HINDU ASIAN INDIAN IMMIGRANT WOMEN AND DOMESTIC VIOLENCE: A MIXED METHODS STUDY

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ABSTRACT

Domestic violence is a highly prevalent and underreported global health issue of public health significance. Dimensions of domestic violence include physical, sexual, mental, psychological and emotional abuse. Internationally, 33% of women are estimated to have a lifetime experience of physical and/or sexual violence, although rates vary by country and by personal situation of the victim. It is estimated that immigrant women are at higher risk for abuse than the general population; however, few studies have been conducted with Asian Indian immigrant women. This study used mixed methods to explore and measure how Asian Indian immigrant women's definitions, experiences and help-seeking behaviors related to domestic violence differ for Indian women in India and Asian Indian immigrant women in the United States (U.S.).

All research participants completed in-depth interviews and questionnaires on demographics, social support, acculturation status and lifetime experiences of domestic violence. The majority of participants reported moderate to high ratings of perceived social support among significant others, friends and family, regardless of their demographics, acculturation status and lifetime experiences of domestic violence. Additionally, most women had moderate to high levels of sociocultural adaptation, psychological adaptation, and orientation to life in the U.S. and in India, despite high levels of perceived cultural difference between American and Indian culture. While there was little variation in acculturation status among participants regardless of lifetime

experiences of abuse, emerging demographic associations highlighted a higher risk of lifetime experience of abuse for women who were not U.S. citizens and who were single. Over half of participants experienced some form of violence in their lifetime and it was most often perpetrated by family members.

All participants who completed questionnaires also completed in-depth interviews on perceived differences of domestic violence and healthy relationships between Indian women in India and Asian Indian immigrant women in the U.S. Women recognized Asian Indian immigrant women who come as dependents on their husband's visa as highly vulnerable for experiencing abuse. Additionally, women identified barriers, stakeholders and intervention activities for consideration when designing supportive services for Asian Indian immigrant women in situations of abuse.

Key findings from the qualitative and feasibility studies are that research with this population is feasible and perceived risk and types of appropriate services for domestic violence survivors differ by subpopulations of Asian Indian immigrant women. Although findings are limited by the small size of the sample, high levels of social support and acculturation status among participants did not correlate with risk for lifetime experiences of abuse. The majority of participants identified the need for outreach targeted to this population by service providers and advocates, who can educate women about their rights and options. Women also emphasized the importance of creating socially, culturally, and linguistically appropriate domestic violence services for Asian Indian immigrant women. Findings suggest that addressing short-term and long-term outcomes of domestic violence among Asian Indian immigrant women in situations of abuse will require the expertise of policymakers, service providers and health professionals as well as the Indian community.

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1.0 INTRODUCTION: WHAT ARE IPV AND DOMESTIC VIOLENCE?

Globally, 66% of victims of violence by intimate partners and family are women (United Nations, 2013). Women are more likely to be injured than men in violent male-female situations (Fernandez, 1997), and 33% of women report an experience of physical or sexual intimate partner violence (IPV) in their lifetime (World Health Organization, 2014). Most often, this violence is perpetrated by an intimate partner or family member. Having a family history of IPV puts women at higher risk of experiencing any type of IPV and experiencing this violence in increasing severity and frequency (Weitzman, 2014). In the United States (U.S.) alone IPV is estimated to result in the loss of eight million days of paid work each year, which equates to 32,000 full-time jobs, with yearly costs of one to ten billion dollars (National Center for Injury Prevention and Control, 2003). Although violence against women places a severe burden on individuals and societies, many of the social, financial and adverse health outcomes that result are preventable.

In order to better explain the complex factors contributing to violence against women, relevant terms must first be defined. Domestic violence is defined by the World Bank as "specific violence commonly directed against women, occurring within the family and in intimate relationships. Intimate relationships can include both spouses and unmarried intimate partners. The violence can come in the form of physical, sexual, emotional or financial abuse" (World Bank, 2015). The Centers for Disease Control and Prevention (CDC) define intimate partner violence (IPV) as "physical, sexual, or psychological harm by a current or former partner or spouse"

(Centers for Disease Control and Prevention, 2014). This term has recently been adopted instead of domestic violence because abuse may not occur in the home and is usually perpetrated by someone close to the woman such as a "husband, ex-husband, boyfriend or ex-boyfriend" (Office on Women's Health, 2011). While IPV is currently the most widely used term for violence against women, this term excludes other family members and does not take into account situations in countries such as India, where both family members and intimate partners are commonly involved in violence perpetration (Shabnam & Mukherjee, 2013).

Although domestic violence has been replaced by the term IPV in the literature, domestic violence is the most appropriate term for discussing violence against Indian women in India and the U.S. In Indian culture, it is common for women to be either single and not date someone for a long period of time before marriage, or married. Being intimate with someone who is not a husband is not supported by Indian cultural norms, which encourage these relationships only within marriage. While intimate partner violence might occur in the domestic setting, the use of the term domestic violence is more appropriate because other individuals in the domestic sphere, such as the mother-in-law, father-in-law and sister-in-law, might also initiate the violent acts.

The term intimate partner violence includes dimensions similar to those of domestic violence, such as physical, sexual and psychological/emotional abuse and includes active forms of aggression, such as hitting, as well as passive forms, such as not paying for child support (White, Yuan, Cook, & Abbey, 2014); however, the terms domestic violence and intimate partner violence are not interchangeable. They are not identical and they are not mutually exclusive. Intimate partner violence is included under the umbrella of domestic violence, and in the study detailed in this paper, domestic violence is used as the dependent variable of interest to include abuse from the husband, in-laws and other perpetrators. However, in the following chapters, the term IPV will

be discussed due to the focus on IPV and not domestic violence as the variable of interest in the current violence against women literature.

The upcoming chapters of this document provide background information, research methods for a study among Hindu Asian Indian immigrant women (AIIW) in Allegheny County, Pennsylvania, and results from this study. The second chapter discusses the global public health significance of violence against women to provide context for the dependent variable of interest, domestic violence, and its relationship with income, education status and religion. As the target population includes women born in India, sociocultural norms of Indian society are appropriate to discuss. Chapter three on IPV in India highlights the following topics: the caste system, treatment of women and girls, family violence and dowry and unnatural deaths. These topics, although discussed in relation to their influence in India, are similarly important for AIIW in the U.S. and are associated with their experiences of violence. Other topics that are particularly relevant for AIIW include acculturation, immigrant status and legal processes, which are outlined in chapter four.

Chapter five focuses on adverse health outcomes associated with women who experience violence, such as those related to maternal and child health, mental health and sexual and reproductive health. The next section highlights methods that have been used to measure violence against women. This provides context for following chapters on the methods and research protocol for this study. While this research resulted in a great deal of relevant findings, the next three chapters are from this research study and address findings that were perceived to be most urgent for immediate dissemination. This includes: 1) findings from a feasibility study that included questionnaires completed by research participants on social support, acculturation status and lifetime experiences of domestic violence; 2) respondents' concerns about AIIW who come to the

U.S. on dependent visas as a high-risk population for experiencing domestic violence; and 3) respondents' suggestions for creating a successful program for AIIW in situations of abuse. The final sections summarize the findings and limitations of this research and discuss future directions for research and interventions for Asian Indian immigrant populations and the necessity for further research.

2.0 GLOBAL PUBLIC HEALTH SIGNIFICANCE OF IPV

Global studies on violence against women have raised awareness of gender-based violence, which is an issue warranting international attention. Globally, girls are estimated to experience sexual violence 1.5 to three times more than boys (Watts & Zimmerman, 2002). Women are also more likely to report severe consequences resulting from their abusive experiences. Violence against women is not restricted to non-Westernized countries; in the U.S., 95% of all cases of violence are against women (Menjivar & Salcido, 2002). Regardless of geographic region, violence against women is underreported due to the stigma of disclosure of IPV status. Issues such as differing definitions of what constitutes abuse transcend country and cultural boundaries (Menjivar & Salcido, 2002).

When there is access to reporting mechanisms, intention to report depends on conceptualization of abuse. For instance, what is considered abuse in a Westernized country may be labeled simply as "discipline or chastisement" in another country (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). Women in India are less likely to report minor abuse such as slapping compared to women in other countries; however, this may be due to a reporting bias among more educated women, who are more likely to report due to different perceptions of what constitutes abuse (Ackerson & Subramanian, 2008). Individual and societal definitions of abuse vary and are worth considering, as 33% of women who experience IPV never seek help (Bhattacharya, Basu, Das, Sarkar, Das, & Roy, 2013). Unfortunately, women who are abused tend to normalize abuse and believe that women should expect and accept it (Bose, Trent, & South, 2013; Vinutha, 2014). Differences in conceptualization and experience of abuse impact how women define themselves as survivors of abuse and their subsequent reporting behaviors related

to their lifetime experience of violence. Abuse cannot be addressed if it is never recognized or reported, and given that statistics related to violence against women rely on self-reports, all research on risk, incidence and prevalence of domestic violence, measures only reported abuse and not actual prevalence.

To better understand the global prevalence of violence against women, the World Health Organization (WHO) has conducted several multi-country studies that found rates of women experiencing IPV ranging from 13-60% (Collucci & Montesinos, 2013). One WHO multi-site study estimates rates of 30-60%, with the lowest rate in Japan and the highest in Peru (Bhattacharya et al., 2013). In this same study, suicidal ideation among women ranged from 11- 64%, physical or sexual violence ranged from 3-54% and 75% of abused women reported the abuse from age 15 onwards (Bhattacharya et al., 2013). In another multi-country study, that included Bangladesh, Brazil, Ethiopia, Japan, Namibia, Peru, Samoa, Serbia and Montenegro, Thailand and Tanzania, physical or sexual abuse ranged from 15-71% (Garcia-Moreno et al., 2006). In all countries except Ethiopia, physical violence was more common than sexual violence. Beating and kicking were the most commonly reported forms of physical violence across all countries (Bhattacharya et al., 2013). Women were more likely to report physical and sexual abuse, or just physical rather than solely sexual abuse. Women who reported physical or sexual violence were also more likely to report restricted physical mobility and social interaction. These women reported violence from intimate partners more than any other person (Garcia-Moreno et al., 2006).

Although the perpetrator of the abuse varied little in these studies, risk factors for women experiencing abuse differed by region. A woman's role in choosing her husband was one of these (Abramsky et al., 2011). In six of the 12 sites in the WHO study, if the woman did not participate in choosing her husband, her risk for recent IPV increased, compared to sites where women had

an active role in choosing their spouse, where risk decreased (Abramsky et al., 2011). For the majority of the countries, history of abuse of women, young age at marriage, being older than the male partner, personal drinking habits, relationship with a husband who abuses alcohol, mother's experience of abuse, history of sexual abuse during childhood and history of physical abuse during childhood all correlated with recent experience of IPV (Abramsky et al., 2011; Bhattacharya et al., 2013). Other risk factors for IPV in the past 12 months included having a relationship with unfaithful partners, being in a polygynous relationship, young age, woman's lifetime experience of violence, man's history of violent behaviors, having children from a previous relationship and being in a new relationship (Abramsky et al., 2011).

The gender norms within a society influence gender relations, including gender-based violence. In addition to risk factors for IPV on the individual level, there are risk factors related to gender norms. These culture-specific risk factors suggest that individual characteristics and experiences are not sufficient for explaining IPV incidence. In a multi-country study, male and female respondents were asked about justification of wife-beating in the following situations: suspected infidelity of the wife, wife leaving the home without permission of the husband, burning food, neglecting children and disrespecting in-laws. Women and men in the poorest quintiles of all countries studied and women in Turkey and Cambodia reported the highest rates of acceptance of wife-beating (Rani & Bonu, 2009). Women in Cambodia reported more acceptance of wife-beating in male and female-headed households compared to men in Turkey, Nepal and Bangladesh, who reported higher acceptance of wife-beating in female-headed households. Over 50% of women in male-headed and female-headed households in India reported acceptance of wife-beating (Rani & Bonu, 2009).

For each hypothetical situation addressed in the study, India ranked highest despite the fact that the Indian version of this questionnaire was conducted only amongst Indian women. India also had the highest rate for acceptance of wife-beating, with 57% of women justifying this violence. In this same study, 11% of ever-married Indian women reported being beaten in the previous 12 months. Among Indian women, 33% justified wife-beating when the wife's fidelity was in question, 37% if the wife left the home without the man's permission, 25% if the wife burnt food, 40% if the woman was neglecting the children, and 34% if the wife was perceived as disrespecting her in-laws (Rani & Bonu, 2009). Percentages were highest among younger women in India, with women ages 15-19 reporting acceptance of 61.6%. However, women in India up to age 50 reported acceptance rates that ranged from 55-57%. In India, wife-beating was also accepted more with increasing years of marriage and with early marriage (Rani & Bonu, 2009). In this study of seven countries, only India showed significance for these factors (Rani & Bonu, 2009). India's high rates for both women's experiences of abuse and acceptance of abuse in the studies detailed in this section warrant a closer look at societal norms contributing to historically high reports of violence against women.

2.1 FACTORS RELATED TO GLOBAL IPV: INCOME AND EDUCATION

Although heavily researched, the impact of education and income on a women's risk for IPV is unclear. It has been suggested that men abuse women when there is no other socially appropriate way to handle their frustration. While this is less common in educated men, if men's masculinity is threatened by their wife's earning potential, violence may be used to assert authority (Ackerson, Kawachi, Barbeau, & Subramanian, 2008) when male dominance is challenged (Lee & Hadeed,

2009). It may be perceived that a man perpetrates abuse when he cannot fulfill the male stereotype of providing for his wife and family (Rastogi & Therly, 2006).

The relationship of women's education to experiences of violence and reporting of violence is inconsistent. Women have been shown to be at risk for severe physical IPV and injuries when they have little or no education (Sabri, Renner, Stockman, Mittal, & Decker, 2014). Secondary education in particular has proven to be a protective factor for recent IPV, but primary education has not been shown to be protective globally (Abramsky et al., 2011). Women with more education have higher reported rates of IPV (Abramsky et al., 2011; Ackerson et al., 2008), and report more lifetime and recent IPV than those with less education than their husband (Ackerson et al., 2008). Women who are less or equally as educated as their husbands are at less risk for IPV than if they are more educated than their husbands (Weitzman, 2014).

In contrast, one study found that women with no formal education were 4.5 times more likely to report lifetime experience of IPV and 5.6 times more likely to report recent IPV than those with post high school education (Ackerson et al., 2008). Another study showed that women with no formal education are at higher risk for physical and sexual abuse than women with more than 12 years of education (Bhattacharya et al., 2013). Increased education has also been shown to decrease risk for IPV (Bose et al., 2013). This might reflect reporting behaviors; that is, women may not necessarily be at more or less risk, but may be more or less likely to report abuse based on education level.

Although studies on effects of a woman's education on her risk for experiencing violence show inconsistent results, higher education in men is associated with less perpetration of violence (Ackerson et al., 2008). More educated men are more likely to support gender equality (Yoshihama, Ramakrishnan, Hammock, & Khaliq, 2012) and their partners are at less risk for IPV,

as compared to men who are illiterate (Bhattacharya et al., 2013) or have no formal education (Ackerson et al., 2008). In addition, when both men and women in a relationship have lower education, women are globally at higher risk for IPV (Bhattacharya et al., 2013).

The impact of income on women's experience of violence varies depending on income at the community and household levels. Low income on the community level results in women being at higher risk for IPV; additionally, women living in low literacy communities are at greater risk for IPV than those living in high literacy neighborhoods (Ackerson et al., 2008), especially when the male literacy rate is low (Vanderende, 2012). In the U.S., higher levels of neighborhood poverty are related to higher rates of IPV for women (Vanderende, 2012). One study found that in low-income households, it is more common for women to report IPV and for perpetrators to exercise control over women's participation in various activities (Du Mont et al., 2012). When the household is poor, there may be more stress and violence against women, especially when women are highly educated (Weitzman, 2014).

The stress of living in a low-income household exacerbates experiences of violence for women, which can be prevented or made worse depending on who earns the income. Women with lower income and SES are more likely to report IPV (Bose et al., 2013; Dalal & Lindqvist, 2012), which suggests that these women are married to men who are also financially disadvantaged (Bhattacharya et al., 2013; Bose et al., 2013). The source of income complicates the relationship dynamic, and findings about the impact of female-earned income on prevalence of IPV are conflicting (Dalal, 2011). Among women who completed the IPV questions on the NFHS-1, working women reported more emotional IPV, more less severe physical violence, more severe physical violence and more sexual violence than non-working women (Dalal, 2011).

A woman's occupational status, location of her work and her total income also have been shown to be associated with experiences of violence. Abuse was reported to be worse for women who worked outside the home than for women who did not (Dalal, 2011). In India, women in female-headed households and employed women in these households have higher rates of IPV than women in male-headed households and non-working women (Dalal, 2011; Dalal & Lindqvist, 2012). When men and women are both employed the risk for women to experience IPV increases, and if the woman only is employed, there is a 45% increase in risk for IPV (Weitzman, 2014). The violence is also more likely to be severe and more frequent if only the woman is employed (Weitzman, 2014). Women who earned the same or less than their husbands were reportedly abused less than those who made more than their husbands (Dalal, 2011). When only the husband works, women are at slightly less risk for IPV, but when neither the man nor woman is working, there is an increased risk for IPV for all women (Abramsky et al., 2011). When women have low income, education and access to healthcare, which is three times higher in the highest quintile than the lowest income quintile, they may not be aware of or have access to resources to address IPV (Baru et al., 2010).

It is possible that educated and/or working women are more likely to report IPV. Increased women's literacy and increase in the number of women's development programs have also been correlated with higher rates of IPV (Ackerson et al., 2008). Women who are educated may feel more empowered and have better access to resources to learn about violence against women and report its occurrence.

2.2 FACTORS RELATED TO GLOBAL IPV: RELIGION

Although this study included only Hindu women, it is important to understand how religious affiliation and religiosity are related to incidence of IPV. Several studies in India have found higher reported rates of IPV among Muslim (Ackerson & Subramanian, 2008; Dalal & Lindqvist, 2012; Sabarwal, McCormick, Silverman, & Subramanian, 2012; Yoshikawa, Agrawal, Poudel, & Jimba, 2012) and Sikh women (Ackerson & Subramanian, 2008) and lower rates among Christian women (Dalal, 2011; Dalal & Lindqvist, 2012). While it is possible for religious organizations and communities of all faiths to serve as facilitators for addressing IPV, religious involvement has been associated with families encouraging women to stay in the marriage to preserve the family unit (Du Mont et al., 2012; Lee & Hadeed, 2009). If the woman follows a religious leader's advice, she may put herself and her family at risk for further adverse consequences; therefore, religious leaders are important stakeholders to include in conversations to protect families in violent situations.

Qualitative studies in the U.S. have been conducted with religious figures from various Christian denominations as well as Jewish rabbis and Muslim imams to understand their opinions on marriage, divorce and IPV, but there is a lack of research detailing Hindu priests' perspective. Regardless of their religion, leaders commonly said that those who perpetrate abuse by citing religious texts are misinterpreting the meaning of the text (Levitt & Ware, 2006). Discussions with religious leaders from several faiths also revealed beliefs that marriage and divorce are to be initiated by the husband (Levitt & Ware, 2006). Although some leaders said a perpetrator of violence needs to be held accountable, several leaders from multiple faiths blamed the women for provoking the abuse or said that they must take responsibility for not leaving the violent situation. Some also believed the violence is a woman's issue and must be discussed among other women,

while others stated that violence was not a problem in their religious community (Levitt & Ware, 2006).

Research with Jewish, Christian and Muslim religious leaders revealed that they did not support ending the marriage in situations of violence (Levitt & Ware, 2006). Some leaders supported divorce only in emergency situations or after multiple failed reconciliations. Others dismissed the option entirely because of beliefs that marriage is eternal, saying their faith does not support divorce (Levitt & Ware, 2006). Religious beliefs, such as the idea that suffering is expected and something that must be accepted among those who are faithful may impede religious leaders from encouraging women to seek help in situations of abuse (Shannon-Lewy & Dull, 2005). This results in women who do seek the help of their religious leaders being unsatisfied with their recommendations and being less likely to seek help with each additional incident of violence (Shannon-Lewy & Dull, 2005).

Most leaders encourage the couple to stay together and maintain the marriage (Levitt & Ware, 2006) and this lack of support for the woman can make the situation worse (Kulwicki, Aswad, Carmona, & Ballout, 2010). Although women were not necessarily blamed for provoking abuse, several leaders said that women should be submissive, answer to their husbands and not work because it interferes with household duties (Levitt & Ware, 2006). Some leaders of reformed religions said they would contact the authorities if a woman approached them with a concern, but many leaders would encourage women to stay in the relationship (Levitt & Ware, 2006) and discourage help-seeking behaviors (Kulwicki et al., 2010).

Religious leaders' prioritization of maintaining the marriage may exacerbate issues around abuse, especially if women do not seek help outside of their religious circles. Beliefs that men are closer to God and superior to women (Levitt & Ware, 2006) may also promote forgiveness and

acceptance of abusive partners (Shannon-Lewy & Dull, 2005). Although women may report marital abuse to religious leaders before other sources of legal and social support (Du Mont et al., 2012; Levitt & Ware, 2006), religious leaders are very rarely trained to address IPV (Levitt & Ware, 2006). This is a missed opportunity for women experiencing IPV because they seek the leader's guidance and advice for issues within the marriage that may ultimately impact their quality of life and safety.

3.0 IPV IN INDIA

3.1 CASTE

In order to better understand rates of violence among AIIW, it is important to understand the global, Indian and immigrant-related factors that contribute to IPV. For India, the caste and Varna system and its influence on social and health outcomes are particularly important. Varna means color but refers more to spiritual color (Nadkarni, 2003). The term caste comes from the Portuguese word 'casta' meaning breed or race (Vaid, 2002). The caste hierarchically orders Indian society based on marriage customs, heredity, rituals and occupation (Kijima, 2006). Caste was originally religiously defined in an ancient Hindu text by the four Varnas that classify the division of labor for individuals in Indian society. While Varna is considered a more religious/ritual term and caste is used more in secular discussions, their bidirectional relationship means that both must be considered when describing social and health outcomes of individuals within the caste/Varna system.

Varna is also a system of ritual purity. An individual's purity is determined by her Varna, which determines occupation, diet and caste-specific behaviors. Those who are less pure are socially limited in freedom of interaction, as well as access to resources. In the caste system, Brahmins are the most superior and pure and are defined not only by their devotion to spirituality and academia, but also by their vegetarian customs. The Kshatriyas include kings, the military and administrators of law and defense. The Vaishyas work as merchants and farmers. The Shudras are recognized as artisans and laborers. A fifth class that does not belong to a particular Varna is referred to as the Untouchables, or those who do not follow the caste-related hygiene norms,

occupational work or dietary restrictions. Due to its offensive connotation, the term Untouchables was replaced with the term Dalits, meaning the oppressed.

Within the caste system, there are jatis or endogamous kinship groups that share a specific occupation, dietary habits, behaviors and rituals. Jati, which means “to be born,” is inherited and involves all members of the group as well as their children (Mandelbaum, 1972). It is considered a closed group, with each jati viewed as a “species” within the caste system (Deliège, 2011). Membership within these groups has evolved and been renegotiated over time with the advancement of data collection practices in India and establishment of the Civil Service Registration Act in 1966 (Guilmoto, 2011). Despite these changes, social group membership and caste status are difficult to measure. Jati often matters most in establishing relationships and status, although their exact hierarchical ranking is difficult to determine (Mandelbaum, 1972). Nevertheless, Varna can help individuals understand the caste system and assess approximately where an individual falls in the caste system (Mandelbaum, 1972). Thus, with Varna, there is some hierarchy that is applied similarly across India’s diverse states and territories because higher Varnas tend to include higher jatis (Mandelbaum, 1972). Regardless, it is a system based on inequality and while some say caste does not exist because caste-based discrimination is illegal, it is still a concern within Indian society (Mandelbaum, 1972).

Although there are occupations traditionally associated with some Varnas and jatis and a majority of jatis try to follow their traditional occupation, they often must take up a second trade to make money or do so because their traditional work is associated with low status, such as fishing, herding or tanning (Srinivas, 1955b). While it is considered proper to follow your traditional occupation, it is possible to take up a new trade, which has become increasingly more common, especially among younger generations, thus the division of labor is less clear (Srinivas,

1955a; Srinivas, 1955b). Many jatis have adopted some type of agricultural practice out of necessity (Srinivas, 1955a; Srinivas, 1955b), even though it is considered more low caste. Supply and demand of services determine when a traditional occupation becomes obsolete, and thus adoption of a new occupation often leads to social mobility because individuals are able to be more successful (Srinivas, 1955b). As a result, Dalits are now refusing to continue with some of their more traditional occupations, which are perceived as degrading (Srinivas, 1955a).

Another opportunity to improve status is through Sanskritization or adoption of behaviors associated with higher castes, such as a vegetarian diet, thus allowing those of low caste to have a higher class status (Srinivas, 1955b). Land ownership is also common among high-population low caste peasant groups and allows them to have social mobility and become dominant castes (Srinivas, 1955b). Those who are landless tend to be Dalits and at the bottom of the hierarchy (Srinivas, 2003). Thus, those of low caste can be of high class because of their large membership and owning great amounts of land (Srinivas, 1955a). Castes that are larger in number and have land ownership rights can have impressive economic and political power, which can result in low caste groups becoming dominant and of higher class (Srinivas, 1955b).

Because rituals determine pollution and thus status along with Sanskritization and land ownership, one interaction by two individuals of different jatis must consider all of this context (Srinivas, 1955b). When there are disputes between jatis, completion of services becomes complicated because certain tasks, such as harvesting, require collaboration between jatis of different status (Srinivas, 1955b). In extreme cases, individuals can be excommunicated, which impacts their and their family's social interactions and access to resources (Srinivas, 1955a). Thus, jatis are extremely interdependent and no one jati can be self-sufficient (Srinivas, 1955b). All jatis

are needed to uphold the village system and maintain relationships in the community (Mandelbaum, 1972).

Keeping track of and upholding caste-specific relations is perhaps most common in Indian village settings. Villages are considered to be the bedrock of Indian tradition and they used to be isolated from other settlements, with most village members not having contacts or relations with individuals who lived more than a few miles from their home (Srinivas, 1955a). Village self-sufficiency is largely due to the division of labor from castes completing tasks associated with their traditional occupations for their own benefit and that of village members; however, importing some goods from outside villages (Srinivas, 1955a) and marriage to those outside of the village have become common. Villages are now becoming more interdependent on each other, rather than village members being interdependent on each other, thus villages are no longer truly isolated (Mandelbaum, 1972). Social order within villages is crucial, even though jati size can range from several to thirty and their membership can range across villages (Mandelbaum, 1972). Each Varna may be represented in the same village, but each jati member has the closest relations with others in their jati (Mandelbaum, 1972) and jatis tend to group together spatially (Guilmoto, 2011).

Village interdependency can be maintained only if there is a good relationship with other villages and this also makes marriage easier, as it allows for marriage to occur inside the jati without marrying too close within their lineage (Beals, 1974). Villages have jatis, each of which has lineages, some of which were established through marriage and which impact access to resources, village population size and the ability of villages to be interdependent and self-sufficient (Beals, 1974). Lineage is considered as a subsystem within jatis (Mandelbaum, 1972). Because lineage is patrilineal, individuals are considered biologically the same as their fathers. It is preferred to marry within the caste and the village (Mandelbaum, 1972) the closest possible

relatives who are not too closely related to the father's side (Beals, 1974), but marrying outside of the village is also appropriate when necessary (Mandelbaum, 1972). Marrying within the family means that daughters will be taken care of, the family remains together and they can share resources and arrange a marriage affordably (Beals, 1974). If this is not possible, individuals of small villages must marry from neighboring villages where successful marriages were contracted before.

This allows for the opportunity to forge new political and economic ties for trade, business, and resource access (Beals, 1974). Caste is paid close attention to, as village, lineage and jati rules must be upheld when marriages are arranged. It is easy to establish one's status by mentioning their jati, thus individuals can find suitable marriage and business partners (Beals, 1974). Marriages can happen only when all jatis complete their traditional occupations and all high-status individuals should be present, as well as all households represented, although some will not attend to show their disapproval of a marriage (Beals, 1974). This can create difficulties, especially when marriages are arranged to resolve conflicts between families and villages, thus disputes can lead to further conflicts in the future and impact village and caste self-sufficiency (Beals, 1974).

While marriage, adopting new occupations and Sanskritization can increase social mobility, disparities have still persisted between members of different caste status. In order to improve the circumstances and socioeconomic status (SES) of those with low caste status, the government created "policy-oriented categories" (Guilmoto, 2011). Two of these classifications, scheduled castes and scheduled tribes, are diverse groups that differ greatly within and between themselves (Guilmoto, 2011). Group membership is determined by the levels of poverty, education, and occupations held by those in each jati, but since classifications are made at the jati and not the individual or household level, there is heterogeneity within each category (Guilmoto,

2011). Other backwards classes are another low caste group defined by their "backwardness" or how members of this group tend to disproportionately be of low education, income and occupation levels. This group usually includes a mix of those considered Vaishyas and Shudras, who are often members of the middle and lower classes. Brahmins and Kshatriyas are usually in upper castes and they are not afforded special privileges by government legislation.

Typically, scheduled castes are comprised of Dalits, who are considered social outcasts and protected by governmental legislation promoting greater participation in education and government. Scheduled castes have special government-assigned reservations that focus on creating opportunities for social mobility, but can also create tension between those who are and are not entitled to these protections (Deliège, 2011). Additionally, higher castes may resent these individuals because they are more able to improve their social status (Srinivas, 2003). Thus, sometimes it is better to be designated as a member of a scheduled caste and some groups view these protections as unnecessary, unfair and divisive (Deliège, 2011).

Because of their occupations, as well as government policies and programs, Brahmins are not all high class and Dalits are not all low class (Deliège, 2011). For example, some Brahmins have low ritual rank, such as those who do funeral rites, and so they are viewed by some as similar to Dalits in ritual status (Srinivas, 2003). Although there is not much interaction between those at opposite ends of the caste hierarchy, caste and class can overlap, but there are also many levels within different castes and classes (Deliège, 2011). While there is a middle class in India, it can be hard to define because there is much fluidity in this class and many opportunities for upward mobility (Guilmoto, 2011). Groups and individuals have been known to change their caste names, practice Sanskritization and convert to other religions to try to improve their social status and become part of the growing middle class (Deliège, 2011). Land ownership and Sanskritization do

not necessarily mean that individuals have high ritual status, thus assuming that caste is the same as class is an overgeneralization of the Indian social hierarchy (Srinivas, 2003).

The caste system has evolved much over time due to "stable but contested" boundaries of Indian states which vary in their languages, customs, levels of development and constant migration among the population (Guilmoto, 2011). Caste status is not fixed and some jatis can absorb others or fracture into new jatis based on disagreements, changes in occupation or efforts to achieve social mobility. Thus, individuals will disagree when ranking the status of jatis and Varnas (Mandelbaum, 1972). Caste was believed to not support modernity, but it has survived history and has adapted over time (Deliège, 2011). There has been upward mobility among those of low castes and classes, and discrimination against those of low caste is often perpetuated by those who are threatened by them (Deliège, 2011). In the majority of cases of conflict, the source of the problem is competition for resources instead of the perceived ritual purity of the involved parties (Deliège, 2011). Groups tend to be more secular and ritual practices are common only in the domestic sphere or in temples (Srinivas, 2003).

While some scholars admit that the impact of the caste system and its interpretation have changed and become less important, Srinivas' (2003) "obituary" on caste details how the caste system has weakened over time and will soon be extinct. Because villages are becoming less isolated and occupations are changing, the "jati-based" labor system in rural India is becoming less compatible and jati ranking is becoming more ambiguous (Srinivas, 2003). Certain jobs are becoming more obsolete and jati status has changed due to education, political shifts, advances in technology and prioritization of achieving equality and democracy (Srinivas, 2003). Many have moved to urban areas where there is greater access to education and more occupational opportunities. Modern occupations employ those from a diverse range of caste backgrounds and

there is much rivalry instead of interdependence between jatis (Deliège, 2011). Among the growing middle class are dominant caste groups, some of whom are minorities and diverse ethnic groups that have benefitted from government education programs (Srinivas, 2003). Thus, there is much room for upward mobility for dominant castes and equality in the middle class, and while caste as a system may be weakening, individual castes are succeeding and competing for secular resources (Srinivas, 2003). The middle class is also emerging and growing more in rural areas, especially among dominant castes and greater access to education and nontraditional occupations may over time continue to lessen the impact of caste status (Srinivas, 2003). Thus, while the influence of Varna and caste on the social hierarchy of India is complicated and challenging to define, it is an important indicator of SES, a key factor for understanding the risk for domestic violence.

3.2 CASTE AND SOCIAL AND HEALTH INEQUITY

Governmental caste classifications are determined by educational, financial and social indicators of each jati, which have important implications for social and health outcomes. Classifications are not fixed; the current list of scheduled castes and scheduled tribes can be altered after each census, conducted every ten years. Regardless of individual caste status, scheduled castes, scheduled tribes and other backwards classes are all considered backwards according to the Constitution for matters such as literacy. State and national governments share the responsibility of designating which jatis are classified as particular castes, therefore the group's geographic location and name, which originally alluded to occupational status, are considered. Due to the fact that some caste groups' initial occupations are now obsolete, sub-castes have now adopted new occupations and intermixed

with other caste groups. This fracturing of groups contributes to a lack of uniformity of caste classifications across Indian states and union territories.

Assigning caste groups is a duty shared by the state and local governments. This becomes particularly important as these classifications result in special reservations for the socially and educationally backwards classes, which is decided by comparing one's education level to the state average (Kumar, 2000). Reservations are official positions that are allotted specifically for underrepresented caste group members, which are meant to improve their representation and allow for positive discrimination, but lower castes still have higher rates of poor health status (Kumar, 2000). These reservations translate into social, educational and financial benefits for individuals of low caste status. A caste's placement in the hierarchy depends on the setting and region, but scheduled castes, scheduled tribes and other backwards classes all have government determined reservations.

While Article 15 of the Indian Constitution prohibits caste-based discrimination, there is evidence for prejudice in employment, standard of living and differences in returns on investment in education and occupation (Kijima, 2006). Those of low caste status exhibit high poverty, low education, low pay and are geographically isolated from educational, occupational and healthcare resources (Indian Council of Medical Research, 2013). These social, educational and economic inequities result in health inequities. Caste status is associated with household financial status, and those with low caste and financial status exhibit higher risks of mortality (Government of India, 2007). Scheduled tribe women who are also low caste have higher rates of anemia and like scheduled caste women, are less likely to have prenatal care; their children are less likely to be treated for diarrheal diseases and more likely to suffer from neonatal, infant, child and under five mortality than higher caste individuals (Nayar, 2007). Scheduled tribes in particular have the

highest infant mortality, under five mortality and 19-44 year-old mortality rates (Po & Subramanian, 2011). Scheduled castes and scheduled tribes suffer higher rates of poverty than upper caste members (Kijima, 2006). In contrast, members of non-scheduled castes and scheduled tribes tend to have longer life expectancy and higher rates of education. They also have higher literacy rates and smaller households, suggesting access to family planning resources (Kijima, 2006).

3.3 CASTE AND WOMEN

Dalit women are considered the most marginalized members of Indian society, while upper caste men are the most advantaged (Deshpande, 2006). Dalits tend to be members of scheduled castes or scheduled tribes, which are the most discriminated against occupationally. Scheduled tribes' geographically isolated lifestyle often results in their living in areas with worse schools and quality of water, poor access to paved roads, little electricity and access to health facilities (Kijima, 2006). Even among villages where non-scheduled castes and scheduled tribes live with scheduled castes and scheduled tribes, health disparities persist (Kijima, 2006). Disparities are highly pronounced among low caste Dalit women (Narula, 2008). Low caste women in India are particularly at risk as they suffer the double burden of female gender and low caste (Deshpande, 2006; Vinutha, 2014). Dalits are less likely to get help during disaster relief, more likely to live in isolated hamlets, more likely to attend India's poor quality government schools, less likely to speak English (considered the language of the higher castes), less likely to have power in the local government panchayats, less likely to have access to healthcare institutions, more likely to have lower nutrition and literacy levels, and more likely to have higher rates of household poverty (Narula, 2008). Dalits are less

likely to be represented in law enforcement and less likely to have their complaints registered with authorities (Narula, 2008). Dalit women have limited access to educational and occupational opportunities and a high dropout rate in schools (Narula, 2008). They are more likely to work as 'manual scavengers' in sewage work, which is considered highly polluting and has been prohibited as an occupation by the ineffective Construction of Dry Latrines Act of 1993 (Narula, 2008).

In addition to poor social, educational and occupational outcomes, Dalit women are at high risk for violence. Dalit women are more likely to engage in survival sex and are at higher risk for sexual violence (Narula, 2008). Dalit women experience violence at disproportionate levels and have the worst standard of living of any caste and gender. While the true incidence and prevalence of violence is not necessarily captured in reports of violence, it is possible that Dalit women may be more candid about IPV than higher caste women, who may worry about how their social status would be impacted by disclosing their IPV status (Deshpande, 2006).

Women in scheduled castes are at highest risk for IPV while upper caste women are least at risk (Dalal & Lindqvist, 2012; Sabarwal, McCormick, Subramanian, & Silverman, 2012). Low caste women are also more likely to report IPV and recent IPV (Ackerson & Subramanian, 2008). Dalit women have reported violence for being unable to bear any children or male children specifically, being suspected of cheating, for their manner of dress or appearance, for refusing sex and for working or independently spending their leisure time (Vinutha, 2014). Many of these incidents of domestic violence still go unreported because Dalit women lack empowerment and advocates, and some crimes are committed in public spheres by the dominant castes whom the authorities will not challenge or file reports against because of power dynamics or bribes (Vinutha, 2014). Other backwards classes are also more at risk for less severe IPV than the upper castes, suggesting all groups other than the upper castes are at risk for IPV (Bose et al., 2013). The

influence of caste status on educational, occupational, social and health outcomes as well as violence against women has been researched for Indian women in India. The influence of caste status may be less important in the U.S. and individuals may be more familiar with Varna status because they no longer live in India, where caste status determines privileges designated by government policies. To further understand the impact of caste on outcomes for AIIW in the U.S., this study included measures of caste status and experiences of lifetime abuse in the U.S. While these measures included data on IPV and caste status, experiences of violence are underreported and these measures cannot fully capture the true incidence of IPV.

