Relationship Between Intimate Partner Violence and Alcohol Use Among Hispanic Women in the Border Region

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RELATIONSHIP BETWEEN INTIMATE PARTNER VIOLENCE
AND ALCOHOL USE AMONG HISPANIC WOMEN
IN THE BORDER REGION

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RELATIONSHIP BETWEEN INTIMATE PARTNER VIOLENCE AND ALCOHOL USE AMONG HISPANIC WOMEN IN THE BORDER REGION

by

SUJEHY ARREDONDO, B.S.

THESIS

Presented to the Faculty of the Graduate School of The University of Texas at El Paso in Partial Fulfillment of the Requirements for the Degree of MASTER OF PUBLIC HEALTH

Department of Public Health Sciences
THE UNIVERSITY OF TEXAS AT EL PASO
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Abstract

BACKGROUND AND SIGNIFICANCE: Hispanic/Latinos are the largest and fastest growing minority group in the United States and are disproportionately affected by alcohol use and intimate partner violence (IPV). Although a strong relationship between substance use and IPV has been documented in the literature, no studies have explored this relationship among Hispanic women in the El Paso, TX. STUDY AIMS: The aims of this study are to (1) determine the prevalence of alcohol use and intimate partner violence and (2) assess the association between IPV and alcohol use among Hispanic women living in the El Paso Border Region. METHODS: Project VIDA II (Violence, Intimate Relationships, and Drugs among Latinos), was conducted among Latinos in Florida then adapted and replicated in El Paso, TX to assess acculturation, depression, self-esteem, IPV, risky sexual behaviors, and substance abuse. Study participants were recruited from Centro de Salud Familiar La Fe at two sites (La Fe Cultural and Technology Center and La Fe Care Center-STD Clinic) and outside local businesses. Eligible participants for this study were women ages 18 to 55, self-identify as Hispanic, English or Spanish speakers, and indicated they had a partner (n=94). This study was a secondary data analysis to assess the association between demographic characteristics and alcohol use by measures of IPV. Bivariate associations with IPV by partner type were assessed using Chi-Square tests and t-tests, as appropriate. RESULTS: A total of 95 participants from the parent study met the eligibility criteria for this secondary data analysis. Overall, participants mean age was 37 (SD=12.1) and completed, on average, 11 (SD=3.9) years of education. Approximately 60% of participants were born in Mexico and 61.1% indicated they were in a relationship or married. Almost all participants (98.9%) reported being heterosexual. Almost a third of participants (29.5%) reported alcohol use. Based on the eligibility criteria for this analysis, all participants had at least one partner (41.1% had one partner, 17.9% had two partners, and 41.1% had three or more partners) in their lifetime and approximately half were currently living with a partner. Experiences of IPV (either sexual, physical, or verbal) were assessed with their
first, last, and current partners were assessed. Overall, 42 (44.2%) participants ever experienced IPV by at least one of these partners. The proportions of country of birth significantly differed by experiences of IPV with their current partner (U.S. 5.3% vs. 94.7%; Mexico 21% vs. 78.9%; p-value= 0.047), were marginally significantly different for their first partner (p-value= 0.060), but not for their last partner (p-value=0.204). There was no significant association between alcohol use and IPV by any of these partners. We did not detect any other significant differences by IPV for any partner. **DISCUSSION**: Although there was no relationship determined between experiencing IPV by any of their partners and alcohol use, a trend exists. Among those who used alcohol, the rate of IPV decreased as the number of partners increased. In this study, participants were asked about their experiences with IPV by, at most, three of their partners. Unlike this study, future studies should assess experiences of IPV with all past partners and the duration of their relationship with each partner. Also, collecting more specific data on alcohol use (e.g., time frames of drinking) would allow for a more comprehensive understanding its temporal relationship with IPV. Such findings would provide insight to tailor future interventions to prevent IPV and/or provide support and coping services.
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Introduction

Hispanic and Latinos are the largest and fastest growing minority group in the United States and are disproportionately affected by substance abuse, intimate partner violence (IPV) and risks for HIV and other sexually transmitted infections (STIs) (Gonzalez-Guarda, Florom-Smith, & Thomas, 2011). Several studies report higher rates of drug and alcohol abuse when compared to non-Hispanic whites and other minority groups (Caetano, Field, Ramisetty-Mikler, & McGrath, 2005).

Hispanics are also disproportionately affected by substance abuse and intimate partner violence. For example, Hispanics are more likely to report an unmet need for substance abuse treatment and mental health outcomes (SAMHSA, 2007) and report higher rates of severe mental health consequences due to IPV compared to Whites and other minority groups (Caetano, 2003).

Despite these disparities, research describing the cultural and gender-specific experiences of Hispanic men and women with substance abuse and intimate partner violence is lacking. The lack of research in this area is a barrier to the progress in developing interventions to address these problems among the Hispanic population.

Although strong relationships between alcohol use and violence have been identified in the literature, none have explored this relationship among Hispanic women in the El Paso Border Region.
Background and Significance

*Intimate Partner Violence*

Intimate partner violence (IPV) is a serious, preventable public health problem that affects millions of individuals (CDC, 2013). The term intimate partner violence describes physical, sexual, or psychological harm by a current or former partner or spouse (CDC, 2013). This type of violence can occur among heterosexual or same-sex couples and does not require sexual intimacy. IPV can vary in frequency and severity. It occurs on a continuum, ranging from one hit that may or may not impact the victim to chronic, severe battering (Gonzalez-Guarda, Vasquez, Urrutia, Villarruel, & Peragallo, 2011).

Physical violence is the intentional use of physical force with the potential for causing death, disability, injury, or harm. Physical violence includes, but is not limited to scratching, pushing, shoving, throwing, grabbing, biting, choking, shaking, slapping, punching, burning, use of a weapon, and use of restraints or one's body, size, or strength against another person (CDC, 2010a).

Sexual violence is divided into three categories: 1) use of physical force to compel a person to engage in a sexual act against his or her will, whether or not the act is completed; 2) attempted or completed sex act involving a person who is unable to understand the nature or condition of the act, to decline participation, or to communicate unwillingness to engage in the sexual act (e.g., because of illness, disability, or the influence of alcohol or other drugs, or because of intimidation or pressure); and 3) abusive sexual contact (CDC, 2010a).

Psychological and emotional violence involves trauma to the victim caused by acts, threats of acts, or coercive tactics. Psychological and emotional abuse can include, but is not limited to humiliating the victim, controlling what the victim can and cannot do, withholding information from the victim, deliberately doing something to make the victim feel diminished or embarrassed, isolating the victim from friends and family, and denying the victim access to money or other basic resources (CDC, 2010a).
In the United States, 1 in 4 women (24.3%) and 1 in 7 men (13.8%) aged 18 and older have been the victims of severe physical violence by an intimate partner in their lifetime (Black M., 2010). Nearly, 15% of women and 4% of men have been injured as a result of IPV that included rape, physical violence, and/or stalking by an intimate partner in their lifetime (Black M., 2010). In 2010, 1095 females and 241 males in the U.S. were murdered by an intimate partner (CDC, 2012).

Apart from deaths and injuries, physical violence by an intimate partner is associated with a number of adverse health outcomes (CDC, 2010a). Several health conditions associated with intimate partner violence may be a direct result of the physical violence (e.g., bruises, knife wounds, broken bones, traumatic brain injury, or headaches). Other health outcomes that are associated with intimate partner violence include cardiovascular, gastrointestinal, endocrine, and immune system effects through chronic stress or other mechanisms (CDC, 2010a).

