

# **Prevalence of Intimate Partner Violence in Emerging Adults**

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By

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## Abstract

Studies have consistently shown that women between the ages of 18 and 24 suffer the highest rates of intimate partner violence (IPV), with over half experiencing any IPV within their lifetime. Yet to date, no previous research has examined the period prevalence and the types, frequency and severity of violence experienced by women ages 18 to 25 across multiple intimate partners. The 18 to 25 year old age group is of particular significance because relationship patterns established at this time might set the stage for violence victimization across the lifetime. My objective was to describe the prevalence of intimate partner violence in women ages 18 to 25, across two time periods (lifetime, past year), by the type (physical, sexual and non-physical), frequency and severity of violence experienced, and by the number of abusive partners who perpetrated each type of violence.

A total of 3568 women ages 18 to 64 were randomly sampled from the enrollment files of Group Health Cooperative, a large integrated health care delivery system providing health services and benefits to approximately 550,000 individuals in Washington State and northern Idaho. For the present paper, I included 287 women between the ages of 18 and 25, who reported having at least one intimate partner since turning age 18.

During a telephone survey, participants were asked 5 questions from the Behavioral Risk Factor Surveillance System (BRFSS) and 10 questions from the Women's Experience with Battering (WEB) to assess exposure to IPV suffered since age 18. For each BRFSS question, if respondents indicated that they had ever suffered the particular type of abuse in their adult lifetime (i.e., since turning age 18), they were then asked if they had experienced it in the last year. After reporting on IPV in those two specific time periods, participants were asked about the total number of partners who perpetrated the violence, the total number of times they experienced the violence across all partners, and their perceptions of its severity.

My analysis found that lifetime prevalence of IPV was 31% and annual prevalence was 16.7%. Controlling behavior was the most prevalent type of abuse in this sample and was most likely to co-occur with physical abuse. Women were more likely to experience multiple forms of abuse as opposed to just one. Participants were unlikely to have more than one abusive partner, but were also unlikely experience only one or two occurrences of abuse. The majority of women's abuse spanned less than one year and less than 10% of their adult life (since age 18 to present age). The majority of abused participants rated their violence as slightly violent or not violent at all. Women were at a 2.33-fold greater risk of reporting IPV if they also divulged a history of child abuse. The majority of abused women did not call the police, but those that did were more likely to rate the severity of their violence to be moderately or extremely severe.

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To the people who have offered their unfailing support, you know who you are.

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## Intimate Partner Violence and Emerging Adults

Intimate partner violence (IPV) is a widespread, global violation of human rights, regarded as a “serious, preventable public health problem” by the Centers for Disease Control (2010) and it is defined as a “process whereby one member of an intimate relationship experiences psychological vulnerability, loss of power and control, and entrapment as a consequence of the other member’s exercise of power through the patterned use of physical, sexual, psychological or moral force” (Smith, Danis, & Helmick, 1998, p. 1). A recent study found that the lifetime prevalence rate of IPV women aged 18 to 64 was 44% (Thompson, et al., 2006). IPV has received increased attention in the past decade because of its long-ranging detrimental effects on mental and physical health, such as depression and anxiety (Bonomi, et al., 2006), and alcohol dependency (Schneider, Burnette, & Ilgen, 2009). Nearly two million injuries and 1,300 deaths are attributed to intimate partner violence nationally each year (Tjaden & Theonnes, 2000).

Despite the increased efforts at understanding the nature of IPV, research is lacking an understanding of abusive partnership formation in younger women. The U.S. Department of Justice’s Bureau of Justice Statistics (BJS) released statistical information gathered from 1993-1999 indicating that women between the ages of 16 and 24 are the most vulnerable to intimate partner violence and are at a higher risk of creating adverse life-long relationship patterns than those who enter abusive relationships later in life

(National Center for Crisis Management). However, little descriptive data has been gathered on the nature of violence in this population.

From the literature, we can conclude that violence in relationships is prevalent and destructive (Straus & Gelles, 1986; Levendosky & Graham-Bermann, 1998; Koziol-McLain, Coates, & Lowenstein, 2001; Plichta, 2004; Breiding, Black, and Ryan, 2008). However, Lindhorst and Tajima (2008) suggested that precision in IPV research needs to increase. In particular, scholars have called for a delineation in IPV research via the examination of contextual factors (Bell & Naugle, 2008). The present paper provides context and meaning through an investigation of IPV among relatively young women (18-25) by assessing the different rates and co-occurrence of three types of IPV (physical, sexual, psychological), the chronic nature of abuse, and its perceived severity within the participant's contextual framework.

### **Emerging Adults and IPV**

Although there is a plethora of research on IPV and its physical, mental and social effects in the overall population of women, there is little information about the specific abuse patterns in women aged 18-25. This developmental period has recently been defined in the literature as 'emerging adulthood' (Arnett, 2000). Perhaps the lack of research on emerging adults is because it has only been proposed as a distinct and separate developmental stage in life within the last decade. Due to shifts in societal structure in the past thirty years, adolescents are prolonging their youth by achieving more education and delaying marriage and children. One of the most important tasks of emerging adulthood is the development of intimate, satisfying romantic partnerships.