3.4 TREATMENT OF WOMEN AND GIRLS

In Indian cultures, along with many others, a woman's traditional primary roles are wife and mother. For females who survive past age 30, their worth is determined according to their relation to others through these roles, and if they are unmarried they can be considered a burden (Johnson & Johnson, 2001). Throughout the lifespan, women may be expected to be submissive and obedient and are perceived as inferior (Segal, 1999). While these expectations may be less common among women who are educated, working and living in urban areas of India or overseas Indian communities, most of Indians still reside in rural villages (Mandelbaum, 1972), where these opportunities are less common for women. The traditional Indian woman is expected to embody the principle of 'sewa' or selfless service, for the duration of her marriage, through bearing and raising children, cooking, and attending to the needs of the family and in-laws (Shirwadkar, 2004). When women do not fulfill these duties, abuse is expected and justified by men and women alike (Yoshihama et al., 2012). As a result, the woman may be physically and psychologically

maltreated, and it is a common excuse that the wife provoked the violence, which is considered to be discipline, not abuse, and culturally appropriate for addressing deviation from traditional gender norms (Segal, 1999).

Although violence against women is a problem across the lifespan, it begins as early as conception for women in India. It is estimated that 52% of individuals in India support sex selective abortion, compared to 30% in Brazil and 20% in Turkey (Segal, 1999). Preference for a son has resulted in families achieving their desired composition of more boys than girls, because families are increasingly utilizing illegal measures, such as sonograms and sex-selective abortions to plan the sex of their children (Sabarwal et al., 2012). Families prefer to have a son because he will have more education and occupational opportunities, carry on the family name, marry and receive a dowry, and carry out specific religious practices (Johnson & Johnson, 2001; Sabarwal et al., 2012). Preference for sons is related to IPV. Women whose husbands prefer sons reported higher rates of IPV in the past year (Sabarwal et al., 2012). Women who had only sons reported lower rates of IPV (Sabarwal et al., 2012).

Illegal but common procedures such as sex-selective abortions and poor treatment of girl children have longitudinal repercussions for all Indians. Girl children who are not aborted fall ill more frequently, are fed less than their brothers and have higher mortality rates up until the age of 30 (Segal, 1999). Higher mortality rates among females was originally mistaken as women being undercounted in surveys and while women are discriminated against across their lifespan, the prevalence of damaging gender practices only becomes clear after observing skewed demographic trends (Guilmoto, 2011). This disregard for female lives results in a surplus of men and an increase in violence against women because there is not a woman for each man (Sabarwal et al., 2012), suggesting that violent behavior is a way to assert control and keep the woman in the relationship.

While it may seem that this would serve as an advantage to women, it has been shown that men are more controlling of their wives because of the difficulty of finding another wife (Sabarwal et al., 2012). The surplus of men in India is correlated with lower rates of female literacy and lower participation of females in the labor force (Bose et al., 2013). In addition, men must resort to marrying women outside of their own community because there are not enough women in their own, and as a result women who move in with their husband's family become more isolated from their natal families, who could serve as advocates during abusive situations (Bose et al., 2013).

The perpetuation of abuse and neglect of women across the lifespan is reflected in country-wide trends of violence. Much of what is understood comes from the Indian National Family Health Surveys (NFHS). The goals of this country-wide survey are to: "a) provide essential data on health and family welfare needed by the Ministry of Health and Family Welfare and other agencies for policy and programme purposes, and b) to provide information on important emerging health and family welfare issues" (Government of India, 2007). There are four iterations of this country-wide survey, the first of which was in 1992. These surveys reveal the following: emotional and physical abuse increasing with age (Dalal & Linqvist, 2012), less risk for IPV when married at an older age and less IPV with increased length of marriage (Bhattacharya et al., 2013). In addition, of the women surveyed in the NFHS, 38% experience first abuse after marriage, 40% report some type of abuse during their lifetime (Ackerson et al., 2008; Bhattacharya et al., 2013), and 20% of women have experienced physical abuse by their husband within the last month (Bose et al., 2013).

According to NFHS data, after women divorce or separate from their husbands, they are 50% more likely to report IPV than married women (Sabri et al., 2013). This increase in reporting may be a result of women feeling more empowered after ending the abusive relationship or

increased experience of IPV because the perpetrator is upset that the woman took action to end the abuse. In this situation, women may experience "traumatic attachment," refusing to leave their husband despite the abuse (Rastogi & Therly, 2006). A woman's marriage and preservation of that union are paramount; leaving the husband has consequences not just for her safety but for her acceptance by her family and the community.

3.5 FAMILY VIOLENCE

When an Indian woman and man marry, their two families also marry. Indian families live patrilocally, meaning that after marriage Indian women move in with their husband, his parents and his unmarried siblings. It is common in India that up to three generations live together, creating a culture of interdependence and collective identity. Decisions are made by the family unit and women are expected to defer to the husband, his father and later her eldest son (Segal, 1999). This is in contrast to a more Western idea of identity that is individualized and focuses on personal independence. Any behavior that is not sanctioned by the family not only impacts the woman's perceived honor and worth, but also those of the family, as a married woman is considered the property of the family and her behavior determines her treatment and inclusion within the family unit and larger Indian community (Payton, 2014). Placing restrictions on the woman's behavior is a means of preserving group honor and identity (Erez & Hartley, 2003). Twenty-five percent of women surveyed by the NFHS-3 reported having husbands with controlling behaviors, making them two to five times more likely to experience domestic violence in their lifetime (Bose et al., 2013; Dalal & Lindqvist, 2012).

Although much of this violence is perpetrated by the husband, it can also be initiated by in-laws (Segal, 1999). Living in a joint family situation means less space, thus creating more stress and burden on resources and possibly resulting in higher rates of household violence. When conflicts arise and need to be addressed, if at all, it is done within the family as they are considered a private family matter (Erez & Hartley, 2003; Ghosh & Choudhuri, 2011; Lee & Hadeed, 2009; Menjivar & Salcido, 2002; Segal, 1999; Vaughn, Salas-Wright, Cooper-Sadlo, Maynard, & Larson, 2014). When the family perpetuates violence, it may be unrecognized as such or justified. Even though mothers-in-law may have experienced violence in their own marriage, they will not necessarily support the daughter-in-law's claims of abuse and may even encourage or carry out the abuse herself (Johnson & Johnson, 2001). By letting their daughters-in-law suffer in silence, mothers-in-law maintain the norm of violence against women and now have authority over the younger woman (Rastogi & Therly, 2006).

It is not uncommon for the husband's violent behavior to be sanctioned by his parents and reinforced through the actions of the mother-in-law and occasionally a sister-in-law (Shirwadkar, 2004). Amongst women in the U.S., 25% of South Asian immigrants who reported IPV in one study (Raj, Livramento, Santana, Gupta, & Silverman, 2006) were more likely to cite abuse from in-laws, domestic servitude to the mother-in-law, abuse during pregnancy, starvation and simultaneous abuse from the husband and mother-in-law (Raj et al., 2006). This involvement of family further complicates the issue of addressing violence against women, especially if the woman cannot seek the help of her own family. As a result of family involvement in and acceptance of abuse, confronting domestic violence in the Indian community becomes difficult (Dasgupta, 1998).

3.6 DOWRY AND UNNATURAL DEATHS

In 1961, the Dowry Prohibition Act was established to prevent grooms and their families from requiring dowry at time of marriage. The act defines dowry as

> any property or valuable security given or agreed to be given, directly or indirectly: by one party at a marriage to the other party or by the parents of either party to a marriage or by any other person to either party to the marriage or to any other person, at or before or after the marriage as consideration for the marriage of the said parties, but does not include "dower" or "mahr" in the case of persons to whom the Muslim Personal Law (Shariat) applies (Rastogi & Therly, 2006, p.68).

Families are allowed to give gifts that are not excessive; but because the law lists no monetary value to indicate what is considered excessive, dowry is still a very common practice. In some circumstances, dowry is used as an opportunity for the family and bride to show off their wealth (Banerjee, 2014).

Dowry, referenced in 1500 B.C. in the Hindu religious text *Manusmriti*, was originally considered optional but is now considered an entitlement (Bhattacharya et al., 2013; Rastogi & Therly, 2006). Dowry was originally common only in high castes before it was adopted by lower caste groups and while it is now a widespread practice, the percentage of marriages that involve dowry is unknown (Guilmoto, 2011). As 90% of Indian marriages are arranged, the higher a groom's socioeconomic status and credentials, the higher the dowry that he and his family expect (Johnson & Johnson, 2001; Rastogi & Therly, 2006). Regardless of the fact that dowry is considered *stridhan* or the woman's property or share of her family's wealth, the woman is very rarely in control and possession of that property (Belur et al., 2014; Rastogi & Therly, 2006).

The husband's family is not always pleased with the size and worth of the dowry payment. Though divorce is a last resort, it is a viable option when dowry expectations are not met (Bain, 2015). Because parents will use their life savings for a dowry, divorce is not desirable, and parents

encourage daughters to stay in violent marriages because of the social and financial cost of divorce and remarriage (Rastogi & Therly, 2006). In contrast, it is culturally acceptable for husbands to remarry and acquire a second dowry payment (Johnson & Johnson, 2001). In the rare situation when an Indian woman does try to remarry, often she must give a thorough description of her situation and why the first marriage was unsuccessful (Goel, 2005). Indian men are allowed to remarry with no explanation for the failure of the first marriage, as opposed to women who, if divorced, are stigmatized along with their unmarried brothers and sisters, who themselves are then considered less desirable marriage prospects (Goel, 2005; Johnson & Johnson, 2001).

When the dowry payment does not meet the husband's family's expectations and divorce is out of the question, women are at risk for abuse (Rastogi & Therly, 2006), which is justified by the husband and his family (Dasgupta, 1998). This specific type of violence, known as dowry-related violence, overlaps with domestic violence, and is the most common type of violence perpetrated against women in India (Rastogi & Therly, 2006). These instances of violence and death are often ruled as accidents, even as the rates of dowry and dowry-related violence increase in India.

When dowry-related violence is recognized and a report is filed, it is usually the family of the woman who advocates on her behalf (Belur et al., 2014). Doctors treat the injuries but do not investigate the cause, and police do not necessarily visit the scene of the crime even when the woman's story is not plausible (Belur et al., 2014). It is not unusual for the authorities to be bribed to misclassify the incident as an accident (Belur et al., 2014), to not register the dowry-related incident when it is identified, or to not respond to the incident at all because culturally it is viewed as a family matter, as is domestic violence (Banerjee, 2014).

4.0 FACTORS RELATED TO IPV FOR IMMIGRANTS

4.1 ACCULTURATION

When immigrants experience a new culture, they must decide whether to incorporate it into their identity, a process some call acculturation. Given that perception of abuse varies by culture, it is crucial to understand how traditional cultural beliefs may support attitudes that promote IPV (Yoshihama, Blazevski & Bybee, 2014). It is possible that the acculturation experience influences the immigrant's conceptualization of gender equality, which may increase her chance of reporting IPV (Vatnar & Bjorkly, 2010). For some cultures, IPV may not be considered a problem, but rather the result of other issues such as financial and social stress (Hyman et al., 2011). Regardless of perceptions of IPV and its etiology, how the acculturation process impacts women's experiences in the U.S. matters, as women's definitions and experiences of and help-seeking behaviors related to domestic violence are addressed in this study.

AIIW, the target population of this study and a non-dominant cultural group in the U.S., and Americans, the dominant cultural group, may influence each other in a bidirectional relationship (Berry, 2005). This is not always voluntary or conscious and depends on the individuals' involvement and participation in the two cultures (Berry, 1997). Acculturation involves adaptation of personal attitudes and behaviors and is more easily facilitated on the individual and group levels when there is acceptance of influence from outside cultures (Berry, 2005). Societies that encourage diversity are considered multicultural and may allow new subcultures to emerge from this interaction of cultures (Berry, 2005). Multiculturalism is most likely to occur when there are low levels of discrimination towards a new culture (Berry, 1997).

However, some immigrant groups, such as Europeans, are viewed more positively in the U.S. than immigrant minorities, who may experience discrimination in the U.S. (Schwartz, Unger, Zamboanga, & Szapocznik, 2010).

Cultural distance and immigrants' various levels of ability to adapt to that distance are described in Berry's Acculturation Model. This model includes four stages. In assimilation, individuals "identify solely with the dominant culture and sever ties with their own culture" (Farver, Narang, & Bhadha, 2002, p. 339). In other words, assimilation involves the individual rejecting her native culture in favor of a new culture. In marginalization, individuals "reject both their own and the host culture," (Farver et al., 2002, p. 339), thus the individual views her culture of origin and the new culture negatively (Berry, 1997). In separation, individuals "identify solely with their own group and reject the host culture," (Farver et al., 2002, p. 339), meaning only the new culture is viewed negatively (Berry, 1997). In integration, individuals "become bicultural by maintaining characteristics of their own ethnic group while selectively acquiring those of the host culture" (Farver et al., 2002, p.339). Reaching integration means that the individual or group feels accepted by the host culture (Mehta, 1998) and positively views both their home and host cultures (Berry, 1997).

Acculturation is important for this study, because individual attitudes and behaviors surrounding domestic violence may change based on exposure to attitudes and behaviors of the dominant culture. Where an individual falls in Berry's model is partially defined by the individual's behavior but also by her attitude towards the host culture, and behavior tends to change quicker than personal attitude (Farver et al., 2002). Behaviors may include preferred language spoken, while attitude is more related to values and identity (Schwartz et al., 2010), which impact gender relations and norms. In the context of this study, educated Indians and their families are

more likely to immigrate to the U.S. (Raj et al., 2006). Some may still have difficulty acculturating and have more traditional beliefs surrounding male and female interactions. This results in some Asian Indian immigrants going through a 'culture-freeze' to maintain their values and traditions (Goel, 2005; Hyman et al., 2006). This may be particularly difficult for Asian Indian Americans in the U.S., most of whom identify as Hindu or Muslim, which defines them as double minorities who must acculturate religiously *and* ethnically into communities that may or may not share these traits. The target population for this study therefore has the triple burden of being an ethnic minority, a religious minority and female. Identifying as a member of these minority groups further complicates gender dynamics that may influence violence against women.

Minority status of immigrants complicates the acculturation process and also contributes to experiences of IPV. Higher acculturation levels among immigrants have been correlated with being less likely to report IPV (Kimber et al., 2014), but this does not necessarily reflect actual experiences of IPV. Acculturation has also been shown to be a strong indicator of a woman's intention to address IPV concerns in her personal life, and with immigrant women's isolation from social and economic resources, they are at risk for further adverse life outcomes (Modi, Palmer & Armstrong, 2014). IPV and child maltreatment have also been studied in the context of acculturation, and non-maltreated children have been shown to be more acculturated and less likely to report IPV later in life (Kimber et al., 2014).

Acculturation and reporting of IPV, which may vary based on the demographic factors of the immigrant, are measured in this research study. Historically, third generation or more immigrants were less likely to report IPV than newer immigrants; however, the stress of immigration is a risk factor for increased IPV (Kimber et al., 2014). Nevertheless, rates of reported violence do not necessarily represent rates of experienced violence among this population.

While there is heterogeneity across Asian cultures and acculturation style, in one study statements that represented a more assimilated or Westernized acculturation attitude correlated with less agreement with statements supporting IPV (Yoshihama et al., 2014). This contrasts findings among those who were less assimilated and more likely to agree with statements that supported IPV and gender norms in their home country (Yoshihama et al., 2014). This suggests that adopting the attitudes of the host culture results in less acceptance of IPV; therefore, measuring acculturation may help predict individual attitudes toward IPV. Nevertheless, attitudes surrounding IPV and acceptance of IPV do not necessarily translate into experiencing IPV, or an individual's willingness to address IPV in her personal life. In one study, those who agreed with IPV supporting statements also tended to have more traditional cultural values, use the language of their country of origin, participate in cultural or faith-based organizations, and attend religious ceremonies (Yoshihama et al., 2014). Frequent attendance at religious events was, however, correlated with less support of the IPV supporting statements (Yoshihama et al., 2014). This heterogeneity in behaviors and beliefs suggests the need for more studies of IPV and its association with acculturation among specific immigrant groups to understand how the acculturation process impacts IPV-related attitudes and behaviors.

4.2 IMMIGRANT STATUS

In general, foreign-born individuals are less likely to formally report IPV (Du Mont et al., 2012), although trends in IPV experiences and reporting vary across immigrant groups. Younger and more recent immigrants are more likely to report IPV (Du Mont et al., 2012), but it is estimated that 25% of all immigrant women experience IPV in their lifetime, regardless of whether they

report it (Menjivar & Salcido, 2002). Despite issues of underreporting, among reported incidents in the U.S., Asian immigrants have higher rates of IPV than European and African immigrants, and rates of IPV among Asian American immigrants were second only to Latin American immigrants (Du Mont et al., 2012).

Asians are America's fasting growing ethnic minority group with their size increasing by over 45% since 1990 (Chang, Shen, & Takeuchi, 2009). Currently, 20% of the U.S. Asian population is Indian (Singh & Unnithan, 1999), and 89% of South Asians are Indian (Mahapatra, 2012). Asian Indians are also the largest South Asian immigrant group in the U.S (Raj et al., 2006). Despite this growing population, studies among South Asian women that include Asian Indian immigrants are few in number and Asian Indian-specific studies are rare (Chang et al., 2009; Hurwitz, Gupta, Liu, Silverman, & Raj, 2006). Several studies among Asian and specifically South Asian women have investigated trends in IPV; however, rates across Asian subpopulations in the U.S. and abroad vary widely, and Asians as well as all South Asians cannot be grouped into one homogenous category.

Studies of South Asian immigrant women suggest that they may be at higher risk for IPV in the U.S. than in their countries of origin; however, higher rates may relate to a change in women's definition and recognition of IPV. One study in Boston found that 20% reported physical or sexual abuse, and of those experiencing abuse in their current relationship, 55% reported physical abuse, 91% reported sexual abuse and 30% claimed to have injuries from the abuse (Hurwitz et al., 2006). Women who were abused were more likely to report poor physical health, depression, suicidal thoughts and stress that limited their physical activity (Hurwitz et al., 2006). Although 40% of South Asian immigrants in Boston report lifetime physical or sexual violence in their current relationship, only 3% filed a restraining order (Goel, 2005). Another study on South

Asian women and their experiences of IPV confirmed a lifetime risk of 77% for IPV among South Asian women in the U.S., with 38% of study participants reporting one or more forms of IPV in the past 12 months (Mahapatra, 2012). Twenty-five percent of these women reported sexual abuse, 66% reported minor instances of abuse, and 33% reported minor and severe experiences of abuse (Mahapatra, 2012). Of these women, 80% did not speak of the situation with their partner and only 2% permanently left the abuser (Mahapatra, 2012).

Interviews in one study with South Asian women identified their conceptualization of the various dimensions of abuse. Most participants reported severe physical abuse but physical and psychological abuse were also reported more often than sexual or economic abuse (Gill, 2004). Psychological abuse was recognized as an issue among all women interviewed as opposed to some women who discussed situations of physical violence but refused to call the acts abusive out of embarrassment and concern for their social well-being (Gill, 2004). In contrast, focus groups with Tamil women in Canada revealed that all age groups recognize the issue of physical and emotional abuse and all age groups except the elderly acknowledge financial abuse (Hyman et al., 2006).

While perspectives on and experiences of abuse vary among immigrants, several barriers exist to addressing domestic violence in the home, regardless of ethnic identity. Immigrant women worry about losing custody of their children (Allagia, Regehr, & Rishchynski, 2009; Lee & Hadeed, 2009) and purposeful delay of their immigration paperwork if they report abuse (Lee & Hadeed, 2009). These women are often dependent on their husbands socially, linguistically, economically and emotionally, and therefore may be threatened with abuse or deportation (Narayan, 1995). If a woman wants to leave her husband, her dowry is an asset for her financial security, but only if she controls access to it. Husbands may control the wife's legal documents and the household money (Preiser, 1999; Shirwadkar, 2004), and the woman may not have the

confidence or knowledge to live on her own (Collucci & Montesinos, 2013). Partners may contribute to women's misinterpretation of their own rights, who often will not challenge their partner's understanding of the law (Allagia et al., 2009). This is further complicated because women must go through a joint interview process to receive permanent residency status, which can take several years, up until which point their conditional status is controlled by partners (Allagia et al., 2009). For women who do decide to report their partners, they must have physical evidence, such as medical and police reports; psychological violence is not sufficient (Allagia et al., 2009). Even in situations when women do have evidence, they may worry how issuing a report will impact her partner's and, as a result, her own status (Menjivar & Salcido, 2002). The report may impact residency status and restrict her access to certain social services (Menjivar & Salcido, 2002).

The impact on children of ending the abusive relationship is often considered before women take action. The welfare of children fathered by the abusive partner is the reason many women maintain the relationship (Hyman et al., 2006). This is common, as 25% of IPV victims report having children (Mahapatra, 2012). AIIW who have children worry about their marriage prospects or that their family and community will shun them for leaving the husband (Allagia et al., 2009; Erez & Hartley, 2003; Mahapatra, 2012). Although some women are too embarrassed to tell their family (Gill, 2004), they are more likely to reach out to family than formal networks for help (Preiser, 1999). In situations where abuse is disclosed to family, women are often encouraged to stay in the relationship (Hyman et al., 2006) even if their doctor encourages the opposite (Preiser, 1999). Indian women worry about dishonoring their families, damaging their husband's reputation in the community and worsening the abuse if they seek assistance (Hyman et al., 2006).

Despite their increasing numbers, AIIW lack culturally appropriate social services, including programs to address IPV, when they seek assistance from more formal networks of support (Collucci & Montesinos, 2013; Hyman et al., 2006; Modi et al., 2014). Economic and linguistic barriers are particularly problematic for women who want to seek shelter or services (Allagia et al., 2009; Lee & Hadeed, 2009; Shirwadkar, 2004), as are geographic barriers because services are predominantly in urban areas (Lee & Hadeed, 2009). Non-Hispanic whites account for 82% of the urban population, and 30% of non-urban population growth was accounted for by foreign-born populations in the years of 2000-2005 (James, Kandel, & Parker, 2007). Of the Asian population living in non-urban areas, almost 50% of all Asians are foreign-born (James et al., 2007), and it is possible that geographic, transportation and cultural barriers may impact their ability to access available services.

While immigrant women create informal social networks easily, when their partners control their mobility and access to transportation and resources, they are less likely to participate in activities that allow them to interface with others, and may have to reach out to emergency services (Menjivar & Salcido, 2002). Seeking help from authorities is rare because women compare their experience with authorities in their home country to those in their new country, where domestic violence is less tolerated (Menjivar & Salcido, 2002). Immigrants are more likely to reach out to the police in their new host country when the abuse is very serious and frequent and they lack financial and social support (Vatnar & Bjorkly, 2010).

While many women worry about being deported or denied services based on their ethnic and religious background, some women do not access shelters because they perceive that they do not belong in a shelter, which they believe to be appropriate only for severely disadvantaged individuals (Shirwadkar, 2004). In contrast, because Asian immigrants are less likely to seek

assistive services than other racial or ethnic groups, they may be unaware of these services or their legal rights if their abuser controls their mobility (Collucci & Montesinos, 2013; Lee & Hadeed, 2009). Providers may also be unaware of the needs of these women because they do not seek out their services. Although awareness may increase with more time spent in the country (Menjivar & Salcido, 2002), women may also worry that the U.S. legal system does not understand the cultural context of their situation enough to assist them (Preiser, 1999). Further research is necessary to better understand how immigrant women make the decision to seek services in situations of domestic abuse.

4.3 LAW

For Indian women in India and AIIW in the U.S., their awareness and perceptions of domestic violence-related laws and stakeholders within the law enforcement and criminal justice systems greatly impact their experiences addressing situations of domestic violence. In India, laws such as the Protection of Women from Domestic Abuse Act (PWDAA) and 50 others were passed in 2005 specifically addressing violence against women. Unfortunately, women suffering from abuse have benefitted little from these laws, which are not consistently or effectively enforced even as rates of crimes for violence against women are steadily increasing (Ghosh & Choudhuri, 2011).

The potential reach and impact of PWDAA are impressive, as the law allows women to file for past instances of violence that include physical, sexual, psychological and financial abuse (Ghosh & Choudhuri, 2011). Women may also file against their in-laws while claiming their home, personal possessions, reimbursement for health services and property. Women who do file are usually of higher SES from urban areas who can pay for legal counsel (Ghosh & Choudhuri, 2011).

Unfortunately, the act is not put into action and many who might benefit from its protection are unaware of its existence (Ghosh & Choudhuri, 2011). Men who challenge this act say that male relatives will be in danger, although there are very few reports of female abusers. Critics also dislike the possible increase in divorce in India that might result from this act and its indirect support of cohabitating, due to the protection of unmarried women against abuse (Ghosh & Choudhuri, 2011). Regardless of complaints of those who oppose the law, when cases are filed under PWDAA, the perpetrators are usually not convicted for their crimes (Ghosh & Choudhuri, 2011), and effectiveness and enforcement of this act, like many other laws in India, have not been evaluated (Johnson & Johnson, 2001).

In the U.S., laws such as the Violence Against Women Act (VAWA) have been implemented for protection of immigrant and non-immigrant women suffering abuse. VAWA is reauthorized twice a decade and applies to domestic violence, violence in unmarried relationships, sexual violence, stalking and human trafficking (Modi et al., 2014). According to VAWA, domestic violence

> includes but is not limited to: throwing objects, pushing or shoving, physical restraint by forcefully holding or tying up the victim (such as locking her in the house or room), slapping, pulling hair, punching, kicking, burning, choking, strangling or smothering, slamming the victim's head into a hard object, beating up the victim, throwing the victim on the floor, running into the victim with an automobile, putting a dangerous substance, such as gasoline, on the victim's skin, hair, or eyes, pushing, scratching, biting, burning, attacking, hitting, cutting or stabbing the victim with a knife or machete, attacking hitting or shooting the victim with a fun, hitting the victim with other objects, and/or assaulting during pregnancy (Orloff & Garcia, 2013, p.3).

Reporting has increased since VAWA's inception, which may mean an increase in prevalence; however, fatalities have decreased, suggesting that women are better able to advocate for themselves when policies to protect them are effectively enforced (Modi et al., 2014; Orloff & Garcia, 2013).

Leaving an abusive partner and addressing the abuse are difficult choices for immigrant and non-immigrant women. On average, a woman in the U.S. makes between two and five attempts before successfully leaving her abuser; however, this is much more difficult and complicated for immigrant women (Orloff & Garcia, 2013). Immigrants cite fear of deportation as the primary reason for not seeking help, which can still put the women at risk from her partner (Orloff & Garcia, 2013). Over 60% of women also listed lack of finances (Orloff & Garcia, 2013). Many women believe their husbands control their residency status and can revoke it at any time (Orloff & Garcia, 2013). Immigrant women experiencing abuse also have varying degrees of interest in prosecuting their abuser, because if the case does not end in their favor they may experience extreme consequences related to their own health and safety as well as their children's (Orloff & Garcia, 2013).

In India, the justice and law enforcement systems are unhelpful and corrupt, and women may assume U.S. services operate similarly (Erez & Hartley, 2003). AIIW often perceive that law enforcement and justice system responses to abuse in the U.S. will be as ineffectual as responses by these systems in their home country (Menjivar & Salcido, 2002). Because of this, U.S. law enforcement, justice and social systems have a very narrow window in which to become known to the victim and build a sustainable relationship founded on respect and trust (Orloff & Garcia, 2013). This is especially relevant because women tend to seek help from informal networks, such as friends and family who will better understand the cultural context of their situation (Raj and Silverman, 2007). Unfortunately, these individuals may encourage her to not seek help from formal networks because of the stigma of disclosing abuse status. Even in situations where there is a need for medical assistance, women may not seek help or perceive themselves as in need of domestic violence services (Raj and Silverman, 2007). In the situations where women seek help

from formal networks of domestic violence support, it is often because they are experiencing increasingly severe situations of abuse, and they have been connected with these services after already reaching out to informal and community supports (Raj and Silverman, 2007).

As previously stated, linguistic barriers as well as lack of awareness of rights are highly limiting factors for women who seek culturally appropriate services (Modi et al., 2014). Because of them, women cannot seek out services or law enforcement even if they are aware of these allies. In addition, advocates who speak their language are not often available (Orloff & Garcia, 2013). Women may also be unaware that under VAWA they have a right to be served by domestic violence organizations, as all of these resources are mandated to provide their services without requiring information about the woman's immigration status or other personal information (Orloff & Garcia, 2013). Making women aware of their rights and helping them understand that acts of violence have consequences in the U.S. are important steps in addressing their experiences of abuse. Additionally, women who are ready to address situations of chronic violence must have culturally, socially and linguistically appropriate services available and accessible to them.

5.0 ADVERSE HEALTH OUTCOMES ASSOCIATED WITH IPV

5.1 MATERNAL AND CHILD HEALTH

When women experience abuse their children also suffer. Children in India are less likely to be immunized for vaccine-preventable diseases when their mothers experience IPV. Children are more likely to be vaccinated when their mothers have higher education, as opposed to mothers who have less education and income, and low caste status, all of which put the mother at increased risk for IPV (Sabarwal et al., 2012).

Children's likelihood of vaccination is dependent on the mother's ownership of a vaccination card, as well as the mother's experiences of IPV. In India, children in urban areas are more likely to be immunized than in rural areas, where their mothers are also more likely to experience IPV (Sabarwal, et al., 2012). Although many children were reportedly immunized, 16% of their mothers did not have a vaccination card, suggesting a possible discrepancy in actual vaccination rates (Sabarwal et al., 2012). Only 45% of all participating mothers in this study had children who were fully immunized (TB/DPT/OP/Measles) (Sabarwal et al., 2012).

A mother's experience of domestic violence also impacts a child's risk for mortality and girl children's future risk for IPV. Infant mortality is 36% more common for mothers in India who have been abused (Ahmed, Koenig, & Stephenson, 2006). Mothers who experience IPV are more at risk for pregnancies ending in stillbirth; it is estimated that 20% of stillbirths could be averted if domestic violence was prevented (Ahmed et al., 2006) With each child born into the family, a mother's risk for severe IPV and violence-related injuries increases by 12% (Sabri et al., 2014), as does her risk for any IPV (Sabarwal et al., 2012). Witnessing domestic violence increases a girl's

chance of experiencing severe domestic violence and injury later in life by 84% (Sabri et al., 2014). A mother's experience of violence and its impact on her health, her children's health and their lifetime experiences of IPV must be addressed to prevent the cycle of domestic violence.

5.2 MENTAL HEALTH

Women who have severe mental illness are more at risk for experiencing sexual violence. Women suffering from mental illness and substance abuse are at even higher risk for IPV (Vaughn et al., 2014). Women who have experienced IPV may have a higher need for mental health services (Rodriguez, Valentine, Son, & Muhammad, 2009). While mental health providers are an important resource for any woman experiencing IPV, one study has shown that utilization of mental health resources by women experiencing IPV is particularly low among ethnic minorities, 71% of whom sought help from friends and/or family, 45% sought out law enforcement services and 22% went to the ER for IPV-related outcomes (Rodriguez et al., 2009).

There are several barriers for immigrant women seeking physical and mental health services who have experienced IPV (Rodriguez et al., 2009). A literature review of IPV and mental health services for women revealed women's concern with disclosing their IPV status to health professionals and their abuser finding out (Rodriguez et al., 2009). Across ethnic minority groups, women with low health insurance coverage were less able to access services and many women prioritized seeking services for their children instead of themselves (Rodriguez et al., 2009). Screening for IPV was also lacking among providers. Some women reported discrimination that resulted in discontinuation of seeking services, and further isolation from care (Rodriguez et al., 2009). Women less proficient in English were linguistically unable to access services and worried

about being labeled as mentally unwell (Rodriguez et al., 2009). Immigrant women also feared deportation and listed this as a reason for not asking for formal help, as well as concern about the confidentiality of their disclosure (Rodriguez et al., 2009).

Mental illness and experience of IPV are correlated among women in India; however, it is sometimes unclear if the mental illness preceded the abuse. In one study, 33% of women at a mental institution in India reported sexual coercion and 33% of these women reported illness before the assault (Chandra, Carey, Carey, & Shalinianant, 2003). This suggests that mental illness can increase risk for experiencing abuse, but experiencing abuse can also increase the risk for subsequent mental illness diagnosis. Very few women in this study connected their sexual assault to their mental illness (Chandra et al., 2003). Although an Indian woman's experience of abuse is correlated with increased likelihood of depression, PTSD and less satisfaction with quality of life (Varma, Chandra, Thomas, & Carey, 2007) in these situations of comorbidity, it must be asked if the mental illness occurred first or the IPV experience. If the IPV experience preceded the onset of mental illness, this is compelling evidence for addressing IPV as the costs of mental health services are a large burden on the individual and society.

5.3 SEXUAL AND REPRODUCTIVE HEALTH

Sexual and reproductive health outcomes of women are negatively impacted by experiences of IPV. Women who experience violence, sexual or otherwise, before and during pregnancy are at greater risk for preterm labor, miscarriage and complications in delivery, as well as having a child with low birth weight; therefore, the health of both the woman and her child are at risk (Shabnam & Mukherjee, 2013). Of women who experience domestic violence, 28% are pregnant women in

developed countries and 20% are pregnant women in the U.S. (Ahmed et al., 2006). It is possible that these women are unintentionally pregnant, because 50% of all pregnancies are unplanned, and that the pregnancy is a result of domestic violence. Data from the NFHS-3 support this; 28% of women experienced physical and sexual violence and of those, 33% had unintended pregnancies (Shabnam & Mukherjee, 2013).

Unintended pregnancies result from sexual violence but also lack of access to contraceptives sometimes due to control by the abusive partner. Sexual abuse and subsequent unintended pregnancies can make it more difficult for the woman to leave the abuser, especially if the pregnancy is carried to term. Some women who did not report contraceptive use cited fear of abuse as a barrier (Shabnam & Mukherjee, 2013). Among women in a study who terminated their pregnancies, having less control in making decisions concerning reproductive health was correlated with IPV (Yoshikawa, 2012), although it is difficult to determine if the termination of the pregnancy or the IPV occurred first (Yoshikawa, 2012).

Globally, 20% of women are estimated to have experienced nonconsensual sex, and many adolescent brides' first sexual experience is forced (Santhya, Haberland, Ram, Sinha, & Mohanty, 2007). In a study of women in India, 12% reported frequent unwanted sexual experiences and 32% reported occasional unwanted sexual experiences (Santhya et al., 2007). Women with higher reported standard of living reported fewer instances of forced sexual experiences, as did women who were acquainted with their husbands before marriage (Santhya et al., 2007). Lack of consent in sexual and reproductive situations makes it more difficult for the woman to control these aspects of her life and may negatively impact her mental health status. Although women may be forced to have sex, they may also give in to their husband's request for sex out of fear of abuse for rejecting sex. Among a sample of women in India interviewed about sexual relations with their husbands,

the majority reported that they gave in to their husband's sexual requests; some women reported physical abuse when they questioned men's behavior (George, 1998).

South Asian women in Boston, which include AIIW, report higher rates of violence than women in India, suggesting that either these women are at greater risk or more often report violence than Indian women in India (Raj, Liu, McCleary-Sills, & Silverman, 2005). The same study found that South Asian women in the U.S. are at increased risk for HIV, unplanned pregnancies and STIs if they have experienced IPV (Raj et al., 2005). Although some women wanted their partners to wear a condom, they expressed fear of abuse for suggesting it. Of all of the women interviewed in the Boston study, 40% reported having an unwanted pregnancy, which they were 3.4 times more likely to experience if they were victims of IPV (Raj et al., 2005).

Of all women in the above-mentioned sample, 74% reported sexual violence and related injuries and many reported lack of decision-making control including limits on number of medical visits, forced abortions, and other adverse outcomes, including miscarriage (Raj et al., 2005). Over 30% of women had no pap smear in the past 12 months (Raj et al., 2005). The presence of sexual and reproductive health concerns for women in India and heightened risk for Asian Indian women in the U.S. experiencing IPV suggest that services for women should include activities that specifically address repercussions of this dimension of abuse.

6.0 MEASURING IPV

Accuracy in measuring IPV is dependent on definitions of IPV, the population experiencing IPV, and method of measuring IPV. Studies measuring IPV among South Asian women include quantitative assessments, as well as more exploratory qualitative methods such as focus groups and in-depth interviews (Hurwitz et al., 2006; Hyman et al., 2006; Raj et al., 2005; Raj et al., 2006). Globally, the most commonly used questionnaire for measuring IPV is the Conflict Tactics Scale (CTS), which has been revised in its English form and translated into the following languages: Chinese, Dutch, Finish, Flemish, French, German, Hebrew, Italian, Korean, Portuguese, Russian, Sesotho, Spanish, Swedish and Zulu (Strauss et al., 1998).

The CTS measures conflict; however, its updated versions are more focused on abuse and ask questions about both abuse of the victim and of the perpetrator, while checking for congruence between the two parties (National Institutes of Justice, 1997). The CTS explores the nature of the relationship (i.e. married, engaged, unmarried, living with) while asking questions about situations such as arguments, emotional reactions, violent actions directed and not directed towards the partner and perpetrator, and frequency of these situations (National Institutes of Justice, 1997). This scale focuses heavily on physical abuse, somewhat on emotional abuse and not at all on sexual abuse (National Institutes of Justice, 1997). It also focuses on injuries that have resulted from these actions and healthcare or law enforcement seeking behaviors that followed (National Institutes of Justice, 1997).

Although the CTS is a valid and reliable instrument for detecting IPV, assessing the prevalence of IPV in general is challenging because measuring behavior only does not capture the full range of IPV. As Lindhorst states, “If IPV is conceptualized as encompassing (a) a pattern of

behaviors that (b) yields adverse effects perceived by the victim (e.g. injury, harm, fear, intimidation, etc.) and that is (c) motivated by the perpetrators' need for power, then measuring the physical act alone is insufficient to accurately measuring the construct" (Lindhorst & Tajima, 2008, p.364). Rates of IPV have increased with measurements of the contextual factors of the violent situation, such as the perpetrator's motivation, survivors' definition of violence/abuse and beliefs about being abused (Lindhorst & Tajima, 2008).