Women with a history of IPV are more likely to display behaviors that present further health risks (e.g., substance abuse, alcoholism, suicide attempts) than women without a history of IPV. Also, IPV is associated with a variety of negative health behaviors (Mercy, Krug, Dahlberg, & Zwi, 2003). These studies show that the more severe the violence, the stronger its relationship to negative health behaviors by victims. Examples of these negative health behaviors are engaging in high-risk sexual behavior, using harmful substances, and even unhealthy diet-related behaviors.

A combination of individual, community and societal factors contribute to the risk of becoming a victim or perpetrator of IPV. Some individual risk factors include low-self-esteem, low income, heavy alcohol and drug use, prior history of being physically abused, unemployment, and emotional dependence and insecurity. Community and societal factors include marital-fight and workforce (CDC, 2010a).
In Texas, one out of every five Hispanic women has reported being forced to have sex against their will (Paso del Norte Foundation, 2012). Also, 40% of Hispanic women who reported experiencing at least one form of violence took no action; an indication of underreporting. According to the Texas Council on Family Violence, there were 196,713 violence incidents reported and 111 women killed by their intimate partner (The State of Texas District Attorneys' Domestic Abuse, 2011).

As far as violence in El Paso, in 2008-2009, the Center Against Family Violence Shelter housed: 551 females and 273 males, 525 residents between the ages of 0-17, and 299 residents above the age of 17. (CAFV, 2013). In 2010, 5512 domestic violence cases were presented to El Paso District Attorney’s Office (El Paso County Attorney, 2011).

Locally, there are organizations that provide help for those that have experienced or are experiencing any kind of violence. Center Against Family Violence (CAFV) and Texas Council on Family Violence (TCVF) offer confidential assistance such as shelter and counseling, educational programs and most importantly, hope to families in need (CAFV, 2013; TCVF, 2013).

Alcohol Use

Substance abuse can be defined as a pattern of harmful use of any substance for mood-altering purposes (CDC, 2010b). It can also be defined as the use of illicit drugs or the abuse of prescription or over-the-counter drugs for purposes other than those for which they are indicated or in a manner or in quantities other than directed (Leonard, 2005). Substance abuse either by using alcohol or a drug results in significant problems in one of the following ways: an inability to adequately take care of your responsibilities or fill your role at work, school, or home, the frequent use of substances in situations where it might be dangerous to do so (e.g., driving while under the influence, public intoxication or disorderly conduct), and the continued use of substances even if the substance use is causing considerable problems in your life (CDC, 2010b).
There are approximately 80,000 deaths attributable to excessive alcohol use each year in the United States (CDC, 2012). This makes excessive alcohol use the third leading lifestyle-related cause of death for the nation (CDC, 2012). Excessive alcohol use is responsible for 2.3 million years of potential life lost (YPLL) annually, or an average of about 30 years of potential life lost for each person (CDC, 2012). In 2006, there were more than 1.2 million emergency room visits and 2.7 million physician office visits due to excessive drinking (CDC, 2012). The economic costs of excessive alcohol consumption in 2006 were estimated at $223.5 billion (CDC, 2012).

The use of alcohol is a risk factor for sexual assault, especially among women. Each year, about one in 20 women are sexually assaulted. Research suggests that there is an increase in the risk of rape or sexual assault when both the attacker and victim have used alcohol prior to the attack (CDC, 2012). Excessive alcohol use is commonly involved in sexual assault because of the impaired judgment caused by alcohol that worsens the tendency of some men to mistake a woman’s friendly behavior for sexual interest and misjudge their use of force (CDC, 2012). Also, alcohol use by men increases the chances of engaging in risky sexual activity including unprotected sex, sex with multiple partners, or sex with a partner at risk for sexually transmitted diseases (CDC, 2012).

In El Paso, Texas, alcohol or drug use is present in an estimated 65 to 80 percent of all violence incidents. Families affected by violence typically experience a higher rate of alcohol and or drug use than families not affected by battering (El Paso County, 2012). While the batterer may blame substance use for the battering, it is important to know that alcohol and drugs do not cause violence; however, the violence and abuse may be more severe during use.

El Paso, Texas counts with non-profit organizations such as Aliviane, Inc. and New Beginnings who provide prevention, intervention, and treatment programs to women, men, and youth with alcohol or drug misuse (Aliviane, 2013; New Beginnings, 2011).
**Intimate Partner Violence (IPV) and Alcohol Use**

Researchers indicate that drug abusing Hispanic women often have a history of intimate partner violence and advocate for the inclusion of intimate partner violence interventions as a mean of improving substance abuse treatment (Gonzalez-Guarda, Vasquez, et al., 2011). Research also indicates that the alcohol use among the partners of Hispanic is associated with physical violence and severe psychological aggression (Morrison, 2004). Male alcohol use is also a risk factor for both male and female perpetrated intimate partner violence where the male partner more likely to be drinking regardless of which gender perpetrates the violence (Caetano, Ramisetty-Mikler, Caetano Vaeth, & Harris, 2007). Also, researchers have suggested that alcohol use and intimate partner violence are associated among Hispanics, not necessarily due to a direct relationships between the two, but rather because of social determinants of health (e.g., income), and psychosocial variables (e.g., relationship characteristics) (Leonard, 2005). In general, among women, the literature is limited for Mexican American women in terms of IPV and alcohol use.

Both research and experience suggests that alcohol abuse is one of several important factors that increase the risk of IPV. IPV also increases the risk for alcohol use. Alcohol use may be affected by other risk factors (e.g., violence in the family of origin, belief in the aggression-increasing power of substances) and alcohol use may affect risk factors (e.g., power motivation, cognitive and behavior skills, and the belief that violence against women is appropriate under certain circumstances) (National Online Resource Center on Violence Against Women, 2011). Even though several conclusions have been made between the relationship of substance abuse and intimate partner violence, results are not consistent and the relationship is complex (National Online Resource Center on Violence Against Women, 2011). This is the same for Mexican American women in terms of IPV and alcohol use.

**U.S.-Mexico Border**
The 2,000-mile U.S.-Mexico Border is one of the world’s busiest international boundaries. An estimated 320 million people cross the northbound border legally every year (Weinberg, Hopkins, Gresham, Ginsberg, & Bell, 2004). The U.S.-Mexico Border is a unique region where the geopolitical boundary does not inhibit social and economic interactions among residents on each side of the border. Some border cities, such as El Paso and Ciudad Juarez, are separated by a short distance and serve as one large metropolitan area for the local community (Weinberg et al., 2004).

There are 32 Texas counties that are located within 100 kilometers of the U.S.-Mexico border. These counties, including El Paso County, are among the poorest in the United States and have numerous barriers to health education and health care access (El Paso County, 2012).

**Hispanic Women**

Hispanics and Latinos are terms that often have been used interchangeably for a wide and diverse group of individuals from long-term U.S. citizens to recent immigrants, from undocumented individuals to legal inhabitants from many parts of the world (Markides, 1996). Recent U.S. Census data indicates that there are 45.5 million Hispanics living in the United States, including a diverse range of Americans who identify themselves as Puerto Ricans, Mexicans, Cubans, Dominicans, among others. Studies reported higher rates of intimate partner violence or any type of violence among Hispanics in comparison to non-Hispanic Caucasians, African-Americans, and Asians (Black M., 2010). Only after Mexico, in 2010, the U.S. ranked second in having the largest number of Hispanic-origin population (U.S. Census Bureau News, 2012).

