., 4*, 33.
- Cunradi, C. B., Caetano, R., Clark, C. L., & Schafer, J. (1999). Alcohol- Related Problems and Intimate Partner Violence Among White, Black, and Hispanic Couples in the US. *Alcoholism: Clinical and Experimental Research, 23*(9), 1492-1501.
- Dobash, R., & Dobash, R. (1979). *Violence against wives: A case against the patriarchy:* Free Press New York.
- Dutton, D. (1994). Patriarchy and wife assault: The ecological fallacy. *Violence and Victims, 9*(2), 167-182.

- Dwyer, D., Smokowski, P., Bricout, J., & Wodarski, J. (1995). Domestic violence research: Theoretical and practice implications for social work. *Clinical Social Work Journal*, 23(2), 185-198.
- Elliott, A. C., & Woodward, W. A. (2007). *Statistical analysis quick reference guidebook: With SPSS examples*: SAGE Publications, Incorporated.
- Felix-Ortiz, M., Newcomb, M. D., & Myers, H. (1994). A multidimensional measure of cultural identity for Latino and Latina adolescents. *Hispanic Journal of Behavioral Sciences*, 16(2), 99-115.
- Field, C. A., & Caetano, R. (2004). Ethnic Differences in Intimate Partner Violence in the US General Population The Role of Alcohol Use and Socioeconomic Status. *Trauma, Violence, & Abuse*, 5(4), 303-317.
- Fields, J. (2004). America's Families and Living Arrangements: 2003. Population Characteristics. Current Population Reports. P20-553. *US Department of Commerce*.
- Fong, C., & Yung, J. (1995). In search of the right spouse: interracial marriage among Chinese and Japanese Americans. *Amerasia Journal*, 21(3), 77-97.
- Fryer, R. G. (2007). Guess who's been coming to dinner? Trends in interracial marriage over the 20th century. *The Journal of Economic Perspectives*, 21(2), 71-90.
- Fu, X., Tora, J., & Kendall, H. (2001). Marital happiness and interracial marriage: A study in a multiethnic community in Hawaii. [Article]. *Journal of Comparative Family Studies*, 32(1), 47-60.
- Furiya, L. (1993). Asian American women's shelters seek to empower victims of domestic violence. *Los Angeles Japanese Daily*, 1.

- Fusco, R. (2010). Intimate Partner Violence in Interracial Couples: A Comparison to White and Ethnic Minority Monoracial Couples. *Journal of Interpersonal Violence*.
- Gaines, S. (2001). Coping with prejudice: Personal relationship partners as sources of socioemotional support for stigmatized individuals. *Journal of Social Issues*, 57(1), 113-128.
- Gavin, A., Walton, E., Chae, D., Alegria, M., Jackson, J., & Takeuchi, D. (2009). The associations between socio-economic status and major depressive disorder among Blacks, Latinos, Asians and non-Hispanic Whites: findings from the Collaborative Psychiatric Epidemiology Studies. *Psychological medicine*, 40(01), 51-61.
- Gee, G. C., Delva, J., & Takeuchi, D. T. (2007). Relationships between self-reported unfair treatment and prescription medication use, illicit drug use, and alcohol dependence among Filipino Americans. *Journal Information*, 97(5).
- Gee, G. C., Ryan, A., Laflamme, D. J., & Holt, J. (2006). Self-reported discrimination and mental health status among African descendants, Mexican Americans, and other Latinos in the New Hampshire REACH 2010 Initiative: the added dimension of immigration. *Journal Information*, 96(10).
- Gee, G. C., Spencer, M., Chen, J., Yip, T., & Takeuchi, D. T. (2007). The association between self-reported racial discrimination and 12-month DSM-IV mental disorders among Asian Americans nationwide. *Social Science & Medicine*, 64(10), 1984-1996.