While the CTS has been translated into many languages to ensure a linguistically appropriate measurement, scales measuring violence must also recognize social and cultural differences in violent behavior. The U.S. Agency for International Development's Demographic and Health Surveys Program (DHS) covers a wide range of health-related topics, including domestic violence, and carries out surveys in 92 countries, including India (United States Agency for International Development, 2016). The Domestic Violence Module includes questions on the participant's lifetime experiences of emotional, psychological, physical, sexual and financial violence carried out by intimate partners and others across the lifespan (United States Agency for International Development, 2016). It addresses frequency and timing of the violence and any help-seeking behaviors that occurred because of the violent incidents (United States Agency for International Development, 2016). Although this module is conducted among Indian women in India, it has never been completed by Indian women in the U.S.

6.1 MEASURING IPV IN THE INDIAN HEALTHY RELATIONSHIPS STUDY

To the best of our knowledge, the current study is the first time Indian women in the U.S. were asked to complete DHS' Domestic Violence module. It was complemented by open-ended questions that asked women to define how they perceive healthy relationships with intimate partners/husbands and in-laws and the different types of violence that should or should not occur in a healthy relationship. The study also explored and provided examples of behaviors perceived as violent to better understand participants' perceptions of what constitutes violence.

This study acknowledges that an individual's or a group's conceptualization of abuse or violence may differ from others based on culture and country of origin. While a specific act may be considered as violent or abusive by outsiders, it may not be understood in the same way by the perpetrator or the victim (Cousineau, 2004). In addition, the definition of a violent act must consider both the intention of the perpetrator and the consequences of the violent act (Cousineau, 2004). Measurement error is unavoidable because individuals from specific countries and/or cultures may be more open to disclosing acts of violence than others as well as supporting and encouraging this violence (Cousineau, 2004).

This study considers the context of Asian subcultures in situations of domestic violence. The personal history of the individual provides important contextual information, such as her reason for coming to the U.S. (Lindhorst & Tajima, 2008). Part of the context is the oppression of women, who may have been historically considered as inferior and submissive (Lindhorst & Tajima, 2008). Women's attitudes may also differ in terms of perceived severity and perceived consequences of the abuse (Lindhorst & Tajima, 2008).

Differences in perceptions and rates of violence further complicate accurate measurement of IPV. Choosing the DHS Domestic Violence module to measure domestic violence among the

AIIW population in the U.S. allows for comparison and contrast of differences in lifetime experience and help-seeking behaviors related to domestic violence among Indian women in India and AIIW in the U.S. While definitions and experiences of domestic violence and related help-seeking behaviors may differ between the two populations, qualitative data from in-depth interviews supplement these data and may increase understanding for how these factors contribute to differences.

7.0 OVERVIEW OF THE DISSERTATION

7.1 SPECIFIC AIMS

Although the World Health Organization (WHO), United Nations (UN), U.S. Department of Justice (DOJ) and CDC have comprehensive definitions for domestic violence, it is unknown how women in situations of chronic abuse perceive these experiences. Women are a heterogeneous population whose perceptions differ based on their social and cultural influences and experiences. For immigrant women, distance from their home culture while transitioning to their host culture makes them vulnerable to experiencing violence. The definitions and lifetime experiences of AIIW regarding domestic violence have been understudied; thus, it is unknown if current definitions and services designed to help women in situations of abuse are culturally relevant. The main aims of this dissertation are 1) to better understand how Hindu AIIW define, experience and react to domestic violence, and 2) to determine the feasibility of measuring the demographic characteristics, social support perceptions, acculturation statuses and domestic violence experiences of this population.

7.2 TARGET POPULATION

As previously discussed, while there are many studies on Indian women in India and American women in the U.S., little research focuses Hindu AIIW's experiences of domestic violence. Existing data on South Asians, the majority of whom are Asian Indian, revealed a 77% lifetime

risk for experiencing violence (Mahapatra, 2012). Despite their high risk for experiencing abuse and rapidly increasing population in the U.S., studies on AIIW are nonexistent. Many studies and data at the national, state and local level are not available on Asian Indians or South Asians or disaggregated by gender. Often these studies and data group all Asians or South Asians together, without taking into account the cultural, social and linguistic nuances that make them unique and may be contributing to experiences of violence. Thus, there is a need to better understand the size of this population, their location, their demographics and perceptions and experiences of abuse. For these reasons, the study target population is Hindu AIIW in Allegheny County, PA and the surrounding counties. Participants included those who do and do not recognize themselves as survivors of domestic violence. The majority of the Indian population in India is Hindu, but there are differences in the experiences of domestic violence across religions. Only women who identified as Hindu were eligible for this study, allowing the principal investigator to control for effects of religion. Because this study focused on exploring women's evolving definition and perceived experiences of violence in India and in the U.S. for Indian women, only women who were first-generation immigrants born in India were eligible for the study. This study focused on women who met the above-mentioned eligibility criteria in Allegheny County, PA, and surrounding counties for feasibility purposes. To ensure that the sample size was sufficient, women who met the eligibility criteria from neighboring counties where there are large Asian Indian populations were also considered for inclusion in the study.

7.3 RECRUITMENT AND PARTICIPATION

Participants were recruited via the University of Pittsburgh's Clinical and Translational Science Institute's (CTSI) Research Participant Registry and mailing list, participant referral and flyers shared with local universities, university and community organizations, and restaurants and grocery stores, particularly those that cater to the local Asian Indian population. CTSI was considered the safest option for recruiting participants, as women may have been in a relationship with their abusive partner and disclosing their abuse status might put them at risk, if their abuser learned of their disclosure. The principal investigator expanded recruitment outside of the CTSI Research Participant Registry to increase the number of participants by sharing a recruitment flyer with the above-mentioned stakeholders. The principal investigator monitored the source of recruitment for each participant to detect differences in responses based on recruitment channel.

Given that past studies have found that the subject of domestic violence is considered a private and not a legal matter in Asian Indian culture (Orloff & Garcia, 2013), it was necessary that participants' privacy was ensured and respected in the recruitment and data collection processes. After receiving notification of interest, the principal investigator communicated with prospective participants by phone or email. If contacted by phone, the principal investigator used the phone message script in the appendix. When the principal investigator contacted participants by email, they were asked to provide a convenient time and number to discuss the study and complete the screening process. The research was framed as the Indian Healthy Relationships Study, which sought to better understand how being an Asian Indian immigrant impacts an Indian woman's understanding and experiences of healthy marriages and relationships compared to Indian women in India. Participants completed research activities during an in-person meeting between the participant and the principal investigator. Interviews and questionnaires were

conducted with 30 women living in the Allegheny and Butler Counties region who met the eligibility criteria. All data collection activities were completed by the principal investigator from February through June 2016.

7.4 QUALITATIVE AND FEASIBILITY STUDY OVERVIEW

The following sections outline the purpose, research questions, hypotheses, analysis plans and limitations of the qualitative and feasibility research studies. Subsequent chapters include two articles based on data from the qualitative research study and one article based on data from the feasibility research study conducted for this dissertation. The first article describes the relationship between and feasibility of a study on demographic characteristics, social support, acculturation status and history of violent experiences of Hindu AIIW in Allegheny County. The second article discusses participant perceptions that AIIW on dependent visas are a population at high risk for experiencing domestic violence. The final article details participants' ideas for how to address logistical barriers to accessing domestic violence services, as well as key actors to involve and vital services to offer for AIIW in situations of chronic violence.

7.5 QUALITATIVE STUDY

7.5.1 Study Purpose and Research Questions

The purpose of this qualitative study was to better understand Hindu AIIW's perceptions of how other women like them define, experience and seek help in situations of domestic violence. This study component addressed the central research question of how AIIW perceive that acculturation in the U.S. impacts their conceptualization of domestic violence, women's experiences of domestic violence and reporting behaviors. Interview questions, included in the appendix, explored a) how women defined domestic violence and its presence in healthy relationships, b) how they thought that definitions of domestic violence and experiences of domestic violence differ between Indian women in India and AIIW in the U.S., c) how they perceived reporting behaviors to differ for these two groups of women, and d) what services they thought were appropriate for AIIW in chronic situations of domestic violence.

7.5.2 Research Hypotheses

This study looked at the role of acculturation in influencing the participants' attitudes and behaviors about domestic violence and its occurrence in healthy relationships. The central research question addressed the hypothesis that women's acculturation to life in the U.S. changes their definition of violence, their perception of their experiences of violence and their reporting behaviors. The principal investigator specifically hypothesized that women's definition of violence will expand to include more behaviors, such as financial and psychological abuse that may include controlling money and verbal abuse. In addition, it was hypothesized that because

definitions of violence are expanding, participants would perceive that AIIW are experiencing more types of violence more frequently. It was also hypothesized that as a result of changing definitions and perceptions, participants will perceive that other AIIW report domestic violence experiences and seek help more often in the U.S. than Indian women in India. These hypotheses do not suggest that AIIW necessarily experience more violence than Indian women in India. This study hypothesized that because of AIIW's expanding definition of domestic violence, violence would be recognized and reported more in the U.S.

7.5.3 Data Collection and Analysis Plan

Thirty research participants completed the interview in person at a location of the participant's choice; time ranged from 23 to 96 minutes. Participants were given a $30 cash incentive, along with a list of supportive services and numbers related to domestic violence for completing the interview to thank them for their time and support of the research. Interviews included a verbal consent process to protect the participant's identity and were audio-recorded with the permission of the participant. All participants gave their permission to be audio-recorded. Interviews were deidentified, assigned a numeric code and kept separate from all identifying information such as date of birth, income, education and caste status, to ensure anonymity. The principal investigator and a third-party service, TranscribeMe, transcribed audio-recorded interviews in Microsoft Word. TranscribeMe has a rigorous protocol for ensuring confidentiality of all transcripts and has worked with researchers to transcribe qualitative data.

Interviews were coded in Microsoft Word and emerging themes were identified as the principal investigator reviewed each interview. Interviews were first read by the principal investigator, who made notes on recurring topics in interviews. After each interview was reviewed,

the principal investigator reread the transcript, applied existing codes to the transcript and created new codes as needed. Codes were organized into a codebook during the process. All transcripts were reviewed and coded twice by the principal investigator. Initially the principal investigator applied codes to sections of the transcript text after they were transcribed. After all interviews were reviewed and coded by the principal investigator, they were reviewed a second time after the codebook was finalized. This allowed the principal investigator to compare overlap in themes and ensure that emerging distinct thematic categories were applied to all transcripts.

While data saturation was initially achieved by the 21st interview, interested eligible participants with underrepresented demographics were later included in the study to ensure a more representative sample. In particular, working women and women of older age groups were more represented among later participants. The addition of these participants led to the creation of more codes.

After the principal investigator coded all interviews twice, an additional researcher coded each interview independently. The research assistant met with the principal investigator to discuss any discrepancies in coding and resolve them based on consensus. No significant changes in code application occurred during the consensus coding process. Commonly used codes highlighted differences and similarities participants identified between Indian women in India and in the U.S. regarding their ideas about healthy relationships and domestic violence, the types of abuse women experience in both countries and their likelihood of seeking help from formal and informal support networks. Frequently used codes included HealthyRelationshipUSIndiaDifferent, DVNormal, DVDontTalkAbout, AbusePresenceNotHealthy and DVIndiaPatriarchy, along with many others that described the participants' complex and specific responses.

7.5.4 Limitations of Research

The purpose of this study was to explore in depth the conceptualizations, experiences and reporting behaviors related to domestic violence of Hindu AIIW in Allegheny County. The findings from this small and specific subpopulation cannot be generalized to other Hindu AIIW, but can inform researchers and relevant community stakeholders about the experiences of this vulnerable, understudied and underserved population. Findings can help guide community and religious organizations as well as providers and policymakers in better recognizing violence among this population and designing services for this population regardless of level of acculturation.

7.6 FEASIBILITY STUDY

7.6.1 Study Purpose and Research Questions

The purpose of this study was to determine the feasibility of describing the relationship of domestic violence, social support and acculturation in a sample of Hindu AIIW in Allegheny County, PA to commonly associated demographic factors. The aim of this pilot study was to identify the potential influence of social support and acculturation status on experiences of domestic violence and subsequent help-seeking behaviors. This topic has been underresearched in the U.S. and has not been examined in Allegheny County, PA; the main purpose of the study was to describe the experiences of the target population. Thus, this study can test the feasibility of conducting questionnaires with AIIW on domestic violence, acculturation status and social support. Any emerging associations between demographic factors, acculturation status, social support and

experiences of domestic violence can be retested in future studies to confirm their significance. Demographic factors such as length of time in the U.S., age, education, caste status and income were particularly important to analyze to determine their correlation with the dimensions of the dependent variable of interest, domestic violence, measured by questions on physical, sexual, psychological/emotional and financial abuse in the domestic sphere.

The feasibility component of this study included a questionnaire created by the principal investigator for this study. This questionnaire included demographic questions, several of which were adapted from the American Community Survey (ACS), and caste and marital status questions adapted from India's National Family Health Survey (NFHS-4). The caste status question used government classification categories, but many Indians may be more familiar with the Varna categories, which are religiously and socially based (e.g. Brahmin, Kshatriya), so these were included in the questionnaire. This change and several others were made after an electronic version of the questionnaire was pretested with a convenience sample of 16 individuals, primarily students, who offered feedback. Other changes included the addition of questions on length of marriage and satisfaction with marriage.

In addition to the demographic questionnaire, the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet, & Farley, 1988), the Brief Sociocultural Adaptation Scale (BSAS), the Brief Psychological Adaptation Scale (BPAS), the Brief Perceived Cultural Distance Scale (BPCDS) the Brief Acculturation Orientation Scale (BAOS) (Demes & Geeraert, 2014), and the Domestic Violence module from Demographic Health Surveys (DHS) (United States Agency for International Development, 2017) were completed by each participant to compare associations between domestic violence experiences, level of acculturation and social support.

The 12-item MSPSS asks participants to rate their level of support of statements on a 7-point Likert scale that ranges from very strongly agree to very strongly disagree on topics such as discussing problems and emotional and decisionmaking support. Questions include support from significant others, family and friends, each of which comprise a subscale and impact the overall score on the total scale. Thus, the participant will get a score on the significant other, family, friends and overall scales. Scores are averaged on each scale, with 1 to 2.9 being low support, 3 to 5 being moderate support and 5.1 to 7 being high support (Zimet, Dahlem, Zimet, & Farley, 1988).

The BSAS and BPCDS have 12 items each, while the BPAS and BAOS each have eight items. The BSAS and BPCDS focus on aspects of the host and home cultures, in this case the U.S. and India, such as climate, eating practices, norms and language. While the BSAS focuses on the host country, the BPCDS asks the participants about their perceived differences between the host and home country on the above-mentioned topics. The BPAS and BAOS asks participants how their current life and integration experiences make them feel about their host and home country, with the BAOS specifically asking how important it is to identify with cultural aspects of each country. The BSAS and BPCDS have a single composite average score, in which higher scores represent higher sociocultural adaptation and higher perceived cultural distance, respectively (Demes & Geeraert, 2014). The BPAS and BAOS are reverse scored and given a single composite average score, with higher scores meaning higher psychological adaptation and home or host acculturation orientation, respectively (Demes & Geeraert, 2014). The demographic questionnaire and domestic violence module do not involve any scoring or categorization.

While the MSPSS has been completed by South Asian women (Yoshioka et al., 2003; Mahapatra & DiNitto, 2013), and the BSAS, BPAS, BPCDS, BAOS were tested among Thai populations (Demes & Geeraert, 2014), the DHS Domestic Violence module has not been tested

among any South Asian population in the U.S. Nevertheless, it has been tested among Indian women in India (United States Agency for International Development, 2017), thus allowing for cross cultural comparisons of lifetime experiences of domestic violence between Indian women in India and AIIW. None of the questionnaires have been completed in studies focusing solely on Asian Indian women. All participants completed all questions for each scale. Because this is the first time these instruments have been tested among the target population, findings can help inform their utility in future work with this population and the creation of other instruments to measure domestic violence and healthy relationships within this population. These instruments informed the research questions for this feasibility study, which include the following:

1. What are the typical demographic characteristics of a Hindu AIIW in Allegheny County and do these demographics vary by social support, acculturation status and history of domestic violence?
2. Do Hindu AIIW in Allegheny County perceive themselves as having adequate social support from friends, family and significant others and how does this social support interact with acculturation status, demographic characteristics and history of domestic violence?
3. Do Hindu AIIW in Allegheny County perceive themselves to be socioculturally and psychologically adapted to life in Allegheny County and how does this interact with demographic characteristics, social support and history of domestic violence?
4. What differences do Hindu AIIW perceive between India and Allegheny County and how does this interact with their demographic characteristics, social support and history of domestic violence?
5. Do Hindu AIIW perceive themselves to be acculturated to life in Allegheny County and how do they perceive themselves to fit in with Indian cultural expectations? How do these perceptions interact with their demographic characteristics, social support and history of domestic violence?
6. What are the domestic violence experiences of Hindu AIIW in Allegheny County and how do they interact with their social support, acculturation status and demographic characteristics?
7. What type(s) of domestic violence are Hindu AIIW most likely to experience how do they interact with their social support, acculturation status and demographic characteristics?

8. What is the frequency of the violence Hindu AIIW experience and who is/are the perpetrator(s) of this violence? How does this interact with their social support, acculturation status and demographic characteristics?
9. Do Hindu AIIW seek help in situations abuse and if so, from whom? How does this interact with their social support, acculturation status and demographic characteristics?

7.6.2 Target Population Demographics and Research Hypotheses

Given that exposures to domestic violence cannot be assigned and data were collected at one point in time, the study used an observational cross-sectional design. Hindu AIIW in Allegheny County served as the population and sampling element for this non-probability convenience sample. While the exact number of women who meet the study's eligibility criteria in Allegheny County is unknown, 3.2% of the county population self-identifies as "Asian alone" (U.S. Census Bureau, 2015). In addition, 0.8% of Allegheny County's 1.3 million, or 10,400 individuals identify as Asian Indian (U.S. Census Bureau, 2015), 51.9% of the county's entire population is female and 19.2% are under the age of 18 (U.S. Census Bureau, 2015). Using these estimates, we can infer from U.S. Census Data that approximately 4,361 Asian Indian women are Allegheny County residents; however, many of these women will not be first-generation immigrants. Because the exact number of AIIW in Allegheny County is unknown, and research on this population is lacking, this study did not have a sample size that was representative of the AIIW population.

After Census statistics were applied to the 530 Asian women in the CTSI Research Participant Registry, the primary sampling frame, it was estimated that approximately 25% of this registry were Asian Indian women, or 133 women. All 133 women were contacted for participation in the proposed research study, and additional participants were recruited by fliers. The principal investigator hypothesized that violence reports to formal systems, such as law enforcement, would be higher among participants who are low-income, low caste and less educated, assuming they

were represented among enrolled participants. Other hypotheses included higher reports of violence among participants with children and/or pregnant women, women in arranged marriages and women who have lived for more years in the U.S., if women with variation in these characteristics participated in the study.

7.6.3 Data Collection and Analysis Plan

Participants who completed the in-depth interview for the qualitative research study also completed all questionnaires for the feasibility study after a verbal consent process at a location of their choice. All participants were given a $10 cash incentive for completing the questionnaires and a list of supportive services and numbers for those who have experienced domestic violence and would like further information. The questionnaires took approximately 20-30 minutes for participants to complete.

All data were entered and analyzed in IBM SPSS Statistics 22. Responses on the domestic module were categorized and social support and acculturation scales were scored. Social support and acculturation scale responses were categorized into groups of low, moderate and high. Descriptive statistics and frequencies such as two sample t-tests, chi-square tests and Fisher's exact tests were calculated for demographic questions, as well as responses on the social support, acculturation and domestic violence scales when appropriate. Data were examined for associations between social support, acculturation status and prevalence of the various dimensions of domestic violence. Analyses also focused on correlations between type of domestic violence and length of time in U.S., age, education, income and other demographic variables and scale results. Two-sample t-tests were also used to highlight any differences in social support, acculturation status and demographics between survivors of domestic violence and non-victims. Due to the small

sample size, frequencies and chi-square tests of association were conducted to describe differences between experiences of domestic violence by age, education, caste status and income among other demographic variables. Data were expected to be non-normal due to anticipated enrollment of high-caste and highly educated participants; therefore, normality was checked through histograms.

7.6.4 Limitations of Research

Disclosing history of domestic violence could have been difficult for some participants; therefore, social desirability bias may be a concern. Participants may not have been willing to disclose their personal experiences of domestic violence due to traumatic memories associated with these experiences in their life or fear of unintended harmful consequences. This could also have resulted in measurement error if participants were ashamed or embarrassed to admit they are survivors of domestic violence, leading to response bias because of underreporting of domestic abuse. In fact, all participants completed all study scales. Measurement error could have also resulted from poor wording of questions or lack of culturally appropriate phrasing of questions. Some participants might also have repressed painful memories, resulting in recall bias and subsequent measurement error.

Due to the specific characteristics of the target population and the recruitment strategy for this study, the results from this study cannot be generalized to all Hindu AIIW, because the Asian Indian immigrant population is larger than the number of participants participating in this study. Participants recruited from the registry and community flyers are not representative of the population of Allegheny County nor of the AIIW population in the U.S. A cross-sectional or longitudinal country-wide study would be necessary to better measure the experiences of domestic

violence and associated factors for AIIW in the U.S., especially to understand how these patterns have changed over time.

8.0 DOMESTIC VIOLENCE AND CONTRIBUTING FACTORS AMONG HINDU ASIAN INDIAN IMMIGRANT WOMEN IN ALLEGHENY COUNTY, PENNSYLVANIA: A FEASIBILITY STUDY

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8.1 ABSTRACT

Background: While there is much research on the characteristics of women experiencing domestic violence in India and in the United States (U.S.), little is known about the social and cultural factors related to domestic violence among Asian Indian immigrant women in the U.S. The objectives of this study were to test the feasibility of 1) recruiting Asian Indian immigrant women, 2) assessing their interest in participating in research, 3) gauging their willingness to discuss domestic violence, 4) investigating the prevalence of domestic violence among this population and their correlations with other social and cultural characteristics, and 5) testing the cultural appropriateness of measures on domestic violence, acculturation status and social support.

Methods: In the months of February-June of 2016, 30 Hindu Asian Indian immigrant women participated in the Indian Healthy Relationships Study. Participants were recruited from a research participant registry, as well as flyers advertised at universities and businesses, restaurants and cultural organizations serving the local Asian Indian immigrant population. Participants met in person with the principal investigator to complete questionnaires on demographics, social support, acculturation and domestic violence. Data were entered and scored in SPSS, and descriptive statistics and correlation analyses were conducted to describe the sample and test correlations.

Results: Over 50% of respondents reported lifetime experience of any abuse, Participants had high levels of perceived social support and acculturation, regardless of whether they had a lifetime experience of violence. Most survivors of abuse were unmarried, Brahmin and not U.S. citizens, and listed family members, not intimate partners, as the perpetrators of abuse.

Discussion: Participants were receptive to this research and there were no issues of item nonresponse, suggesting that research among AIIW and research on domestic violence is feasible.

High rates of lifetime experiences of violence among AIIW suggest they are at high risk for experiencing abuse and lack of variability in social support and acculturation scale responses suggest the need to further test these instruments among AIIW. Results indicate the need for supportive services and policies to prevent abuse among this vulnerable population. Longitudinal research including larger samples of Asian Indian immigrant women will lead to a better understanding of the influence of social support and acculturation on risk of violent experiences, as well as the cultural appropriateness of existing measures.

8.2 BACKGROUND

Lifetime experiences of domestic violence have been well-researched among American women in the U.S. and Indian women in India, but few studies have been conducted with Asian Indian immigrant women (AIIW) in the U.S. In the U.S., 25% of women are estimated to experience intimate partner violence (IPV) during their lifetime (Bhattacharya et al. 2013), and over 16% are victims of attempted or completed rape (Ackerson & Subramanian, 2008). For women in India, the estimates of prevalence of domestic violence, specifically violence against women in the home setting, range from six to 60 percent (Mahapatro, Gupta, & Gupta, 2012). It is estimated that every five minutes, there is a report of domestic violence in India, often carried out by the husband or one of his relatives (Abramsky et al., 2011). Research has shown that immigrants who experience IPV are more likely to be of a minority racial group (Allagia et al., 2009), perceive discrimination (Vatnar & Bjorkly, 2010), report IPV less than non-immigrant peers (Du Mont et al., 2012) and be less acculturated (Kimber et al., 2014). Survivors of abuse are more likely to have arranged marriages (Abramsky et al., 2011), be of low-income (Du Mont et al., 2012), and low caste

(Ackerson & Subramanian, 2008; Dalal & Lindqvist, 2012; Sabarwal, McCormick, Subramanian, & Silverman, 2012) and have lower education levels (Ackerson et al., 2008; Bhattacharya et al., 2013; Sabri et al., 2014). Having children with the perpetrator may also discourage the woman from leaving her partner (Hyman et al., 2006).

Acculturation is the process by which individuals adjust to a new culture and choose whether or not to incorporate new behaviors and attitudes of that culture into their identity. Acculturation is an indicator of an individual's or a group's level of adaptation to a new, dominant culture. This is important because those who do not adopt cultural practices of the new country have been shown to suffer more adverse mental health outcomes (Mehta, 1998), be maltreated as children (Kimber et al., 2014) and be at higher risk for IPV (Hyman et al., 2006). Lack of assimilating or integrating the dominant culture's norms is common when there is much cultural distance between the host culture and the culture of origin (Schwartz et al., 2010). While diversity is acceptable in multicultural societies, when there is little tolerance for emerging cultures, immigrant populations may become more isolated because of their differences, and instances of perceived and actual discrimination increase (Schwartz et al., 2010).

Understanding the relationship between acculturation and domestic violence is crucial as the presence of Asian Indians in the U.S. continues to increase. The Asian Indian diaspora is the third largest Asian diaspora in the U.S. after the Chinese and Filipino diasporas, with 3.8 million people as of 2013 (Zong & Batlova, 2016). Asian Indians are widely spread and heavily concentrated in a higher number of states, more than any other Asian group (U.S. Census Bureau, 2012). Of the Asian population as of 2013, 62% are first generation immigrants and 64% of females are first generation immigrants, meaning they were born outside of the U.S. (U.S. Census Bureau, 2012). Pennsylvania Department of Health data group Asians with Pacific Islanders, and

it is estimated that as of 2014, 426,123 Asian and Pacific Islanders were in Pennsylvania (Pennsylvania Department of Health, 2016).

In general, the majority of Asian Indians view themselves as "very different" from the typical American and are less likely than most populous Asian groups in the U.S., such as Chinese, Filipino and Japanese Americans, to consider themselves as “typical” Americans (Pew Research Center, 2013). Asian Indians also care deeply about the quality of their relationships, with 64% of them reporting that having a successful marriage is "one of the most important things” in life compared to 34% of all Americans 18 or older (Pew Research Center, 2013). This rate is identical among Korean Americans, but exceeds rates among Vietnamese, Filipino, Japanese and Chinese Americans (Pew Research Center, 2013). Among Asian Indians, 78% reported that “being a good parent” is "one of the most important things" in life, which is higher than the five other most populous Asian groups in the U.S. and rates among all adult Americans, amongst which only half agree (Pew Research Center, 2013).

Although the Asian Indian population is well-established in Pennsylvania and in the Allegheny County area, there is a lack of data about their population size, neighborhood location and other demographic factors. There is also little research that focuses on Hindu AIIW’s experiences of domestic violence. Existing data on South Asians, the majority of whom are Asian Indian, revealed a 77% lifetime risk for experiencing violence (Mahapatra, 2012), but despite their high risk for experiencing abuse and rapidly increasing population size in the U.S., studies on AIIW are nonexistent. Many studies and data at the national, state and local level are not available on Asian Indians or South Asians or disaggregated by gender. Often these studies and data group all Asians or South Asians together, without taking into account the cultural, social and linguistic nuances that make them unique and may be contributing to experiences of violence. Thus, there is

a need to better understand the size of this population, their location, demographics and perceptions and experiences of abuse. For these reasons, the study target population is Hindu AIIW in Allegheny County, PA and the surrounding counties. Researchers, providers and policymakers do not fully understand the relationship between social support, acculturation and domestic violence among AIIW in the U.S. and there is a need to test existing instruments to better understand this relationship. This paper will address methodological and study findings from this research about the feasibility of conducting questionnaires on the social and cultural characteristics of AIIW and their experiences of domestic violence.

8.3 METHODS

8.3.1 Study Design and Participants

Prior to recruiting participants in the study, the principal investigator had several informal discussions with AIIW in Allegheny County to explore whether domestic violence is common among the target population and the feasibility of conducting a study with AIIW. These conversations informed the design of the Indian Healthy Relationships Study (IHRS). This was a mixed methods study advertised and completed by participants in Allegheny County, Pennsylvania. The aim of this study was to assess the feasibility of describing local AIIW and their experiences of domestic violence, as well as better understand how length of time in the U.S. impacts how AIIW define, experience and seek help in situations of abuse. This study was part of a larger research study that included in-depth interviews, and the same participants completed the in-depth interviews and questionnaires on demographics, social support, acculturation and lifetime

experiences of domestic violence. The overall research question for the study was: *what is the relationship between social support, acculturation status, domestic violence and demographic factors*?

This research is a pilot study to explore the associations between these variables among the target population as well as the feasibility of conducting this research with Hindu AIIW. Although the study sample size (n=30) limited the generalizability of findings, it was anticipated that women in arranged marriages, with children, who are low-income, low caste and less educated would have higher reports of domestic violence, as these have been shown to be risk factors for abuse (Abramsky et al., 2011; Ackerson et al., 2008; Ackerson & Subramanian, 2008; Bhattacharya et al., 2013; Dalal & Lindqvist, 2012; Du Mont et al., 2012; Hyman et al., 2006; Sabarwal, McCormick, Subramanian, & Silverman, 2012; Sabri et al., 2014). Additionally, reports were expected to be higher among participants who have spent more years in the U.S., because it was perceived that participants who had spent more time in the country would have broader definitions of domestic violence and that they would be more likely to report instances of abuse.

In order to participate in the study, participants had to self-identify as female, Hindu, age 18 or older, Indian-born, and living in Allegheny County or the surrounding counties. Participants did not have to identify as a survivor of domestic violence to be eligible for participation in the study. Most Asian Indians identify as Hindu and experiences of domestic violence may vary across members of different religions. To control for effects of religion that could influence participant responses, only Hindu women were eligible for this study. All interested participants born in India were eligible for the study; there was no minimum length of time for women to have spent in India before moving to the U.S. Participants were recruited from Allegheny County and the surrounding counties for feasibility purposes. Women who met the eligibility criteria from Allegheny County

and nearby counties were considered for inclusion in this research to ensure an adequate sample size. In addition to eligibility criteria, advertisements for this study highlighted that all research activities would occur during a two-hour private meeting. All participants were given incentives of $10 for completion of the questionnaires.

The study was advertised electronically and through mailers by the University of Pittsburgh's Clinical and Translational Science Institute's (CTSI) Research Participant Registry. The CTSI registry was considered the safest option for participant recruitment, as women's involvement in the registry and thus their potential interest in the study could be kept private in situations where the woman was experiencing domestic violence. As a result, the study was first advertised by the registry only. Several weeks after advertising the study on CTSI, no participants had been recruited. As a result, flyers were shared with and advertised by additional stakeholders to increase recruitment and these included Pittsburgh-based college campuses, through community organizations and in nearby grocery stores, restaurants and businesses. Some participants were also recruited by friends or other participants of the study. Local Hindu temples were also considered as recruitment sites. After discussions with local members of the Asian Indian population, it was decided that because temples are the center of the Asian Indian community recruiting from them may result in more harm for women who were patrons at the temple and were currently involved in situations of domestic violence.

Flyers encouraged individuals interested in participating to call or email the principal investigator (C.P.). Regardless of whether the participant first contacted the principal investigator via email or phone, all eligibility screening for the study occurred over the phone. Those who contacted the principal investigator via email were asked to provide a phone number and time at which the principal investigator could contact the woman and discuss the study. Responses via

phone and email from the principal investigator to interested participants were purposefully vague and brief to ensure that if the woman was still in a situation of abuse, her participation in a domestic violence related study would be kept private. After screening for eligibility over the phone, the principal investigator reviewed the purpose of the study using an IRB approved script and arranged a time and location to meet with the participant to complete research activities. This research was reviewed and approved by the University of Pittsburgh Institutional Review Board (IRB).

8.3.2 Data Collection and Measures

Research activities were completed from February to June of 2016. Of the 30 Hindu AIIW who participated in the study, 73% were recruited from flyers advertised on university campuses and approximately 17% were referred by friends, while other participants were recruited from student organizations or flyers at local Indian grocery stores. Participants completed questionnaires on social support, acculturation, domestic violence, and demographics in-person with the principal investigator at a location of the participant's choosing. Although the participants were given the choice of where to meet, research activities were often conducted in university conference rooms to ensure privacy and minimal disruption.

The demographic questionnaire was designed by the principal investigator and included questions on household residents and income from the U.S. American Community Survey and caste and marital status from the Indian National Family Health Survey (NFHS) (Kishor & Gupta, 2009). The question on caste status uses government classification categories, but because Indians may be more familiar with the Varna categories, which are religiously and socially based (e.g. Brahmin, Kshatriya), these were also included in the questionnaire. While an individual's caste status is indicative of the government's assessment of the socioeconomic status of the individual

and the affirmative action-like policies that exist for someone based on their status, Varna status is more linked to ritual. Varna status is a fairly accurate way to determine someone's caste status and most individuals are more familiar with their Varna status than their caste status, especially if they no longer or never lived in India. This change and several others were made after an electronic draft version of the questionnaire was pretested with a convenience sample of 16 individuals, primarily students, who offered feedback. Other changes included the addition of questions on length of marriage and satisfaction with marriage. The 18 demographic questions addressed citizenship status, length of time spent in the U.S., Indian state of origin, native language, marital status, marriage type, length of marriage, satisfaction with marriage, motherhood status, pregnancy status, household composition, Varna status, caste status, education status and income.

In addition to the demographic questionnaire, participants completed questionnaires on social support, acculturation status and lifetime experiences of violence. For social support, participants answered the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS is 12 items and asks participants on a 7-point Likert scale to rate their level of support of statements with responses that range from very strongly agree to very strongly disagree. Topics include having someone to discuss problems with and having someone for emotional and decisionmaking support. Questions refer to support from significant others, family and friends, each of which have their own subscale and impact the overall score on the scale. Thus, the participant will get a score on the significant other, family, friends and overall scale regarding their support from each person or group. Scores are averaged on each scale, with 1 to 2.9 representing low support, 3 to 5 representing moderate support and 5.1 to 7 representing high support (Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS has been completed by South

Asian women (Yoshioka et al., 2003; Mahapatra & DiNitto, 2013), but not in a study that is exclusively Asian Indian women.

Acculturation status was measured by 40 total items on several questionnaires including the Brief Sociocultural Adaptation Scale (BSAS), the Brief Psychological Adaptation Scale (BPAS), the Brief Perceived Cultural Distance Scale (BPCDS) and the Brief Acculturation Orientation Scale (BAOS) (Demes & Geeraert, 2014). The BSAS and BPCDS have 12 items each, while the BPAS and BAOS each have eight items. The use of adaptation instead of acculturation for the BSAS and BPAS refers to behavioral acculturation in the case of the BSAS and mental well-being in the context of relocation for the BPAS (Demes & Geeraert, 2014). The BSAS and BPCDS focus on aspects of the host and home cultures, in this case the U.S. and India, such as climate, eating practices, norms and language. While the BSAS focuses on the host country, the BPCDS asks the participants about their perceived differences between the host and home country on the above-mentioned topics. The BPAS and BAOS ask participants how their current life and integration experiences make them feel about their host and home country, with the BAOS specifically asking how important it is to identify with cultural aspects of each country.

The BSAS and BPCDS have a single composite average score, in which higher scores represent higher sociocultural adaptation and higher perceived cultural distance, respectively (Demes & Geeraert, 2014). The BPAS and BAOS are reverse scored and given a single composite average score, with higher scores meaning higher psychological adaptation and home or host acculturation orientation, respectively (Demes & Geeraert, 2014). The BSAS, BPAS, BPCDS, BAOS have been tested among Thai populations (Demes & Geeraert, 2014), but not with the Asian Indian population.

The Demographic Health Survey (DHS) Domestic Violence module is a 40-question domestic violence measurement instrument (United States Agency for International Development, 2017) and a component of the NFHS that participants completed on their lifetime experiences of violence. Similar to the demographic questionnaire, the DHS Domestic Violence module did not involve any scoring or categorization of participant responses. To our knowledge, the DHS Domestic Violence module has not been tested among any South Asian population in the U.S. This questionnaire has been tested among Indian women in India (United States Agency for International Development, 2017) and therefore it allows for cross-cultural comparisons of lifetime experiences of domestic violence between Indian women in India and AIIW. Because none of these questionnaires have been used in studies focusing solely on Asian Indian women, this study is an opportunity to determine the feasibility of administering these measures among AIIW and compare associations between domestic violence experiences, level of acculturation and social support.

8.3.3 Data Analysis

All questionnaire responses were entered into an SPSS database. The MSPSS responses were scored and the BSAS, BPAS, BPCDS and BAOS were consolidated into low, moderate or high categories according to participant ratings on each scale. Social support and acculturation scale scores were categorized into groups of low, moderate and high. Descriptive statistics and frequencies that included two sample t-tests were computed when appropriate for demographic questions and responses on the social support, acculturation scales and domestic violence questionnaire. Two-sample t-tests were used to test hypotheses and compare differences in social support, acculturation status and demographics between participants based on their domestic

violence status. Data were examined for associations between social support, acculturation status and prevalence of the various dimensions of domestic violence. Analyses also focused on correlations between experiences of domestic violence and length of time in the U.S., citizenship status, education and other demographic variables and scale results.

8.4 RESULTS

Informal discussions with the Asian Indian community prior to finalizing the study design and beginning data collection revealed important insights on conducting research with Hindu AIIW. Discussions with women included students who moved to the U.S. during their childhood, as well as women who left India in their young adult years, and their ages ranged from 23 to 73 years old. While several of the students were not in intimate relationships, some of the middle-aged women spoke of their peers who feared reporting abuse and leaving the abusive partner. As a result, several community members expressed concerns over the difficulty of identifying survivors of abuse and talking with them about their experiences. Despite issues concerning recruitment, informants were supportive of efforts to research domestic violence among AIIW and suggested reaching out to organizations and businesses embedded in the Asian Indian community to identify women to participate in research. Informants agreed that identifying women who are isolated and lack informal support systems is crucial for determining who may be at risk for experiencing domestic violence.