About one-third of Hispanic women have experienced a type of violence at some point in their lives (The State of Texas District Attorneys' Domestic Abuse, 2011). In 2012, 114 Hispanic women in the state of Texas were killed due to domestic violence (The State of Texas District Attorneys' Domestic Abuse, 2011).
Alcohol use among Hispanic women in the Border Region has doubled over the past decade (Paso del Norte Foundation, 2012). Also, it has been said that single women between the ages of 18 to 34 drink more than men and drink less than married women (Paso del Norte Foundation, 2012).

The presence of drinking in a partner-violence incident does not necessarily mean that alcohol is the cause of the violence. People with problems in one area of their lives (e.g., alcohol dependence) are more likely to have problems in other areas of their lives (e.g., IPV) than people without any problems with alcohol (Caetano, R; Cunradi, C.B.; Clark, C.I., and Schafer, J. 2000).

Besides of their drinking and other alcohol related problems, other characteristics such as income level, unemployment, violent victimization as a child, and observing threats or actual violence between parents can contribute to the occurrence of IPV. These can act individually or in combination to increase the risk of IPV (Caetano, R; Cunradi, C.B.; Clark, C.I., and Schafer, J. 2000).

In addition to alcohol use, Hispanic women who experience IPV as victims are at risk for other health disparities such as HIV/AIDS. According to Women's Health, women account for about 1 in 4 new HIV/AIDS cases in the United States and Hispanic women are four times more likely to have HIV/AIDS than non-Hispanic white women (U.S. Department of Health and Human Services, 2012).

Not only are women who are victims of IPV experienced the emotional, mental, and physical consequences, specifically, Hispanic women, face a higher number of documented barriers in terms of seeking services and support compared to their non-Hispanic counterparts (Markides, 1996). Lack of insurance and other cultural factors are examples of reported barriers to health services. Having no insurance or coming from a low socioeconomic family increases the risks for high rates of other diseases because they don’t have the appropriate resources to do so (Markides, 1996). Language is a significant cultural characteristic that prevents Spanish only speaking women from seeking health services; the inability to speak fluently in English could be a significant factor making it difficult for many of the
residents to communicate effectively with health care providers and not wanting to seek help (Louie, 2012). Although language can be a barrier for women in the United States, it may not be the case for women living along the El Paso border Region where most people are of Mexican origin and speak Spanish.

Healthy People 2020

Healthy People 2020 (HP 2020) provides science-based, 10-year national objectives for improving the health of all Americans. Healthy People has established benchmarks and monitored progress over time in order to: encourage collaborations across communities and sectors, empower individuals toward making informed health decisions and measure the impact of prevention activities. The following is a description of Healthy People topics and how these relate with this study: Injury and Violence Prevention, Substance Abuse, and Social Determinants of Health (HealthyPeople2020, 2013a).

Injury and Violence Prevention

The overall goal for Injury and Violence Prevention is to prevent unintentional injuries and violence, and reduce their consequences. Injuries and violence are widespread in society. Both unintentional injuries and those caused by acts of violence are among the top 15 killers for Americans of all ages (HealthyPeople2020, 2013b).

For reducing physical assaults, Healthy People 2020 addresses reducing violence by current and former intimate partners (IPV-33) in terms of physical, sexual, and psychological violence. Another objective (IPV-40) addresses reducing sexual violence by reducing rape or attempted rape, abusive sexual contact other than rape or attempted rape, and non-contact sexual abuse. These objectives relate to this study because of its focus on IPV, the primary outcome of this study.

Substance Abuse
Substance abuse is important because it has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. The main objective of HP 2020 is to reduce substance abuse to protect the health, safety, and quality of life for all (HealthyPeople2020, 2013d). This is relevant to the study because alcohol abuse not only affects the individual itself, but everyone who surrounds him/her. Alcohol abuse can also lead to serious consequences on a person's life, leading to physical, mental and public health problems.

Social Determinants of Health

The overall goal for Social Determinants of Health is to create social and physical environments that promote good health for all. Its main key areas include economic stability, education, social and community context, health and health care, and neighborhood and built environment. Social determinants of health reflect social factors and the physical conditions in the environment in which are born, live, learn, play, work, and age. These social determinants impact a wide range of health, functioning and quality of life outcomes. Some of these determinants are social norms and attitudes, exposure to crime, violence, and social disorder (HealthyPeople2020, 2013c). This is relevant to the study because the range of personal, social, economic, and environmental factors influence one’s health status; poor health outcomes are often made worse by the interactions between individuals and their social and physical environment.
Goals and Objectives

The goal of this study is to learn about experiences with alcohol use and intimate partner violence to improve the lives of Hispanic women living on the U.S.-Mexico border region.

The objective of this study is to document Hispanic woman’s experiences with respect to alcohol use and intimate partner violence to provide information for the future development or expansion of appropriate services needed or lacking in the El Paso and Border Region.
Study Aims and Hypothesis

The aims of this study are to:

1. determine the prevalence of alcohol use and intimate partner violence among Hispanic women living in the El Paso border region.

2. assess the association between intimate partner violence and alcohol use.

The hypothesis of this study is to determine if the proportion of women who experienced IPV is higher among those who report alcohol use compared to those who do not. This hypothesis will be repeated for past and current partners.
Methods and Materials

Parent Study

Project VIDA (Violence, Intimate relationships, and Drugs among Latinos), conducted by Drs. Provencio-Vasquez, Gonzalez-Guarda, and De Santis (2011) was the foundation of this current study. The study assessed the relationship between acculturation, depression, self-esteem, and substance abuse among a sample of Hispanic men in South Florida, including both heterosexual men and men who have sex with men. Their initial study included men from different Hispanic subgroups and a majority were of Cuban descent. They found that the majority of participants were more acculturated to the Hispanic culture than the U.S. culture. They also reported lower levels of education and income and higher levels of depression and substance abuse compared to the general population in Florida (Gonzalez-Guarda, Vasquez, et al., 2011).

This study was adapted and replicated in El Paso, Texas as Project VIDA II with similar goals and objectives. The main difference from the original study was the geographic location and focus on the Mexican American Hispanic subgroup. The specific aims were to: 1) describe the individual experience of community dwelling Hispanic women, heterosexual men, and men who have sex with other men (MSM) with respect to substance abuse, violence, and intimate/sexual relationships; 2) investigate the frequency of outcome variables (e.g., substance abuse, violence perpetration and victimization, risk for HIV/AIDS and other STD’s) and other culture-related factors (e.g., acculturation, culture-related stress, familism); 3) use these findings to inform the development and implementation of future intervention to reduce HIV/AIDS risk behaviors among Hispanic women, heterosexual males, and men who have sex with other men (MSM).

Study Participants
To be eligible, participants had to be between the ages 18 and 55, self-identify as Hispanic, and be an English or Spanish speaker.

**Sample Size**

Recruitment continued until 100 men (50 heterosexual men and 50 MSM) and 100 women were interviewed.