Emerging adults' juxtaposition between adolescence and adulthood gives researchers a unique opportunity to explore relationship formation and violence patterns established at a pivotal point of romantic development. Thompson, et al (2006) found that, of all age groups sampled in their study, 18-24 year-old women had the highest percentages of IPV in the past five years of all age groups. Breiding et al., (2008) also dissected IPV prevalence by age and found that women in this development period had the highest prevalence of abuse exposure annually of all age groups, indicating that relationship abuse is more present in younger women's lives.

Involvement in an abusive relationship is dangerous for a woman's future; once involved with an abusive partner it often takes many years and several attempts to end the relationship (Ferraro & Johnson, 1983). However, even when a woman successfully leaves a violent partnership, she still experiences more negative health effects than if she had never been abused (Ford-Gilboe, et al., 2009; Rivara, et al., 2007). Furthermore, abused women are at a higher risk of revictimization in future relationships: Of women who obtained a protective order against a violent partner, 35.2% were in a second abusive relationship twelve months later (Cole, Logan, & Shannon, 2008). Therefore, early intervention for younger women is pivotal for lifelong development.

### **Previous Literature on IPV and Emerging Adulthood**

There have been four previous papers that have explored IPV exposure and categorized the findings by age group (see Table 1 for annual and lifetime prevalence comparisons between studies). Within these studies, the women in emerging adulthood

had very high rates of IPV prevalence, and in some cases the highest prevalence rates of any age group.

Coker et al. (2002) gathered data from the nationally representative National Violence Against Women Survey (NVAWS) in which three commonly employed scales were utilized: Conflict Tactics Scale, Power and Control Scale, and the National Women's Study questions. The sample was broken into women who were 18-25 and the lifetime prevalence rate for experiencing partner abuse was 19.7%. No annual prevalence rates were reported. Breiding, et al. (2008) also utilized nationally representative data from the Behavioral Risk Factor Surveillance System (BRFSS) in which women between the ages of 18-24 from ten U.S. states were surveyed. The lifetime abuse prevalence rate was slightly higher than Coker et al. (2002), at 24.1%. The data also included an annual prevalence rate, which was 3.8%. The third study was conducted by Snow Jones, et al. (1999) and gathered data from an HMO health survey administered to women in the metropolitan Washington, DC area. This sample was older and larger than the previous studies, with the youngest category of women aged 21-29 years old. A modified version of the Abuse Assessment Screen (AAS) was used and found the highest prevalence rates of all the studies: 36.7% of the sample experience abuse from an intimate partner in their lifetime, with 8.2% reporting that it occurred in the last year.

The final study I provide for comparison was conducted by Thompson et al. (2006) using the same data that are currently being utilized in the present study. In the paper by Thompson et al. (2006), the youngest women in the sample were categorized from 18-24 and surveyed using the Behavioral Risk Factor Surveillance System (BRFSS)

and the Women's Experience with Battering Scale (WEB). Lifetime prevalence of IPV in the 18-24 year old age group was 27.9% and annual prevalence was 13.9%.

### **Effects of IPV**

Potential effects of IPV have important implications for women who experience violence at a young age. Younger women experience ten times more risk of IPV than older, post-reproductive aged women (Peters, Shackleford, & Buss, 2002). Women who are in abusive relationships are less likely to have close friends and more likely to be isolated from family, friends, and neighbors than non-abused women (Nielsen, Endo, and Ellington, 1992). Mothers in violent relationships had 87% greater odds of depressive symptoms and 62% greater odds of anxious symptoms compared to mothers in nonviolent relationships (Adkins & Kamp Dush, 2010). This depression and anxiety can lead to suicide; women who had experienced at least one act of violence in their life reported more suicidal thoughts and suicide attempts than non-abused women (Ellsberg, Jansen, Heise, Watts & Garcia-Moreno, 2008).

Women who reported IPV occurrences in the past year had significantly higher prevalence rate ratios of psychosocial/mental disorders than women who did not report past-year IPV history: These women were 5.89-fold more likely to abuse substances, 4.96-fold more likely to have family and social problems, and 3.26-fold more likely to have depression than never-abused women. They were also significantly more likely to report musculoskeletal problems, female reproductive conditions, sexually transmitted diseases, and lacerations than nonabused women (Bonomi, Anderson, Reid, Rivara, Carrell, & Thompson, 2009).

Physically abused women have overall poorer health, chronic disease, chronic mental illness and more injuries than non-abused women (Coker, et al., 2002). However, women were most likely to be psychologically abused by a partner through threats, coercion, control and intimidation (Basile, Arias, Desai, & Thompson, 2004). Psychological abuse can have the same effects as physical abuse: Coker, Smith, McKeown, & King (2000) found that psychological IPV was as strongly correlated as physical IPV with a variety of physical health ailments. Another study found that women who were psychologically abused were just as likely to have depression, anxiety and thoughts of suicide as women who were both psychologically and physically abused (Pico-Alfonso, et al., 2006). Thus, IPV prevalence in this paper is delineated by five specific types (physical, sexual contact, forced sex, controlling behavior, and threats).