All 30 research participants of this study completed the 110 questionnaire items. Questionnaires took approximately 20 to 30 minutes to complete. As shown in Table 1, over 75% of participants were under the age of 30 at the time of data collection. Over 60% of the sample had

been in the U.S. for ten years or less and over 50% of the population were not U.S. citizens when they participated. Most respondents were unmarried, and slightly more married women had chosen their spouse than had an arranged marriage. The majority of participants did not have children and were current students, with 70% pursuing or having already completed a bachelor's, master's or doctoral degree. Most participants identified as Brahmin and upper caste. Some participants were unable to report their caste or Varna status, perhaps because these traditional Indian markers of status are less emphasized in American culture. The majority of individuals lived with one other person, whom they identified as family, and had an individual income of less than $12,000.

Table 8-1: Select Demographics of Participants

Demographics	**N=30 (%)**
Age	
<20	2 (6.7)
20-24	11 (36.7)
25-29	10 (33.3)
30-34	5 (16.6)
35 and above	2 (6.7)
Time Spent in U.S.	
<1 year	8 (26.6)
2-3 years	5 (16.7)
4-5 years	1 (3.3)
6-10 years	5 (16.7)
11-15 years	3 (10.0)
16-20 years	5 (16.7)
>20 years	3 (10.0)
Citizenship Status	
U.S Citizen	13 (43.3)
Non-U.S. Citizen	17 (56.7)
Marital Status	
Married	9 (30.0)
Unmarried	21 (70.0)
Marriage Type	
Arranged	4 (13.3)
Chose Spouse	5 (16.7)
Unmarried	21 (70.0)
Children	
Yes	3 (10.0)
No	27 (90.0)
Education Level	
Secondary Education	2 (6.7)

Table 8-1 Continued

Some College Education	6 (20.0)
Associate's Degree	1 (3.3)
Bachelor's Degree	6 (20.0)
Master's Degree	12 (40.0)
Doctoral Degree	3 (10.0)
Student Status	
Student	20 (66.7)
Non-student	10 (33.3)
Varna Status	
Brahmin	14 (46.7)
Kshatriya	6 (20.0)
Shudra	1 (3.3)
Vaishya	5 (16.7)
Don't Know	4 (13.3)
Caste Status	
Upper caste	16 (53.3)
Scheduled caste	2 (6.7)
Other backwards class	2 (6.7)
Don't know	10 (33.3)

Table 8-1 Continued

Household Size	
1	2 (6.7)
2	13 (43.3)
3	5 (16.7)
4	6 (20.0)
5	4 (13.3)
Individual Earnings	
<$12,000	20 (66.7)
$12,000-$25,000	2 (6.7)
$25,001-$40,000	2 (6.7)
$40,001-$50,000	2 (6.7)
$60,001-$75,000	2 (6.7)

Lifetime experiences of violence were not uncommon and were reported by 53% of women who participated in this study. As shown in Table 2, physical violence was reported by 33% of the sample and 68% of survivors of abuse. While 17% of participants and 31% of survivors reported instances of psychological abuse, such as husbands insisting on knowing where they are, or humiliating or insulting them, the most common type of violence experienced was being hit, slapped or kicked by another person.

More participants identified their perpetrators as family members rather than intimate partners. The most common perpetrator of abuse was the woman's mother, reported by almost

25% of participants and 63% of those who were physically abused, although fathers, brothers and nonfamily members such as a former boyfriend, teacher, male community member or a stranger were also identified. In some cases, participants reported multiple perpetrators. Forced sexual intercourse was reported by 10% of the sample, with perpetrators including a former boyfriend, an acquaintance and a fellow tenant. In total, approximately 17% of the sample and 31% of survivors of abuse reported a lifetime experience of sexual violence, when accounting for instances of forced sex and unwanted instances of flashing.

When asked, almost 17% of participants reported that their fathers physically assaulted their mothers. Seeking help in situations of abuse was not as common as the abuse itself. Of the 53% of women who reported abuse, only 25% ever sought help, with participants identifying friends, mothers or online resources as sources of support. Seeking medical or other additional help was reported by 44% of women who had a lifetime experience of abuse and they sought help from friends, mentors, boyfriends, mothers, and cousins.

Table 8-2: Experiences of Violence

	N=30 (%)
Husband Insists Knowing Where You Are	1 (3.3)
Husband Humiliates You	1 (3.3)
Husband Insults You	2 (6.7)
Husband Physically Forces Sexual Act	1 (3.3)
Anyone Hits, Slaps or Kicks You	11 (36.7)
Anyone Hits, Slaps or Kicks You: Who*	
Father	4 (13.3)
Mother	7 (23.3)
Brother	2 (6.7)
Former Boyfriend	1 (3.3)
Teacher	1 (3.3)
Male Community Member	1 (3.3)
Stranger	1 (3.3)
Anyone Has Physically Forced Sex	3 (10.0)
Ever Experienced Sexual Violence**	5 (16.7)
Ever Experience Any Violence	16 (53.3)
Ever Try To Seek Help	4 (13.3)

Table 8-2 Continued

Where Go for Medical or Other Help*	
Friends	2 (6.7)
Mentor	1 (3.3)
Boyfriend	1 (3.3)
Mother	1 (3.3)
Cousin	1 (3.3)
Self-medicated	1 (3.3)
Father Ever Beat Mother	5 (16.7)

*Signifies some participants reported multiple responses on this question
**Includes those who experienced forced sex and participants that reported being flashed

When looking at survivors of abuse, their demographic characteristics varied when compared to non-victims, but there was not a significant difference. Seventy-five percent of survivors of any lifetime experience of violence and 73% of physical violence survivors were non-U.S. citizens. Survivors of abuse also had smaller households, with over 60% of those who had a lifetime experience of abuse living alone or with one other person. Most survivors were single, with almost 70% of participants with any lifetime experience of abuse and 73% with a history of physical abuse identifying as unmarried. Over 60% of survivors of any abuse had an individual income of less than $12,000, supporting the hypothesis that survivors would be low-income. However, it is possible that this finding is confounded by the fact that most participants were students and most likely not working at the time of data collection. Hypotheses that survivors would be less educated, low caste, have spent more time in the U.S., have children and have arranged marriages were not supported by research findings. Individuals with less education, low caste and high income levels were not well-represented among participants. Regarding education, almost 70% of survivors had or were pursuing master's degrees or higher. In the case of caste, close to 70% of survivors identified as Brahmin. When accounting for survivors who listed their caste as Kshatriya, this number increases to over 80%, meaning that the majority of survivors in this sample were of high caste status.

Seventy-five percent of survivors reported no experiences of abuse in the past 12 months. The remaining 25% of survivors were still victims of abuse at the time of data collection, with 75% of these participants reporting psychological abuse and the remainder reporting sexual violence. None of the survivors who had ever experienced physical violence were currently experiencing physical violence. Each of the current victims of abuse was experiencing violence perpetrated by their husbands. This translates to 13% of the study sample experiencing abuse at the time of data collection. Several had been physically abused by multiple perpetrators, which often included at least one family member.

There was little variability in ratings of social support, regardless of whether the participant had a lifetime experience of violence. As shown in Table 3, the majority of the sample had high perceived social support from significant others, family, friends and overall. Although respondents indicated they had the most support from significant others, followed by family and friends, for each subscale and for the total scale, all except one participant indicated high or moderate social support on each subscale. No survivors of abuse reported low social support on any scale and two sample t-tests found no difference between survivors and non-victims based on scores of perceived social support among friends, significant others, family or overall.

Similar to social support findings, there was a lack of variation in acculturation responses among non-victims and survivors, as shown in Table 3. The majority of participants and all but one survivor of abuse identified themselves as moderately or highly adapted on sociocultural and psychological adaptation scales. All participants reported high or moderate perceived cultural distance, home acculturation orientation and host acculturation orientation. Two sample t-tests revealed that there were no significant differences between survivors and non-victims on scores for sociocultural and psychological adaptation, perceived cultural distance, or host acculturation

orientation. For home acculturation orientation, there was a significant difference between individuals who had a lifetime experience of violence and those who did not.

Table 8-3: Social Support and Acculturation Responses

Scales			**N=30 (%)**
Multidimensional Scale of Perceived Social Support			
Support Type	**Low**	**Moderate**	**High**
Significant Other	1 (3.3)	4 (13.3)	25 (83.3)
Family	1 (3.3)	6 (20.0)	23 (76.7)
Friends	1 (3.3)	8 (26.7)	21 (70.0)
Total	1 (3.3)	3 (10.0)	26 (86.7)
Acculturation Scales			
Acculturation Type	**Low**	**Moderate**	**High**
Sociocultural	2 (6.7)	17 (56.7)	11 (36.7)
Psychological	1 (3.3)	26 (86.7)	3 (10.0)
Cultural Distance	0 (0.0)	7 (23.3)	23 (76.7)
Home Orientation	0 (0.0)	12 (40.0)	18 (60.0)
Host Orientation	0 (0.0)	8 (26.7)	22 (73.3)

Demographic characteristics and perceived social support for those who sought help for their experiences of abuse differed from those who did not. Of the 53% of participants who had ever experienced any abuse, 25% sought help, were not U.S. citizens and identified as Brahmin. Of the women who sought help, 75% were single, all were without children and had or were pursuing a master's degree or higher. All reported high social support from significant others and overall and 75% reported high social support from friends and family.

8.5 DISCUSSION

To our knowledge this is the first study to test the feasibility of using the above-mentioned measures to examine the relationship between demographics, social support, acculturation status

and lifetime experiences of domestic violence among AIIW in the U.S. Discussions with participants during the screening and data collection process indicated that AIIW are receptive to participating in research regarding domestic violence. Despite the two-hour timeslot required to complete research activities, all participants completed all questionnaire items in their entirety. It is possible that item nonresponse was not an issue because many women felt strongly about supporting research on the topic of domestic violence among AIIW. Additionally, participants may have been more likely to answer all questions because data collection occurred in person. The lack of nonresponse suggests that this type of research and these questionnaires may be completed feasibly at a low cost among the target population in the future.

Although the IHRS was heavily focused on domestic violence, questionnaires also asked about healthy relationships. For this reason, the study was called the Indian Healthy Relationships Study, a study to better understand how a woman's identity as an Asian Indian immigrant influences her understanding and experiences of relationships compared to Indian women in India. This name for the study also frames the research in a positive way, and highlights its focus on the spectrum of all types of relationships. These decisions were made to ensure that women were not discouraged from participating in a study that focused primarily on domestic violence. It is worth noting that several participants shared that they were more interested in participating in the study after learning that the study would focus on domestic violence, because they perceived it as a very important topic to discuss within the context of Indian culture.

The high rate of lifetime experiences of violence among participants in this sample indicates the need for more research among AIIW. Lifetime experiences of any violence were reported by 53%, physical abuse was reported by 37% and sexual violence was reported by 17% of participants in this study. This is compared to the 33% of women globally who have experienced

sexual or physical IPV in their lifetime (World Health Organization, 2014) and this does not include psychological, emotional or financial experiences of abuse. Over 33% of women in the U.S. have experienced physical violence (Black et al., 2011) and 20% experience rape in their lifetime (NCADV, 2017). In India alone, 39% of married women between the ages of 15-49 report experiencing physical, sexual or emotional abuse in their marriage (Kishor & Gupta, 2009). Despite the limited sample size for this study, lifetime reports of violent experiences exceeded the typical rates for lifetime experiences of abuse for women in the U.S. and in India. Over 16% of all respondents also indicated that they had knowledge of their fathers beating their mothers. This is in comparison to the 21% of children in the U.S. estimated to witness family assault in their lifetime, 8% of whom are estimated to have observed this type of violence in the past year and 17% of children estimated to witness assault between parents (Finkelhor, Turner, Shattuck, Hamby, & Kracke, 2015).

The high level of physical violence perpetration by family members suggests the need to further explore family dynamics. Since the DHS Domestic Violence module measures lifetime experiences of violence, this questionnaire captures both current and past incidents of domestic violence. Among those who had ever experienced violence, 25% were still victims of abuse, which was perpetrated by their partners. Since the domestic violence module shows dimensions of abuse experienced by survivors of abuse and current victims, this finding further supports the idea that many of those physically abused by parents may have been reporting past experiences of child abuse. Certain types of physical abuse may be considered as acceptable forms of punishment, in which victims are disciplined by the perpetrator for some perceived wrongdoing. Some participants who disclosed this abuse had a tendency to minimize or justify its occurrence, suggesting that these incidents may not be perceived as abuse within this context or within this

culture. This may explain why so few participants had ever sought help for the abuse, especially if they were children at the time. Exploring the context and timing of this abuse in women's lives can help researchers better understand if measures are capturing instances of child abuse. Existing instruments should distinguish if the abuse occurred during childhood instead of adulthood to guide providers how to feasibly prevent future situations of violence across the lifespan.

Mothers were listed most often as the perpetrators of physical abuse. Fathers and brothers were also cited, and non-family members were listed as perpetrators of physical and sexual abuse. The finding that family members were more often perpetrators than intimate partners was unexpected and suggests that future studies should consider family members more often as potential perpetrators, rather than intimate partners. Despite this surprising finding, these results are not uncommon in India. For women married in India, the most common perpetrator of violence is her partner, but for unmarried women in India the most common perpetrator is the mother (UNICEF, 2014). South Asian women in the U.S. are also most likely to report child abuse perpetrated by the mother (Maker, Shah, & Agha, 2005). Child abuse among Asian Pacific Islanders is considered very low at 3.5 out of every 1,000 children (Zhai & Gao, 2009), compared to nine of every 1,000 American children (National Children's Alliance, 2014). Similar to South Asian and Asian Pacific Islanders, over 75% of American children experience child abuse at the hands of their parents (National Children's Alliance, 2014). However, as with any population it is possible that there is less reporting, not less experience, of abuse in this population.

Most survivors were non-U.S. citizens, Brahmin, had a smaller household size, made $12,000 or less and were unmarried and some of these findings are supported by previous research studies. Among a study of battered South Asian immigrant women in the U.S., 42% were visa holders (Mahapatra & DiNitto, 2013), suggesting that non-U.S. citizens continue to be a high-risk

population for domestic violence. USAID's Demographic Health Surveys Program revealed that Indian women in nuclear family households are more likely to experience violence than those in households where there is not a married couple or a female-headed household with or without children (Kishor & Johnson, 2004). While this supports study findings that AIIW in smaller households may be more likely to experience domestic violence, it is possible that this finding is confounded by the marital status of the sample.

Studies in India have found that women of lower caste are at highest risk and high caste women at the lowest risk for domestic violence (Dalal & Lindqvist, 2012; Sabarwal, McCormick, Subramanian, & Silverman, 2012), and low caste women are more likely to report violence (Ackerson & Subramanian, 2008). These findings do not support the current study's results of high rates of violence among Brahmin women. Brahmin women tend to be overrepresented in the U.S., because they are more likely to have higher SES and have more opportunities for education and occupational opportunities. It is possible that Brahmin women have the same level of risk for experiencing violence as low caste women, but because of perceived and actual social costs, they are less likely to report the violence. AIIW with a high education level also tend to be overrepresented in the U.S. and this study found that most survivors of violence had high education levels. This contradicts findings in India that women with secondary or higher levels of education are less likely to experience violence (Kishor & Johnson, 2004). Overrepresentation of high caste and highly educated women in our sample limited our ability to test our hypotheses that lifetime experiences of violence would be more common among low caste and less educated women, because low caste and less educated women were not well-represented in this sample. Thus, the overrepresentation of highly educated Brahmin women in this study and in the U.S. suggests the

need for more research on how education, caste and Varna status impact risk for domestic violence in the U.S.

While there was little variability in social support and acculturation regardless of whether participants had lifetime experiences of domestic violence, other studies found similarly high rates of social support and acculturation among survivors of domestic violence. A study using the MSPSS to measure social support with South Asian, African American and Hispanic battered women living in the U.S. found moderate levels of social support among all participants (Yoshioka et al., 2003). South Asian women had higher social support than African American women, but lower support than Hispanic women (Yoshioka et al., 2003). Another U.S. based study of 215 South Asian women in 33 states found that 38% of South Asian women experienced abuse, despite reporting high levels of social support from friends, family and significant others on the MSPSS (Mahapatra & DiNitto, 2013). South Asian women reported high social support from significant others, and because almost 80% were married and experienced abuse in the past year, it is highly likely that their current partners were the perpetrators (Mahapatra & DiNitto, 2013). In contrast, another study among this same group of women found that overall those with more social support were less likely to be abused (Mahapatra, 2012).

While it is possible that AIIW have high rates of social support and acculturation, the lack of variation in the study sample suggests that the MSPSS and acculturation scales may not be culturally appropriate enough to detect nuances in social support and acculturation for this population. It is possible that while Asian Indians have high rates of social support from friends, family and significant others, they do not have support when making life-changing and culturally taboo decisions, such as seeking a divorce from an abusive partner. Although lack of variability in participant responses on acculturation scales may be due to actual high acculturation scores, these

findings may also suggest the need to test these scales further in the Asian Indian population to develop more culturally relevant scales that can further explore the context of how acculturation status impacts gender and domestic violence norms.

While this study also found little variability in responses on acculturation scales, responses from survivors and participants who had never experienced abuse were significantly different regarding their home acculturation. Survivors of abuse were more likely to have lower scores of home acculturation than those who had never experienced abuse, suggesting that women who are less acculturated to India, or more Westernized, are more likely to have experienced or reported that they have experienced violence in their lifetime. In one study among Asian Indians, statements that represented a more assimilated or Westernized acculturation attitude correlated with less agreement with statements supporting IPV among participants (Yoshihama et al., 2014). This contrasts with findings among those who were less assimilated and more likely to agree with statements that supported IPV and gender norms in their home country (Yoshihama et al., 2014). Another study among abused immigrant women found that women who are less acculturated are more likely to experience abuse, and less likely to take action that promoted safety in situations of abuse (Nava, McFarlane, Gilroy, & Maddoux, 2014). These findings suggest that acculturation to the U.S. impacts the likelihood of immigrants experiencing or reporting abuse.

In the current study, only 25% of survivors reached out for help in situations of domestic violence, despite high levels of social support. A study that included South Asian battered women found that they were more likely to seek help from family members than African American or Hispanic women, and also more likely to be advised to stay in the marriage and work it out by both family and non-familial sources than the other groups (Yoshioka et al., 2003). When South Asian women do seek help, it is most often from friends and family, and among women who do

seek help from formal resources almost 33% do so as a last resort (Mahapatra & DiNitto, 2013). These findings suggest that high levels of social support do not always dictate help-seeking or reporting behaviors.

None of the women who sought help in the current study were U.S. citizens at the time of data collection and most were unmarried, Brahmin, without children and had or were pursuing a graduate degree. All participants in the current study were foreign-born and 70% had a bachelor's degree or higher. This compares to another study that included South Asian battered women, 75% of women were also foreign-born and over 60% had master's or equivalent degrees (Mahapatra & DiNitto, 2013). In this study with South Asian immigrant women, of those who had experienced abuse almost 70% had a master's degree (Mahapatro & DiNitto, 2013). The majority of survivors in the current study were low-income and most survivors in Mahapatro and DiNitto's study (2013) reported incomes of over $70,000. While it is possible that high levels of education and income do not reduce risk for experiencing abuse, this may be confounded due to the small household size of participants.

8.6 LIMITATIONS

While this study has identified emerging associations in the relationship between social support, acculturation and domestic violence among AIIW, there are limitations to its findings. The study sample included 30 Hindu AIIW who self-selected to participate in this study. This research was advertised as the Indian Healthy Relationships Study, and those who are not in healthy relationships may have decided not to participate. While the study was advertised by a research registry, businesses and restaurants and by Indian cultural organizations and groups, it was also

advertised on local university campuses and most participants were young students recruited via university campus flyers. While participants had to have been born in India, many moved to the U.S. in their early childhood and therefore may have more Westernized and thus different responses than those who had spent their formative years in India. Two hours were allotted for each participant to complete the questionnaires and qualitative component of this study. This time constraint may have been more realistic for a student schedule, compared to a working woman's schedule. Additionally, the incentive may have been more appealing to students, who may be unable to work while completing their classes during the school year. The lack of variability in participant demographics could be addressed in future studies by offering questionnaires over the phone or online. This may lead to broader participation from AIIW of different age levels or work experiences.

Although all participants responded to all items on every questionnaire, it is possible that there was reporting bias. Demographic, social support and acculturation questionnaires were completed independently, but the DHS Domestic Violence module was dictated by the principal investigator. The DHS program is conducted in 92 countries and all questions, including those in the Domestic Violence module are completed orally (United States Agency for International Development, 2016). Thus, in order to maintain fidelity, the DHS Domestic Violence module was dictated to participants and not self-administered. An additional limitation is that several sections on physical and psychological abuse on the Domestic Violence module are completed only by participants who are married. This includes measurements of specific types of physical abuse, such as burning and psychological abuse, such as insults and humiliation. As a result, these specific types of violence are not captured in questionnaires completed by unmarried women. Sharing lifetime experiences of violence can be emotional and some participants may have chosen not to

disclose this information, leading to social desirability bias and underreporting of domestic violence among participants. Despite this limitation, over half of the highly-educated sample from this study reported a lifetime experience of abuse. Given that violence is often underreported, this may also be a conservative estimate of actual prevalence of abuse among this population.

As previously mentioned, the majority of perpetrators of violence were family members, specifically mothers. Because the Domestic Violence module does not require participants to disclose their age or date of the violent incident, it is not possible to confirm if these experiences were child abuse. Because this questionnaire looks at lifetime experiences of violence, it is possible that reports of violence shared by participants are not an accurate reflection of current experiences of abuse, thus some reported abuse may have occurred when the woman was under age 18 and legally a child. Interestingly, none of the participants who were currently experiencing abuse at the time of data collection were experiencing physical abuse or experiencing violence from their parents. All victims were experiencing psychological or sexual abuse and the perpetrator was the current partner.

While the MSPSS has been tested among South Asian women, the acculturation scales have not, and measurement error may have occurred due to lack of culturally appropriate phrasing of questions. The majority of participants reported moderate or high social support and acculturation on all scales, and it is unclear if this lack of variability is due to high levels of social support and acculturation or absence of culturally appropriate phrases and wording. Thus, while the implementation of this study demonstrates high feasibility for domestic violence research among AIIW, the findings suggest the need for further testing of these instruments among the Asian Indian population and AIIW. Also, due to the size of the sample and lack of variability in their demographics, the results from this study cannot be generalized to Hindu AIIW. Participants

who were recruited from registry advertisements and flyers are not representative of the population of Allegheny County nor of the AIIW population in the U.S.

8.7 FUTURE DIRECTIONS

This pilot study identified associations of lifetime experiences of domestic violence, social support, acculturation status and demographic characteristics, and supports the feasibility of using measurement instruments among AIIW. Although social support and acculturation status varied little regardless of lifetime experience of domestic violence, other studies with similar findings suggest the need to further explore the impact of social support and acculturation among a larger sample of AIIW. Additionally, instruments measuring social support and acculturation should be tested and validated among the Asian Indian population and AIIW. While research participants in the current study were recruited without difficulty and not discouraged from completing data collection despite the length of research activities, the lack of variability in findings suggests that instruments may need to be tailored to members of different cultural backgrounds.

Future directions should explore how social support can both positively and negatively influence decisions to seek help or end abusive relationships, particularly when support is from individuals in the Asian Indian community. Additionally, research should investigate how acculturating to life in the U.S. impacts experiences of abuse and the victim's decision to seek help. Measures of lifetime experiences of violence should also include items on perpetrators who are not intimate partners, particularly family members. These studies should represent a larger and more diverse sample of AIIW, who are more representative of the AIIW population in the U.S. This research indicated that AIIW are receptive to participating in research on domestic violence,

thus expansion of this research should be feasible and well supported by AIIW. Given that the current study included only one measurement of lifetime experiences of violence, a longitudinal country-wide, state or local study would be necessary to better measure the experiences of domestic violence. The validity and reliability of these instruments and this study's findings can be tested by replicating this study in larger and more diverse populations of AIIW, after instruments are reviewed by and pretested among AIIW. This will help researchers better understand lifetime experiences of violence and associated factors for AIIW in the U.S., especially to understand how these associations have changed over time.

8.8 CONCLUSION

Violence against women is a global health issue that is influenced by individual social and cultural characteristics and experiences. This study indicated that research with AIIW is feasible and there were no issues with recruitment or item nonresponse among participants in this study. Although the number of participants in this research study limited the generalizability of findings, this research suggests that AIIW may be more vulnerable to lifetime experiences of violence than native women in the U.S. and Indian women in India and AIIW are open to and interested in participating in studies on domestic violence. Similar levels of acculturation and perceived social support among survivors and non-victims suggest that future research should include larger samples of women to better detect, interpret and address emerging associations, as well as identify how to make instruments more culturally appropriate for diverse populations. Further research should also be longitudinal to help researchers and policymakers better understand and mitigate factors contributing to violent experiences among AIIW.

9.0 HINDU ASIAN INDIAN IMMIGRANT WOMEN ON DEPENDENT VISAS: A POPULATION AT HIGH RISK FOR DOMESTIC VIOLENCE

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9.1 ABSTRACT

Due to the limitations and circumstances of their immigration status, Asian Indian immigrant women (AIIW) who come to the United States (U.S.) on a dependent visa are at high risk for experiencing domestic violence. Thirty Hindu Asian Indian immigrant women who completed in-depth interviews on perceptions and experiences of domestic violence, as well as help-seeking behaviors, identified dependent women as a vulnerable population in need of targeted educational outreach and supportive services to prevent and address situations of chronic violence. Participants described violent experiences, isolation, fear of deportation, lack of awareness of existing resources and legal rights as reasons for dependent women to not seek formal supportive services. Future directions should focus on policy measures to expand dependent women's access to formal protection and programs that engage dependent women about their options and raise awareness of their rights in situations of abuse.

9.2 BACKGROUND

While the number of women who come to the U.S. as dependents on their spouse's visa in situations of abuse is not known, these women will face unique barriers, if they decide to apply for a U visa to escape the abusive situation. These visas are a special protection for victims of crimes, such as domestic violence, and they require victims to help law enforcement address the crime while giving them the opportunity to remain in the U.S. Those who come to the U.S. for temporary work are often on non-immigrant visas, such as an H-1B visa or temporary worker visa (U.S. Department of State, 2017). Students, physicians, professors and various types of scholars are also

permitted to come as non-immigrants on a J or exchange visitor visa (U.S. Department of Homeland Security, 2017). Students may also come on an F-1 or a student visa to attend a college or university (U.S. Department of State, 2017). Spouses or children of students may be on a J-2 or F-2 visa (U.S. Department of Homeland Security, 2017; U.S. Department of State, 2017). Spouses or children of individuals who are working on an H-1B visa may be approved for an H-4 visa, and spouses of those on an H-4 visa can apply to be authorized for employment, if their spouses are applying for employment-based lawful permanent residency. In order for someone on this type of visa to be eligible for employment approval, their spouse on the H-1B visa must still have their visa status approved, thus their ability to work would be impacted by their partner's visa status. In addition, if their spouse's H-1B visa was revoked, the woman's employment approval can be revoked as well (U.S. Department of Homeland Security, 2017). Much of the individual's ability to follow through with securing employment depends on their forms being valid, being aware of and having access to state resources, and having money to cover the fees that must be submitted with these forms.

Those who have been victims of "criminal activities" in the U.S. or dependents of those who engaged in criminal activities are able to petition for a U non-immigrant status visa (U.S. Department of State, 2017). According to the U.S. Department of State, "victims must have suffered substantial mental or physical abuse due to the criminal activity and possess information concerning that criminal activity" (U.S. Department of State, 2017). In addition, law enforcement must confirm that the victim is cooperating and aiding in the investigation process and/or "prosecution of the criminal activity" (U.S. Department of State, 2017). The U visa was created when the Victims of Trafficking and Violence Protection Act was passed in 2000, with victims of

trafficking, sexual assault and domestic violence in mind. Victims of these and other crimes are eligible for the U visa (U.S. Department of Homeland Security, 2017).

In order to get a U visa, individuals must apply and their petition must be approved by the U.S. Citizenship and Immigration Services (USCIS) before they are even granted an interview (U.S. Department of State, 2017). Also, a nonrefundable application fee for this visa must be paid prior to the interview. All applicants must bring with them to the interview their passport, the visa application, a receipt for their payment, a photo and approval for their current visa. If they are approved for the U visa, they must pay an additional visa fee and may have to fill out more paperwork. Individuals must complete a petition and additional paperwork that certifies they are cooperating with law enforcement in prosecuting the perpetrator of the crime, include a statement describing the criminal activity and provide evidence of their eligibility for this visa (U.S. Department of Homeland Security, 2017). While the petition for this visa is free, other forms that need to be filled out may require a fee, although the individual can fill out a fee waiver (U.S. Department of Homeland Security, 2017).

The U visa is valid for four years and can be extended depending on the personal circumstances of the individual (U.S. Department of Homeland Security, 2017). Only 10,000 U visas can be granted each year, after which there is a waiting list. Applying for a green card after having a U visa requires having been in the U.S. for three consecutive years while having U visa status, and continued cooperation with law enforcement as needed to carry on investigation of related criminal activity. If the woman is unwilling to assist law enforcement in prosecuting the perpetrator, she jeopardizes her chances of being approved for this special visa status. Of the 35,044 who applied for a U visa in 2016, 10,046 were approved with 1,843 denied and the rest pending; these numbers are steadily increasing each year (U.S. Department of Homeland Security,

2017). U visa statistics are not categorized by age, gender, criminal activity or country of origin, therefore the number of Asian Indian immigrant women (AIIW) seeking a U visa is unknown. Due to the many steps and length of time required to complete this process, in addition to having access to legal resources, many women who would benefit from this visa option may not apply for this visa.

Studies among South Asian women that include Asian Indian immigrants are few in number and Asian Indian-specific studies are rare, despite growing population size and risk for experiencing domestic violence (Chang et al., 2009; Hurwitz et al., 2006). While Asians include any individuals from the Asian continent, South Asians have historically included Indian, Pakistani, Bangladeshi, Sri Lankan, Nepali, Bhutanese and Maldivian individuals, among others (Hurwitz et al., 2006; Raj et al., 2006). Currently, 20% of the U.S. Asian population is Indian (Singh & Unnithan, 1999), and Asian Indians are the largest South Asian immigrant group (Raj et al., 2006), with 89% of South Asians identifying as Indian (Mahapatra, 2012). In 2010, 2,918, 807 Asian Indians were estimated to be in the U.S., a 69.8% increase since the year 2000 (U.S. Department of Homeland Security, 2017). Asian Indian immigrants represent 14% of total temporary visa holders working towards a doctoral degree (Zong & Batalova, 2015). Of the Asian Indian immigrants who come to the U.S., 37% come for education and 34% come for economic reasons (Zong & Batalova, 2015). Although 13 million foreign-born Asian immigrants were living in the U.S. in 2014 (U.S. Census Bureau, 2014), and approximately 50% of Asian Indian immigrants living in the U.S. are U.S. citizens (Zong & Batalova, 2015), domestic violence among this population has been understudied.

Amongst women in the U.S., 25% of South Asian immigrants who completed a questionnaire reported intimate partner violence (IPV) (Raj et al., 2006). Overall in the U.S., Asian

immigrants have higher rates of IPV than European and African immigrants, and rates of IPV among Asian immigrants were second only to Latin American immigrants (Du Mont et al., 2012). One study in Boston found that 20% of participants reported physical or sexual abuse, and of those currently experiencing abuse, 55% reported physical abuse, 91% reported sexual abuse and 30% suffered injuries from the abuse (Hurwitz et al., 2006). Women who were abused were more likely to report poor physical health, depression, suicidal thoughts and stress that limited their physical activity (Hurwitz et al., 2006). Although 40% of South Asian immigrants in Boston reported lifetime physical or sexual violence in their current relationship, only 3% filed a restraining order (Goel, 2005). Another study (Mahapatra, 2012), on South Asian women and their experiences of IPV confirmed a 77% lifetime risk of IPV for South Asian women in the U.S., with 38% of study participants reporting one or more forms of IPV in the past 12 months. Of these women, 80% did not speak of the situation with their partner and only 2% permanently left the abuser (Mahapatra, 2012).

While perspectives on and experiences of abuse vary among immigrants, several barriers exist to addressing domestic violence in the home, regardless of ethnic identity. Younger and more recent immigrants are more likely to report IPV (Du Mont et al., 2012), even though it is estimated that 25% of immigrant women experience IPV in their lifetime (Menjivar & Salcido, 2002). Immigrant women worry about losing custody of their children (Allagia et al., 2009; Lee & Hadeed, 2009) and purposeful delay of their immigration paperwork if they report abuse (Lee & Hadeed, 2009). These women are often dependent on their husbands socially, linguistically, economically and emotionally, and therefore may worry about additional abuse or deportation, as a consequence of reporting the abuse (Narayan, 1995).

If a woman wants to leave her husband, her dowry is an asset for her financial security, but only if she controls access to it. Husbands may possess the wife's legal documents and the household money (Preiser, 1999; Shirwadkar, 2004), and the woman may not have the confidence or knowledge to live on her own (Collucci & Montesinos, 2013). Partners may contribute to women's misinterpretation of their own rights, who often will not challenge their partner's understanding of the law (Allagia et al., 2009).

Oftentimes South Asian immigrant women will not have family in their new host country and perpetrators may limit their contact with family members in the country and in India (Raj and Silverman, 2002). While immigrant women create informal social networks easily in their host country, when their partners control their mobility and access to transportation and resources, they are less likely to participate in activities that allow them to interface with others and so they may have to reach out to emergency services (Menjivar & Salcido, 2002). Seeking help from authorities is rare because women compare their experience with authorities in their home country to those in their new country, where domestic violence is addressed differently (Menjivar & Salcido, 2002). This article describes Hindu AIIW's perceptions and concerns that AIIW coming on dependent visas to the U.S. are a highly vulnerable population for experiencing domestic violence.

9.3 METHODS

9.3.1 Recruitment

Research participants were recruited to participate in the Indian Healthy Relationships Study (IHRS) through the website for the University of Pittsburgh's Clinical and Translational Science

Institute's (CTSI) Research Participant Registry and listing in registry mailers. Flyers for the IHRS were also posted on college campuses in the Pittsburgh area and shared by university and community organizations, local restaurants, grocery stores and businesses frequented by the Asian Indian population in Pittsburgh. Participants were also encouraged to refer friends for study participation. The IHRS was reviewed and approved as exempt by the University of Pittsburgh Institutional Review Board (IRB).

9.3.2 Data Collection

Interviews for the IHRS were completed from the months of February through June of 2016. Each of the 30 Hindu AIIW who participated in the study was screened by phone for eligibility by the principal investigator. All interviews were completed at a location chosen by the participant and principal investigator and ranged from 23 to 96 minutes in length. Participants were asked about their conceptualizations of domestic violence, as well as their personal experiences and related help-seeking behaviors. Women were asked to reflect on how their perceptions might have changed as a result of coming to the U.S. Respondents were encouraged to compare and contrast their opinions on these topics with the ideas of Indian women in India and in the U.S.

In addition to interviews, all women completed questionnaires on demographics, perceived social support, acculturation status and lifetime experiences of domestic violence. Demographic questionnaires collected data on citizenship status, length of time spent in the U.S., Indian state of origin, native language, marital status, marriage type, length of marriage, satisfaction with marriage, motherhood status, pregnancy status, household composition, Varna status, caste status, education status and income. Women were compensated $30 for participating in the interview and $10 for participating in the questionnaires.

9.3.3 Data Analysis

All participants gave permission for interviews to be recorded by the principal investigator. Recordings were kept separate from identifiable information and were transcribed in Microsoft Word by the principal investigator and a third-party provider. The principal investigator read each interview transcript twice for themes and codes developed, primarily focusing on topics discussed in interview questions, such as dimensions of violence, definitions of healthy relationships, and conceptualizations of domestic violence in India and the U.S.

Initially, the principal investigator identified emerging themes and applied codes organized in a codebook. All interviews were coded once, and were subsequently reread to check for application of all relevant codes across interview transcripts. After all interviews were coded twice, a research assistant reviewed the codebook and applied codes to all interviews independently, after which transcripts were checked for agreement. During the coding process, no major discrepancies were identified.

While participants were not explicitly asked about the difference between women who migrate to the U.S. independently and women who come as dependents on a spouse's visa, discussions about this population came up organically in many interviews. As a result, the principal investigator applied a specific code when interviewees discussed the differences between these two populations, regarding their definitions, experiences and help-seeking behaviors in situations of domestic violence. This manuscript highlights participants' perceptions of dependent AIIW as a population at high risk for experiencing domestic violence in the U.S.

9.4 RESULTS

The majority of research participants were under the age of 30, unmarried, had received at least some college education and were pursuing a college degree program at the time of data collection, as shown in Table 1. Participants were more evenly distributed across categories for length of time spent in the U.S., with over 60% spending ten years or less in the country. Over 50% of interviewees were non-U.S. citizens and reported a lifetime experience of violence.

Table 9-1: Select Demographics of Participant

Demographics	**N=30 (%)**
Age	
<20	2 (6.7)
20-24	11 (36.7)
25-29	10 (33.3)
30-34	5 (16.6)
35 and above	2 (6.7)
Time Spent in U.S.	
<1 year	8 (26.6)
2-3 years	5 (16.7)
4-5 years	1 (3.3)
6-10 years	5 (16.7)
11-15 years	3 (10.0)
16-20 years	5 (16.7)
>20 years	3 (10.0)
Citizenship Status	
U.S Citizen	13 (43.3)
Non-U.S. Citizen	17 (56.7)
Marital Status	
Married	9 (30.0)
Unmarried	21 (70.0)
Education Level	
Secondary Education	2 (6.7)
Some College Education	6 (20.0)
Associate's Degree	1 (3.3)
Bachelor's Degree	6 (20.0)
Master's Degree	12 (40.0)
Doctoral Degree	3 (10.0)
Student Status	
Student	20 (66.7)
Non-student	10 (33.3)
Lifetime Experience of Any Violence	
Yes	16 (53.3)
No	14 (46.7)

Participants explained that immigrants differ based on their personal circumstances and rationale for coming to the U.S. In particular, interviewees talked about how women who come as dependents on a husband's visa are different from women who come independently. Additionally, they discussed how women who are more recent immigrants may also be at risk and may not know about or seek out options in situations of domestic violence.

9.4.1 Differences Between Indian Women

Several interviewees explained that there is also a difference between Indian women who have the opportunity to come to the U.S. and those who stay in India. While they discussed how women who come to the U.S. on their own tend to be more independent, they also highlighted that women who marry to come to the U.S. as a dependent may be at risk for experiencing violence more.