**Study Design**

Project VIDA was a cross-sectional study designed to describe experiences with substance abuse, violence, and risky sexual behaviors in a sample of Hispanic men and women living in El Paso, Texas.

**Measures**

Project VIDA II explored the experiences of Hispanic men and women in terms of violence, sexual risk behaviors, and substance abuse as well as health outcomes (e.g., HIV/AIDS, and depression) and culture related factors (e.g., acculturation).

Gender, age, ethnicity, date of birth, and preferred language (English or Spanish) were the demographics used to verify if the participant was eligible for the study in a Candidate Tracking Form (See Appendix B). These measures were also used in the secondary data analysis.

Substance abuse questions were assessed using the CAGE (Cut, Annoyed, Guilt, Eye opener) Scale (Ewing, 1984) This is a four-question test that diagnoses alcohol problems over a lifetime. Also, the TWEAK (Tolerance, Worried, Eye opener, Amnesia, K/cut down) Scale was utilized (Russel, 1996). This is a five-item test developed originally to screen for risk drinking. A combination of scales, CAGE
and TWEAK, was utilized to assess the alcohol usage patterns of the participants. Measures from the combined scale will be used in this study.

Intimate partner violence was assessed by several instruments differentiating situations in which participants were victims or perpetrators. Violence instruments assessed exposure to violence in terms of physical, sexual, and verbal/psychological abuse of those participants before and after the age of 18 (adults). A psychological violence victimization scale (Tolman, 1989) was used to further explore verbal/psychological abuse among Hispanics. This is 15-item tools that assess psychological abuse within intimate relationships within the past year. This scale was also used on this study.

Data Collection

In the parent study, the Candidate Tracking form was used to verify if participant was eligible for the study. If the participant was eligible for the study, the research assistant then explained the consent form, emphasized confidentiality, and answered any questions that participants may have had. Once consent was obtained from the participant, the research assistant began the face-to-face interview. Individual face-to-face structured interviews were used to assess the individual experiences that participants have with intimate partner violence and substance abuse. The research assistant read the script and questions contained in the questionnaire and recorded participants’ responses. The interview duration was approximately 1.5-2 hours. Upon completion of the interview, the participant received a cash incentive of $30, which served as compensation for their time and travel.

Responses collected from the interviews were recorded using the Survey Gold questionnaire system, a Windows web-based used to create and conduct surveys in-person, on paper, or via kiosk (Golden Hills Software, 1998-2013). This system was programmed for use during data collection, excluding any personal identifying information. All consents and receipts that were collected were
submitted to the study coordinator within one working day. These documents are stored in locked cabinets to protect the confidentiality of the participants.

Recruitment

Study participants were recruited from Centro de Salud Familiar La Fe at two sites: La Fe Cultural and Technology Center and La Fe Care Center-STD Clinic, both in El Paso, Texas. Participants were also recruited outside local businesses in El Paso County. Time was spent in the different recruitment locations informing women about the study and providing them with flyers containing additional information. Candidates were encouraged to tell family and friends about the study and referred them to participate.

IRB Approval

Approval from the University of Texas at El Paso (UTEP IRB) was obtained on September 6, 2011 under study title “[231116-2] Project VIDA II: Violence, Intimate Relationships and Drugs”. The UTEP IRB Approval Letter is provided in the Appendix (See Appendix D).

Thesis Study

Study Participants

Female participants of the parent study were used for this analysis. As described in the Parent Study, participants were recruited from Centro de Salud Familiar La Fe, including the following sites: La Fe Cultural and Technology Center and La Fe Care Center. Study participants were also recruited outside local businesses in El Paso County. Hence, the sample population for this study includes women between the ages 18 and 55, self-identify as Hispanic, who speak English or Spanish, and indicated they had a partner.
Sample Size

A total of 100 Hispanic adult females were recruited in the parent study, but only 95 served as the sample for this proposed study. Male participants were excluded in this analysis.

Study Design

This study followed a cross-sectional study design as in the parent study.

Measures

This study focused on the following measures collected in the parent study: demographics, alcohol use, and intimate partner violence.

Demographic Characteristics

Demographic characteristic questions were used to identify the study of quantifiable subsets within Hispanic females. Candidate Tracking Form was used to collect the measures for gender, age, ethnicity, date of birth, and preferred language (English or Spanish) used to verify eligibility and to subset the dataset to the appropriate participants (Refer to Appendix B). In addition, these demographic characteristics were assessed: relationship status (single, in a relationship, not legally married, married, divorced, separated, or widowed), sexual orientation (heterosexual, homosexual, bisexual, or prefer not to answer), education level (years), currently living with partner (yes, no), and participant alcohol use (yes, no).

Alcohol Use

Participants were asked if they drink alcohol (true, false).

Intimate Partner Violence
Participants were asked about their history of intimate partner violence (IPV). Questions assessed exposure to violence in terms of physical, sexual, and verbal/psychological abuse using the Intimate Partner Violence among Partners-Partner Table (Peragallo, 1998, Peragallo & Gonzalez, 2006).

Sexual IPV was assessed by asking participants if they were ever forced to have sex/been sexually abused in their relationship (yes, no). Physical IPV was assessed by asking participants if they were ever hit, hurt, or physically abused in any way by their partner or anyone else (yes, no). Psychological IPV was assessed by asking participants if they were ever screamed at or yelled at or psychologically abused by their partner in a way that it made them feel scared (yes, no).

Intimate partner violence was assessed for current and past partners. Partner 1 refers to the participants’ first partner, Partner 2 refers to their second partner, and Partner 3 refers to their last or current partner. If the participant had only 2 partners in their lifetime, Partner 2 refers to the most current partner/last partner and skips questions for Partner 3. If the participant had only one partner, their responses for partner 1 would refer to first or current partner and they would skip questions for Partner 2 and 3. Those without a partner skipped all the questions on IPV and will be excluded from this analysis.

### Table 1.1 IPV Questions for Partners 1, 2, and 3

<table>
<thead>
<tr>
<th>Number of Lifetime Partners</th>
<th>Partner 1</th>
<th>Partner 2</th>
<th>Partner 3</th>
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<td>First</td>
<td>Current/Last</td>
<td>-----</td>
</tr>
<tr>
<td>&gt;2</td>
<td>First</td>
<td>Previous</td>
<td>Current/Last</td>
</tr>
</tbody>
</table>
Data Collection

All data was for this study was collected in the parent study. No additional data was collected for this analysis. Measures for gender, age, date of birth, and preferred language (Spanish or English) were the demographic characteristics used to verify if participant was eligible for this study. The data was subsetted to those eligible for this study. All data managing, cleaning, and analysis was conducted with SPSS, a software package used for statistical analysis (SPSS, 2009).

Recruitment

Recruitment strategies are described in the Parent Study. No additional recruitment was conducted for this secondary data analysis.

Statistical Analysis

Data was transferred from Survey Gold to SPSS where several variables were recoded and created. A categorical variable was created from a continuous variable for the number of lifetime partners. Their responses were recoded into 0, 1, 2 or 3 and more partners. This variable was created given that the IPV measures asked for partners 1, 2 and 3 as defined in the measures section. Marital status was created by merging levels into two; single/divorced/separated/widowed and relationship/married. Alcohol use (yes/no) was recoded from a categorical variable that measured if participant does not drink (true/false). Responses for IPV variables with the option “refuse to answer” were treated as missing and were combined with the “No” responses.