- Gelles, R. (1999). Through a sociological lens: Social structure and family violence. *Sociology of Families: Readings*, 299.
- Germain, C., & Gitterman, A. (1980). The life model of social work practice: New York: Columbia University Press.
- Gondolf, E. W. (1999). A Comparison of Four Batterer Intervention Systems Do Court Referral, Program Length, and Services Matter? *Journal of Interpersonal Violence*, 14(1), 41-61.
- Gondolf, E. W. (1999). Characteristics of Court-Mandated Batterers in Four Cities Diversity and Dichotomies. *Violence Against Women*, 5(11), 1277-1293.
- Greene, R. R. (1999). *Human behavior theory and social work practice* (2nd ed.). New York: Aldine de Gruyter.
- Greene, R. R. (2000). *Human behavior theory and social work practice*: Aldine.
- Hampton, R., Oliver, W., & Magarian, L. (2003). Domestic violence in the African American community. *Violence against women*, 9(5), 533-557.
- Harrell, F. E., Lee, K. L., Califf, R. M., Pryor, D. B., & Rosati, R. A. (1984). Regression modelling strategies for improved prognostic prediction. *Statistics in medicine*, 3(2), 143-152.
- Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry*, 70(1), 42-57.
- Hattery, A. J. (2009). Race and intimate partner violence: violence in interracial and interracal relationships *Intimate partner violence*: Rowman & Littlefield Pub Inc.

- Heaton, T. B. (2002). Factors contributing to increasing marital stability in the United States. *Journal of Family Issues, 23*(3), 392-409.
- Heeringa, S., Wagner, J., Torres, M., Duan, N., Adams, T., & Berglund, P. (2004). Sample designs and sampling methods for the Collaborative Psychiatric Epidemiology Studies (CPES). *International Journal of Methods in Psychiatric Research, 13*(4), 221-240.
- Heise, L., Ellsberg, M., & Gottemoeller, M. (1999). Ending violence against women. *Population reports, 27*(4), 1-43.
- Hibbler, D. K., & Shinew, K. J. (2002). Interracial couples' experience of leisure: A social network approach. *Journal of Leisure Research, 34*(2), 135-156.
- Huston, T. (2000). The social ecology of marriage and other intimate unions. *Journal of Marriage and Family, 62*(2), 298-320.
- Hwang, S.-S., Saenz, R., & Aguirre, B. E. (1997). Structural and assimilationist explanations of Asian American intermarriage. *Journal of Marriage and the Family, 758-772*.
- Imamura, A. E. (1990). Strangers in a strange land: Coping with marginality in international marriage. [Article]. *Journal of Comparative Family Studies, 21*(2), 171-191.
- Jacobs, J. A., & Labov, T. G. (2002a). *Gender differentials in intermarriage among sixteen race and ethnic groups*. Paper presented at the Sociological Forum.
- Jacobs, J. A., & Labov, T. G. (2002b). *Gender differentials in intermarriage among sixteen race and ethnic groups*.

- Jasinski, J. L. (1998). The role of acculturation in wife assault. *Hispanic Journal of Behavioral Sciences*, 20(2), 175-191.
- Jasinski, J. L., & Kantor, G. K. (2001). Pregnancy, stress and wife assault: Ethnic differences in prevalence, severity, and onset in a national sample. *Violence and Victims*, 16(3), 219-232.
- Jeong, G. J., & Schumm, W. R. (1990). Family satisfaction in Korean/American marriages: An exploratory study of the perceptions of Korean wives. [Article]. *Journal of Comparative Family Studies*, 21(3), 325-336.
- Kalmijn, M. (1993). Trends in black/white intermarriage. *Social Forces*, 72(1), 119-146.
- Kasturirangan, A., Krishnan, S., & Riger, S. (2004). The impact of culture and minority status on women's experience of domestic violence. *Trauma, Violence, & Abuse*, 5(4), 318-332.
- Kennedy, R. (2003). *Interracial intimacies: Sex, marriage, identity, and adoption* (Vol. 2002): Pantheon Books.
- Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 208-230.
- Kessler, R. C., Molnar, B. E., Feurer, I. D., & Appelbaum, M. (2001). Patterns and mental health predictors of domestic violence in the United States: Results from the National Comorbidity Survey. *International Journal of Law and Psychiatry*, 24(4-5), 487-508. doi: 10.1016/s0160-2527(01)00080-2
- Klein, D., & White, J. (1996). *Family theories: An introduction*: Sage Publications.