> *Those people…who…come here and establish their homes here…then it kind of just follows that those women are kind of the independent ones that come here* (Age 20, 16-20 years in U.S., unmarried, non-victim, citizen).

> *If Indian women are here, they're here to be independent…their main criteria is to earn money.…to sit at home and raise children…That's not their main criteria…they want to live life on their own terms…They don't want domestic violence, they don't want to have abusive relationship(s), that is why they are here. And there, I think their perception is quite different from what is…in India* (Age 24, >1 year in U.S., unmarried, non-victim, non-citizen).

Women who…couldn't have been in a healthy relationship back in India…probably wouldn't have gotten an opportunity to come here without getting married...I do know of…Indian men who are here, who want to have a wife who has been in India, just get them here to have those…Indian traits (Age 19, 16-20 years in U.S., unmarried, non-victim, citizen).

You come here as a dependent and that really matters…you are expected to play a certain role. Most of the men who come here with a job, or are doing their PhD, look back home for what reason? They want a doormat…that's why they are getting…who would cook for you…relieve some of the stress from everyday life…It depends how the women come…if you're coming alone with no strings attached, it can have a good…impact on you…if you're coming as…someone's wife or…even like a girlfriend, chances are the experiences won't be very good (Age 32, 6-10 years in U.S., single, survivor, non-citizen).

9.4.2 Marrying to Immigrate

Several participants discussed how women and their families may think marrying women to men in the U.S. ensures that they will have a happy life. Unfortunately, interviewees explained that among women who move to the U.S. after marriage and without family, domestic violence is very common.

If she has come here because she just got married, been here for a year and violence starts …she may not have any avenue to find a friend or a family member to go to…you deal with

it in your own little space…You're not going to talk about it with a stranger…So I think she probably lives with it (Age 49, <20 years in U.S., married, non-victim, citizen).

That's the one common thread...these are the women who have had problems who were brought to America by marriage…I don't know anyone who came here for school, was independently living here, got married, and then had problems (Age 28, 6-10 years in U.S., unmarried, survivor, non-citizen).

Some of these people don't even know English…They don't know what to do, or where to go, or whom to get help from…It's basically like you got someone to work for you from another country…and…parents… they're in that blind belief that she'll…have a happier life, and they make her life miserable (Age 26, 6-10 years in U.S., married, non-victim, citizen).

She came to the US when she was 24…when she got married to a guy who was living in the US…she came to the US as an immigrant dependent… he met someone else here…He wouldn't come home…He would bring the other girl home…he's physically assaulted her…he's actually raped her… when she got pregnant, he got her aborted…And all of this over the course of three to four years…for three years…he didn't sign the papers…She was not even asking for any kind of alimony…she just wanted him to sign the papers so that she can be let free…finally he did it because he wanted to get married to the other woman (Age 25, 2-3 years in U.S., unmarried, survivor, non-citizen).

9.4.3 Transitioning to Life in the U.S.

Some interviewees described how the early period of transitioning to a new life in the U.S. may be particularly difficult for women and result in stressful situations that increase her risk for experiencing abuse.

> *I think it's just as easy to be violent in America…your home is kinda closed off and it's…up to you…how you act there…if the husband feels more…emasculated coming here…he has…a lower paying job, or he feels more out of place in society, and he got to cause more violence, because he wants to feel more in control* (Age 19, 16-20 years in U.S., single, survivor, citizen).

> *She loves her husband…and they move to America. I think coming to a new culture shocks everyone…including the husband, and can create a lot of frustration…factored in with aggression, home sickness, culture shock can potentially increase the frequency of domestic violence…in the first few months…of someone's stay here. And the lack of woman's resources…can make it difficult for her to raise her voice* (Age 28, 6-10 years in U.S., unmarried, survivor, non-citizen).

> *That period of time…there is not much that we can do, everything is in the hands…[of] the government…In India, we are in our own community and we have a lot of control to do…what we want. But that's not how it is when you move…to a different country…we have to wait for all sorts of visas, and immigration policies…to study, to work, to...start a business…that…period of time, of moving here, adjusting…that's…a very bad*

period…for…Indian women moving here, or to any country...I'm sure that is the time period when there is a lot of…aggressive behavior because of so many restrictions…it's very difficult to survive that period of time...that's where all the aggressive behavior comes up…You get so angry and get so frustrated trying a lot of opportunities and not getting things (Age 28, 2-3 years in U.S., married, survivor, non-citizen).

9.4.4 The Impact of Length of Time Spent in the U.S.

Interviewees recognized that a woman's length of time in the U.S. may determine if she knows individuals in the community to whom she would be comfortable reaching out, if she were experiencing abuse. Additionally, women who have migrated more recently to the country may not be aware that they are in a situation that is considered abusive in American society.

Unless they have been here a long time they are probably not going to realize that they are in a…violent relationship…Because for them, it was the way there…Why is it different here? (Age 49, <20 years in U.S., married, non-victim, citizen).

If I am all alone in a new city…and I am being abused, then I'd probably still not do anything about it because I don't have anywhere to go. But then if I have a few close friends or people around that I can discuss this with, then I'd probably do that (Age 23, >1 year in U.S., unmarried, non-victim, non-citizen).

A person who's been here for a while would probably be more open or confident...They would know…the financial aspect…the legal aspect…what can I do to help myself. They

talk to other females who are on some type of visas and how they made it here. So, they would definitely be…more clear of what is the next step...Someone who just got here, they are clueless (Age 31, 2-3 years in U.S., married, survivor, non-citizen).

9.4.5 Concerns about Deportation and Custody of Children

If a woman is a dependent on her spouse's visa, her concerns about deportation or custody issues with their children may impact her decision to seek help. These worries can consume a woman's thoughts and prevent her from trying to end the relationship.

They'd be like, what's going to happen to my kids? Like are they going to get deported with me? Or where do I stay? Or do they have to stay with him?...Because he would, the man would be the one with the visa (Age 21, 16-20 years in U.S., unmarried, non-victim, citizen).

It also depends on the visa status…that's a very complicated factor in itself.…if I was to move away from him, how do I survive in this country?...I wouldn't know where to go. I would have to go back to India. Even if I want to stay in this country, I can't. I have no money; I have no visa…I have no support system (Age 31, 2-3 years in U.S., married, survivor, non-citizen).

If someone's on a… spousal visa…if your husband is being deported, you're deported with them unless…you are aware that you can legally file for asylum (Age 28, 6-10 years in U.S., unmarried, survivor, non-citizen).

9.4.6 Awareness of Existing Resources

Many interviewees emphasized that dependent women are very limited in their options to address situations of abuse, because they are unaware of available resources. Participants explained that for women who recently came to the U.S., dependence on their husbands and lack of exposure to available resources limit their ability to take action in situations of abuse. Regardless of how long women have been in the U.S., lack of knowledge about available options for addressing the violence may impede those who want help from seeking it.

> *If they have been here long enough and they know that that's an option [going to the police]…I'd imagine if you had like moved here pretty recently…you don't know who to turn to…you…may not realize…the police and social workers and others, counselors are…there* (Age 21, 16-20 years in U.S., unmarried, non-victim, citizen).

> *If they raise their voice here, what would they do, where would they go?...They're probably not even exposed to…different asylum situations, social services because they never lived here independently* (Age 28, 6-10 years in U.S., unmarried, survivor, non-citizen).

> *I consider myself to be very independent, not dependent on my husband at all for anything…but I still don't know what options I have if I were in an abusive relationship* (Age 30, 4-5 years in U.S., married, non-victim, non-citizen).

9.4.7 A Greater Risk for Violence in the U.S.

While many interviewees were critical of the prevalence of domestic violence in India, some women perceived that women are more at risk in the U.S., because of their lack of options and isolation.

> *They are even actually more trapped…There were a few days in my life, in the past few months, when I was like, "God damn it, if he tells me today to leave the house, I have bloody nowhere to go." I have no family. If I was in India, even if my parents were unhappy with my decision, they wouldn't turn me away, I would still have a shelter. But, I have nowhere to go here* (Age 31, 2-3 years in U.S., married, survivor, non-citizen).

> *I think it's worse than India…Because here, most Indian women come…on a dependent visa, and so they're stuck in home most of the times…They have a very skewed perspective…there's a huge section of women…who still thinks…marriage…really makes you safe in life…it gives you security…They're more likely to experience it here…Because the husband is the only family…there's no other forms of interaction…they live under far more stress than in India* (Age 32, 6-10 years in U.S., single, survivor, non-citizen).

> *Couples move to the US is because of the man's job…woman would sit at home…and wait for the man to come home…it's not…like she can go…to other places, she's kind of stuck at home…she's very under his control…once you establish that sort of relationship…there's a much greater risk for him to be abusive verbally or even physically and for him to get more angry quickly…that creates that sort of disparity and which leads to a greater…risk*

of violence…I think that there would a greater chance of that existing in the United States…in India…even if the woman is at home…she's able to go out and about…she would have friends over, she would go somewhere…when you move to the United States, at least at first, you don't really have that luxury…So everything that you know is based on what your husband or your partner is telling you…the woman becomes completely dependent on him…you move there for his job, and he's the one making the money…you can't really do anything else except live your life for him (Age 19, 16-20 years in U.S., unmarried, non-victim, citizen).

9.4.8 Cultural Differences in Law Enforcement

Some participants expressed that women may hesitate to seek out law enforcement for various reasons. While some interviewees discussed the cultural differences between when police become involved in situations of domestic violence in both countries, others discussed concerns that women did not want to see their husbands prosecuted.

Everyone knows here if there's an emergency, you call 9-1-1. But if my husband slapped me, do I call 9-1-1?...If a stranger attacks you, you know you have to call 9-1-1…But if your own partner attacks you and you're in the safety of your own home…a person who's just come here will be afraid to call 9-1-1…you would think that 9-1-1 is…when something like a theft, or a kidnap, or a murder…happens. You won't think that you can call 9-1-1 for things like that (Age 28, 6-10 years in U.S., unmarried, survivor, non-citizen).

Fear of approaching the police here is much more… the police here takes quick actions…in India, I know if I go to the police…they might just stop the girl's husband or…give a warning…it's not…taken that seriously….But here…there might be serious consequence…women are the one who take pain, and they still worry…nothing should happen to my husband…the consequences that a husband faces might be much more serious in this country…that fear might just keep them from complaining, or taking action (Age 25, >1 year in U.S., unmarried, non-victim, non-citizen).

A person who just came here would…be…more inhibited because they don't know what's happening…their language barrier probably would be much worse…a person who has been here a couple of years would…be more confident because she knows that she has access to so many resources. If she needs help, she can call 9-1-1, it's not that big of a deal. But, in India, calling the police is…something…really terrible has happened…she would be much more scared and hesitant…She would also not want to open up about it…she would want to keep defending her husband because she traveled half the world to be with him, so he must be worth it (Age 31, 2-3 years in U.S., married, survivor, non-citizen).

9.4.9 Connecting with Social Support in India

Participants discussed that when women do not perceive that they have options in the U.S., they will often contact family in India or return to India where they have more support.

I think my cousin only went back to India because she didn't know who to ask for help here (Age 28, 6-10 years in U.S., unmarried, survivor, non-citizen).

Unless you have a work visa and you are working, and…you have an option out, nothing else is in your favor…A lot of women just compromise because…where would you really even go, except going back to India? But, how is that good either?...Going back to India is always an option…Even if your parents are not happy with your decision, it's not like they're going to turn you away…a lot of these women are actually qualified to work in India…They have the degrees and they have their qualifications to get a job. So…if you go back, you could get a job and do something with your life. But here, there is no way of staying in this country without a job and a visa (Age 31, 2-3 years in U.S., married, survivor, non-citizen).

If she comes to an exposed social environment, where she gets to meet and interact with a lot of people, and she can get information…about how to handle domestic violence, she will...If not, her only place she would call is…her own family back in India…they will…contact someone who lives here…guide their daughters to someone who can help them (Age 28, 6-10 years in U.S., unmarried, survivor, non-citizen).

9.4.10 The Impact of Financial Dependence and a Woman's Career

Participants perceived that women who are more financially independent or focused on their careers would be more able to end an abusive relationship. Interviewees explained that these women differ from women who are dependents on their husband's visa, because independent women would be more likely to address violence if it occurs.

Because if she's self-sufficient and if she's in a bad relationship…she'll definitely walk out... But if she's dependent on him…there's no more choice. She must either go back or she must stay here and get suffocated (Age 24, >1 year in U.S., unmarried, non-victim, non-citizen).

For my cousin, she knows that it's bad, but she won't get out of it because she doesn't know how to make money…But, she knows that it's a domestic violence situation and…she would say like, "He beats me up. It's over but, I still have to--"...she's articulating…that it's domestic violence…I would say it's also the shared dependence on the husband - there's no one else over there. They come as dependents and they're locked up in this apartment…They have very little interactions (Age 32, 6-10 years in U.S., single, survivor, non-citizen).

If they feel…the relationship is not working out…They just move out of the relationship, because they're independent. They can take care of themselves, they are financially independent, and…they respect themselves more (Age 24, >1 year in U.S., unmarried, non-victim, non-citizen).

In addition to discussing how women's independence impacts their ability to address situations of chronic violence, several participants expressed that women in general are more independent in the U.S. Some interviewees perceived women in the U.S. to be similar to Indian women residing in cities of India, whom they consider to be more modern, educated and independent than women in rural India. Many participants thought that women can become more

independent after coming to the U.S., but that women who are dependents on their husband's visa do not have this opportunity and thus are more vulnerable, if they experience violence in the U.S.

Several participants shared that if women are exposed to more broad definitions of domestic violence and connect with other Indian women in the U.S., they will feel more supported in their decision to seek help, and may feel less stigmatized than they would in India for ending a relationship. Participants identified that if women are empowered enough to seek help in the U.S., they will benefit from more responsive police and better quality supportive services than in India. Interviewees emphasized that regardless of the woman's visa status, she must have the individual strength to prioritize herself and her needs, if she is going to end a relationship. While participants expressed that moving on from an abusive relationship is easier in the U.S., this decision will be impacted by the woman's level of independence, education, social support and confidence in speaking English to advocates in formal supportive services.

9.5 DISCUSSION

Participants acknowledged that the personal situation of an AIIW and the circumstances of her coming to the U.S. greatly impacts her risk for experiencing abuse. Two different types of Indian women come to the U.S., women who are independent and women who are dependents on their husband's visa. The level of dependence impacts how they are treated by their husbands. Women discussed situations in which men want to marry Indian women residing in India, because of their more traditional upbringing and assumptions that they will be more submissive, a phenomenon among first and second generation immigrants that has been well-documented (Raj & Silverman, 2002). Participants explained that only certain women from India have the opportunity to come to

the U.S., and women who come to the U.S. as dependents on a visa are at a higher risk for experiencing domestic violence.

Interviewees often described situations when dependent women come to the U.S. after marrying an Indian man who is already settled in the U.S. Participants perceived this to be a growing trend among men who want a wife with a traditional Indian upbringing and values and parents who believe they are giving their daughters a chance at a better life in the U.S. These circumstances for a woman's arrival in the U.S. impacts how the husband will treat his wife, respondents explained. If the woman is dependent, she will be more vulnerable for experiencing abuse.

Despite the best intentions of parents, these women may be unprepared for adjusting to life in a country where the only person they know is their new husband. Participants discussed how the first few months in the U.S. can be a very challenging time for the couple. During this period, patterns of domestic violence may be more likely to emerge for dependent women, due to the husband's frustration over delays in formal government processes that impact schooling and employment opportunities. These transitional periods have been known to result in high amounts of stress that may put the woman at higher risk for abuse (Raj & Silverman, 2002). For dependent women, this can be a dangerous time, because husbands may take out their aggression because they feel powerless in a new country.

Interviewees suggested that a woman's length of time in the U.S. may determine if AIIW reach out to support systems to address abuse. AIIW who are new to the country may not consider themselves to be experiencing abuse, if they are used to seeing and experiencing similar treatment of women in India. As a result, they may be unaware that they can seek help and what supportive services are available. If dependent women have been in the U.S. for a longer period of time, they

may be more empowered and willing to talk to other women about resources for addressing the abuse. Their decision to seek help may be further complicated, as dependent women may be concerned about how their visa status will be impacted and fear deportation or losing custody of children. Women may also worry about the perpetrator retaliating, if he learns that she reported the abuse. Many interviewees expected that women would be hesitant to report the abuse, because they are on their husband's visa and are therefore directly impacted by his visa status and may not know about options to seek asylum.

Lack of awareness about available supportive services was perceived to be especially common among women who are dependents and recently settled in the U.S. Because these women are often unable to go to school, work or even drive, they may not be exposed to information about existing resources. Participants described situations where women are isolated at home, while men work or go to school and can control the information women receive about their rights in the U.S. This suggests the need for social services and law enforcement to reach out to these communities and make them more aware of services that they are eligible to receive. Due to this isolation, several interviewees perceived women in the U.S. to be more at risk for abuse than in India. Considering that many of these women may not know anyone other than their husband, they may decide to stay with him, especially because they depend on him socially, emotionally and financially.

Although law enforcement are often the first responders in situations of domestic violence, women may hesitate to call them. Participants explained that women perceive the role of law enforcement differently in India and do not call on police in situations of domestic violence, but in other emergency cases. Some interviewees noted that the police force in India is very corrupt and ineffective and emphasized that it does not take cases of domestic violence seriously. As a

result, women who are new to the U.S. may not know that they can call police in this type of situation. In contrast, women who know that the police actively respond to calls regarding domestic violence may decide not to seek help out of fear for severe consequences for their husband.

Participants consistently identified family as the main resource women reach out to in situations of abuse. This is especially true for women who feel unsupported in the U.S. and whose family members reside in India. Women experiencing abuse will connect with family for guidance and sometimes return to India permanently, because they feel their dependent status gives them no other options. Participants described that this may be a more appealing solution to women, who are familiar with the culture and people, and have more support and opportunities to use their education and work experiences in India. Even among women who decide to stay in the U.S., several interviewees cited that the family in India will encourage them to stay in their relationship, or connect with other Asian Indians whom they know in the country.

Throughout their interviews, participants compared women who come as dependents to women who come independently to the U.S. Interviewees suggested that women who are employed and financially independent are more able to address situations of abuse than dependent women. Several participants also perceived that independent women would be less likely to experience abuse, but more likely to recognize and address the abuse than dependent women. For dependent women who are unable to make a living for themselves and any children they have, interviewees emphasized that women will accept the abuse and stay in the relationship. These AIIW contrast women residing in cities in India, who participants perceived to be more vocal and empowered to seek help in situations of abuse.

9.6 CONCLUSIONS

As with any research, this study has limitations. The results of this research are not externally valid and generalizable to the perceptions of all Hindu AIIW. Participants were self-selected in a specific urban region of the U.S. Women were not required to have experienced abuse to participate in this study, thus those who experienced domestic violence may have been less likely to volunteer to participate in the study. Study participants were primarily young adults who were current students, and their opinions and experiences may not reflect those of elderly women, less educated women and working women who are also Hindu Asian Indian immigrants.

Despite these limitations, this was the first study to our knowledge to address AIIW's perceptions of dependent women as an at-risk population for domestic violence. Interviewees shared insight and suggestions for dependent women in situations of abuse and how their lack of independence, education, social support and linguistic abilities may impact the likelihood of their experiencing abuse and seeking supportive services. Targeted outreach among social service providers, law enforcement and immigration officials may encourage women who are unaware of their options to seek help. These stakeholders all have the potential to serve as advocates and should be aware of how deportation concerns, lack of social support and stigmatization of divorce influence a women's decision to seek help. Additionally, they must consider how women may generalize unsuccessful attempts to get help in India to experiences seeking services in the U.S.

This research focused on Hindu AIIW's awareness of dependent women on spousal visas as an increasingly vulnerable population for experiencing chronic situations of violence. Participant responses addressed the importance of identifying and reaching out to dependent women, who may be unaware of their legal rights, as well as available services. Due to the circumstances of their immigration to the U.S. and their immigration status, they have specific

needs that differ from other AIIW. Thus, there is a growing need to target outreach to AIIW and dependent AIIW, as a vulnerable subset of this population. Connecting women to existing services and tailoring programs to be more culturally aware and appropriate for the needs of these women is crucial for ensuring that AIIW are informed of their options and supported in their decisions to address ongoing abusive relationships.

10.0 CULTURALLY APPROPRIATE SERVICES FOR HINDU ASIAN INDIAN IMMIGRANT WOMEN IN SITUATIONS OF DOMESTIC VIOLENCE

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10.1 ABSTRACT

Asian Indian immigrant women's (AIIW) perceptions of domestic violence and essential services for women experiencing violence are not well understood by researchers, providers and policymakers. Additionally, socially, culturally and linguistically appropriate services are not available for AIIW in situations of chronic violence. The objective of this qualitative study was to understand AIIW's perspectives on how to design a successful program for AIIW experiencing domestic violence. From February to June 2016, 30 Hindu AIIW in an urban setting of the United States (U.S.) participated in in-depth interviews. Questions focused on participants' perceptions of how AIIW define, experience and address situations of domestic violence and how these are different from Indian women in India.

Participants identified significant obstacles that deter women from seeking help, which must be addressed to promote utilization of supportive services. Additionally, interviewees recognized the role of community stakeholders and inclusion of the Indian community in designing, advertising and delivering program activities. Respondents discussed services that would be helpful for AIIW experiencing domestic violence. Participants recognized that survivors' needs may vary based on personal situation and socioeconomic status, as well as familiarity with rights and available services. To our knowledge, this is the first study of AIIW's perceptions on designing an intervention for survivors of abuse. Interviewees' responses focused on addressing barriers, relevant stakeholders and offering supportive services. Incorporating respondent suggestions into service provision and considerations for future policy on domestic violence can support women and families experiencing abuse and make home a safe place.

10.2 INTRODUCTION

The World Health Organization (WHO) estimates that worldwide one of every three women has experienced physical and/or sexual intimate partner violence (IPV) (WHO, 2014). Women are more likely to suffer from abuse than men both in the U.S. and globally (Menjivar & Salcido, 2002). Risk factors for violence against women include young age, having children from a previous relationship, mother's experience of abuse, history of childhood physical and sexual abuse (Abramsky et al., 2011), young age at marriage and being in a relationship with an alcoholic partner (Bhattacharya et al., 2013). These risk factors and the experience of domestic violence prevent women from reaching their potential as individuals, family members and contributing members of society.

Although IPV is a global public health issue that is underreported among women worldwide, immigrant women are a particularly vulnerable population. Immigrant women who experience IPV face many barriers that prevent them from seeking help or leaving the abusers. In many cases, the abuser is the woman's only source of social and financial support and may be the only person who shares her cultural identity. Financial, legal and cultural barriers prevent women from reporting IPV due to perceived or actual inability to live independently (Mehta, 1998), lack of awareness of legal rights (Lee & Hadeed, 2009; Mehta, 1998), fear of losing custody of their children (Allagia et al., 2009; Lee & Hadeed, 2009), worry about partners purposefully delaying their residency application and paperwork (Lee & Hadeed, 2009), ineffective enforcement of laws in their home country (Menjivar & Salcido, 2002), fear of deportation (Orloff & Garcia, 2013), lack of insufficient financial means to support themselves (Orloff & Garcia, 2013) and concerns about how leaving the abusive partner will impact their social status and acceptance by family and community members (Erez & Hartley, 2003).

Immigrants from all backgrounds are at high risk for IPV. In addition to real and perceived repercussions from seeking help in situations of abuse, immigrants are further deterred from reporting due to lack of suitable services among the immigrant population (Shirwadkar, 2004). Immigrants are less likely to access services; however, socially, linguistically and culturally appropriate resources are also lacking for immigrant populations (Allagia et al., 2009; Lee & Hadeed, 2009). Addressing situations of domestic violence may be challenging among immigrant populations that do not identify with members of their local community or do not have similar others to connect with for social support. Lack of social support along with lack of access to resources limit the options of women experiencing IPV, who may be unaware of their rights, as well as services to address their situation. Immigrant women tend to share experiences of IPV with members of their social network more than with formal support systems, such as law enforcement or legal services because of linguistic barriers (Orloff & Garcia, 2013). They prefer to connect with other women, friends and family from the same cultural background who they perceive will better understand their situation (Orloff & Garcia, 2013).

While there has been much research on IPV for Indian women in India and American women in the U.S., little has been done on IPV for Asian Indian immigrant women (AIIW) residing in the U.S. A report on IPV among South Asians in the U.S. found that 37% of women reported experiencing violence in the last year (South Asian Public Health Association, 2002). South Asian women are more at risk for IPV when they are married, financially dependent on their husbands, have children under the age of 15 and identify themselves as religious (Hyman et al., 2006). Their higher rates of reported IPV in the U.S. compared to India suggest they may be at greater risk for IPV; however, these higher levels may also be related to better access to reporting agencies or differences in reporting behaviors (Raj et al., 2005).

Asian Indian immigrants, along with other Asian immigrants are classified as "South Asian" and their heterogeneity in experiences and reporting of IPV is not well understood. Regardless of a difference in incidence or reporting behaviors, South Asian immigrant women suffering from IPV in the U.S. are at increased risk for HIV, unplanned pregnancies, sexually transmitted infections (STIs), limitations on seeking gynecologic care, injuries from abuse, forced abortions and miscarriage (Raj et al., 2005). Understanding the barriers to accessing vital services for AIIW in situations of abuse is critical for addressing adverse health outcomes and creating sustainable culturally appropriate services.

Developing culturally appropriate services is crucial for the growing Asian Indian population in the U.S. and in Pennsylvania. As of 2015, almost 11 million Asian women were in the U.S. (United States Census Bureau, 2015) The Asian population was the fastest growing group of any race in the U.S. from 2000-2010 (United States Census Bureau, 2013) and Asian Indians are the fastest growing Asian group as of 2015 (United States Census Bureau, 2015; United States Department of Homeland Security, 2015). Currently, 3.4% of Pennsylvania's population identifies as Asian and their size increased 62% from 2000-2010 (United States Census Bureau, 2010; United States Census Bureau, 2012). In 2008, Asian Indian immigrants accounted for 9.8% of immigrants in PA (Terrazas & Batog, 2010). In 2015, 3.6% of residents in Allegheny County identified as Asian alone compared to 5.6% in the U.S (United States Census Bureau, 2015). Some immigrants become permanent residents; in 2015, 64,116 Asian Indians received lawful permanent residency status and 42,213 were naturalized (United States Department of Homeland Security, 2015). Asian Indians represent 70% of individuals on H-1B visas and 17% of those given legal permanent residency (LPR), usually through employment opportunities (United States Department of Homeland Security, 2015). Asian Indian women in situations of abuse, who are not working or

going to school and dependent on their partner's visa may fear seeking help because of risk of deportation.

AIIW's age, education, social support and linguistic abilities may impact their knowledge of supportive services and decision to seek help. Asian Indians are younger than most foreign-born groups, with a median age of 49 and 83% falling between the ages of 18-64 (Zong & Batalova, 2015). Of all Asian Indian adults in the U.S., 87% are foreign-born. Asian Indian immigrants tend to be more educated than other immigrants and those born in the U.S., with 76% holding college degrees and 56% having graduate degrees (Zong & Batalova, 2016). Despite attending English-speaking universities and the fact that over 75% of Asian Indian immigrants speak English proficiently, 10% speak only English at home. Additionally, 27% report having limited English proficiency (Zong & Batalova, 2015). This suggests that AIIW may prefer not to speak English or seek services offered only in English. AIIW may feel more encouraged to seek services if supported by their peers. Thirty-eight percent of Asian Indians report that almost all of their friends in the U.S. are Asian Indian; however, 69% say that their spouse, parents, siblings or children are still in India (Zong & Batalova, 2015). Supporting AIIW who may not have knowledge, social support, or confidence in their speaking abilities is crucial for connecting them with supportive services.

In the U.S., many domestic violence organizations offer services, literature, trainings and events. The National Domestic Violence Hotline has services online, over the phone, or via videoconference for those who are deaf, as well as a Spanish version of its website (National Domestic Violence Hotline, 2017). The National Resource Center on Domestic Violence has trainings, reports, and a comprehensive list of providers in different states (National Resource Center on Domestic Violence, 2017). The National Coalition Against Domestic Violence offers

definitions, a hotline and lists of services from other organizations (National Coalition Against Domestic Violence, 2017). The National Network to End Domestic Violence offers similar options to those visiting its website and identifies domestic violence coalitions and services by state (National Network to End Domestic Violence, 2017).

Statewide coalitions, such as the Pennsylvania Coalition Against Domestic Violence, offer hotlines in English and Spanish, trainings, lists of resources by state and within each county of PA, ways to get involved and information on relevant legislation (Pennsylvania Coalition Against Domestic Violence, 2017). Other organizations such as Domestic Violence Services of Southwestern PA serve specific PA counties and offer a 24-hour hotline, housing, legal assistance and education programs (Domestic Violence Services of Southwestern PA, 2017).

Accessing services depends on the survivor's location and availability of culturally appropriate services. While providing hotlines and education to women in situations of abuse is crucial, these services were not offered in any Asian Indian languages, and therefore may not appeal to AIIW in situations of abuse. Currently, there are not adequate services to address domestic violence among immigrants in the Allegheny County area, which is particularly concerning for those who lack social support. Locally, Women's Center and Shelter of Greater Pittsburgh (WCS), founded in 1974, was one of the first shelters for female victims of abuse in the U.S. (Women's Center and Shelter of Greater Pittsburgh, 2016). WCS has a 24-hour hotline, housing, a program for children, legal, medical and education services and support groups (Women's Center and Shelter of Greater Pittsburgh, 2016). The WCS website allows the user to select which language she prefers and has the capability to translate site information into 103 different languages, including nine Indian languages. However, it does not appear that it offers services in languages other than English (Women's Center and Shelter of Greater Pittsburgh,

2016). Additional county domestic violence service providers include Crisis Center North, Womansplace, the Center for Victims, Alle-Kiski Area Hope Center and Pittsburgh Action Against Rape (PAAR). Of these organizations, PAAR offers select pages on its website in Spanish, as well as a liaison for members of the Hispanic community (Pittsburgh Action Against Rape, 2017). The other above mentioned organizations offer information or services only in English.

An additional resource in Allegheny County is the specialized District Attorney's Office Domestic Violence Prosecution Unit (Allegheny County District Attorney, 2017). This unit recognizes domestic violence as a crime that is vastly underreported (Allegheny County District Attorney, 2017). Like many of the other resources mentioned above, it is unclear if this group offers legal counseling in any languages other than English. While many of these resources may be physically accessible to survivors of abuse, they may not be culturally or linguistically accessible. Offering services in the woman's native Indian language, in locations that are familiar, such as a local Indian community organization, and having services delivered by Indian women are some ways that services can be altered to be more appealing to this population. Tailoring services to be more culturally appropriate and targeting outreach to the local Asian Indian population may make them more aware and open to accessing available services.

10.3 METHODS

10.3.1 Recruitment

The Indian Healthy Relationships Study (IHRS) was initially advertised online and through mailers for the University of Pittsburgh's Clinical and Translational Science Institute's (CTSI)

Research Participant Registry. To increase sample size, flyers for the study were displayed on local university campuses, as well as through student and community organizations, restaurants, grocery stores and businesses that cater to the local Asian Indian population. Additionally, some participants were referred by friends or other participants to enroll in the study. This study was approved as exempt by the University of Pittsburgh Institutional Review Board (IRB).

10.3.2 Data Collection

From February through June of 2016, 30 Hindu AIIW were interviewed by the principal investigator. Interviews ranged from 23 to 96 minutes and were conducted at a location of the participant's choice. Interviews explored participant definitions of, experiences with and help-seeking behaviors around healthy relationships and domestic violence and how these have been impacted by length of time spent and experiences in the U.S. Interviewees were asked about their own conceptualizations, experiences and behaviors, as well as those of other Indian women in the U.S. and in India. Participants also completed questionnaires on social support, acculturation and domestic violence, as well as a demographic questionnaire. Demographics included citizenship status, length of time spent in the U.S., Indian state of origin, native language, marital status, marriage type, length of marriage, satisfaction with marriage, motherhood status, pregnancy status, household composition, Varna status, caste status, education status and income. Participants were each compensated $30 for taking the time to complete the interview and $10 for completing the accompanying questionnaires.

10.3.3 Data Analysis

All in-depth interviews were recorded with the permission of the interviewee, deidentified and transcribed by the principal investigator or a third party in Microsoft Word. After transcription, interviews were reviewed twice for emerging thematic categories by the principal investigator. Code creation was guided by concepts explored in key interview questions, such as types of domestic violence, qualities of healthy relationships with partners, perceived differences in domestic violence between women in India and Asian Indian women in the U.S. and suggestions for intervention services for Asian Indian women in situation of domestic violence. New codes were added in subsequent interviews with additional research participants from underrepresented age and work status groups. The principal investigator first took notes on common themes and coded the interview with existing codes, which were compiled into a codebook. After coding all interviews, each interview was reread and recoded to ensure that any codes created later in the coding process were applied to earlier interview transcripts as needed. After the codebook was finalized and interviews were coded, a research assistant reviewed and coded interviews independently. The principal investigator and research assistant independently coded each interview and then used consensus coding to discuss any coding discrepancies. No major discrepancies were found during this process.

This article focuses on participant responses to the question, "*What would a successful program look like for Asian Indian immigrant women experiencing domestic violence in the U.S.?"* Participants were encouraged to explain what services they perceived would be most helpful for women in these situations, as well as ways to offer the program that would ensure participant confidentiality and ease of access. Respondents were very conscious of the barriers that women in

these situations might experience while seeking services and discussed how to provide programs that would appeal to and offer support to women.

10.4 RESULTS

As shown in Table 1, slightly over 50% of participants were not U.S. citizens, and over 25% of participants had spent less than a year in the U.S. Of the remaining participants, 50% had been in the U.S. for over ten years. Just over 66% of participants were unmarried, although several were in committed relationships. The population was highly educated, with 50% of participants having completed or in the process of pursuing graduate or professional degrees and over 40% of participants reported some college education. At the time of data collection, 66% of participants were students and 80% were age 30 or under. Over 50% reported lifetime experiences of violence.

Table 10-1: Select Demographics of Participants

Demographics	N=30 (%)
Age	
<20	2 (6.7)
20-24	11 (36.7)
25-29	10 (33.3)
30-34	5 (16.6)
35 and above	2 (6.7)
Time Spent in U.S.	
<1 year	8 (26.6)
2-3 years	5 (16.7)
4-5 years	1 (3.3)
6-10 years	5 (16.7)
11-15 years	3 (10.0)
16-20 years	5 (16.7)
>20 years	3 (10.0)
Citizenship Status	
U.S Citizen	13 (43.3)
Non-U.S. Citizen	17 (56.7)
Marital Status	
Married	9 (30.0)
Unmarried	21 (70.0)

Table 10-1 Continued

Education Level	
Secondary Education	2 (6.7)
Some College Education	6 (20.0)
Associate's Degree	1 (3.3)
Bachelor's Degree	6 (20.0)
Master's Degree	12 (40.0)
Doctoral Degree	3 (10.0)
Student Status	
Student	20 (66.7)
Non-student	10 (33.3)
Lifetime Experience of Any Violence	
Yes	16 (53.3)
No	14 (46.7)

Respondents described various services that they thought AIIW experiencing abuse would be interested in seeking out. Additionally, interviewees discussed the inclusion of relevant stakeholders. Participants also highlighted the logistical design of a program that would ease any burdens in accessing services, such as transportation, cost, time of day and offering services that are culturally appropriate. Responses have been edited for clarity and to eliminate repetition. Unless otherwise noted, the term women will be used to refer to women in situations of abuse.

10.4.1 Logistical Barriers to Seeking Services

Interviewees identified many logistical barriers that would need to be addressed to design a successful intervention. Several participants stated that service providers would have difficulties identifying and gaining access to women.

If there's someone who somebody's keeping like that in their house, you wouldn't know… They would not let that person go out, or not let that person do anything, and that woman

would just be in some house, and they just lock it from the outside when they go out...like how would you find her? (Age 26, married, 6-10 years in U.S., non-victim).

Women staying at home are not really interacting with any social entity. They don't really go to school or they're not working anywhere, so even if people are interested in helping, I don't know how they would get to know about somebody in trouble (Age 25, single, >1 year in U.S., non-victim).

Many participants said that helping improve outcomes for women in situations of abuse will require offering services at locations where women already frequent. Advertising and providing services in familiar settings would make it easier for women to conceal their activities and whereabouts from abusive partners, an added protection for these women.

Having those available at places where we visit, not necessarily in hospitals or anything like that, but temples.…(Age 49, married, >20 years in U.S., non-victim).

It's important to target places where a lot of Indian people are, or they go to.…Indian temples especially, or Indian restaurants. Although an important thing to keep in mind would be that…a lot of people would, you know, look at you like what is going on, just because it's not a norm (Age 26, married, 6-10 years in U.S., non-victim).

Respondents explained that current services for women in situations of abuse are not linguistically appropriate. This discourages women who are not comfortable speaking English from seeking available services.

> *My mom has such a huge language barrier, though she was a social worker, her English is still not 100% and she feels very self-conscious about that. And she just wants to talk to someone in Hindi* (Age 21, single, 16-20 years in U.S., victim).

> *Even if it's the main like Hindi and maybe Urdu…But it doesn't have to be many languages…just a couple is fine, like the main ones* (Age 26, single, >20 years in U.S., victim).

Participants discussed other logistical barriers such as time, cost, nearby location and confidentiality of participation in services as potential deterrents for interested women.

> *To make a…successful program it should be minimal cost, free, that's in terms of money and also proximity, how far you have to drive for that, because nothing here is in walking distance* (Age 21, single, 16-20 years in U.S., victim).

> *I think something where…they were able to pay and…without, I guess, it being on their insurance, so their husbands wouldn't find out or something. Something where it's, you know, extremely confidential would be important* (Age 19, single, 16-20 years in U.S., non-victim).

Interviewees described situations in which some women may not be able to overcome barriers to seek services. When women cannot access services physically, interviewees suggested offering programs online, sharing women's stories in a book or helping women return to their families in India. Participants explained that these nontraditional approaches may be potential solutions for women who are unsure about seeking help:

> *When you publish your work…Not just publishing it in a journal, publishing it in a book… because that goes on the newsstands...just more literature…whether it's online, in a journal, or in a book* (Age 29, single, 6-10 years in U.S., victim).