Univariate statistics included sample size (n), mean, standard deviation (SD) for all continuous variables and n, frequencies, and percents for all categorical variables to describe the sample overall and by IPV status for past and current partners.
Bivariate associations were assessed for all variables, including alcohol, by IPV status for each partner, the binary outcome. Equivalent non-parametric tests were used as necessary. For all continuous variables: Mann-Whitney Test (MW) was used for variables that were not normally distributed, otherwise p-value for a Two Sample T-Test (T) was reported. For all categorical variables: Fisher Exact Test (F) was reported for a (2x2) table or Likelihood Ratio Test (L) was reported for a (2xN) table if expected cell count was less than 5 for at least one cell, otherwise p-value for a Pearson Chi-Square Test (P) was reported. Significant associations were determined at $\alpha = 0.05$ and marginally associations were determined at $\alpha = 0.10$.

**IRB Approval**

The parent study was approved in September 6, 2011 by the University of Texas at El Paso Institutional Review Board (IRB). The IRB reference number was 231116-2 under study title: “Project VIDA II: Violence, Intimate Relationships and Drugs among Latinos.” This study was closed on April 26, 2012. For the current secondary data analysis, I applied for exemption from the UTEP Institutional Review Board using the “Secondary Use of Pre-Existing Data” form. The request for exemption was approved on December 13, 2013 under study title: “Relationship between Intimate Partner Violence and Alcohol Use among Hispanic Women in the Border Region” and IRB reference # 487346-1.
Results

Univariate Analysis

Univariate analysis results are presented in Table 1.2 (See Appendix F). There were a total of 95 participants from the parent study who met the eligibility criteria for this secondary data analysis. Overall participants had mean age of 37 (SD=12.1) and, on average 11 (SD=3.9) years of education completed. About 60% of participants were born in Mexico, close to a third were born in the U.S. (37.9%), and the rest were born somewhere else (2.1%). Out of the 95 participants, 58 (61.1%) indicated they were in a relationship or married and the rest indicated they were single, divorced, separated, or widowed. Approximately half of participants (53.7%) were currently living with a partner. Based on the eligibility criteria for this analysis, all participants had at least one partner; (41.1% had one partner, 17.9% had two partners, and 41.1% had three or more partners) in their lifetime. Almost all participants (98.9%) reported being heterosexual. Almost a third of participants (29.5%) reported use of alcohol.

Experienced IPV with Partners 1, 2, or 3

Partners 1, 2, or 3 refer to the partners the interview questions were referring to. Overall, 42 (44.2%) participants ever experienced IPV, sexually, physically, or verbally, with the partners identified as 1, 2, or 3.

Experienced IPV with Partner 1

Overall 36.8% ever experienced IPV with their first partner. This was determined by whether participant indicated ever been forced to have sex or had been sexually abused (5.3%), ever been hit or hurt or physically abused (10.5%), ever been hit or hurt or physically abused by their partner in any way (15.8%), or ever been screamed or yelled at or psychologically abused by their partner in a way that made them feel scared (31.6%).

Experienced IPV with Partner 2
Overall 23.2% ever experienced IPV with their first partner. This was determined by whether participant indicated ever been forced to have sex or had been sexually abused (8.9%), ever been hit or hurt or physically abused (7.1%), ever been hit or hurt or physically abused by their partner in any way (8.9%), or ever been screamed or yelled at or psychologically abused by their partner in a way that made them feel scared (17.9).

**Experienced IPV with Partner 3**

Overall 15.4% ever experienced IPV with their first partner. This was determined by whether participant indicated ever been forced to have sex or had been sexually abused (2.6%), ever been hit or hurt or physically abused (5.1%), ever been hit or hurt or physically abused by their partner in any way (5.1%), or ever been screamed or yelled at or psychologically abused by their partner in a way that made them feel scared (12.8%).

**Bivariate Analysis**

Bivariate analysis and associations between demographics and IPV by partner type are included in Table 1.3 (See Appendix G).

Mean age marginally differed for those who experienced intimate partner violence with Partner 1 (M=40.97, SD=11.88) compared to those who did not (M=34.80, SD=11.81) (p-value =0.016). We did not find a statistically significant difference in mean age by IPV for Partner 2 (p-value=0.695) and Partner 3 (p-value=0.927).

We did not find a statistically significant difference in mean years of education difference by IPV for Partners 1 (p-value=0.119), 2 (p-value=0.898), and 3 (p-value=0.167).

The proportions for country of birth by experience of IPV was a significant different for Partner 3 (U.S. 5.3% vs. 94.7%; Mexico 21% vs. 78.9%; and Other 0% vs. 1%) (p-value= 0.047). There was a marginally significant difference by IPV with Partner 1 (p-value= 0.060) but not for Partner 2 (p-value=0.204).
There was no significant difference in the proportion of those participants that are single/divorced/separated/widowed, the proportion of those currently living with their partner, or median number of lifetime partners by IPV by any partner (p-value>0.05).

The proportion of IPV by sexual orientation did not differ for Partner 1 (p-value\(\geq 0.999\)), Partner 2 (p-value=0.232), and Partner 3 (p-value=0.154). However, the majority of participants were heterosexuals. Only one person was homosexual as seen in Table 1.

There was no significant difference in the proportion of experiencing IPV by alcohol use vs. not for Partner 1 (39.3\% vs. 35.8\%; p-value=0.750), Partner 2 (28.6\% vs. 20.0\%; p-value =0.523), and Partner 3 (17.6\% vs. 13.6\%; p-value \(\geq 0.999\)). Among those who use alcohol, the rate of IPV decreased as the number of partners increased.
Discussion

As far as the results, we found a significant difference in mean age with the first partner that was the group with the largest sample size. This significant finding may merely be an indication that the longer you live the greater the chance of experiencing IPV. It is important to note that all participants answered questions for Partner 1 (n=95 participants). Of those, 39 had exactly one lifetime partner and skipped the questions on IPV for Partner 2 and 3. Only those with 3 or more lifetime partners (n=39 participants) answered all questions for all partners. Hence, the decreasing sample size may have affected the possibility of detecting other significant differences (e.g., study was under powered).

We did not find difference in education difference by IPV for Partners 1, 2, and 3, but there was a similar distribution of percentages for all partners.

There was a significant difference between country of birth and by partners. For Partner 1 and 2, the proportions of place of birth did not differ. There was one participant who reported they were born in another country (not U.S. or Mexico). However, this person might not have influenced the other values since there was a similar distribution of percentages by partners.

As mentioned in the results, there was no significant difference in the proportion of experiencing IPV by alcohol use for all three partners. The majority of women interviewed had one or two lifetime partners and had never used alcohol. However, among those who use alcohol, the rate of IPV decreased as the number of partners increased (39.3% for Partner 1; 28.6% for Partner 2; and 17.6% for Partner 3).

There was no significant difference in the percent of those currently living with their partner or of those participants that are single/divorced/separated/widowed or in a relationship/married who experienced IPV by Partners 1, 2, and 3. This can be an indication that whether or not they have a
partner or those that have experienced it are less likely to live with someone after that. However, we cannot determine a causal relationship.

Unlike this study, future studies should include more detail on other partners (e.g., duration of the relationship, not limiting to only three partners) and IPV experiences (e.g., duration of the occurrences) in order to build evidence to tailor prevention efforts and interventions in the area of IPV and/or to provide proper services for support and coping.