- Kreider, R. M. (2000). Interracial marriage: Social connection, marital conflict and divorce. *Paper addressed to American Sociological Association (ASA)*.
- Kruttschnitt, C. (1996). Contributions of quantitative methods to the study of gender and crime, or bootstrapping our way into the theoretical thicket. *Journal of Quantitative Criminology*, 12(2), 135-161.
- Landale, N. S., Oropesa, R. S., & Bradatan, C. (2006). Hispanic families in the United States: Family structure and process in an era of family change. *Hispanics and the Future of America*, 138.
- Le, C. N. (2009). Interracial dating and marriage/ U.S.-raised. Asian-Nation: The Landscape of Asian America., from <http://www.asian-nation.org/interracial2.shtml>
- Le, C. N. (2012). Interracial Dating & Marriage. from Asian-Nation: The Landscape of Asian America <http://www.asian-nation.org/interracial.shtml>
- Lee, S. M., & Edmonston, B. (2005a). *New marriages, new families : U.S. racial and Hispanic intermarriage*. Washington, DC: Population Reference Bureau.
- Lee, S. M., & Edmonston, B. (2005b). *New marriages, new families: US racial and Hispanic intermarriage*: Population Reference Bureau.
- Lee, S. M., & Fernandez, M. (1998). Trends in Asian American racial/ethnic intermarriage: A comparison of 1980 and 1990 census data. *Sociological Perspectives*, 323-342.
- Levinson, D. (1989). *Family violence in cross-cultural perspective*: Sage Publications Newbury Park, CA.

- Liang, Z., & Ito, N. (1999). Intermarriage of Asian Americans in the New York City region: Contemporary patterns and future prospects. *International Migration Review*, 876-900.
- Lockhart, L. L., & Danis, F. S. (2010). *Domestic Violence: Intersectionality and Culturally Competent Practice*: Columbia Univ Pr.
- Loseke, D. (1989). Violence is violence or is it? The social construction of wife abuse and public policy. *Images of issues: Typifying contemporary social problems*, 191-206.
- Maneker, J. S., & Rankin, R. P. (1987). Correlates of marital duration among those who file for divorce: Selected characteristics in California, 1966–1976. *Journal of divorce*.
- Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *Journal Information*, 91(11).
- Mays, V. M., Cochran, S. D., & Barnes, N. W. (2007). Race, race-based discrimination, and health outcomes among African Americans. *Annual Review of Psychology*, 58, 201-225.
- Mercy, J. A., & Saltzman, L. E. (1989). Fatal violence among spouses in the United States, 1976-85. *American Journal of Public Health*, 79(5), 595-599.
- Mertler, C. A., & Vannatta, R. A. (2002). *Advanced and multivariate statistical methods*: Pyrczak Los Angeles.
- Miscally, M. (2009). A path model of discrimination, social integration, social support, and substance use for Asian American adults.

- Moran, R. F. (2003). *Interracial intimacy: The regulation of race and romance*. Chicago: University of Chicago Press.
- Mossakowski, K. N. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health? *Journal of Health and Social Behavior*, 318-331.
- Mulvaney-Day, N. E., Alegria, M., & Sribney, W. (2007). Social cohesion, social support, and health among Latinos in the United States. *Social science & medicine*, 64(2), 477-495.
- Mulvaney-Day, N. E., Alegría, M., & Sribney, W. (2007). Social cohesion, social support, and health among Latinos in the United States. *Social Science & Medicine*, 64(2), 477-495. doi: 10.1016/j.socscimed.2006.08.030
- National Healthy Marriage Resource Center. (2009). *Interracial Marriage and Relationships: A Fact Sheet* Retrieved March 31, 2013, from <http://www.healthymarriageinfo.org/resource-detail/index.aspx?rid=3358>
- Nguyen, T. D. (2007). *Domestic violence in Asian American communities: A cultural overview*: Rowman & Littlefield.
- Noh, S., & Kaspar, V. (2003). Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. *Journal Information*, 93(2).
- Olena, H., Colleen, R., Renee, C., Colleen, V., Natalie, C., Cecilia, B., & Shari, B. (2010). Exploring the promises of intersectionality for advancing women's health research. *International Journal for Equity in Health*, 9.
- Oliver, W. (2000). Preventing domestic violence in the African American community. *Violence against women*, 6(5), 533-549.