> *How would they-- if they needed to escape the country, I mean, if they didn't want to live with that person anymore and they wanted to go home, the natural refuge for Indian woman is to go to their parents* (Age 26, single, >20 years in U.S., victim).

Several participants suggested a more prevention-based approach to intervention. To have the greatest impact, interviewees supported screening women for abuse while they are still in India or immediately upon immigration. Integrating this activity into the pre-immigration or arrival protocol for all immigrants may help women prepare for any emerging conflicts, as well as help them better understand what constitutes abuse and what options are available.

> *For immigration purposes…maybe something that could be included in the visa forms…when they're going for visas like, you know, "Does your husband hit you?"… no one would say that even if-- because they want to come here, but, I wish there was a*

basic kind of screening when they just come… just a little orientation that, you know, if you're at risk, if you're a first-time visitor…and, you know, you can get help (Age 28, single, 6-10 years in U.S., victim).

*That would go back to India, that would go back to awareness in those villages in India that…getting your daughter married off to America does not necessarily mean that she'll have a golden life (*Age 26, married, 6-10 years in U.S., non-victim).

10.4.2 Relevant Stakeholders to Engage in Service Provision

When discussing implementation of services for AIIW in situations of abuse, interviewees often mentioned involving key stakeholders. These individuals can contribute to the advertisement and delivery of services and also provide facilities for holding intervention programs. Many participants mentioned the importance of having Indian women involved in service provision:

I think something that would help would be Indian women running the place because they just don't feel comfortable with a white woman, you know, trying to talk about these things because, not that they don't have insight, it's just they feel that white people don't really understand what they are going through (Age 21, single, 16-20 years in U.S., victim).

I think that a good program would have a lot of Indian women, who are maybe running it who or who act as counselors within the program…I know even with my mom, she's been here for 20 years - but she would feel more comfortable speaking about domestic violence to another Indian woman... (Age 19, single, 16-20 years in U.S., non-victim).

In addition to Indian women, respondents discussed the importance of involving family members and abusive partners. Including these individuals in the intervention can keep the women engaged and ensure that factors contributing to abuse are addressed in the intervention.

> *It's the husband that has to stop. We need to reach out to the men…Only thing she can do is move out, move away, stop staying with him… there can be a counseling session where both husband and wife are ready to come and talk* (Age 25, single, >1 year in U.S., non-victim).

> *First have the woman, just kind of to get the information and her perspective, but then also have the man come…And have them talk about what, almost note down the reasons for, why, "You think it's right for me to-- for you to abuse me?"* (Age 20, single, 16-20 years in U.S., non-victim).

While including partners and family members was identified as important, several participants also addressed the necessity of involving other women who had experienced abuse. Helping women currently in situations of abuse connect with women who have been able to improve their situations could provide a model for how to overcome violence in the home.

> *I guess if you have a program that has Indian women who've been through the abuse and who have been successful as in they left the partner and…they have a job and they have kids…and if they are successful and happy…you can have the mentoring partnership between them* (Age 22, single, 11-15 years in U.S., non-victim).

So, probably other females who have been through it or who are victims of abuse, or even if not abuse who are from India and they kind of understand what they're going through, would be a huge help (Age 31, married, 2-3 years in U.S., victim).

Interviewees followed up on the difficulties of identifying and enrolling AIIW who are experiencing abuse in services. To address this significant barrier, respondents identified potential community partners for advertising and delivering services, which included doctors, grocery stores, restaurants, temples, schools and places of employment.

I'll go into a doctor's office and in the bathroom, they have, oh, you know, in an abused relationship? Grab this phone number. I've done that for my sister (Age 49, married, >20 years in U.S., non-victim).

Where every, everybody at [university name] can go to for help. So, I think a successful program should be linked to the place of work, or a place of study (Age 25, single, >1 year in U.S., non-victim).

10.4.3 Service Components

In addition to locating and engaging women in programs with the help of relevant stakeholders, participants identified services that they think would be most helpful to women in situations of abuse. Many interviewees identified counseling and case workers as a crucial part of any intervention for survivors, as well as perpetrators.

I think…talking to somebody first and talking to somebody outside the home…whether it's a counselor or…psychologist, or a psychiatrist (Age 49, <20 years in U.S., married, non-victim).

Having a liaison, someone assigned to you…case workers, right?...But, yeah, someone to help navigate them through all of the legal jargon (Age 26, single, >20 years in U.S., victim).

Many respondents expressed that preparing survivors to make changes in the abusive situation is possible only when the woman feels ready and empowered. As a result, offering services to increase the woman's self-worth and help her develop action steps are crucial:

I think you have to make the woman understand she is a person and not someone who has to kind of live by the husband's rule (Age 22, single, 11-15 years in U.S., non-victim).

I think the guilt and self-esteem issues are something that need to be addressed first thing… for her to realize her own self-worth and realizing that if she actually went through it, it's not… something that happened to her because of her fault (Age 29, single, >1 year in U.S., victim).

In addition to activities, participants discussed the importance of providing tangible resources to support women's immediate needs. Arranging a safe living space for women and their

families was identified as a high priority, in particular, to ensure that survivors are able to start rebuilding a new life without fear.

> *If the violence is too much that they should stop staying with husband…so she needs a shelter…They need medical help, and just a shelter where they can stay, especially if she is not an earning wife* (Age 25, single, >1 year in U.S., non-victim).

> *Sometimes, people need a… few days…if they aren't working, or if they don't have their own bank account, or anything, they don't have money, really, to go spend it in a hotel* (Age 26, single, >20 years in U.S., victim).

Respondents recognized monetary difficulties as a challenge for women when addressing their situation of abuse. In order to become financially stable, program participants would need occupational opportunities to earn their own income and achieve independence. Interviewees described this common obstacle and stated:

> *Can you guide them toward some temporary work or some kind of financial support? Because she has nowhere to go in this country. Where is she living? Where is her next meal coming from?* (Age 31, married, 2-3 years in U.S., victim).

> *Especially if women are being oppressed or tormented, they're not financially independent, I think they should be made financially-- they should have some kind of jobs where they can start earning...* (Age 25, single, >1 year in U.S., non-victim).

For victims having difficulty leaving their homes, services need to offer isolated women assistance remotely. Participants identified a help line as one potential approach for connecting with these particular women who are interested in seeking supportive services.

> *An anonymous helpline would definitely help, somewhere where she, a woman, can speak up and her anonymity is kept* (Age 25, single, >1 year in U.S., non-victim).

> *It might not be easy for me to slip out of my home when my husband is abusing me…to, you know, go to a place… I will maybe also think twice about it, if I have to go somewhere, but if it's a phone line that I can call and talk to somebody…I think that would be more helpful* (Age 30, married, 4-5 years in U.S., non-victim).

Vulnerability and needs may vary depending on the woman's length of time spent in the U.S., interviewees shared. For women who are newer to the country and do not have an independent visa, immigration issues are a barrier to address in supportive services. This concern in particular was identified as urgent and a major source of stress for women, which greatly impacts their decision to seek help.

> *If my visa status does not allow me to work, I'm dependent on my husband, and if he hits me and if I put him in jail, what am I do? I'm going to be deported back* (Age 28, single, 6-10 years in U.S., victim).

What happens to me, if I'm in on a dependent visa?...Where do I go? Do I have to report the crime and go back in the same house? Live with that person? Do I have to move back to India immediately?...If I know that if I report this crime to the police, I have to go back in the same house, and I have to stay there unless I somehow manage those $1,000, $1,500, to go back to India.…that might be discouraging (Age 30, married, 4-5 years in U.S., non-victim).

While involving Indian women in intervention programs was identified as one component of culturally appropriate services, respondents also highlighted the importance of incorporating aspects of Indian culture into program implementation. Victims' willingness to engage in services will depend on their comfort with participating in the program, and integrating Indian cultural values and religion will add familiarity and predictability in an otherwise unpredictable life situation.

That is a problem because a lot of American institutions are very secular and that for a lot of Indian women, especially Hindu women, is it, it reaches into their heart, because they grew up with it and it's something that they have developed to identify with...I think it is an important part of, if you are targeting Indian Hindu women. You need to have religion as a component of it....To talk about religion and even not be afraid to recommend solutions based on Hinduism and scriptures... (Age 21, single, 16-20 years in U.S., victim).

I think it's important (to) incorporate both elements of India and America, because as a woman who has moved from India to here, it's really hard to relate to American women

completely…but it's also really hard to relate to Indian women completely, because now you're just in this between, limbo state… (Age 21, single, 11-15 years in U.S., victim)

Participants emphasized that many women who would benefit from supportive services do not recognize that they are experiencing domestic violence. Giving women an opportunity to discuss these experiences and raising awareness about their options for addressing the abuse would help women make a plan for addressing their personal situation.

Convince them that nothing is going to happen. You can sustain yourself. You are independent to sustain yourself. Okay, even if you leave that person, nothing will change (Age 24, single, >1 year in U.S., non-victim).

That's the first step, I'd say, is to make them realize. I think a lot of people don't even know that this is an unsafe situation to be in sometimes. Especially if it's verbal or something. I don't think Indian women would recognize that that's a situation of domestic violence (Age 21, single, 6-10 years in U.S., non-victim).

Many interviewees stated that services to improve outcomes for women in situations of abuse must change women's perceptions of gender and domestic violence norms. Helping survivors reflect on their experiences of abuse and feel comfortable with ending a relationship or raising children independently was perceived as a challenge by many respondents.

You have to understand these women, they're vulnerable, they're not going to trust people easily, especially if they are in a new country, with different people with different values. It definitely is going to take some time to get used to the environment and get used to the changes. And to really realize domestic violence is not okay...She can leave him (Age 22, single, 11-15 years in U.S., non-victim).

So if you can tell them this is okay to leave your abusive husband, it's okay to raise your kids on your own…and it's not the worst thing in the world (Age 19, single, 16-20 years in U.S., victim).

Participants suggested additional services for women in situations of abuse to facilitate their transition to a new life. When possible, interviewees discussed involving lawyers and doctors in addressing medical and legal concerns of survivors, as well as successful Indian women in the community, who can serve as mentors.

If there is a concept of alimony, which is applicable to her, and she doesn't even know because there is no concept of alimony in India, maybe that's something that should make her feel empowered. That she has a future even without that guy and the guy owes her something (Age 31, married, 2-3 years in U.S., victim).

If there is a program where the Indian women can meet other Indian women…who are being in a good position…good industry, good research programs, with whom we can

interact, make a platform so that we can enrich ourself (Age 31, married, >1 year in U.S., victim).

For AIIW who have recently moved to the U.S., many of the key members of their support network still live in India. This isolation from family and close friends may deter them from seeking help and make them feel unsupported in these efforts. Respondents discussed how a successful program must not only help women reach their support networks in India, but also serve as her system of support throughout her transition.

Just offering them support…would make it more easy for them to get through that tough period…bring in different experiences of people who have been in the same situation... (Age 23, single, >1 year in U.S., non-victim).

If they're born and bred up here, then that's a different story. But if their parents are still in India and they moved here, I think that goes for a lot of Indian women, currently, then I think they're really missing their family and that person to talk to about what they're going through…there's only so much you can do over a phone, having that personal contact is really essential, so, kind of fulfilling whatever the family would do in India (Age 20, single, 16-20 years in U.S., non-victim).

Several participants also talked about offering protective services for those in emergency situations. For many interviewees, seeking the support of the local Indian community for all stages of the program design and implementation process was considered critical. However, some

respondents felt that stigma from the Indian community over ending a relationship could also deter women from seeking supportive services. Additionally, interviewees perceived different service needs depending on the woman's length of time spent in the U.S. and her financial, education and occupational situation. Although participants perceived services for survivors of domestic violence in the U.S. to be more effective and available than in India, level of awareness of services and repercussions for perpetrators, as well as survivors, were identified as potential barriers and facilitators for reporting the abuse.

10.5 DISCUSSION

This analysis focused on socioculturally appropriate services for AIIW in situations of abuse. Participants in this study identified a diverse set of logistical barriers, relevant stakeholders and critical services to consider when creating interventions. Respondents emphasized the difficulty of locating these women and ensuring that information about available services is made available to them. Given that victims may not frequent areas where services are typically offered and advertised, it was suggested that program announcements and activities be offered at locations that women access on a regular basis, such as grocery stores, restaurants, doctor's offices and temples. While victims may be socially isolated if they are not enrolled in higher education or working, participants stated that these resources are used by AIIW, regardless of status or length of time in the U.S. In addition to partnering with resources that support the local Asian Indian community, interviewees highlighted the importance of offering services to victims in multiple Indian languages. Although victims may be fluent in English, several respondents indicated that women will be more comfortable sharing their experiences in their native language.

Program providers need to consider women's time, financial situation and privacy. Participants suggested offering services during the day, when potential abusers are otherwise occupied and at locations that are easily accessible by women who may have limited transportation access. Additionally, costs associated with the program should be minimal and not prohibit the woman from enrolling, if she is unable to pay for services. While cost and location may deter women from accessing services, perhaps the most significant concern identified by interviewees was confidentiality. Victims often do not seek services out of fear that their abusers will find out about their efforts to address or end the abusive relationship. Ensuring that women's program participation is confidential is essential for engaging victims in supportive services.

For victims who are unable to physically engage in programs in person due to accessibility or confidentiality concerns, respondents proposed offering services online or through other innovative channels. One participant who had experienced abuse shared that her participation in virtual services was the first step in her own recovery and felt that other women would benefit from this approach. An interviewee also recommended sharing stories of women in a book, so other women can learn about survivors' experiences. Other opportunities for intervention suggested by respondents included offering screening for domestic violence to women who are preparing to immigrate to the U.S. or after their arrival in the U.S. If this screening is incorporated into the immigration process, women experiencing abuse may be able to make more informed decisions about their situation and learn about relevant services for them in the U.S.

In addition to addressing obstacles for victims interested in seeking services, respondents identified key stakeholders to involve in the program design, provision and advertisement. It has been well-researched that individuals feel most comfortable seeking support and services from others who are like them. This was supported by interviewees, many of whom stressed the need

for services to be delivered by Asian Indian women. In addition to survivors of abuse, family and perpetrators of abuse can benefit from participating in services. Partners, as well as any family members involved in the perpetration or experience of abuse, should be enrolled in program services to confront the cause of abuse in the home and facilitate necessary next steps in the relationship. Participants consistently identified the importance of involving male partners, because women may not be ready to end the relationship or have any intentions to end the relationship in the future, because divorce is highly stigmatized.

As highlighted by several respondents, collaborating with community partners is essential for advertising services and establishing a safe space for program activities. Interviewees stated that program literature should be displayed and/or services should be carried out in doctor's offices, grocery stores and restaurants, Hindu temples and schools and workplaces that serve the Asian Indian population. These community resources are familiar to Asian Indian women and their decision to regularly access these services would not be thought of as suspicious. Thus, victims can access services in a safe environment that is logical and culturally appropriate.

Participants described vital services for supporting the needs of AIIW in situations of abuse. The majority identified counseling as essential for victims, perpetrators and family members. Because domestic violence is rarely discussed in Asian Indian society or within families, respondents emphasized that talking about the abuse with all involved parties in a setting where everyone's views are respected and acknowledged is critical. Victims might use an anonymous help line as a first step in opening up about their abuse. Participants proposed offering empowerment activities to build women's self-confidence, legitimize women's abuse experiences and address culture and gender norms of domestic violence. Respondents discussed helping women validate experiences of domestic violence, challenge their husband's violent behavior and

raise children on their own. Facilitating these processes may be difficult for survivors and participants described the need to raise survivors' awareness of existing social and legal services. To attract more Asian Indian women to their programs, supportive services should also incorporate elements of Indian culture and religion throughout the program.

Respondents recognized that confronting domestic violence requires support from informal and formal networks. Services should help women connect with friends and family in India, as well as offer support through their program. Participants shared that in situations of abuse, women feel more comfortable discussing their experiences with members of their social circle, who may better understand the social and cultural factors mediating the abuse. While advice from these individuals for addressing the abuse is of great importance to the victim, she can receive additional support from formal social services to prepare for real and perceived repercussions of addressing the abuse.

Working with doctors to address any medical concerns and lawyers to address legal and immigration issues may increase the woman's likelihood of addressing the abuse. Legal and immigration issues may vary based on the woman's length of time in the U.S., but interviewees identified deportation fears as a significant barrier that deters women from seeking help when it is needed most. Support from lawyers, as well as counselors and caseworkers who can coordinate services and help women navigate medical, legal and immigration options can further help women address situations of chronic violence. Additionally, providers must discuss with victims the real and perceived consequences of reporting abuse and seeking justice.

Respondents identified other immediate needs of victims including financial support, housing and opportunities to work. For many victims, lack of monetary resources prohibits them from ending an abusive relationship. Offering victims funding to cover the cost of basic needs and

travel may make the difference in a woman's decision to seek help. Women may not have a support network or a safe place to go in situations of domestic violence, therefore providing emergency housing or financial support to help them return to India is essential. Participants recognized that ending an abusive relationship and starting a new life independently can be overwhelming for victims, especially if they have children. To decrease the burden of this transition and provide women with income, interviewees suggested offering occupational training and connecting victims with opportunities to work. Establishing these linkages for survivors makes a safe, stable and healthy life more feasible and sustainable.

10.6 CONCLUSION

Creating and maintaining supportive services for AIIW in situations of domestic violence will require consistent support within the Indian community and consideration of differing needs among individual AIIW. While the Asian Indian community, in particular Asian Indian women, were identified repeatedly as key stakeholders in program activities, providers must also recognize how lack of support from the Indian community may inhibit women from seeking services. Interviewees cited stigma and ostracism from Asian Indian community circles as barriers for victims who already feel isolated from their support system in India. This translates into AIIW not reporting abuse or seeking services, because of perceived and actual social costs. Respondents' discussion of pervasive social stigma suggests that the Asian Indian community as a whole must be engaged to create a successful program and sustainable outcomes for program participants.

Researchers and providers can use community-based participatory research (CBPR) to involve the Asian Indian community in all stages of intervention design and implementation.

Participant responses suggest that AIIW should lead these efforts and serve as mentors. Oftentimes, Asian Indian immigrants are perceived as a model minority group, one which has successfully assimilated into American society because of its high socioeconomic status. Unfortunately, these attitudes result in AIIW being overlooked in favor of refugees, internally displaced persons and more recent immigrant communities, who are seen as more in need of supportive services. These high-risk populations are equally deserving of supportive services to address situations of abuse, as their needs and the needs of AIIW are still not being met. Some respondents perceived less tolerance of domestic violence and more effective services to address domestic violence in the U.S. compared to in India. Regardless of the accuracy of these perceptions, the support of researchers, healthcare providers and policymakers is crucial to change these beliefs into reality. Previous research has suggested that partnerships between organizations serving or run by immigrant communities and organizations offering services for survivors of domestic violence collaborate to create opportunities to share best practices (Raj and Silverman, 2002).

As with all research, this study has limitations. The findings from this study are not generalizable to Hindu AIIW outside of the Allegheny County region, nor to the general population residing in this region. The study used a purposive convenience sample and did not use probability or random sampling. Respondents were self-selected, the majority of whom were young adults and students. As a result, interviewees may differ in their perceptions compared to older working women, who were underrepresented in this sample. While some participants reported experiencing domestic violence, this was not a requirement for study participation and results may differ if lifetime experience of abuse was a criterion for study eligibility. Although there are limitations to

this study, participants from this sample represented multiple universities, as well as a diverse range of Indian states and regions and lengths of time spent in the U.S.

This analysis focused on better understanding Hindu AIIW's perceptions of supportive services for women in situations of domestic violence. These findings highlight the urgent need to increase awareness and availability of supportive services. Improving outcomes among AIIW will require widespread program and policy provision informed by consistent engagement with the Asian Indian population, researchers, policymakers and healthcare providers.

11.0 DISCUSSION

11.1 SUMMARY OF FINDINGS

Domestic violence against women is an issue of global public health significance that is less understood among vulnerable immigrant populations than non-immigrant populations. The immigrant's experience of domestic violence differs from that of a non-immigrant because she may be acculturating to a society with different gender norms, as well as treatment for domestic abuse. AIIW, like other immigrants, lack access to socially, culturally and linguistically appropriate services to address violence in the home, a finding that has been observed in other studies of immigrant women in the U.S. (Raj & Silverman, 2002).

The completed feasibility study was the first study in Allegheny County to measure experiences of domestic violence among AIIW and identify its association with social support, acculturation status and demographic factors. There were no issues of item nonresponse and participants indicated in phone calls to screen for eligibility that they felt strongly about supporting and participating in research on domestic violence within the context of Indian culture. This suggests that AIIW are receptive to participating in research, including studies on particularly sensitive topics like domestic violence. Most participants were single and those who were married were more likely to have chosen their spouse. The majority of participants were without children, currently pursuing their bachelor's degree or higher, non-U.S. citizens, less than 30 years old, and have been in the U.S. for 15 or less years. Most participants were Brahmin and from an upper caste. The majority of participants lived with one other person, often a family member, and had an individual income of less than $12,000. Most participants had moderate or high levels of perceived

social support and ratings of psychological and sociocultural adaptation. Participants also reported high levels of orientation to life in their home country of India and host country of the U.S., and all participants responded on the Perceived Cultural Distance Scale that the two countries are moderately or highly different culturally.

Responses on social support and acculturation scales showed high levels regardless of whether participants had lifetime experiences of abuse. While no significant differences were found between survivors and non-victims based on ratings of social support, psychological adaptation, sociocultural adaptation, perceived cultural distance and host acculturation orientation, there was a difference in home acculturation. Women with lower home acculturation, or acculturation to India, were more likely to be survivors of domestic violence, suggesting those who are more Westernized are at higher risk for abuse. African American and Hispanic women who have experienced abuse have also reported moderate social support on the MSPSS (Yoshioka et al., 2003) as have South Asian women, even when asked about support in situations where they were still very likely with the abusive partner (Yoshioka et al., 2003; Mahapatra & DiNitto, 2013).

Nevertheless, other studies have shown that South Asian women with more social support are less likely to have experienced violence (Mahapatra, 2012) and that immigrant women who have experienced abuse are less acculturated (Nava, McFarlane, Gilroy, & Maddoux, 2014). In additional to social support and acculturation, demographic questions did not have a significant association with lifetime experiences of violence. Almost 75% of participants had a bachelor's degree or higher in this study and other studies that focused only on women who have experienced abuse found similarly high rates of education among South Asian women (Mahapatra & DiNitto, 2013). The majority of participants who had experienced abuse in this study of South Asian women

also reported incomes of over $70,000, thus highlighting that education and income may not serve as protective factors for experiencing abuse.

Among the over 50% of participants who reported lifetime experiences of abuse, most survivors were single, Brahmin, highly educated, had a smaller household size and were non-U.S. citizens. Of those who had experienced abuse and knew their Varna status, all but one individual was Brahmin or Kshatriya. Thus, abuse was common despite high Varna and caste status and education levels. Research findings supported the hypothesis that survivors would be low-income, but did not support hypotheses that women would be low caste, less educated, have children, have arranged marriages and have lived in the U.S. for longer periods of time. Low caste, less educated and high income participants were also not well-represented in the sample. While previous studies support findings that survivors are more likely to be non-U.S. citizens (Mahapatra & DiNitto, 2013) and live in smaller nuclear households (Andersson, Ho-Foster, Mitchell, Scheepers, & Goldstein, 2007; Kishor and Johnson, 2004), studies have also shown that survivors are more likely to be of low caste (Dalal & Lindqvist, 2012; Sabarwal, McCormick, Subramanian, & Silverman, 2012) and be less educated (Kishor & Johnson, 2004), suggesting the need for further studies investigating the influence of these variables among AIIW.

For survivors of abuse in this study, most perpetrators were family members rather than intimate partners. Physical and sexual violence were more common than emotional abuse and mothers were most often the perpetrators of physical violence, although other family members and multiple perpetrators were identified by some survivors. At the time of data collection, 13% of the sample and 25% of survivors of violence were still experiencing the abuse, the majority of which was psychological. Additionally, current victims of abuse were all experiencing psychological or sexual abuse perpetrated by partners, where all participants that reported physical abuse from

parents indicated this abuse was no longer occurring. This suggests that reported experiences of violence involving parents may have been past experiences of child abuse. The focus of this research was primarily on partner-to-partner acts of violence, thus abuse between parents and children was given less attention in study design. However, these findings mirror trends of abuse in India, where married girls are most likely to be abused by husbands and unmarried girls are most likely to be abused by mothers (UNICEF, 2014). Children abused in the U.S. are most likely to be abused by the parent and in the first year of life (National Children's Alliance, 2014). South Asian women in the U.S. have also been shown to be at high risk for experiencing abuse from their mothers, with over 50% of the sample of one study reporting abuse from the mother, as opposed to 30% from the father (Maker, Shah, & Agha, 2005). These findings, supported by other research, highlight the need for studies to consider the role of family members as perpetrators in situations of abuse against AIIW and how this may impact survivors differently than partner initiated violence.

The majority of participants who reported lifetime experiences of abuse never sought help. Similar to past research studies, participants tended to share the experiences with friends or family (Mahapatra & DiNitto, 2013). Anecdotally, participants shared that family and other support network members may also be a barrier to escaping the abuse and encourage victims to stay in relationships, a finding that has been observed in other studies (Yoshioka et al., 2003). Those who had sought help for the abuse in this study were all non-U.S. citizens and were more likely to be single, Brahmin, without children and have a graduate degree. Other studies have shown that South Asian immigrant women who have experienced abuse and who are visa holders, thus non-U.S. citizens, are also at high risk for abuse (Mahapatra & DiNitto, 2013). Although the findings of this study are limited by the small sample size, 53% of participants, most of whom were of high caste

and education levels, reported any lifetime experience of violence, a rate that is higher than the global average, national average and average for Indian women in India (Black et al., 2011; Kishor & Gupta, 2009; World Health Organization, 2014).

The completed qualitative study explored Hindu AIIW's definitions of domestic violence and how it is related to healthy relationships, their perception of experiences of domestic violence among AIIW and reporting of these experiences to formal and informal networks. Similar to the feasibility study, there were no issues of item nonresponse and all participants agreed to have their interviews audiorecorded. This suggests that future in-depth qualitative research with this population is also feasible. Participants perceived differences in definitions, experiences and help-seeking behaviors between independent and dependent AIIW. Additionally, participants identified women on dependent visas as highly vulnerable to experiencing abuse. People come to the U.S. for different reasons and participants discussed how coming to the U.S. differs for AIIW, based on whether they are dependent on their spouse's visas or independent. This also impacts their likelihood of experiencing abuse. Many dependent women come to the U.S. after marriage and respondents perceived that they are treated differently by their husbands, act differently in situations of abuse and are more likely to experience abuse than independent women.

Dependent women may have difficulty adjusting to life in the U.S., especially because their entire family and social network is still in India. This further complicates situations of abuse, which may be more likely to emerge during the first months of transition to life in the U.S., due to the unpredictability of government processes that impact education and work status, thus creating situations of high stress and potential aggression. Women who are new to the U.S. may be unaware that what they are experiencing is abuse and not know what services are available for addressing their situation. If dependent women have been in the U.S. for an extended period of time, they may

have more confidence in their ability to seek help, although concerns surrounding deportation, losing custody of children or perpetrator retaliation may influence their decision to seek help.

Increasing awareness of available services and law enforcement were identified as important obstacles to address. Women on dependent visas have been shown to be very isolated from others because of their inability to work and go to school. Educating women about eligible services requires targeted outreach and is especially important, as they may not know people who can help them or with whom they feel comfortable disclosing their abuse status. As a result, women may be more likely to stay with the perpetrator, who is the only person they know and who supports them financially. Seeking help from law enforcement was discussed as especially rare, because women generalize their perceptions of police in the U.S. to their experiences in India, where police were viewed as unhelpful and ineffective in situations of domestic violence. Some participants also cited that women do not call the police because they do not want repercussions for their partners, despite their abusive behavior.

In addition to experiences of abuse, participants perceived differences between how dependent and independent women react in situations of abuse. Participants discussed family members as the individuals with whom they would be most likely to disclose abuse, even if they are in India. Some participants who knew AIIW in situations of abuse said it was not uncommon for these women to return to India because of a lack of options and financial support, as well as familiarity with the culture, existing social support, work and education opportunities. Unfortunately, family members may encourage AIIW in abusive situations to stay with the perpetrator. If a woman is independent, having a job and an income might allow her to leave the abusive relationship, unlike the dependent women. Overall, independent women were identified as being less likely to be in an abusive relationship, but also more likely to identify the relationship

as abusive and take the necessary steps to end the relationship. Thus, dependent AIIW are a vulnerable subset of the population in need of targeted outreach to address their high risk for experiencing violence.

Participants identified different barriers, relevant stakeholders and services for AIIW, depending on their level of independence and personal situation. Obstacles included finding women who are experiencing abuse and identifying opportunities to make them aware of available services and their rights. Advertising and offering services in Asian Indian languages at locations that women already frequent may allow those who are socially isolated and not working or going to school to learn about, as well as physically and linguistically access, services regardless of their personal situation. Offering services at a low cost at convenient times and locations, while ensuring privacy, may address transportation barriers and ensure participation in services are kept confidential from the perpetrator. For those unable to physically access programs, services could be offered online or through anonymous helplines and can be started as early as pre-immigration to the U.S. or immediately after arriving in the country.

In order for these programs to be successful, they should be designed and implemented by key stakeholders. Having services delivered by other Asian Indian women, particularly those who have experienced violence and can support victims through situations of abuse, was seen as an instrumental element for intervention services. Involving family and perpetrators of abuse was also suggested by respondents, who discussed how many AIIW may never end the abusive relationship. Participants acknowledged that hesitancy to end to the relationship is sometimes because of the perceived fallout for the family in the Asian Indian community. Prioritizing their attendance at intervention activities would be an opportunity to confront the abuse, as well as help the family

understand the abusive situation. Other collaborators for creating and delivering services included doctors, Asian Indian grocery stores and restaurants, Hindu temples, schools and places of work.

After addressing logistical barriers and involving necessary stakeholders, participants identified a number of services that would be essential for AIIW experiencing abuse. Offering counseling to survivors of abuse, as well as their perpetrators and family members was suggested by many interviewees. Additionally, women identified a need for empowerment activities to address gender and domestic violence norms and educate survivors about what constitutes domestic violence, while validating their experiences of abuse. Services should inform AIIW about their options and their rights as a survivor of domestic violence, and offer services in a way that integrates Indian culture. These services will be more successful if AIIW are supported by and connected with their family and friends in the U.S. and in India, as well as formal networks of social and legal support. Lawyers can provide vital legal counsel related to immigration issues, while doctors can address medical concerns and caseworkers can connect women with social services in their community. Additional essential services include monetary support, emergency housing, work training and employment opportunities that may help women to become more independent and become more likely to leave the abusive situation.

11.2 LIMITATIONS

Due to the small size of the study sample, as well as the geographic focus and recruitment methods of this research, study findings cannot be generalized to other Hindu AIIW in Allegheny County, Pennsylvania, or the U.S. Participants self-selected to enroll in this research study after responding to advertisements in the CTSI Research Participant Registry and community flyers. Although these

flyers were shared with universities, restaurants, businesses, and organizations serving the local Asian Indian population, the study population is not representative of AIIW in the Allegheny County region. Because this research was listed as the Indian Healthy Relationships Study, AIIW who consider themselves to be in unhealthy relationships may have felt they were not an appropriate candidate for the study. Because the advertised flyer for the study portrayed a family with a couple that includes a man and a woman, AIIW who are in same-sex partnerships may have also purposefully decided not to participate in the study, although eligibility criteria did not mention sexual orientation.

The majority of AIIW who participated in this study were students at the time of data collection. Due to the fact that flyers stipulated that all participants must allot two hours for participation in this study, it is possible that working AIIW were discouraged from participating. In contrast, participation may have been more feasible for a student's schedule and the payment may have further incentivized female students who do not work to participate. There was much variation in the length of time women spent in India before moving to the U.S., thus the participation of women who have spent more time in the U.S. than in India must be considered in the context of women's responses. While the majority of participants had some lifetime experience of abuse, it is possible that AIIW who are currently experiencing abuse, particularly AIIW on dependent visas, were not exposed to opportunities to learn about the study or had concerns about how participating in this study could impact their current vulnerable situation. This lack of variability in AIIW's working status, immigration status, as well as age, can be addressed in future studies by facilitating questionnaires and interviews electronically or over-the-phone.

While questionnaires on demographics, social support and acculturation status were completed independently by participants, these questions are less stigmatizing than those

highlighted in the domestic violence questionnaire, which the principal investigator read aloud to participants. This decision ensured fidelity, as this instrument is not self-administered by the DHS Program in its multi-country studies. Sharing lifetime experiences of violence may have been emotionally challenging and/or traumatic for participants and thus increased the likelihood of social desirability bias, recall bias, and underreporting of domestic violence. Additionally, several sections on physical and psychological abuse on the Domestic Violence module are completed only by participants who are married. This includes measurements of specific types of physical abuse, such as burning and psychological abuse, such as insults and humiliation. As a result, these specific types of violence are not captured in questionnaires completed by unmarried women. Despite this limitation, over half of the high caste and highly educated sample from this study reported a lifetime experience of abuse. Given that violence is often underreported, this may also be a conservative estimate of the actual prevalence of abuse among this sample.

As previously mentioned, the majority of perpetrators of violence were family members, specifically mothers, although some mentioned abuse from fathers, brothers or multiple perpetrators across the lifespan. Because the Domestic Violence module does not require participants to disclose their age or date of the violent incident(s), it is not possible to confirm if these experiences were child abuse. However, since this questionnaire looks at lifetime experiences of violence, it is possible that reports of violence shared by participants are not an accurate reflection of current experiences of abuse, thus some reported abuse may have occurred when the woman was under age 18 and legally a child. This must be considered when taking into account low rates of reporting behaviors, since children may be less likely to formally report an experience of violence than an adult. The questionnaire does measure if the abuse is currently happening or if it has not happened in the last year. Interestingly, none of the participants who

were currently experiencing abuse at the time of data collection were experiencing physical abuse or experiencing violence from their parents. All victims were experiencing psychological or sexual abuse and the perpetrator was the current partner.

Although the MSPSS has been tested among South Asian women (Yoshioka et al., 2003; Mahapatra & DiNitto, 2013), and acculturation scales were tested among Thai populations (Demes & Geeraert, 2014), lack of culturally appropriate wording on questionnaire items may also have resulted in measurement error on questionnaires. In order to increase the reliability of findings in future studies on AIIW, a cross-sectional or longitudinal national study could measure lifetime experiences of domestic violence and other influential variables for AIIW in the U.S. Future directions may include comparing results from the Domestic Violence module to the results from the NFHS-4 domestic violence-specific questions for congruence in findings between Indian women in India and AIIW in the U.S.

11.3 FUTURE DIRECTIONS

Despite its limitations, this research can inform future directions in research, programmatic efforts and policymaking for AIIW. The results from each study may broaden researchers', providers' and policymakers' understanding of AIIW's experiences of domestic violence and help inform local, county, country-wide and longitudinal studies on this issue, as well as future research and interventions tailored to meet the needs of AIIW. As discussed by several participants in in-depth interviews, the most difficult barrier to overcome when conducting research with this population is locating AIIW and recruiting them for participation in research or intervention programs.

Nevertheless, this research has shown that conducting studies on domestic violence with AIIW is feasible.

Given that the Asian Indian population is relatively young compared to the American population, it may be difficult to conduct studies with this population via landline telephones. Ideally, research could occur electronically or in person to address situations in which AIIW cannot physically access centers to participate in research. Holding research activities in a doctor's office would allow AIIW women to participate in research in a setting that is familiar and which would not be considered suspicious by a perpetrator in an abusive relationship. Religious or cultural organizations are also natural partners, specifically Hindu temples, as many AIIW may regularly attend religious services.

A potential partner for collaboration that could serve as a liaison is Citizenship and Immigration Services through the Department of Homeland Security. This agency has access to data on the background of all immigrants and while not all of these data are publicly available or disaggregated by gender, they may be able to provide support in reaching out to AIIW in situations of abuse by sharing information on geographic areas where there are large Asian Indian communities. If data collection is completed in-person, there may be a reporting bias if it is delivered in the home when the woman is not alone. Since literacy or linguistic access may impede participation and data collection, audio computer-assisted self-interview (ACASI) software would allow for greater participation by offering questionnaires in Asian Indian languages. This would also create a rare opportunity to intervene with AIIW experiencing abuse by educating them about their legal rights and making them aware of existing services.

Because women may have immigrated with an abusive partner, data collection, service delivery and follow-up would need to be strategic. Ideally, there should be multiple data collection

points every six months over several years, because many women who participated in the study perceived that abuse would increase after immigration, especially for dependent AIIW. Each data collection period would be an opportunity to remind AIIW of their rights and available services. This study indicated that AIIW are open to participating in research activities and have high completion rates when they participate. Questions may be pretested with AIIW and at this time, participants may suggest additional questions to include in questionnaire and interview protocols to better understand current and lifetime experiences of abuse, the timing of this abuse, and what sort of supportive services women need in these situations. Collecting demographic information on this population as well as why they came to the U.S. (e.g. education, job opportunities) and for whom (e.g. themselves, partners), and their immigration status (i.e. dependent, independent) is crucial. While there may be concerns with attrition over time and social desirability bias, participants in this research strongly suggested targeted outreach to AIIW and specifically dependent AIIW, thus the need for this research cannot be overstated. Data collection can also involve family members, partners and young children to better understand who is involved, what types of violence are occurring and when it is happening across the lifespan.

In addition to future studies on domestic violence among AIIW, there is a need for more research on social support and acculturation among this population. There was little variation in social support and acculturation status among survivors and non-victims of violence in this research, as in other studies. Participants discussed how social support from the family can enable them to seek help, but also prevent them from ending the abusive relationship, suggesting that high levels of support may not prevent the abuse from happening in the first place and may even convince women against reporting the abuse. Thus, measures of social support may also be indicative of relationships with and involvement of friends, family and significant others, but not

necessarily support in making crucial life decisions. Concerns about the stigma of disclosing abuse status and/or seeking divorce revealed that AIIW value the collectivism of Indian society, but real and perceived social consequences within the Asian Indian community may impede them from ending an unhealthy relationship. Additionally, lower acculturation to India, which was shown to be more common among survivors of abuse in this study, must be further researched to better understand if more Western attitudes indicate a higher likelihood of experiencing and/or reporting experiences of violence. As a result, more studies must investigate the complex relationship between social support in the Asian Indian community, acculturating to life in the U.S. and domestic violence experiences and help-seeking behaviors among larger groups of AIIW.