Strengths

The main strength of the study is the study population, which is primarily Mexican American women living in the El Paso Border. This is strength because past studies that focus on Hispanic women, do not include large samples of Mexican-Americans. The needs and IPV experiences in this population are not documented.

LIMITATIONS

Methodological

In this study, participants were primarily women of Mexican descent living El Paso, TX and attending clinics or included other women in this network. This limits the generalizability of findings to all Hispanic women in El Paso, TX. Not all women victims of IPV seek care of any kind; hence our samples of victims of IPV may not be representative of all IPV victims in the region. Even though the sample for this analysis was small, its findings inform that El Paso women are experiencing IPV and services need to be tailored and adapted. Despite efforts to program skip patterns into the questionnaire, those without partners were asked several questions on intimate partner violence. We excluded those responses from the analysis. Participants were not assessed with how many partners they have experienced IPV. They were only asked up to three partners, but some might have experienced IPV with
their current fourth or fifth partner and not reported in the analysis. Participants were asked about their drinking use; however some participants were under Texas legal drinking age of 21 years old and may have felt compelled to lie or felt the need to say they did not drink because of the underage drinking being illegal. This could have led to an underreporting for alcohol use.

Analytical

The first analytical limitation was a small sample size, particularly for the bivariate analysis for Partners 2 (n=56) and 3 (n= 39). The second analytical limitation for this study includes the assessment of current alcohol consumption, not including past use. Hence, we cannot assess or estimate temporal associations between alcohol use and IPV events. Also, the analysis was not adjusted for age, a known confounder for alcohol use. Stratifying by age may have potentially allowed us to see patterns; however the small sample size did not allow us to do so. Adjusting the analysis by age may have allowed us to identify other significant relationships. Lastly, there were missing values on Spanish interviews. During cleaning process, we noticed that the data was missing for the questionnaires conducted in Spanish when merged with the English database (e.g., coding was not consistent and data was lost).
**MPH Competencies**

**Biostatistics** is the development and application of statistical reasoning and methods in addressing, analyzing and solving problems in public health; health care; and biomedical, clinical and population-based research. I applied biostatistics to analyze, summarize and interpret the results that apply to my study. Towards the end of this study I gained skills in data collection and data analysis that helped prepare me for the near future in my profession. Also, I applied descriptive techniques commonly used to summarize public health data and apply informatics techniques with vital statistics and public health records in the description of public health characteristics and in public health research and evaluation.

**Epidemiology** is the study of patterns of disease and injury in human populations and the application of this study to the control health problems. I was able to describe the magnitude problem of Hispanic women experiencing IPV along the El Paso Border Region.

**Social and behavioral sciences** in public health address the behavioral, social, and cultural factors related to individual and population health and health disparities over life course. Research and practice in this area contributes to the development, administrative and evaluation of programs and policies in public health and health services to promote and sustain healthy environments and healthy lives for individuals and populations. I increased my knowledge that will in turn allow me to plan and implement programs targeted to vulnerable populations such as women who have or are experiencing IPV.

**Hispanic / Border Health Concentration Specific Core Competency**: At the end of this study, I was able to act as an effective resource person for Hispanic and border residents, organizations and communities and utilize basic concepts in skills involved to facilitate culturally/linguistically appropriate
Hispanic/border community engagement and empowerment. I acquired skills that allowed me to act as a mentor and advocate for vulnerable populations by taking into account cultural competencies.
References


Appendix A: Questionnaire (selected sections)

DEMOGRAPHICS

Project Vida Demographic Intake Form

1. Please tell me where you were born (country of birth)
   (Select only one.)
   - United States
   - Argentina
   - Bolivia
   - Brazil
   - Chile
   - Columbia
   - Costa Rica
   - Cuba
   - Dominican Republic
   - Ecuador
   - El Salvador
   - Guatemala
   - Honduras
   - Mexico
   - Nicaragua
   - Panama
   - Paraguay
   - Peru
   - Puerto Rico
   - Uruguay
   - Venezuela
   - Other Country:

3. What is your gender?
   (Select only one.)
   - Male
   - Female

4. What is your current relationship status?
   (Select only one.)
   - single
   - in a relationship, not legally married
   - married
   - divorced
   - separated
   - widowed
5. Are you currently living with your spouse or partner?  
(Select only one.)
☐ Yes
☐ No
☐ Not Applicable

6. Your current partner is  
(Select only one.)
☐ Male
☐ Female
☐ Not Applicable

7. How do you identify yourself?  
(Select only one.)
☐ Heterosexual
☐ Homosexual
☐ Bisexual
☐ Prefer not to answer

28. How many years of education have you completed?  
(Provide one response only.)

TWEAK

Participant does not drink  
(Select only one.)
☐ True, the participant does not drink. (Skip to Q. 257)
☐ False, the participant does drink.

IPV Questions

Partner 1

Partner Table

294. How many different male/female sexual partners have you had, in your lifetime?  
(Provide one response only.)

334. Were you ever forced to have sex/been sexually abused in this relationship? Partner 1  
(Select only one.)
☐ Yes
☐ No
☐ Refused
336. **Were you ever hit or hurt/physically abused in any way in this relationship? Partner 1**  
(Select only one.)  
- Yes  
- No  
- Refused

337. **Did your partner ever hit or hurt/physically abuse you in any way in this relationship? Partner 1**  
(Select only one.)  
- Yes  
- No  
- Refused

339. **Did your partner ever scream or yell at you/psychologically abuse you in a way that it made you feel scared? Partner 1**  
(Select only one.)  
- Yes  
- No  
- Refused

**Partner 2**

378. **Were you ever forced to have sex/been sexually abused in this relationship? Partner 2**  
(Select only one.)  
- Yes  
- No  
- Refused

380. **Were you ever hit or hurt/physically abused in any way in this relationship? Partner 2**  
(Select only one.)  
- Yes  
- No  
- Refused

381. **Did your partner ever hit or hurt/physically abuse you in any way in this relationship? Partner 2**  
(Select only one.)  
- Yes  
- No  
- Refused

383. **Did your partner ever scream or yell at you/psychologically abuse you in a way that it made you feel scared? Partner 2**  
(Select only one.)  
- Yes  
- No  
- Refused
422. Were you ever forced to have sex/been sexually abused in this relationship? Partner 3
(Select only one.)
☐ Yes
☐ No
☐ Refused

424. Were you ever hit or hurt/physically abused in any way in this relationship? Partner 3
(Select only one.)
☐ Yes
☐ No
☐ Refused

425. Did your partner ever hit or hurt/physically abuse you in any way in this relationship? Partner 3
(Select only one.)
☐ Yes
☐ No
☐ Refused

427. Did your partner ever scream or yell at you/ psychologically abuse you in a way that it made you feel scared? Partner 3
(Select only one.)
☐ Yes
☐ No
☐ Refused
Appendix B: Candidate Tracking Form

Candidate Number: _______________  Candidate Initials _______________

The following questions are asked of the candidate at screening:

1. What is your preferred language?  Or  Cual es su lenguaje de preferencia?  
   (If eligible to participate, consent should be done in preferred language)
   English _____  Spanish / Espanol _____  Both / Ambos ______

Candidate Demographics

2. Do you consider yourself to be Hispanic/Latino?  Usted se considera
   Hispano(a)/Latino(a)
   Si _____  No _____  (Interviewer tells participant: “I’m sorry, but you do not qualify for this study.”  “Lo siento pero usted no califica para este estudio”.  End form).