- Pallant, J., & Manual, S. S. (2007). *A Step by Step Guide to Data Analysis Using SPSS for Windows Version 15*: Open University Press, Milton Keynes, UK.
- Park, R. E. (1928). Human migration and the marginal man. *American journal of sociology*, 881-893.
- Passel, J. S., Wang, W., & Taylor, P. (2010). Marrying out: One-in-seven new US marriages is interracial or interethnic. *Pew Research Center (June 4)*.
- Pollard, K. M., & O'Hare, W. P. (1999). *America's racial and ethnic minorities*. Washington, D.C.: Population Research Bureau.
- Qian, Z., Blair, S. L., & Ruf, S. D. (2001). Asian American Interracial and Interethnic Marriages: Differences by Education and Nativity. *International Migration Review*, 35(2), 557-586.
- Qian, Z., & Lichter, D. T. (2001). Measuring marital assimilation: Intermarriage among natives and immigrants. *Social Science Research*, 30(2), 289-312.
- Qian, Z., & Lichter, D. T. (2007). Social boundaries and marital assimilation: Interpreting trends in racial and ethnic intermarriage. *American Sociological Review*, 72(1), 68-94.
- Refsing, K. (1998). Gender identity and gender role patterns in cross-cultural marriages: The Japanese-Danish case. *Cross-Cultural Marriage. Identity and Choice. Mid-Glamorgan: Berg*, 193-208.
- Ren, X. S. (1997). Marital status and quality of relationships: The impact on health perception. *Social Science & Medicine*, 44(2), 241-249.

- Rennison, C. M., Welchans, S., & Statistics, U. S. B. o. J. (2000). *Intimate partner violence*: US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Washington, DC.
- Renzetti, C. M., Edleson, J. L., & Bergen, R. K. (2001). *Sourcebook on violence against women*: Sage Publications, Inc.
- Root, M. P. P. (1996). *The multiracial experience: Racial borders as the new frontier*: Sage Publications, Inc.
- Rubin, A., Babbie, E., & Lee, P. (2008). Research methods for social work: Custom edition prepared exclusively for San Jose State University. *Belmont, CA: Wadsworth/Thompson Learning*.
- Salahu-din, S. N. (2003). *Social work research : an applied approach*. Boston: Allyn and Bacon.
- Schechter, S. (1988). Building bridges between activists, professionals, and researchers. *Feminist perspectives on wife abuse*, 299-312.
- Schechter, S. (1982). *Women and male violence*: Boston: South End Press.
- Shin, H. L. (1995). *Violence and intimacy: Risk markers and predictors of wife abuse among Korean immigrants*. (Ph.D. 9614067), University of Southern California, United States -- California. ProQuest Dissertations & Theses (PQDT); ProQuest Dissertations & Theses A&I database.
- Simmons, T., & O'Connell, M. (2003). *Married-couple and Unmarried-partner Households, 2000*: US Department of Commerce, Economics and Statistics Administration, US Census Bureau.