Research participants identified family members as the perpetrators of violence more often than intimate partners, suggesting the need to include more questions on perpetrator characteristics and their relationship to the survivor. As previously mentioned, it is possible that the DHS Domestic Violence module, which measures lifetime experiences of violence, captured incidents of child abuse among participants. None of the participants who were abused by a parent or sibling were currently experiencing abuse at the time of data collection, and while this may indicate an instance of child abuse, because participants were not required to disclose when this abuse occurred, it cannot be confirmed if the participant was under 18 at the time of the abuse. Participants seemed at times to minimize abuse from parents, suggesting that they do not consider these experiences to be abuse, or if they are abuse, it is culturally expected and accepted. Definitions of abuse may vary based on the type of action, the intent to harm, or harmful outcomes that result from the incident, thus it is difficult to develop a definition that is appropriate for different and diverse cultures. These findings reveal the importance of better understanding definitions of abuse, specifically child abuse, within different cultures to develop approaches to

address this violence in a way that is respectful of the culture, but also prioritizes the health and well-being of the victims.

Despite this theme, women in this study, as well as South Asian women in other studies identified family and friends as crucial sources of support (Raj and Silverman, 2007), even though domestic violence is not discussed publicly in South Asian populations (Mahapatra & DiNitto, 2013). Initiating conversations in the Asian Indian community would begin to address the stigma of being a survivor of domestic violence and help researchers better understand what would make AIIW more likely to seek help, as well as how the Asian Indian community can support that process. The Asian Indian community was identified as a crucial stakeholder in creating and delivering culturally appropriate services to AIIW, thus their backing is paramount in ensuring that women feel supported in seeking services. Establishing buy-in from the Asian Indian community for these services can create a model of CBPR, in which the community, particularly AIIW, are able to directly impact the provision of services and participate as program facilitators.

Research on domestic violence among women in the U.S. and in India has informed this study, and may be also informed by these findings for the Asian Indian community in the U.S. and the Indian community in India. For example, participants suggested screening for and educating women about domestic violence in India before coming to the U.S., as well as when they arrive in the U.S. This approach may be particularly important for dependent women, who come to the U.S. shortly after marriage and do not have established support networks in the U.S. Future research among AIIW should explore the experiences of this vulnerable population to better understand the needs of dependent women who are survivors and current victims of abuse.

While support from individual members of the Asian Indian community may contribute to the success of domestic violence services for AIIW, religious and cultural organizations that are

already embedded in the community are potential partners. This allows AIIW to seek help from others who share their background at familiar and established organizations. However, it must also be considered how these collaborations will be received by members of the Asian Indian community in situations of chronic abuse. Many of these organizations are at the center of the Asian Indian community and must be sensitive to women's situations and be careful not to do more harm than good by sharing private information about the abusive situation with other community members.

Regardless of the sensitive nature of establishing these connections, past research has suggested the need for partnerships between immigrant organizations and local domestic violence organizations, who can train each other on their cultural and domestic violence expertise (Raj & Silverman, 2002). Asian Indian religious and cultural centers in Allegheny County, such as Sri Venkateswara Temple, can partner with domestic violence organizations, such as WCS, to target outreach to the Asian Indian community. Religious leaders should be trained on how to identify and best support individuals in situations of violence, since they are a familiar figure from whom AIIW may already be seeking guidance. Additional partners include lawyers specializing in immigration law, family law and domestic violence, who can educate women on their legal rights, definitions of IPV, and available public benefits for them and their children (Raj & Silverman, 2002). For women who are extremely isolated from these services, domestic violence screening by physicians may be one of the few opportunities for AIIW to be connected with domestic violence services.

While cultural and domestic violence organizations, doctors and lawyers may be obvious advocates for AIIW in situations of abuse, officials in the law enforcement, immigration and judicial systems may be perceived as less understanding of and sympathetic to their situation.

Previous studies have shown that when South Asian women seek help from formal networks, it is more likely to be for counseling and rarely for the assistance of law enforcement (Raj & Silverman, 2007). Encouraging AIIW to reach out to law enforcement, regardless of their immigration status, is imperative and past researchers have suggested that training police on the needs of this population may increase the likelihood of immigrant women in situations of abuse utilizing them as a resource (Mahapatra & DiNitto, 2013). Law enforcement officials should be aware that AIIW are often unwilling to prosecute the perpetrators and criminalize their actions, which suggests that gaining the trust and support of AIIW who are being abused may be challenging.

After law enforcement and the criminal justice system become involved in a case of domestic violence, a common form of legal recourse for the perpetrator is batterer intervention programs (BIPs). These are opportunities for perpetrators to attend weekly group counseling sessions to address the root of their violent behaviors. While BIPs exist across the country, the development of culturally appropriate BIPs may be less common. Many participants discussed in their interviews how AIIW may never consider divorcing their abusive partner; they would rather stop the abuse than end the relationship. BIPs may be the best and only opportunity for perpetrators to be held accountable for their abusive actions, thus there is a great need to develop culturally appropriate BIPs and test their feasibility among diverse populations of perpetrators of violence.

Officials involved in the immigration process, such as judges and immigration officers, are additional stakeholders who may benefit from tailored cultural training on helping immigrant women in situations of abuse (Raj & Silverman, 2002). These key actors must be educated on common concerns of AIIW, such as deportation, child custody issues and unsuccessful past experiences with law enforcement, immigration, and criminal justice representatives in the U.S. and in India, which may have negatively impacted their perception of these systems. Stakeholders

at the federal level may also support these efforts. In particular, the Violence Against Women Act (VAWA) and United States Citizenship and Immigration Services (USCIS) should increase efforts to raise awareness among AIIW of their rights in situations of domestic violence, and their options for obtaining a U visa and additional protective services.

Although cultural competency trainings have been recommended and implemented for teachers, law enforcement and health service providers throughout the last decade, they are especially critical with the emergence of xenophobia and rise in hate crimes in the current political climate. Data collection for this study occurred prior to the 2016 U.S. Presidential election. During this time, tension between ethnic and racial groups increased and it was often highlighted by the media and candidates on the campaign trail. Incidents defaming immigrants and involving immigrant deportation have escalated dramatically since the election. Several of these incidents, one of which was fatal, involved an Asian Indian man. In another case, a Latina woman in a situation of abuse was arrested and detained because of her immigration status.

Because of the increase in incidents of this nature and growing fears of deportation, it has been suggested that incidents of violence against women are being reported less and women will continue to feel less inclined to report situations of abuse and/or seek justice against their perpetrators. While data for this study were collected before these incidents occurred, many participants still discussed AIIW's fears of deportation and custody issues with children and how this negatively impacts their reporting behaviors in situations of abuse. Thus, the impact of current and recent events cannot be understated, as it may make it more difficult to find AIIW in situations of abuse, encourage them to disclose their abuse status, increase their participation in domestic violence research and connect them with supportive services.

In addition to support from immigration services, South Asian women in past studies, as well as participants in this study have identified the need for help in accessing social services and monetary support (Raj & Silverman, 2007). Financial support was particularly important for AIIW on dependent visas, as identified in this study and another recent study (Raj & Silverman, 2007). While social services and domestic violence organizations may have much experience working with survivors of abuse, there is a need for advocates to understand that the goals of an AIIW may be different than other women in situations of chronic violence. Research among South Asian women has shown that survivors of abuse are usually more interested in seeking services to stop the abuse, rather than to end the relationship altogether (Raj & Silverman, 2007). This may go against the protocol of domestic violence organizations, which typically suggest that victims identify a plan to leave the perpetrator. South Asian women experiencing abuse have been known to continue living with their abusive partner and even report high levels of social support from them (Mahapatra & DiNitto, 2013). This suggests that for many of these women, a successful outcome may be preserving the relationship with the abusive partner while attempting to end the abuse. This further supports the need for developing services to address the violent actions of the perpetrators, such as BIPs, for Asian Indian perpetrators of abuse. While some AIIW may be more open to leaving the partner permanently and ending the abusive relationship, it should not be assumed that all AIIW will follow through with ending the relationship.

Despite the small size of this study sample, the findings of this research confirm that Asian Indian immigrants' status as a model minority group with high levels of education, caste, income, social support and acculturation does not mean that they are less vulnerable to situations of domestic violence. In addition to marginalized refugees and more recent immigrant community members in situations of abuse, AIIW are also in need of culturally appropriate supportive

services. Metropolitan areas like Pittsburgh and other cities where Asian Indian immigrant populations are increasing can also learn from the histories of domestic violence organizations that work with this population. These organizations include, but are not limited to Apna Ghar, Inc. in Chicago, IL, Sakhi in New York City, NY, Manavi in New Brunswick, NJ, and MAITRI in Santa Clara, CA.

The results of this research should be shared in scholarly journals. The following journals are appropriate for sharing research results with other researchers, providers and advocates: *Violence Against Women, Journal of Interpersonal Violence, Trauma, Violence and Abuse, Gender and Society, Journal of Immigrant and Minority Health, Journal of Family Violence, Violence and Victims,* and *Women and Health.* Findings may also be reported at conferences focusing on domestic violence and abuse, as well as public health conferences, such as the annual meetings for the American Public Health Association, End Violence Against Women International Conference, International Conference and Summit on Violence, Abuse and Trauma, and the National Conference on Health and Domestic Violence. Local centers and organizations, such as the Center for Health Equity at the University of Pittsburgh may also be important collaborators to share research results with the local community.

Because participants identified local stakeholders, such as Indian restaurants, businesses, religious organizations and temples, individuals affiliated with them may serve as community champions and contribute services, guidance and facilities to support interventions. Additionally, local news sources among the Asian Indian population such as *Patrika* or the Hindi magazine *Setu* may be appropriate channels for sharing this research with the local community. Disseminating results with the local Asian Indian population has the potential to create opportunities for

community members to engage with findings and identify forums for understanding the burden of domestic violence locally among AIIW.

11.4 CONCLUSION

Violence against women is a significant global public health issue with adverse consequences for the individual, family, communities and society. Domestic violence can lead to additional social, health, education and occupational disparities that negatively impact the well-being of the individual and their quality of life. This was the first research study to the author's knowledge that focused on AIIW's definitions and experiences of and help-seeking behaviors related to domestic violence, as well the relationship between demographics, social support, acculturation and domestic violence among AIIW.

This study demonstrated the feasibility of conducting research with AIIW, even on culturally sensitive topics such as domestic violence. Although the generalizability of these research findings is limited, this study suggests that AIIW, specifically dependent AIIW, are a population at high risk for experiencing domestic violence. Women in this study represented a wide range of Indian state origins, lengths of time spent in the U.S., and several universities in the Pittsburgh area. Participants shared information on their demographics, perceived social support, acculturation status, and lifetime experiences of abuse, in addition to identifying dependent AIIW as a high-risk population for abuse and domestic violence services for AIIW.

These studies demonstrated the need to target outreach to AIIW, specifically those on dependent visas, while connecting them to existing services and advocates. Additionally, results highlighted the importance of having more culturally nuanced measures for diverse populations.

Future research studies and interventions should continue to investigate and address factors contributing to experiences of chronic violence among AIIW, such as caste, immigration, citizenship and marital status. It is crucial to conduct future research studies and develop interventions to better understand AIIW experiencing domestic violence and connect them to services that meet their specific needs. Findings from this research can help inform cultural, religious, community and domestic violence organizations, as well as government officials, researchers and policymakers in better identifying, understanding and addressing domestic violence among AIIW to make home a safe place.

APPENDIX A: INDIAN HEALTHY RELATIONSHIPS STUDY FLYER

The Indian Healthy Relationships Study

Are you a Hindu Asian Indian-born woman living in the U.S.? If so, you may be able to participate in a research study about relationships.

Eligible participants are women who are:

- Hindu
- Born in India
- Ages 18 and older
- Living in Allegheny County and the surrounding counties

Participants will be paid $40 to complete three surveys and an interview during a private two-hour session. To learn more email clp44@pitt.edu or call 412-601-2600. This study has been approved by the University of Pittsburgh Institutional Review Board (IRB).

Chelsea Pallatino
412-601-2600
clp44@pitt.edu

APPENDIX B: CONTACT SCRIPTS FOR INDIAN HEALTHY RELATIONSHIP STUDY

Phone Script

Hello, this is Chelsea Pallatino. I am contacting you because you indicated your interest in participating in the Indian Healthy Relationships Study through CTSI's Research Participant Registry. Is that correct? (*assuming participant says yes, will carry on*). Is now an okay time for us to talk about you participating in this study? (*assuming participant says yes, will carry on*). For this study, we are talking to women who are English-speaking Hindu Asian Indian-born women who are U.S. citizens and living in Allegheny County and the surrounding counties. Can you confirm with me that you meet these criteria? (*assuming participant says yes, will carry on*). Okay, great. For this study, we will be talking about your ideas concerning healthy relationships. This study will also focus on your opinions about domestic violence in relationships. I will be asking about how you think relationships are influenced by your experiences as a new resident in the United States. I will also ask you how you think women like you experience and respond to violence in relationships. I want to learn about the type of violence women experience so that service providers can help women make home a safe place.

For this research, you will complete questionnaires that include questions about you and your experiences of violence, your opinions on American culture and social support in your life. The interview you will complete includes questions about how you define healthy relationships and domestic violence. The researcher will ask your opinions on differences in healthy

relationships for Indian women in the U.S. and Indian women in India. This information will help guide new ideas for services for women like you who may be in unsafe situations in their homes.

Your participation in this study is entirely voluntary. You can stop participating in this research at any time without penalty. Your answers will be kept private and your name will not be recorded. The questionnaire and interview will take two hours to complete at a location of your choice. Your time and insight are very valuable to us. You will be paid up to $40 in total, $10 for the questionnaires and $30 for the interview. Would you like to schedule a time and place for us to meet? (*assuming participant says yes, will carry on*). Thank you for your time and support. I look forward to meeting with you.

Phone Message

Hello, I am calling you about your interest in participating in the study as indicated by the CTSI registry. Please call me back at 412-601-2600 to confirm your interest in participating in this study. Thank you for your time and consideration.

APPENDIX C: IN-DETH INTERVIEW GUIDE

Hello, my name is Chelsea Pallatino and I am a doctoral student at the University of Pittsburgh Graduate School of Public Health in the Department of Behavioral and Community Health Sciences. I am conducting research on healthy relationships and domestic violence among Hindu Asian Indian female immigrants. The goal of this interview is to learn about how you define domestic violence in the context of a healthy relationship. I want to know your ideas about Asian Indian female immigrants' experiences of domestic violence. I want to learn about how you perceive these women find help. In addition, I want to know how that is different here in the U.S. as an immigrant compared to India. As a female Indian immigrant you are an expert on this issue. I am interested in learning how your ideas about women's experiences of domestic violence have changed since coming to the U.S. I want to know if you think there are differences between the U.S. and India for Indian women. If there are, I want to know why you think these differences exist. I also want to know if your personal views have changed since coming to the U.S. If they have changed, I want you to tell me why. I have several questions I would like to ask you. Our discussion will be informal. I would like for you to mention anything you think is relevant to our conversation. There are no benefits and no risks to you as a participant in this study; however, we will be talking about a sensitive topic that may be upsetting to you. I will be giving you contact information for services to address domestic violence, should you be interested. While your participation in this study is appreciated and valued, it is also voluntary. You can stop participating at any time without penalty. With your permission, I would like to record our conversation today. If you have any questions or concerns, please let me know.

APPENDIX D: INTERVIEW QUESTIONS

1. How would you define a healthy relationship with an intimate partner? (probe: with their family?)
2. So, when you hear the phrase "domestic violence," what do you think of? What is domestic violence in your opinion? (probe: examples of behavior)
3. Do you think domestic violence can occur in a healthy relationship? (why or why not?)
4. Do you think that women in India define a healthy relationship with intimate partners differently from women in the U.S.? (probe: how they have changed)
5. Do you think that women in India define a healthy relationship with family differently from women in the U.S.?
6. Do you think that women in India define domestic violence differently from women in the U.S.?
7. How has your definition of domestic violence or ideas about what it is changed since coming to the U.S.? (probe: impact of caste, how they have changed)
8. Recently, reports of violence against women in India have increased. Why do you think that's happening?
9. Tell me about any experiences you or another Asian Indian female immigrant you know has had with domestic violence here in the US.
10. What do you think Asian Indian women do when these things happen? (probe: when appropriate to seek help, informal/ formal social support)
11. [For women who have lived and were married in India] What are those experiences like in India?
12. What do you think Indian women do when those things happen in India?
13. How do you think moving to the U.S. affects Asian Indian women's experiences of domestic violence? (probe: experience of healthy relationship)
14. Tell me how you think that moving to the US affected your understanding of domestic violence. (probe: understanding of healthy relationship)
15. Do you think how Asian Indian women handle domestic violence changes after moving to the U.S.?
16. What would a successful program look like for Asian Indian immigrant women experiencing domestic violence in the U.S.?

APPENDIX E: INDIAN HEALTHY RELATIONSHIPS STUDY DEMOGRAPHIC FORM

THE INDIAN HEALTHY RELATIONSHIPS STUDY

1. Please write your date of birth (MM/DD/YYYY).

2. How did you become a U.S. citizen?

    a. I was naturalized
    b. I was adopted by parents who are citizens of the U.S.
    c. I married a U.S. citizen
    d. I am not a U.S. citizen
    e. Don't know

3. How many years have you been in the U.S.?

    a. Less than a year
    b. 1 year
    c. 2-3 years
    d. 4-5 years
    e. 6-10 years
    f. 11-15 years
    g. 16-20 years
    h. >20 years

4. Please write your Indian state/union territory of origin.

5. Please write your native language.

6. What is your marital status?

    a. Single
    b. Currently married
    c. Widowed
    d. Divorced
    e. Separated

7. Did you get married through an arrangement by your family or did you choose your spouse yourself?

    a. Arranged
    b. Chose spouse
    c. I am not married.

8. How long have you been married/how long were you married?

    a. Less than a year
    b. 1 year
    c. 2-3 years
    d. 4-5 years
    e. 6-10 years
    f. 11-15 years
    g. 16-20 years
    h. >20 years
    i. I am a widow.
    j. I am not married.

9. If you are a widow, how long were you married?

    a. Less than a year
    b. 1 year
    c. 2-3 years
    d. 4-5 years
    e. 6-10 years
    f. 11-15 years
    g. 16-20 years
    h. >20 years
    i. I am not a widow.
    j. I am not married.

10. How satisfied are you/were you with your marriage?

    a. Very satisfied
    b. Somewhat satisfied
    c. Neutral

d. Somewhat unsatisfied
e. Very unsatisfied
f. I am not married.

11. Do you have children?

a. Yes
b. No

12. Are you currently pregnant?

a. Yes
b. No, but trying to become pregnant
c. No
d. I don't know

13. How many people are living at your current address? Please write the appropriate number in the provided space below.

a. 1
b. 2
c. 3
d. 4
e. 5
f. 6-8
g. 9-10
h. >10

14. Who lives with you at your current address? Please write in your relation to each person in the home.

15. What is your Varna status?

a. Brahmin
b. Kshatriya
c. Vaishya
d. Shudra
e. Don't know

16. What is your caste status?

a. Scheduled caste
b. Scheduled tribe
c. Other backwards class
d. Upper/forwards caste
e. Don't know

17. What is your highest level of education completed?

a. No formal education
b. Primary education
c. Secondary education
d. Some college education
e. Associate's degree
f. Bachelor's degree
g. Master's degree
h. Professional degree
i. Doctoral degree

18. Please indicate the range of your current yearly earnings from the choices provided below.

a. <12,000
b. 12,000-15,000
c. 15,001-20,000
d. 20,001-25,000
e. 25,001-28,000
f. 28,001-32,000
g. 32,001-36,000
h. 36,001-40,000
i. 40,001-50,000
j. 50,001-60,000
k. 60,001-75,000
l. >75,000

APPENDIX F: MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
Circle the "2" if you **Strongly Disagree**
Circle the "3" if you **Mildly Disagree**
Circle the "4" if you are **Neutral**
Circle the "5" if you **Mildly Agree**
Circle the "6" if you **Strongly Agree**
Circle the "7" if you **Very Strongly Agree**

		Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

APPENDIX G: BRIEF SOCIOCULTURAL ADAPTATION SCALE

Brief Sociocultural Adaptation Scale

Instructions: Think about living in the U.S. How easy or difficult is it for you to adapt to:

Circle the "1" if you think it is **very difficult**
Circle the "2" if you think it is **difficult**
Circle the "3" if you think it is **somewhat difficult**
Circle the "4" if you think is is **neither difficult nor easy**
Circle the "5" if you think it is **somewhat easy**
Circle the "6" if you think it is **easy**
Circle the "7" if you think it is **very easy**

	Very Difficult	Difficult	Somewhat Difficult	Neither	Somewhat Easy	Easy	Very Easy
1. climate (temperature, rainfall, humidity)	1	2	3	4	5	6	7
2. natural environment (plants and animals, pollution, scenery)	1	2	3	4	5	6	7
3. social environment (size of the community pace of life, noise)	1	2	3	4	5	6	7
4. living (hygiene, sleeping practices, how safe you feel)	1	2	3	4	5	6	7
5. practicalities (getting around, using public transport, shopping)	1	2	3	4	5	6	7
6. food and eating (what food is eaten, how food is eaten, time of meals)	1	2	3	4	5	6	7
7. family life (how close family members are, how much time family spend together)	1	2	3	4	5	6	7
8. social norms (how to behave in public, style of clothes, what people think is funny)	1	2	3	4	5	6	7
9. values and beliefs (what people think about religion and politics, what people think is right or wrong)	1	2	3	4	5	6	7

10. people (how friendly people are, how stressed or relaxed people are, attitudes towards foreigners)	1	2	3	4	5	6	7
11. friends (making friends, amount of social interaction, what people do to have fun and relax)	1	2	3	4	5	6	7
12. language (learning the language, understanding people, making yourself understood)	1	2	3	4	5	6	7

APPENDIX H: BRIEF PSYCHOLOGICAL ADAPTATION SCALE

Brief Psychological Adaptation Scale

Instructions: Think about living in the U.S. In the last 2 weeks how often have you felt:

Circle the "1" if you think it is **never**
Circle the "2" if you felt this way **very rarely**
Circle the "3" if you felt this way **rarely**
Circle the "4" if you felt this way **sometimes**
Circle the "5" if you felt this way **frequently**
Circle the "6" if you think it is **usually**
Circle the "7" if you think it is **always**

		Never	Very Rarely	Rarely	Sometimes	Frequently	Usually	Always
1.	excited about being in the U.S.	1	2	3	4	5	6	7
2.	out of place, like you don't fit into American culture	1	2	3	4	5	6	7
3.	sad to be away from India	1	2	3	4	5	6	7
4.	nervous about how to behave in certain situations	1	2	3	4	5	6	7
5.	lonely without your Indian family and friends around you	1	2	3	4	5	6	7
6.	homesick when you think of India	1	2	3	4	5	6	7
7.	frustrated by difficulties adapting to the U.S.	1	2	3	4	5	6	7
8.	happy with your day to day life in the U.S.	1	2	3	4	5	6	7

APPENDIX I: BRIEF PERCEIVED CULTURAL DISTANCE SCALE

Brief Perceived Cultural Distance Scale

Instructions: Think about India and the U.S. In your opinion, how different or similar are these two countries in terms of:

Circle the "1" if you think they are **very similar**
Circle the "2" if you think they are **similar**
Circle the "3" if you think they are **somewhat similar**
Circle the "4" if you think they are **neither similar nor different**
Circle the "5" if you think they are **somewhat different**
Circle the "6" if you think they are **different**
Circle the "7" if you think they are **very different**

	Very Similar	Similar	Somewhat Similar	Neither	Somewhat Different	Different	Very Different
1. climate (temperature, rainfall, humidity)	1	2	3	4	5	6	7
2. natural environment (plants and animals, pollution, scenery)	1	2	3	4	5	6	7
3. social environment (size of the community pace of life, noise)	1	2	3	4	5	6	7
4. living (hygiene, sleeping practices, how safe you feel)	1	2	3	4	5	6	7
5. practicalities (getting around, using public transport, shopping)	1	2	3	4	5	6	7
6. food and eating (what food is eaten, how food is eaten, time of meals)	1	2	3	4	5	6	7
7. family life (how close family members are, how much time family spend together)	1	2	3	4	5	6	7
8. social norms (how to behave in public, style of clothes, what people think is funny)	1	2	3	4	5	6	7
9. values and beliefs (what people think about religion and politics, what people think is right or wrong)	1	2	3	4	5	6	7

10. people (how friendly people are, how stressed or relaxed people are, attitudes towards foreigners)	1	2	3	4	5	6	7
11. friends (making friends, amount of social interaction, what people do to have fun and relax)	1	2	3	4	5	6	7
12. language (learning the language, understanding people, making yourself understood)	1	2	3	4	5	6	7

APPENDIX J: BRIEF ACCULTURATION ORIENTATION SCALE

Brief Acculturation Orientation Scale

Instructions: Think about being in the U.S. How much do you agree with the following sentences? When in the U.S. it is important for me to...

Circle the "1" if you **strongly disagree**
Circle the "2" if you **disagree**
Circle the "3" if you **somewhat disagree**
Circle the "4" if you **neither agree nor disagree**
Circle the "5" if you **somewhat agree**
Circle the "6" if you **agree**
Circle the "7" if you **strongly agree**

		Strongly Disagree	Disagree	Somewhat Disagree	Neither	Somewhat Agree	Agree	Strongly Agree
1.	have Indian friends	1	2	3	4	5	6	7
2.	take part in Indian traditions	1	2	3	4	5	6	7
3.	hold on to my Indian characteristics	1	2	3	4	5	6	7
4.	do things the way Indian people do	1	2	3	4	5	6	7
5.	have American friends	1	2	3	4	5	6	7
6.	take part in American traditions	1	2	3	4	5	6	7
7.	hold on to (or develop) my American characteristics	1	2	3	4	5	6	7
8.	do things the way American people do	1	2	3	4	5	6	7

APPENDIX K: DHS DOMESTIC VIOLENCE MODULE

SECTION 11. HOUSEHOLD RELATIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1101	CHECK COVER PAGE: WOMAN SELECTED FOR THIS SECTION YES ⚑ NO ☐ →	
1102	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL EFFECTIVE PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . 2 →	
1103	READ TO THE RESPONDENT #REF! Now I would like to ask you questions about some other important aspects of a woman's life. I know that some of these questions are very personal. However, your answers are crucial for helping to understand the condition of women in India. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else will know that you were asked these questions.	
1104	CHECK 301: CURRENTLY MARRIED ⚑ ↓ FORMERLY MARRIED ⚑ ↓ (1105 TO 1115: READ IN PAST TENSE) NEVER MARRIED OR MARRIED, GAUNA NOT PERFORMED ☐ →	
1105	#REF! First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) husband.	YES NO DK
	a. #REF! He (is/was) jealous or angry if you (talk/talked) to other men.	JEALOUS 1 2 8
	b. #REF! He frequently (accuses/accused) you of being unfaithful.	ACCUSES 1 2 8
	c. #REF! He (does/did) not permit you to meet your female friends.	NOT MEET FRIENDS 1 2 8
	d. #REF! He (tries/tried) to limit your contact with your family.	NO FAMILY 1 2 8
	e. #REF! He (insists/insisted) on knowing where you (are/were) at all times.	WHERE YOU ARE 1 2 8
	f. #REF! He (does/did) not trust you with any money.	MONEY 1 2 8

1

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1106	A #REF! Now if you will permit me, I need to ask some more questions about your relationship with your (last) husband. (Does/did) your (last) husband ever:	B #REF! How often did this happen in the last 12 months: often, only sometimes, or not at all?

	EVER		OFTEN	SOME-TIMES	NOT IN THE LAST 12 MONTHS
a. #REF!					
Say or do something to humiliate you in front of others?	YES	1 →	a. 1	2	3
	NO	2 ↓			
b. #REF!					
Threaten to hurt or harm you or someone close to you?	YES	1 →	b. 1	2	3
	NO	2 ↓			
c. #REF!					
Insult you or make you feel bad about yourself?	YES	1 →	c. 1	2	3
	NO	2			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1107	A #REF! (Does/did) your (last) husband ever do any of the following things to you:	B #REF! How often did this happen during the last 12 months: often, only sometimes, or not at all?

		EVER		OFTEN	SOME-TIMES	NOT IN THE LAST 12 MONTHS
a.	#REF! Push you, shake you, or throw something at you?	YES 1 →		a. 1	2	3
		NO 2 ↓				
b.	#REF! Twist your arm or pull your hair?	YES 1 →		b. 1	2	3
		NO 2 ↓				
c.	#REF! Slap you?	YES 1 →		c. 1	2	3
		NO 2 ↓				
d.	#REF! Punch you with his fist or with something that could hurt you?	YES 1 →		d. 1	2	3
		NO 2 ↓				
e.	#REF! Kick you, drag you or beat you up?	YES 1 →		e. 1	2	3
		NO 2 ↓				
f.	#REF! Try to choke you or burn you on purpose?	YES 1 →		f. 1	2	3
		NO 2 ↓				
g.	#REF! Threaten or attack you with a knife, gun, or any other weapon?	YES 1 →		g. 1	2	3
		NO 2 ↓				
h.	#REF! Physically force you to have sexual intercourse with him even when you did not want to?	YES 1 →		h. 1	2	3
		NO 2 ↓				
i.	#REF! Physically force you to perform any other sexual acts you did not want to?	YES 1 →		i. 1	2	3
		NO 2 ↓				
j.	#REF! Force you with threats or in any other way to perform sexual acts you did not want to?	YES 1 →		j. 1	2	3
		NO 2				

1108	CHECK 1107 A (a-j): EXPERIENCED PHYSICAL VIOLENCE AT LEAST ONE 'YES' ↓ ⚑ NOT A SINGLE 'YES' ☐	
1109	#REF! How long after you first got married to your (last) husband did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE 95

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1110	#REF! Did the following ever happen as a result of what your (last) husband did to you?:	YES NO
	a. #REF! You had cuts, bruises or aches?	CUTS/BRUISES 1 2
	b. #REF! You had severe burns?	SEVERE BURNS 1 2
	c. #REF! You had eye injuries, sprains, dislocations, or minor burns?	EYE INJURIES, SPRAINS DISLOCATIONS, ETC. 1 2
	d. #REF! You had deep wounds, broken bones, broken teeth, or any other serious injury?	OTHER SERIOUS INJURY 1 2
1111	#REF! Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) husband at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2
1112	#REF! In the last 12 months, how often have you done this to your (last) husband: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3
1113	#REF! (Does/did) your (last) husband drink alcohol?	YES . . . . . 1 NO 2
1114	#REF! How often (does/did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3
1115	#REF! Are (Were) you afraid of your (last) husband: most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3
1116	CHECK 307: MARRIED MORE THAN ONCE →	MARRIED ONLY ONCE →
1117	A #REF! So far we have been talking about the behavior of your (current/last) husband. Now I want to ask you about the behavior of any previous husband.	B #REF! How long ago did this last happen?
		EVER / 0 - 11 MONTHS AGO / 12 OR MORE MONTHS AGO / DON'T REMEMBER
	a. #REF! Did any previous husband ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 → / NO 2 ↓
	b. #REF!	YES 1 → a. 1 / 2 / 3 b. 1 / 2 / 3

NO.	QUESTIONS AND FILTERS		CODING CATEGORIES
	Did any previous husband physically force you to have intercourse or perform any other sexual acts against your will?	NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1118	CHECK 301: EVER MARRIED → a. NEVER MARRIED OR MARRIED, GAUNA NOT PERFORMED → b. a. #REF! From the time you were 15 years old has anyone other than (your/any) husband hit you, slapped you, kicked you, or done anything else to hurt you physically? b. #REF! From the time you were 15 years old has anyone ever hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3
1119	#REF! Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E CURRENT BOYFRIEND . . . . . F FORMER BOYFRIEND . . . . . G MOTHER-IN-LAW . . . . . H FATHER-IN-LAW . . . . . I OTHER IN-LAW . . . . . J TEACHER . . . . . K EMPLOYER/SOMEONE AT WORK . . . . L POLICE/SOLDIER . . . . . M OTHER _____ X (SPECIFY)
1120	#REF! In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3
1121	CHECK 201, 226, AND 231: EVER BEEN PREGNANT ('YES' ON 201 OR 226 OR 231) → NEVER BEEN PREGNANT →	
1122	#REF! Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO . . . . . 2 →

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1123	#REF! Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER .... A FORMER HUSBAND/PARTNER ..... B CURRENT/FORMER BOYFRIEND .... C FATHER/STEP-FATHER ..... D BROTHER/STEP-BROTHER ..... E OTHER RELATIVE ..... F IN-LAW ..... G OWN FRIEND/ACQUAINTANCE ..... H FAMILY FRIEND ..... I TEACHER ..... J EMPLOYER/SOMEONE AT WORK .... K POLICE/SOLDIER ..... L PRIEST/RELIGIOUS LEADER ..... M STRANGER ..... N OTHER _____ X (SPECIFY)
1124	CHECK 301: EVER MARRIED → NEVER MARRIED OR MARRIED, GAUNA NOT PERFORMED	
1125	#REF! Now I want to ask you about things that may have been done to you by someone other than (your/any) husband. At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER/ NO ANSWER 3
1126	#REF! At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER/ NO ANSWER 3
1127	#REF! Who was the person who was forcing you the very first time this happened?	CURRENT HUSBAND ..... 01 FORMER HUSBAND ..... 02 CURRENT/FORMER BOYFRIEND ..... 03 FATHER/STEP-FATHER ..... 04 BROTHER/STEP-BROTHER ..... 05 OTHER RELATIVE ..... 06 IN-LAW ..... 07 OWN FRIEND/ACQUAINTANCE ..... 08 FAMILY FRIEND ..... 09 TEACHER ..... 10 EMPLOYER/SOMEONE AT WORK .... 11 POLICE/SOLDIER ..... 12 PRIEST/RELIGIOUS LEADER ..... 13 STRANGER ..... 14 OTHER _____ 96 (SPECIFY)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1128	CHECK 301: EVER MARRIED → a. #REF! NEVER MARRIED OR MARRIED, GAUNA NOT PERFORMED → b. #REF! a. In the last 12 months, has anyone other than (your/any) husband physically forced you to have sexual intercourse when you did not want to? b. In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3
1129	CHECK 1107 A (h-j) and 1117 A (b): EXPERIENCED SEXUAL VIOLENCE AT LEAST ONE 'YES' → NOT A SINGLE 'YES'	
1130	CHECK 301: EVER MARRIED → a. #REF! NEVER MARRIED OR MARRIED, GAUNA NOT PERFORMED → b. #REF! a. How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband? b. How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS . . [ ][ ] DON'T REMEMBER 98
1131	CHECK 1107 A (a-j), 1117 (a-b), 1118, 1122, 1125, AND 1126: EXPERIENCED ANY VIOLENCE AT LEAST ONE 'YES' → NOT A SINGLE 'YES'	
1132	#REF! Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2
1133	#REF! From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S FAMILY . . . . . B CURRENT/FORMER HUSBAND . . . . . C CURRENT/FORMER BOYFRIEND . . . . . D FRIEND . . . . . E NEIGHBOUR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . . . H POLICE . . . . . I LAWYER . . . . . J

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
		SOCIAL SERVICE ORGANIZATION .... K OTHER _____ X (SPECIFY)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1134	#REF! Have you ever told any one else about this?	YES . . . . . 1 NO 2
1135	CHECK 1133: 'H' IS CIRCLED → 'H' IS NOT CIRCLED →	
1136	#REF! Where did you go for medical help? Anywhere else? RECORD ALL MENTIONED.	**PUBLIC HEALTH SECTOR** GOVT./MUNICIPAL HOSPITAL . . . . A VAIDYA/HAKIM/HOMEOPATH (AYUSH) . . . . . B GOVT. DISPENSARY . . . . . C UHC/UHP/UFWC . . . . . D CHC/RURAL HOSPITAL/ BLOCK PHC . . . . . E PHC/ADDITIONAL PHC . . . . . F SUB-CENTRE/ANM . . . . . G GOVT. MOBILE CLINIC . . . . . H CAMP . . . . . I ANGANWADI/ICDS CENTRE . . . . . J ASHA . . . . . K OTHER COMMUNITY-BASED WORKER . . . . . L OTHER PUBLIC HEALTH SECTOR . . . . . M NGO OR TRUST HOSPITAL/CLINIC . . . . N **PRIVATE HEALTH SECTOR** PVT. HOSPITAL . . . . . O PVT. DOCTOR/CLINIC . . . . . P PVT. MOBILE CLINIC . . . . . Q VAIDYA/HAKIM/HOMEOPATH (AYUSH) . . . . . R TRADITIONAL HEALER . . . . . S PHARMACY/DRUGSTORE . . . . . T DAI (TBA) . . . . . U OTHER PRIVATE HEALTH SECTOR . . . . . V OTHER _____ X (SPECIFY)
1137	#REF! As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.