3. How old are you?  Que edad tiene usted? ______________

4. What is your date of birth?  Cual es su fecha de nacimiento?
   ___/___/____(mm/dd/yyyy)

5. What is your gender?  Cual es su sexo?
   Male/ Masculino _____  Female/ Femenina _____

6. How did you learn about the study?  Como supo de este estudio?
   Flyer/ Announcement  Panfletos/ Avisos ________
   Friend/ Relative  Amigo/ Familiar ________________
   Study Staff member  Miembros del Equipo del estudio ________
   Other/ Otro ________________
Appendix C: Flyers (English and Spanish)

The University of Texas at El Paso
School of Nursing & the HHDRC

Be part of a research study for Hispanic Women from anywhere in the Americas...
We are currently recruiting Hispanic Women between the ages of 18 & 55 for this Study.

The study consists of:
- An interview where you will be asked to answer questions relating to your individual experiences with drugs, violence, and intimate relationships which will last approximately one and a half hours.

You will be PAID for your participation
If interested, please call (915) 747-8324 or (915) 747-8584 for more information.

Principal Investigators: Dr. Elias Proveció-Vásquez y Dra. Gloria López-McKee
University of Texas at El Paso School of Nursing and the Hispanic Health Disparities Research Center, 500 W. University, El Paso, Texas 79968
La Universidad de Texas en El Paso
Facultad de Enfermería y el HHDRC

Le invitamos a participar en una investigación para Mujeres Hispánas de cualquier país de las Américas

En este momento estamos reclutando a Mujeres Hispánas entre los 18 y 55 años de edad para el estudio.

El estudio consiste en:
- Una entrevista en la que usted tendrá la oportunidad de contestar preguntas sobre sus experiencias personales con las drogas, la violencia, y las relaciones íntimas. Esta entrevista se tomará aproximadamente una hora y media en completar.

Le PAGAREMOS por su participación.

Si se interesa, favor de llamar al: (915) 747-8584 o (915) 747-8324 para más información.

Investigadores Principales: Dr. Ellas Proveció-Vázquez y Dra. Gloria López-Mckee
La Universidad de Texas en El Paso y el HHDRC
500 W. University, El Paso, Texas 79968
Appendix D: UTEP IRB Approval Letter for Parent Study

THE UNIVERSITY OF TEXAS AT EL PASO
Office of the Vice President for Research and Sponsored Projects
Institutional Review Board
El Paso, Texas 79968-0187
phone: 915 747-8841 fax: 915 747-5931
FWA No: 00001224

DATE: September 6, 2011
TO: Gloria McKee-Lopez, Ph.D.
FROM: University of Texas at El Paso IRB
STUDY TITLE: [231116-2] Project VIDA II: Violence, Intimate Relationships and Drugs Among Latinos.
IRB REFERENCE #: 231116-2
SUBMISSION TYPE: Amendment/Modification
ACTION: APPROVED
APPROVAL DATE: September 6, 2011
EXPIRATION DATE: April 26, 2012
REVIEW TYPE: Expedited Review

Thank you for your submission of Amendment/Modification materials for this research study. University of Texas at El Paso IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This study has received Expedited Review based on the applicable federal regulation.

The following revised documents were submitted for review and approved:

- Revised Demographic Intake Survey (English & Spanish)
- Revised Sexual History Questionnaire (English & Spanish)
- IRB Training for new research assistant

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.
Please note that all research records must be retained for a minimum of three years after termination of the project.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

If you have any questions, please contact Athena Fester at (915) 747-8841 or afester@utep.edu. Please include your study title and reference number in all correspondence with this office.

cc:
Appendix E: UTEP IRB Approval Letter for Thesis Study

THE UNIVERSITY OF TEXAS AT EL PASO
Office of the Vice President for Research and Sponsored Projects
Institutional Review Board
El Paso, Texas 79968-0387
phone: 915 747-8841   fax: 915 747-5931
FWA No: 00001224

DATE: December 13, 2013
TO: Sujehy Arredondo, BS
FROM: University of Texas at El Paso IRB
STUDY TITLE: [487346-1] Relationship between Intimate Partner and Alcohol Use among Hispanic Women in the Border Region
IRB REFERENCE #: 487346-1
SUBMISSION TYPE: New Project
ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: December 13, 2013

Thank you for your submission of New Project materials for this research study. University of Texas at El Paso IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulation [45 CFR 46.101(b)(4)]:

• Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects

Exempt protocols do not need to be renewed. Please note that it is the Principal Investigator’s responsibility to resubmit the proposal for review if there are any modifications made to the originally submitted proposal. This review is required in order to determine if “Exemption” status remains.

We will put a copy of this correspondence on file in our office.

If you have any questions, please contact Christina Ramirez at (915) 747-7693 or cramirez22@utep.edu. Please include your study title and reference number in all correspondence with this office.

cc:
Appendix F: Table 1.2 Univariate Statistics for Demographic Characteristics, Alcohol Use, and Intimate Partner Violence among Female Participants with Partners in VIDA II Study (N=95)

### Demographic Characteristics (N=95)

<table>
<thead>
<tr>
<th></th>
<th>Freq (%)</th>
<th>Mean (SD)</th>
<th>Median (Q1, Q3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean Age (years) (SD)</strong></td>
<td>37.1 (12.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mean Years of Education Completed (SD)</strong></td>
<td>11 (3.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Place of Birth</strong></td>
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<td></td>
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</tr>
<tr>
<td>U.S.</td>
<td>36 (37.9%)</td>
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<tr>
<td>Mexico</td>
<td>57 (60%)</td>
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<tr>
<td>Other</td>
<td>2 (2.1%)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Single/divorced/separated/widowed</td>
<td>37 (38.9%)</td>
<td></td>
<td></td>
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<tr>
<td>Relationship married</td>
<td>58 (61.1%)</td>
<td></td>
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</tr>
<tr>
<td><strong>Currently living with partner</strong></td>
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<tr>
<td>Yes</td>
<td>51 (53.7%)</td>
<td></td>
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</tr>
<tr>
<td>No/not applicable</td>
<td>44 (46.3%)</td>
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### Demographic Characteristics (N=95)

<table>
<thead>
<tr>
<th></th>
<th>Freq (%)</th>
<th>Mean (SD)</th>
<th>Median (Q1, Q3)</th>
</tr>
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<tbody>
<tr>
<td><strong>Median Number of Lifetime Partners (Q1, Q3)</strong></td>
<td>2 (1.0, 4.0)</td>
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<tr>
<td><strong>Number of Lifetime Partners</strong></td>
<td></td>
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</tr>
<tr>
<td>1 partner</td>
<td>39 (41.1%)</td>
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<tr>
<td>2 partners</td>
<td>17 (17.9%)</td>
<td></td>
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<tr>
<td>3 or more partners</td>
<td>39 (41.1%)</td>
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<tr>
<td><strong>Sexual Orientation</strong></td>
<td></td>
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</tr>
<tr>
<td>Heterosexual</td>
<td>94 (98.9%)</td>
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<td></td>
</tr>
<tr>
<td>Homosexual</td>
<td>1 (1.1%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alcohol Use</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>28 (29.5%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>67 (70.5%)</td>
<td></td>
<td></td>
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<tr>
<td><strong>IPV (N=95)</strong></td>
<td></td>
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</tr>
<tr>
<td>Ever experienced IPV with Partner 1, 2, or 3</td>
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</tr>
<tr>
<td>Yes</td>
<td>42 (44.2%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>33 (35.8%)</td>
<td></td>
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</table>
### FIRST PARTNER (N=95)