- Smith, D. (1990). *The conceptual practices of power: A feminist sociology of knowledge*. Univ of Toronto Pr.
- Sokoloff, N. J., & Dupont, I. (2005). Domestic Violence at the Intersections of Race, Class, and Gender Challenges and Contributions to Understanding Violence Against Marginalized Women in Diverse Communities. *Violence against women*, 11(1), 38-64.
- Spickard, P. R. (1991). *Mixed blood: Intermarriage and ethnic identity in twentieth-century America*: Univ of Wisconsin Pr.
- Straus, M. A. (1979). Measuring Intrafamily Conflict and Violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*(Journal Article), 75-88.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2). *Journal of Family Issues*, 17(3), 283-316.
- Strauss, A. L. (1954). Strain and harmony in American-Japanese war-bride marriages. *Marriage and Family Living*, 16(2), 99-106.
- Stueve, A., & O'Donnell, L. (2008). Urban young women's experiences of discrimination and community violence and intimate partner violence. *Journal of Urban Health*, 85(3), 386-401.
- Sugarman, D. B., & Frankel, S. L. (1996). Patriarchal ideology and wife-assault: A meta-analytic review. *Journal of Family Violence*, 11(1), 13-40.
- Symington, A. (2004). Intersectionality: A tool for gender and economic justice. *Women's rights and economic change*, 9.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Experimental designs using ANOVA*: Thomson/Brooks/Cole.

- Takeuchi, D., Zane, N., Hong, S., Chae, D., Gong, F., Gee, G., . . . Alegria, M. (2007). Immigration-related factors and mental disorders among Asian Americans. *American Journal of Public Health, 97*(1), 84.
- Tjaden, P., & Thoennes, N. (2000a). *Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey*: National Institute of Justice Washington.
- Tjaden, P., & Thoennes, N. (2000b). Full report of the prevalence, incidence, and consequences of violence against women: findings from the National Violence Against Women Survey. *Washington, DC: United States Department of Justice, 71*.
- Vaquera, E., & Kao, G. (2005). Private and public displays of affection among interracial and intra- racial adolescent couples. *Social Science Quarterly, 86*(2), 484-508.
- Walter, J. (2006). Domestic Violence in the Hispanic Immigrant Community: Toward an Explanatory Model.
- Wang, H., Kao, G., & Joyner, K. (2006). Stability of interracial and intraracial romantic relationships among adolescents. *Social Science Research, 35*(2), 435-453.
- West, C. M. (1998). Lifting the “political gag order”: Breaking the silence around partner violence in ethnic minority families. *Partner violence: A comprehensive review of, 20*, 184-209.
- West, C. M. (2004). Black women and intimate partner violence. *Journal of Interpersonal Violence, 19*(12), 1487-1493.
- Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health. *Journal of Health Psychology, 2*(3), 335-351.

- Xu, X., Campbell, J. C., & Zhu, F. (2001). Intimate Partner Violence Against Chinese Women The Past, Present, and Future. *Trauma, Violence, & Abuse*, 2(4), 296-315.
- Yamashiro, G., & Matsuoka, J. (1997). Help-seeking among Asian and Pacific Americans: a multiperspective analysis. *Social work*, 42(2), 176.
- Yancey, G. (2009). Crossracial differences in the racial preferences of potential dating partners: A Test of the alienation of African Americans and social dominance orientation. *The Sociological Quarterly*, 50(1), 121-143.
- Yick, A. G., & Agbayani-Siewert, P. (1997). Perceptions of domestic violence in a Chinese American community. *Journal of Interpersonal Violence*, 12(6), 832-846.
- Yllo, K. (1983). Using a feminist approach in quantitative research. *The dark side of families: Current family violence research*, 277-288.
- Yllo, K., & Straus, M. (1990). Patriarchy and violence against wives: The impact of structural and normative factors. *Physical violence in American families: Risk factors and adaptations to violence in*, 8, 383-399.
- Zebroski, S. A. (1999). Black-White intermarriages: The racial and gender dynamics of support and opposition. *Journal of Black Studies*, 30(1), 123-132.
- Zerai, A. (2000). Agents of Knowledge and Action: Selected Africana Scholars and Their Contributions to the Understanding of Race, Class and Gender Intersectionality. *Cultural Dynamics*, 12(2), 182.
- Zhang, Y., & Van Hook, J. (2009). Marital Dissolution Among Interracial Couples. *Journal of Marriage and Family*, 71(1), 95-107. doi: 10.1111/j.1741-3737.2008.00582.x

Zweigenhaft, R. L., & Domhoff, G. W. (2006). *Diversity in the power elite: How it happened, why it matters*: Rowman & Littlefield Pub Inc.