1138	DID YOU HAVE TO INTERRUPT THIS SECTION OF THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES ONCE	YES, MORE THAN ONCE	NO
		HUSBAND 1	2	3
		OTHER MALE ADULT 1	2	3
		FEMALE ADULT 1	2	3

1139 INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE

_____

_____

_____

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
1140	RECORD THE TIME.	HOUR ..... ☐☐ MINUTES ..... ☐☐

APPENDIX L: ALLEGHENY COUNTY COMMUNITY RESOURCES HANDOUT

ALLEGHENY COUNTY COMMUNITY RESOURCES

Abuse, Domestic Violence and/or Trauma

Center for Victims | 5916 Penn Ave, Pittsburgh, PA 15206.....(412)678-4616
National Domestic Violence Hotline.....(800)799-SAFE(7233)
Pennsylvania Coalition Against Domestic Violence.....1(800)932-4632
Sexual Assault/Domestic Violence Hotline.....888-822-6325
Women's Center and Shelter of Greater Pittsburgh.....(412)687-8005

Adoption

Adoptions from the Heart.....800-355-5500
Allegheny County Adoption|400 N Lexington St #106, Pittsburgh, PA.....(412)473-2300
Catholic Charities|212 Ninth Street, Pittsburgh, PA 15222.....(412)456-6999
Children's Home Pittsburgh| 5324 Penn Avenue Pittsburgh, PA 15224.....(412)441-4884

Alcohol & Drug Abuse Services

Addison Behavioral Care| 905 West St #4, Pittsburgh, PA 15221.....(412)731-2353
Coalition for Recovery (ACCR) |One Smithfield Street, Third Fl.,Pittsburgh, PA 15222.....(412)325-0369
Sojourner House| 5460 Penn Ave., Pittsburgh, PA 15206.....412-441-7783
The Women's Helpline.....866-349-0141

Child Care

Angel's Place | http://www.angelsplacepgh.org/
+2615 Norwood Avenue, Pittsburgh, PA 15214.....(412)321-4447
+Brookline: 600 Fordham Avenue, Pittsburgh, PA 15226.....(412)531-MOMS(6667)
+Swissvale: 2538 Woodstock Avenue, Pittsburgh, PA 15218.....(412)271-2229
Child Care Information Services of Allegheny County| 305 Wood Street , 3rd Fl., Pittsburgh, PA 15222.....(412)261-2273

Child Health and Guidance

Allegheny Children's Initiative|2304 Jane St., Pittsburgh, PA 15203.....(412)431-8006
Allegheny Intermediate Unit DART Program |475 East Waterfront Drive, Homestead, PA 15120.....(412)394-5904
Children's Hospital Division of Adolescent Medicine| http://www.chp.edu/CHP/am.....(412)692-6677
Women Infants and Children (WIC)| 239 Fourth Avenue, 3rd Fl., Pittsburgh, PA 15222.....(412)350-5801

Crisis and Suicide

Crisis Center North, Inc. – 24 hour crisis hotline.....(412)364-5556
Mental Health America – Allegheny County |100 Sheridan Square, 2nd Floor Pittsburgh, PA 15206.....(412)661-7860
National Institute of Mental Health|http://www.nimh.nih.gov/index.shtml.....(866)615-6464
PA 211, United Way Hotline|http://pa211sw.org/.....2-1-1
re:solve Crisis Network| 333 N. Braddock Avenue, N. Point Breeze, 15208.....1-888-796-8226

Counseling or Therapy

Community Care Behavioral Health|112 Washington Place Pittsburgh, PA 15219.....1-800-553-7499
Jewish Family & Children's Service of Pittsburgh|5743 Bartlett Street, Pittsburgh.....(412)422-7200

Food and Nutrition

Allegheny Valley Association of Churches|1913 Freeport Road Natrona Heights, PA 15065.....(724)226-0606
Greater Pittsburgh Community Food Bank|1 North Linden Street, Duquesne, PA 15110.....(412)460-0418
North Hills Community Outreach|1975 Ferguson Road Pittsburgh, PA 15101.....(412)487-6316
Urban League's Emergency Food Assistance Hotline|610 Wood Street Pittsburgh, PA 15222.....(866)395-3663

Health and Safety

Allegheny County Health Department |542 Fourth Ave. Pittsburgh, PA 15219.....(412)687-2243

Community Human Services Corporation|372 Lawn Street, Pittsburgh.....(412)621-4708
Medical Assistance (Medicaid)| http://www.dhs.state.pa.us/foradults/healthcaremedicalassistance/.....(412)565-2146
Pittsburgh AIDS Task Force (PATF)|913 Penn Ave, 2nd Fl., Pittsburgh, PA 15206.....(412)345-7456
Pittsburgh AIDS Center for Treatment |3601 Fifth Avenue, Falk Building 7th Floor, Pittsburgh, PA 15213.....(877)788-7228
Pittsburgh Community Services Inc.- Neighborhood Safety Program.....(412)904-4711

Homelessness Services
Allegheny County Housing Authority|625 Stanwix St. Pittsburgh, PA 15222.....(412)355-8940
Alle-Kiski Area HOPE Center – Tarentum.....(888)299-4673
Bethlehem Haven|1410 Fifth Avenue, Pittsburgh, PA.....(412)391-1348
Familylinks Downtown Outreach Center and Shelter|1601 Fifth Avenue, Pittsburgh, PA 15219.....(412)471-6160
Womanspace East, Inc|http://www.wseinc.org/index.php.....(.412)765-2661
Women's Center and Shelter of Greater Pittsburgh|http://www.wcspittsburgh.org/.....(877)338-8255

LGBTQ
Gay and Lesbian Community Center (GLCC)|210 Grant St., Pittsburgh, PA 15219.....(412)422-0114
Gay, Lesbian, Bisexual, and Transgender Helpline.....(888) 843-4564
PERSAD Center| 5301 Butler Street, Suite 100 Pittsburgh, PA 15201.....(412)441-9786

Mentoring
Big Brothers Big Sisters of Greater Pittsburgh|5989 Centre Avenue, Pittsburgh, PA 15206.....(412)363-6100
Mentoring Partnership of Southwestern PA| 1901 Centre Avenue, Suite 103, Pittsburgh, PA 15219.....(412)281-2535

Parenting Services and Supports
Human Services-Children, Youth and Families (CYF)| One Smithfield St. Suite 400 Pittsburgh, PA 15222.....(412)350-5701
Family Resources of PA|141 South Highland Ave., Pittsburgh, PA 15206.....(412)363-1702
Family Support Centers| One Smithfield Street Pittsburgh, PA 15222.....(412)350-5701
ParentWISE Education – Family Services of Western PA| http://fswp.org/services/education-resources ...(724)837-5410

Pregnancy and Family Planning
Adagio Health|960 Penn Avenue, Suite 600, Pittsburgh, PA 15222.....1-800-215-7494
Birthright of Pittsburgh| 160 N. Craig St., Suite 200 Pittsburgh, PA 15213.....(412)621-1988
Catholic Charities | 212 Ninth Street, Pittsburgh, PA 15222.....(412)456-6999
Genesis of Pittsburgh| 550 California Avenue, Pittsburgh, PA 15202.....(412)766-2693
Pittsburgh Family Planning Center (Planned Parenthood)| 933 Liberty Ave., Pittsburgh, PA 15222.....(412)434-8971

Professional Development
Dress for Success|332 5th Ave #510, Pittsburgh.....(412)201-4204
Goodwill of Southwestern Pennsylvania|2600 East Carson Street, Pittsburgh.....(412)481-9005

Protective Services
Area Agency on Aging and Protective Services | 2100 Wharton Street, Second Fl., Pittsburgh, PA 15203.....(412)350-4234
Human Services- Children, Youth and Families (CYF)| One Smithfield St. Suite 400, Pittsburgh, PA 15222.....(412)350-5701

Sexual Assault
Center for Victims | 5916 Penn Ave, Pittsburgh, PA 15206.....(412)678-4616
Pittsburgh Action Against Rape (PAAR)| 81 South 19th St, Pittsburgh, PA 15203.....(866)363-7273
Rape, Abuse, and Incest National Network – Sexual Assault Hotline.....800-656-HOPE(4673)
Sexual Assault/Domestic Violence Hotline.....888-822-6325
Women's Center and Shelter of Greater Pittsburgh.....(412)687-8005

For more resources, please visit:
http://www.health.pa.gov/My%20Health/Documents/Allegheny%20County%20Resource%20Guide.pdf

BIBLIOGRAPHY

Abramsky, T., Watts, C. H., Garcia-Moreno, C., Devries, K., Kiss, L., Ellsberg, M., Jansen, H. & Heise, L. (2011). What Factors Are Associated with Recent Intimate Partner Violence?: Findings from the WHO Multi-Country Study on Women's Health and Domestic Violence. *BMC Public Health, 11*(109), 1-17.

Ackerson, L. K. & Subramanian, S. V. (2008). State Gender Inequality, Socioeconomic Status and Intimate Partner Violence (IPV) in India: A Multilevel Analysis. *Australian Journal of Social Issues, 43*(1), 81-102.

Ackerson, L. K., Kawachi, I., Barbeau, E. M. & Subramanian, S. V. (2008). Effects of Individual and Proximate Educational Context on Intimate Partner Violence: A Population Based Study of Women in India. *American Journal of Public Health, 98*(3), 507-514.

Ahmed, S., Koenig, M. A., Stephenson, R. (2006). Effects of Domestic Violence on Perinatal and Early-Childhood Mortality: Evidence from North India. *American Journal of Public Health, 96*(8), 1423-1428.

Allagia, R., Regehr, C. & Rishchynski, G. (2009). Intimate Partner Violence and Immigration Law in Canada: How Far Have We Come? *International Journal of Law and Psychiatry, 32*(6), 335-341.

Allegheny County District Attorney. (2017). *Domestic Violence.* Retrieved from http://www.alleghenycountyda.us/Units/DomesticViolence/

Andersson, N., Ho-Foster, A., Mitchell, S., Scheepers, E., & Goldstein, S. (2007). Risk Factors for Domestic Physical Violence: National Cross-sectional Household Surveys in Eight Southern African Countries. *BMC Women's Health, 7*(11), 1-13.

Bain, S. (2015, March 10). The divorce rate is falling. Here's why that's bad news for some Americans. The Washington Post. Retrieved July 28, 2015 from https://www.washingtonpost.com/posteverything/wp/2015/03/10/the-divorce-rate-is-falling-heres-why-thats-bad-news-for-some-americans/

Banerjee, P. R. (2014). Dowry in 21st Century India: The Sociocultural Face of Exploitation. *Trauma, Violence & Abuse, 15*(1), 34-40.

Baru, R., Acharya, A., Acharya, S. Kumar, A. K. S. & Nagaraj, K. (2010). Inequities in Access to Health Services in India: Caste, Class and Region. *Economic and Political Weekly, 45*(38), 49-58.

Beals, A.R. (1974). Intervillage Relationships: Jati & Marriage. In *Village Life in South India: Cultural Design and Environmental Variation.* (pp. 107-123). Piscataway, NJ: Aldine Transaction Publishers.

Belur, J., Tilley, N., Daruwalla, N., Kumar, M., Tiwari, V. & Osrin, D. (2014). The Social Construction of 'Dowry Deaths.' *Social Science & Medicine, 119*, 1-9.

Berry, J. W. (2005). Acculturation: Living Successfully in Two Cultures. *International Journal of Intercultural Relations, 29*(6), 697-712.

Berry, J. W. (1997). Immigration, Acculturation, and Adaptation. *Applied Psychology: An International Review, 46*(1), 5-29.

Bhattacharya, A., Basu, M., Das, P., Sarkar, A. P., Das, P. K. & Roy, B. (2013). Domestic Violence: A Hidden and Deeply Rooted Health Issue in India. *South East Asia Journal of Public Health. 3*(1), 17-23.

Black, M.C., Basile, K.C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., Chen, J., & Stevens, M.R. (2011). The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved from: https://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf

Bose, S., Trent, K. & South, S. J. (2013). The Effect of a Male Surplus on Intimate Partner Violence in India. *Economic Political Weekly, 48*(35), 1-20.

Centers for Disease Control and Prevention (2014). Intimate Partner Violence Definitions. Retrieved from http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html

Chandra, P. S., Deepthivarma, S., Carey, M. P., Carey, K. B., & Shalinianant, M. P. (2003). A Cry from the Darkness: Women with Severe Mental Illness in India Reveal their Experiences with Sexual Coercion. *Psychiatry, 66*(4), 323-334.

Chang, D. F., Shen, B. J. & Takeuchi, D. T. (2009). Prevalence and Demographic Correlates of Intimate Partner Violence in Asian Americans. *International Journal of Law and Psychiatry, 32*(3), 167-175.

Collucci, E. & Montesinos, A. H. (2013). Violence Against Women and Suicide in the Context of Migration: A Review of the Literature and a Call for Action. *Suicidology Online, 4*, 81-91.

Cousineau, M. M. (2004). Towards a Transnational and Cross-Cultural Analysis of Family Violence. *Violence Against Women, 10*(8), 935-949.

Dalal, K. (2011). Does Economic Empowerment Protect Women from Intimate Partner Violence? *Journal of Injury and Violence Research, 3*(1), 35-44.

Dalal, K. & Lindqvist, K. (2012). A National Study of the Prevalence and Correlates of Domestic Violence Among Women in India. *Asia-Pacific Journal of Public Health, 24*(2), 265-277.

Dasgupta, S. D. (1998). Gender Roles and Cultural Continuity in the Asian Indian Immigrant Community in the U. S. *Sex Roles, 38*(11/12), 953-974.

Deliège, R. Caste, Class & Untouchability. In I. Clark-Decès, (Ed.) *A Companion to the Anthropology of India.* (pp. 45-61). Hoboken, NJ: Wiley-Blackwell.

Demes, K.A., & Geeraert, N. (2014). Measures matter: Scales for adaptation, cultural distance and acculturation orientation revisited. *Journal of Cross-Cultural Psychology, 45*(1), 91-109.

Deshpande, S. (2006). Exclusive Inequalities: Merit, Caste and Discrimination in Indian Higher Education Today. *Economic and Political Weekly, 41*(24), 2438-2444.

Domestic Violence Services of Southwestern PA. (2017). *Services.* Retrieved from http://www.peacefromdv.org/services/

Du Mont, J., Hyman, I., O'Brien, K., White, M. E., Odette, F. & Tyyska, V. (2012). Factors Associated with Intimate Partner Violence by a Former Partner by Immigration Status and Length of Residence in Canada. *Annals of Epidemiology, 22*(11), 772-77.

Erez, E. & Hartley, C. C. (2003). Battered Immigrant Women and the Legal System: A Therapeutic Jurisprudence Perspective. *Western Criminology Review, 4*(2), 155-169.

Farver, J. A. M., Narang, S. K. & Bhadha, B. R. (2002). East Meets West: Ethnic Identity, Acculturation, and Conflict in Asian Indian Families. *Journal of Family Psychology, 16*(3), 338-350.

Fernandez, M. (1997). Domestic Violence by Extended Family Members in India: Interplay of Gender and Generation. *Journal of Interpersonal Violence, 12*(3), 433-455.

Finkelhor, D., Turner, H., Shattuck, A., Hamby, S., & Kracke, K. Office of Juvenile Justice and Delinquency. (2015). *Children's Exposure to Violence, Crime and Abuse: An Update*. (Juvenile Justice Bulletin, NCJ 248547). Laurel, MD: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency. Retrieved from https://www.ojjdp.gov/pubs/248547.pdf

Garcia-Moreno, C., Jansen, H., Ellsberg, M., Heise, L., & Watts, C. H. (2006). Prevalence of Intimate Partner Violence: Findings from the WHO Multi-Country Study on Women's Health and Domestic Violence. *Lancet, 368*(9543), 1260-1269.

George, A. (1998). Differential Perspectives of Men and Women in Mumbai, India on Sexual Relations and Negotiations Within Marriage. *Reproductive Health Matters, 6*(12), 87-96.

Gill, A. (2004). Voicing the Silent Fear: South Asian Women's Experiences of Domestic Violence. *The Howard Journal, 43*(5), 465-483.

Ghosh, B. & Choudhuri, T. (2011). Legal Protection Against Domestic Violence in India: Scope and Limitations. *Journal of Family Violence, 26*(4), 319-330.

Goel, R. (2005). Sita's Trosseau: Restorative Justice, Domestic Violence, and South Asian Culture. *Violence Against Women, 11*(5), 639-665.

Government of India, Ministry of Health and Family Welfare. (2007). National Family Health Survey (NFHS-3) 2005-2006 Key Findings. Mumbai, India. Retrieved from http://dhsprogram.com/pubs/pdf/SR128/SR128.pdf

Guilmoto, C. Z. (2011). Demography for Anthropologists: Populations, Castes and Classes. In I. Clark-Decès, (Ed.) *A Companion to the Anthropology of India.* (pp. 25-44). Hoboken, NJ: Wiley-Blackwell.

Hurwitz, E. J. H., Gupta, J., Liu, R., Silverman, J. G. & Raj, A. (2006). Intimate Partner Violence Associated with Poor Health Outcomes in U.S. South Asian Women. *Journal of Immigrant and Minority Health, 8*(3), 251-261.

Hyman, I., Mason, R., Berman, H., Guruge, S., Manuel, L., Kanagaratnam, P., Yoganathan, T. & Tarcicius, R. (2006). Perceptions of and Responses to Woman Abuse Among Tamil Women in Toronto. *Canadian Woman Studies, 25*(1-2), 145-150.

Hyman, I., Mason, R., Guruge, S., Berman, H., Kanagaratnam, P. & Manuel, L. (2011). Perceptions of Factors Contributing to Intimate Partner Violence Among Sri Lankan Tamil Immigrant Women in Canada. *Health Care for Women International, 32*(9), 779-794.

Indian Council of Medical Research, National Institute of Medical Statistics. (2013). Infant and Child Mortality in India: Levels, Trends and Determinants Fact Sheet. New Delhi, India. Retrieved from http://www.unicef.org/india/FactsheetMedia(2).pdf

James, C., Kandel, W., & Parker, T. (2007, April 1). *Population Dynamics are Changing the Profile of Rural Areas*. United States Department of Agriculture Economic Research Service. Retrieved from https://www.ers.usda.gov/amber-waves/2007/april/population-dynamics-are-changing-the-profile-of-rural-areas/

Johnson, P. S. & Johnson, J. A. (2001). The Oppression of Women in India. *Violence Against Women, 7*(9), 1051-1068.

Po, J.Y.T. & Subramanian, S. V. (2011). Mortality Burden and Socioeconomic Status in India. *PLOS ONE, 6*(2), 1-8.

Kijima, Y. (2006). Caste and Tribe Inequality: Evidence from India: 1983-1999. *Economic Development and Cultural Change, 54*(2), 369-404.

Kimber, M., Henriksen, C. A., Davidov, D. M., Goldstein, A. L., Pitre, N. Y., Tonmyr, L. & Afifi, T. O. (2014). The Association between Immigrant Generational Status, Child Maltreatment History and Intimate Partner Violence (IPV): Evidence from a Nationally Representative Survey. *Social Psychiatry and Psychiatric Epidemiology, 50*(7), 1135-1144.

Kishor, S. & Gupta, K. (2009). Gender Equality and Women's Empowerment in India. National Family Health Survey (NFHS-3), India, 2005-06. Mumbai: International Institute for Population Sciences; Calverton, Maryland, USA: ICF Macro. Retrieved from: http://rchiips.org/nfhs/a_subject_report_gender_for_website.pdf

Kishor, S. & Johnson, K. (2004). *Profiling Domestic Violence – A Multi-Country Study*. Calverton, Maryland: ORC Macro.

Kulwicki, A., Aswad, B., Carmona, T., & Ballout, S. (2010). Barriers in the Utilization of Domestic Violence Services Among Arab Immigrant Women: Perceptions of Professionals, Service Providers & Community Leaders. *Journal of Family Violence, 25* (8), 727-735.

Kumar, R. (2000). Caste Enumeration in Census: Constitutional Imperative. *Economic and Political Weekly, 35*(35/36), 3100-3102.

Lee, Y. S. & Hadeed, L. (2009). Intimate Partner Violence Among Asian Immigrant Communities: Health/Mental Health Consequences, Help-Seeking Behaviors, and Service Utilization. *Trauma, Violence & Abuse, 10*(2), 143-170.

Levitt, H. M. & Ware, K. N. (2006). "Anything with Two Heads Is a Monster": Religious Leaders' Perspectives on Marital Equality and Domestic Violence. *Violence Against Women, 12*(12), 1169-1190.

Levitt, H. M. & Ware, K. N. (2006). Religious Leaders' Perspectives on Marriage, Divorce, and Intimate Partner Violence. *Psychology of Women Quarterly, 30*(2), 212-222.

Lindhorst, T. & Tajima, E. (2008). Reconceptualizing and Operationalizing Context in Survey Research on Intimate Partner Violence. *Journal of Interpersonal Violence, 23*(3), 362-388.

Mahapatra, N. & DiNitto, D. (2013). Help-Seeking Behaviors of South Asian Women Experiencing Domestic Violence in the United States. *Partner Abuse, 4*(3), 295-313.

Mahapatra, N. (2012). South Asian Women in the U. S. and their Experience of Domestic Violence. *Journal of Family Violence, 27*(5), 381-390.

Mahapatro, M., Gupta, R. N. & Gupta, V. (2012). The Risk Factor of Domestic Violence in India. *Indian Journal of Community Medicine, 37*(3), 153-157.

Maker, A.H., Shah, P.V., & Agha, Z. (2005). Child Physical Abuse Prevalence, Characteristics, Predictors, and Beliefs about Parent-Child Violence in South Asian, Middle Eastern, East Asian, and Latina Women in the United States. *Journal of Interpersonal Violence, 20*(11), 1406-1428.

Mandelbaum, D.G. (1972). Tasks, Concepts and Scope. In *Society in India: Volume 1: Continuity and Change*. (pp.3-30).Berkley, CA: University of California Press.

Mehta, S. (1998). Relationship Between Acculturation and Mental Health for Asian Indian Immigrants in the United States. *Genetic, Social, and General Psychology Monographs, 124*(1), 61-78.

Menjivar, C. & Salcido, O. (2002). Immigrant Women and Domestic Violence: Common Experiences in Different Countries. *Gender and Society, 16*(6), 898-920.
Miller, E., Jordan, B., Levenson, R. & Silverman, J. G. (2011). Reproductive Coercion: Connecting the Dots Between Partner Violence and Unintended Pregnancy. *Contraception, 81*(6), 457-459.
Modi, M. N., Palmer, S. & Armstrong, A. (2014). The Role of Violence Against Women Act in Addressing Intimate Partner Violence: A Public Health Issue. *Journal of Women's Health, 23*(3), 253-259.
Nadkarni, M. V. (2003). Is Caste System Intrinsic to Hinduism? Demolishing a Myth. *Economic and Political Weekly, 38*(45), 4783-4793.
Narayan, U. (1995). "Male-Order" Brides: Immigrant Women, Domestic Violence and Immigration Law. *Hypatia, 10*(1), 104-119.
Narula, S. (2008). Equal by Law, Unequal by Caste: The "Untouchable" Condition in Critical Race Perspective. *New York University Public Law and Legal Theory Working Papers*. 89.
National Center for Injury Prevention and Control. Costs of Intimate Partner Violence against Women in the United States. Atlanta: Centers for Disease Control and Prevention, 2003.
National Children's Alliance. (2014). *National Statistics on Child Abuse.* Retrieved from http://www.nationalchildrensalliance.org/media-room/media-kit/national-statistics-child-abuse
National Coalition Against Domestic Violence. (2017). *National Statistics.* Retrieved from http://ncadv.org/learn-more/statistics
National Institute of Justice. (1997). Project on Human Development in Chicago Neighborhoods (PHDCN): Conflict Tactics Scale for Partner and Spouse, Wave 1, 1994-1997. (Inter-university Consortium for Political and Social Research #13583). Ann Arbor, Michigan.
National Network to End to Domestic Violence. (2017). *U.S. State and Territorial Coalitions.* Retrieved from http://nnedv.org/resources/coalitions.html
Nava, A., McFarlane, J., Gilroy, H., & Maddoux, J. (2014). Acculturation and Associated Effects on Abused Immigrant Women's Safety and Mental Functioning: Results of Entry Data for a 7-year Prospective Study. *Journal of Immigrant and Minority Health, 16*(6), 1077-1084.
Nayar, K. R. (2007). Social Exclusion, Caste & Health: A Review Based on the Social Determinants Framework. *Indian Journal of Medical Research, 126*(4), 355-363.
Office on Women's Health (2011). Domestic and Intimate Partner Violence. Retrieved from http://womenshealth.gov/violence-against-women/types-of-violence/domestic-intimate-partner-violence.html
Orloff, L. & Garcia, O. (2013). Dynamics of Domestic Violence Experienced by Immigrant Victims. Breaking Barriers: A Complete Guide to Legal Rights and Resources for Battered Immigrants. American University: Washington College of Law, pp. 1-23.
Payton, J. (2014). "Honor," Collectivity, and Agnation: Emerging Risk Factors in "Honor"-Based Violence. *Journal of Interpersonal Violence, 29*(16), 2863-2883
Pennsylvania Department of Health. (2016). *Pennsylvania and County Health Profiles 2016 Report.* Retrieved from http://www.statistics.health.pa.gov/HealthStatistics/VitalStatistics/CountyHealthProfiles/Documents/County_Health_Profiles_2016.pdf

Pew Research Center. (2013). *The Rise of Asian Americans.* Retrieved from http://www.pewsocialtrends.org/files/2013/04/Asian-Americans-new-full-report-04-2013.pdf

Pittsburgh Action Against Rape. (2017). *The Hispanic Community.* Retrieved from http://paar.net/prevention/#hispanic

Preiser, A. B. (1999). Domestic Violence in South Asian Communities in America. *Violence Against Women, 5*(6), 684-699.

Raj, A., Livramento, K. N., Santana, M. C., Gupta, J. & Silverman, J. G. (2006). Victims of Intimate Partner Violence More Likely to Report Abuse from In-Laws. *Violence Against Women, 12*(10), 936-949.

Raj, A., Liu, R., McCleary-Sills, J. & Silverman, J. G. (2005). South Asian Victims of Intimate Partner Violence More Likely than Non-Victims to Report Sexual Health Concerns. *Journal of Immigrant Health 7*(2), 85-91.

Raj, A. & Silverman, J. (2007). Domestic Violence Help-Seeking Behaviors of South Asian Battered Women Residing in the United States. *International Review of Victimology, 14*(1), 143-170.

Raj, A. & Silverman, J. (2002). Violence Against Immigrant Women: The Roles of Culture, Context and Legal Immigrant Status on Intimate Partner Violence. *Violence Against Women, 8*(3), 367-398.

Rani, M. & Bonu, S. (2009). Attitudes Toward Wife-Beating: A Cross Country Study in Asia. *Journal of Interpersonal Violence, 24*(8), 1371-1397.

Rastogi, M. & Therly, P. (2006). Dowry and Its Link to Violence Against Women in India. *Trauma, Violence and Abuse, 7*(1), 66-77.

Rodriguez, M., Valentine, J. M., Son, J. B. & Muhammad, M. (2009). Intimate Partner Violence and Barriers to Mental Health Care for Ethnically Diverse Populations of Women. *Trauma, Violence & Abuse, 10*(4), 358-374.

Sabarwal, S., McCormick, M. C., Silverman, J. G. & Subramanian, S. V. (2012). Association between Maternal Intimate Partner Violence Victimization and Childhood Immunization in India. *Journal of Tropical Pediatrics, 58*(2), 107-113.

Sabarwal, S., McCormick, M. C., Subramanian, S. V. & Silverman, J. G. (2012). Son Preference and Intimate Partner Violence Victimization in India: Examining the Role of Actual and Desired Family Composition. *Journal of Biosocial Science, 44*(1), 43-56.

Sabri, B., Renner, L. M., Stockman, J. K. Mittal, M. & Decker, M. R. (2014). Risk Factors for Severe Intimate Partner Violence and Violence-Related Injuries Among Women in India. *Women & Health, 54*(4), 281-300.

Santhya, K. G., Haberland, N., Ram, F., Sinha, R. K., & Mohanty, S. K. (2007). Consent and Coercion: Examining Unwanted Sex Among Married Young Women in India. *International Family Planning Perspectives, 33*(3), 124-132.

Schwartz, S. J., Unger, J. B., Zamboanga, B. L. & Szapocznik, J. (2010). Rethinking the Concept of Acculturation: Implications for Theory and Research. *American Psychologist, 65*(4), 237-251.

Segal, U. A. (1999). Family Violence: A Focus on India. *Aggression and Violent Behavior, 4*(2), 213-231.

Shabnam, S. & Mukherjee, A. (2013). Spousal Violence and Unintended Pregnancy in India: Evidence from the NFHS-3. *Indian Journal of Research and Reports in Medical Sciences, 3*(3), 1-8.

Shannon-Lewy, C. & Dull, V.T. (2005). The Response of Christian Clergy to Domestic Violence: Help or Hindrance? *Aggression and Violent Behavior, 10*(6), 647-659.
Shirwadkar, S. (2004). Canadian Domestic Violence Policy and Indian Immigrant Women. *Violence Against Women, 10*(8), 860-879.
Singh, R. N. & Unnithan, N. P. (1999). Wife Burning: Cultural Cues for Lethal Violence Against Women Among Asian Indians in the United States. *Violence Against Women, 5*(6), 641-653.
South Asian Public Health Association. (2002). Intimate Partner Violence. A Brown Paper: The Health of South Asians in the United States. Pp. 1-8. http://www.sapha.org/adminkit/uploads/files/BrownPaper-IPV.pdf
Srinivas, M.N. (2003). An Obituary on Caste as a System. *Economic & Political Weekly, 38*(5), 455-459.
Srinivas, M.N. (1955a). The Social Structure of a Mysore Village. *Economic & Political Weekly, 3*(42-43),1051-1056.
Srinivas, M.N. (1955b). The Social System of a Mysore Village. In M. Marriott & A.R. Beals (Ed.) *Village India: Studies in the Little Community.* (pp. 1-35). Chicago, IL: University of Chicago Press.
Strauss, M.A., Hamby, S. L., Boney-McCoy, S., Sugarman, D. B., Finkelhor, D., Moore, D. W. & Runyan, D. K. (1998). Conflict Tactics Scale (CTS). *Child Abuse and Neglect, 22*(4), 249-270.
Terrazas, A. & Batog, C. Migration Policy Institute. (2010). *Indian Immigrants in the United States.* Retrieved from http://www.migrationpolicy.org/article/indian-immigrants-united-states-1
The National Coalition Against Domestic Violence. (2017). *National Coalition Against Domestic Violence*. Retrieved from http://www.ncadv.org
The National Domestic Violence Hotline. (2017). *Contact.* Retrieved from http://www.thehotline.org/contact/
The National Resource Center on Domestic Violence. (2017). *Domestic Violence Resource Center*. Retrieved from http://www.nrcdv.org/dvrn/
The Pennsylvania Coalition Against Domestic Violence. (2017). *Domestic Violence and Victim Resources in Pennsylvania.* Retrieved from http://www.pcadv.org/Find-Help/Victim-Resources-PA/
UNICEF. (2014). *Violence Prevention and Response.* Retrieved from http://unicef.in/Whatwedo/28/Violence-Prevention-and-Response
United Nations. United Nations Office on Drugs and Crime. (2013). Global Study on Homicide 2013. Vienna, Austria.
United States Agency for International Development (2016). All Surveys by Country. Retrieved from http://dhsprogram.com/What-We-Do/survey-search.cfm?pgtype=main&SrvyTp=country
United States Agency for International Development (2016). DHS Questionnaire Modules. Retrieved from http://dhsprogram.com/publications/publication-DHSQM-DHS-Questionnaires-and-Manuals.cfm
United States Agency for International Development, The Demographic and Health Surveys Program. (2017). DHS Questionnaires and Modules, DHS Domestic Violence Module. Rockville, Maryland, USA: ICF International.

United States Census Bureau (2015). *Allegheny County, Demographic and Housing Characteristics*. Retrieved from http://quickfacts.census.gov/qfd/states/42/42003.html
United States Census Bureau (2015). *Allegheny County, Pennsylvania, State and County Quick Facts*. Retrieved from http://www.census.gov/population/race/data/asian.html
United States Census Bureau, 2006, 2010, and 2014 American Community Surveys (ACS), and Campbell J. Gibson and Kay Jung, "Historical Census Statistics on the Foreign-born Population of the United States: 1850-2000" (Working Paper no. 81, U.S. Census Bureau, Washington, DC, February 2006).
United States Census Bureau (2015). *Population* [Data file]. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
United States Census Bureau (2015). *Quick Facts Allegheny County, Pennsylvania* [Data file]. Retrieved from http://www.census.gov/quickfacts/table/RHI425215/42003,00
United States Census Bureau (2010). *Quick Facts Pennsylvania* [Data file]. Retrieved from https://www.census.gov/quickfacts/table/PST045215/42
United States Census Bureau (2013). *The Asian Alone Population in the United States* [Data file]. Retrieved from https://www.census.gov/population/race/data/ppl-aa13.html
United States Census Bureau (2012). *The Asian Population: 2010.* Retrieved from https://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf
United States Department of Homeland Security, U.S. Citizenship and Immigration Services. (2017). *Employment Authorization for Certain H-4 Dependent Spouses*. Retrieved from https://www.uscis.gov/working-united-states/temporary-workers/employment-authorization-certain-h-4-dependent-spouses
United States Department of Homeland Security, U.S. Citizenship and Immigration Services. (2017). *Exchange Visitors.* Retrieved from https://www.uscis.gov/working-united-states/students-and-exchange-visitors/exchange-visitors
United States Department of Homeland Security, U.S. Citizenship and Immigration Services. (2017). *FAQs: Employment Authorization for Certain H-4 Dependent Spouses*. Retrieved from https://www.uscis.gov/working-united-states/temporary-workers/faqs-employment-authorization-certain-h-4-dependent-spouses
United States Department of Homeland Security, U.S. Citizenship and Immigration Services. (2017). *Number of I-918 Petitions for U Nonimmigrant Status (Victims of Certain Criminal Activities and Family Members) by Fiscal Year, Quarter and Case Status 2009-2016.* Retrieved from https://www.uscis.gov/sites/default/files/USCIS/Resources/Reports%20and%20Studies/Immigration%20Forms%20Data/Victims/I918u_visastatistics_fy2016_qtr4.pdf
United States Department of Homeland Security, U.S. Citizenship and Immigration Services. (2017). *Victims of Criminal Activity: U Nonimmigrant Status.* Retrieved from https://www.uscis.gov/humanitarian/victims-human-trafficking-other-crimes/victims-criminal-activity-u-nonimmigrant-status/victims-criminal-activity-u-nonimmigrant-status
United States Department of Homeland Security (2015). *Yearbook of Immigration Statistics 2015.*Retrieved from https://www.dhs.gov/sites/default/files/publications/Yearbook_Immigration_Statistics_2015.pdf
United States Department of State, Bureau of Consular Affairs. (2017). *Student Visa Overview.* Retrieved from https://travel.state.gov/content/visas/en/study-exchange/student.html

United States Department of State, Bureau of Consular Affairs. (2017). *Temporary Worker Visas:Overview.* Retrieved from https://travel.state.gov/content/visas/en/employment/temporary.html

United States Department of State, Bureau of Consular Affairs. (2017*). Visas for Victims of Criminal Activity: U.* Retrieved from https://travel.state.gov/content/visas/en/other/visas-for-victims-of-criminal-activity.html

Vaid, D. (2002). The Caste-Class Association in India: An Empirical Analysis. *Asian Survey, 52*(2), 395-422.

Vanderende, K. E., Yount, K. M., Dynes, M. M. & Sibley, L. M. (2012). Community-Level Correlates of Intimate Partner Violence Against Women Globally: A Systematic Review. *Social Science and Medicine, 75*(7), 1143-1155.

Varma, D., Chandra, P. S., Thomas, T. & Carey, M. P. (2007). Intimate Partner Violence and Sexual Coercion Among Pregnant Women in India: Relationship with Depression and Post-Traumatic Stress Disorder. *Journal of Affective Disorders, 102*(1-3), 227-235.

Vatnar, S. K. & Bjorkly, S. (2010). An Interactional Perspective on the Relationship of Immigration to Intimate Partner Violence in a Representative Sample of Help-Seeking Women. *Journal of Interpersonal Violence, 25*(10), 1815-1835.

Vaughn, M. G., Salas-Wright, C. P., Cooper-Sadlo, S., Maynard, B. R. & Larson, M. (2014). Are Immigrants More Likely Than Native-Born Americans to Perpetrate Intimate Partner Violence? *Journal of Interpersonal Violence, 24*(1), 1-17.

Vinutha, G. (2014). Domestic Violence Against Dalit Women: A Critical Review. *Asian Journal of Multidisciplinary Studies, 2*(10), 1-7.

Watts, C. & Zimmerman, C. (2002). Violence Against Women: Global Scope and Magnitude. *Lancet, 359*(9313), 1232-1237.

Weitzman, A. (2014). Women's and Men's Relative Status and Intimate Partner Violence in India. *Population and Development Review, 40*(1), 55-75.

White, J. W., Yuan, N. P., Cook, S. L. & Abbey, A. (2014). Ethnic Minority Women's Experiences with Intimate Partner Violence: Using Community-Based Participatory Research to Ask the Right Questions. *Sex Roles, 69*(3-4), 226-236.

Women's Center and Shelter of Greater Pittsburgh. (2016). *Our History.* Retrieved from https://www.wcspittsburgh.org/our-history/

Women's Center and Shelter of Greater Pittsburgh. (2016). *What We Do.* Retrieved from https://www.wcspittsburgh.org/what-we-do/

Women's Center and Shelter of Greater Pittsburgh. (2016). *Women's Center and Shelter of Greater Pittsburgh*. Retrieved from https://www.wcspittsburgh.org

World Bank Group. (2015). Methodology for Protecting Women from Violence. Retrieved from http://wbl.worldbank.org/methodology/protecting-women-from-violence.

World Health Organization. United Nations Office on Drugs and Crime and United Nations Development Program. (2014). Global Status Report on Violence Prevention 2014. Geneva, Switzerland.

Yoshihama, M., Blazevski, J. & Bybee, D. (2014). Enculturation and Attitudes Toward Intimate Partner Violence and Gender Roles in an Asian Indian Population: Implications for Community-Based Intervention. *American Journal of Community Psychology, 53*(3-4), 249-260.

Yoshihama, M., Ramakrishnan, A., Hammock, A. C. & Khaliq, M. Intimate Partner Violence Prevention Program in an Asian Immigrant Community: Integrating Theories, Data and Community. (2012). *Violence Against Women, 18*(7), 763-783.

Yoshikawa, K., Agrawal, N. R., Poudel, K. C. & Jimba, M. A Lifetime Experience of Violence and Adverse Reproductive Outcomes: Findings from Population Surveys in India. *Bioscience Trends 6*(3), 115-121.

Yoshioka, M. R., Gilbert, L., El-Bassel, N., Baig-Amin, M. (2003). Social Support and Disclosure of Abuse: Comparing South Asian, African American, and Hispanic Battered Women. *Journal of Family Violence, 18*(3), 171-180.

Zhai, F. & Gao, Q. (2009). Child Maltreatment Among Asian Americans: Characteristics and Explanatory Framework. *Child Maltreatment, 14*(2), 207-224.

Zimet, G.D. , Dahlem, N.W., Zimet, S.G., & Farley, G.K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1), 30-41.

Zong, J. & Batalova, J. Migration Policy Institute. (2016). *Asian Immigrants in the United States.* Retrieved from http://www.migrationpolicy.org/article/asian-immigrants-united-states#Distribution%20by%20Region%20and%20Country%20of%20Origin

Zong, J. & Batalova, J. Migration Policy Institute. (2015). *Indian Immigrants in the United States.* Retrieved from http://www.migrationpolicy.org/article/indian-immigrants-united-states