<table>
<thead>
<tr>
<th>Event</th>
<th>Freq (%)</th>
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<tbody>
<tr>
<td>Ever experienced IPV</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>35 (36.8%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>60 (63.2%)</td>
</tr>
<tr>
<td>Ever forced to have sex/been sexually abused</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5 (5.3%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>90 (94.7%)</td>
</tr>
<tr>
<td>Ever hit or hurt/physically abused</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>10 (10.5%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>85 (89.5%)</td>
</tr>
<tr>
<td>Ever hit or hurt/physically abuse you in any way</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>15 (15.8%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>80 (84.2%)</td>
</tr>
<tr>
<td>Ever screamed or yelled at you/ psychologically abuse you in a way</td>
<td></td>
</tr>
<tr>
<td>that it made you feel scared</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30 (31.6%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>65 (68.4%)</td>
</tr>
</tbody>
</table>

### SECOND PARTNER (N=56)

<table>
<thead>
<tr>
<th>Event</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever experienced IPV</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>13 (23.2%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>43 (76.8%)</td>
</tr>
<tr>
<td>Ever forced to have sex/been sexually abused</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5 (8.9%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>51 (91.1%)</td>
</tr>
<tr>
<td>Ever hit or hurt/physically abused</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4 (7.1%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>52 (92.9%)</td>
</tr>
<tr>
<td>Ever hit or hurt/physically abuse you in any way</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5 (8.9%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>51 (91.1%)</td>
</tr>
<tr>
<td>Ever screamed or yelled at you/ psychologically abuse you in a way</td>
<td></td>
</tr>
<tr>
<td>that it made you feel scared</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>10 (17.9%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>46 (82.1%)</td>
</tr>
<tr>
<td>Ever experienced IPV</td>
<td>Freq (%)</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Yes</td>
<td>6 (15.4%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>33 (84.6%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ever forced to have sex/been sexually abused</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1 (2.6%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>38 (97.4%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ever hit or hurt/physically abused</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2 (5.1%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>37 (94.9%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ever hit or hurt/physically abuse you in any way</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2 (5.1%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>37 (94.9%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ever screamed or yelled at you/psychologically abuse you in a way that it made you feel scared</th>
<th>Freq (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3 (12.8%)</td>
</tr>
<tr>
<td>No/refused to answer/unknown</td>
<td>34 (87.2%)</td>
</tr>
</tbody>
</table>
**Appendix G: Table 1.3: Bivariate Associations between Demographic Characteristics by Intimate Partner Violence by Partner Type among Female Participants with Partners in VIDA II Study**

<table>
<thead>
<tr>
<th></th>
<th>Partner 1 (N=66)</th>
<th>Partner 2 (N=66)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Mean Age (SD)</strong></td>
<td>35</td>
<td>40.97</td>
<td>11.38</td>
</tr>
<tr>
<td><strong>Mean Years of Education Completed (SD)</strong></td>
<td>35</td>
<td>10.20</td>
<td>3.26</td>
</tr>
<tr>
<td><strong>Place of Birth</strong></td>
<td>35</td>
<td>60</td>
<td>0.362 L</td>
</tr>
<tr>
<td>United States</td>
<td>10</td>
<td>27.6%</td>
<td>26</td>
</tr>
<tr>
<td>Mexico</td>
<td>22</td>
<td>54.4%</td>
<td>24</td>
</tr>
<tr>
<td>Other Country</td>
<td>2</td>
<td>100.0%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td>35</td>
<td>60</td>
<td>0.372 P</td>
</tr>
<tr>
<td>Single divorced/separated/widowed</td>
<td>14</td>
<td>37.3%</td>
<td>23</td>
</tr>
<tr>
<td>Relationship married</td>
<td>21</td>
<td>54.3%</td>
<td>37</td>
</tr>
<tr>
<td><strong>Currently living with partner</strong></td>
<td>35</td>
<td>60</td>
<td>0.171 P</td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>61.1%</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>38.9%</td>
<td>31</td>
</tr>
<tr>
<td><strong>Median Number of Lifetime Partners (Q1-Q3)</strong></td>
<td>35</td>
<td>2 (1.4)</td>
<td>60</td>
</tr>
<tr>
<td><strong>Sexual Orientation</strong></td>
<td>35</td>
<td>60</td>
<td>&gt;0.999 F</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>35</td>
<td>37.2%</td>
<td>59</td>
</tr>
<tr>
<td>Homosexual</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Alcohol Use</strong></td>
<td>35</td>
<td>60</td>
<td>0.750 P</td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>39.3%</td>
<td>17</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>60.7%</td>
<td>43</td>
</tr>
</tbody>
</table>

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44
<table>
<thead>
<tr>
<th></th>
<th>Yes (N=6)</th>
<th></th>
<th>No (N=33)</th>
<th></th>
<th>p-values</th>
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<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>Mean</td>
<td>%</td>
<td>SD</td>
<td>Median</td>
</tr>
<tr>
<td>Mean Age (SD)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean Years of Education Completed (SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place of Birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>1</td>
<td>33.50</td>
<td>10.08</td>
<td>33</td>
<td>34.97</td>
</tr>
<tr>
<td>Mexico</td>
<td>4</td>
<td>33.50</td>
<td>3.71</td>
<td>33</td>
<td>12.34</td>
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<tr>
<td>Other Country</td>
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<td>100.0%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Relationship Status:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/divorced/separated/widowed</td>
<td>2</td>
<td>9.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship married</td>
<td>4</td>
<td>23.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently living with partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>23.5%</td>
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<td></td>
<td></td>
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<tr>
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<td>2</td>
<td>100.0%</td>
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</tr>
<tr>
<td>Median Number of Lifetime Partners (Q1, Q3)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Sexual Orientation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>5</td>
<td>11.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homosexual</td>
<td>1</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol Use</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3</td>
<td>17.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>17.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Vita

The growing number of diseases in our community, especially in the Hispanic population is the driving force behind the decision to pursue/widen my education in Public Health. Sujehy Arredondo graduated with a Bachelors of Science degree in Health Promotion with a minor in Community Health from UTEP and began the Masters of Public Health Program in the Fall 2011. Sujehy has been part of an interdisciplinary research group under the guidance of Dr. Joe Tomaka and Dr. Holly Mata and a volunteer at the Hispanic Health Disparities Research Center (HHDRC) since Fall 2010. She has had the opportunity to present in national conferences such as the Society for Behavioral Medicine (SBM) and Society for Public Health Education (SOPHE). Sujehy had the opportunity to work with multiple community partners such as International AIDS Empowerment, Boys and Girls Club, Centro de Salud Familiar La Fe, and American Red Cross. She has also led nutrition education programs in community youth settings, served as a research assistant on a youth smoking prevention project, and provided community disaster preparedness education in several community settings. Overall, Sujehy has a passion for helping others and finds great satisfaction being resourceful in her community.

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El Paso, TX. 79924

This thesis/dissertation was typed by Sujehy Arredondo.