Because of these various outcomes, IPV exposure results in higher health care costs for women: Those who experienced ongoing physical abuse reported 42% higher health care costs than non-abused women; women who were in a recent, but terminated, abusive relationship reported 24% higher health costs (Bonomi, Anderson, Reid, Rivara, & Thompson, 2009). With healthcare costs consistently higher for women who have ever been abused, it is likely that women who are in abusive relationships earlier in the life course (i.e., before the age of 25) will have higher lifetime health care costs than women who are never in an abusive relationship or experience violence later in life.

### **Child Abuse and IPV**

A cyclical transmission of violence has been found through research on the survivors of childhood abuse; a large proportion of women who report experiencing child



abuse also report revictimization through IPV in romantic relationships (Bensley, Van Eenwyk, & Simmons, 2003; Desai, Arias, Thompson, & Baslie, 2002; Filipas & Ullman, 2006). When considering risk factors for IPV, a history of child abuse exposure is the strongest predictor of adult exposure to violence and was therefore important to include within the current analysis.

### **IPV and Police Involvement**

The relationship between IPV and police involvement is attenuated due to a lack of consistent police involvement initiated by victims of abuse. It is estimated that only 20% of IPV rapes or sexual assaults, 25% of physical assaults, and 50% of stalking incidents directed toward women are reported to the police (Centers for Disease Control and Prevention, 2010). These findings indicate that victims of IPV do not view the police as a resource; despite arrests being one of the few ways a woman experiencing violence has the control to temporarily stop her abuse.

Women were more likely to call the police only if their violence was severe or they sustained an IPV-related injury (Bonomi, Holt, Martin, & Thompson, 2006). Stover, Berkman, Desai & Marans (2010) analyzed a police-advocacy home-visit outreach program for battered women and found that the Domestic Violence Home Visit Intervention (DVHVI) was successful in increasing the willingness of a woman to call the police, even for less serious incidents of violence; however the program did not decrease the likelihood of repeat incidences of IPV. Cho & Wilke (2010) found that when police officers *arrest* an abusive partner, odds of revictimization decrease by 43.2%. These results indicate that there are dual responsibilities: A woman must act to

protect herself by calling the police, but police must also act in order for long-standing results to be seen in the lives of victims.

The IPV literature is focused on preventing relationship abuse and its associated outcomes. Emerging adulthood is the most beneficial period to study violent relationships because women are at the beginning of their relational development. With continued effort, researchers can discover if romantic violence experienced in this developmental period could set the stage for violence victimization lasting across adulthood. The concentrated study of this population may have important implications for violence survivors, mental health professionals, the health care system, and violence researchers across the country.

### **Research Questions**

The importance of analyzing this understudied population of abused women has led to the development of my research questions concerning the period prevalence, types, perceived severity and length of abuse experienced in emerging adult women; the ultimate goal was to capture a snapshot of this group's abuse experiences.

### **Hypotheses**

Based on the literature findings discussed previously, I made the following hypotheses: First, I predicted that the prevalence of violence within this population would be consistent with previous rates found in both nationally representative and local samples. Second, I predicted that controlling behavior would be the most common type of abuse reported by women in the sample, physical abuse would be the second most prevalent and would be most likely to co-occur with controlling behavior. I predicted

that sexual violence would be the least prevalent type of violence. Third, I predicted that participants who experienced more than one violent occurrence, more than one abusive partner, or experienced abuse for a greater percentage of their adult lifetime would rate their violence as more severe. Fourth, I predicted that women who rated violent encounters to be extremely severe would involve the police. I examined each of these outcomes among women in emerging adulthood, those women in the Group Health Cooperative Study between the ages of 18 and 25.

## **Data and Methods**

### **Sample**

My sample was drawn from a localized study conducted among members of the Group Health Cooperative (GHC), a large integrated health care delivery system providing health services and benefits to approximately 550,000 individuals in Washington State and northern Idaho. To be eligible for the study, participants were required to be enrolled in GHC for greater than three years between the years of 1991 and 2001, thereby providing enough medical history information to be analyzed.

A total of 3,568 English speaking women aged 18 to 64 were randomly sampled from the enrollment files by GHC and sent an invitation letter. 848 of those women were between the ages of 18 and 25. A total of 67 were excluded from the denominator because of sampling error (65), too ill (1), or language/hearing impaired (1). There were 190 (24.3%) active refusals, 114 (14.6%) passive refusals, and 92 (12.3%) could not be located. Interviews were completed with 385 women, for a response rate of 48.8%. Of the 385 women, 98 were excluded from the numerator because they never had an

intimate partner since turning 18. Therefore final sample size consisted of 287 eligible participants, who responded to interviewer phone calls, completed surveys and reported at least one intimate partner.

Analyses indicated that there were no significant differences on age, length of enrollment at Group Health, and medical diagnoses between responders and non-responders.

### **Procedure**

Members of the GHC were invited to enroll in this study via letter. Given the sensitive nature of the topic, women were told in the invitation letter that the study was a Group Health Wellness Study and were only informed that the survey would include questions on domestic violence during the following phone call. They were also told that questions on health habits, functional status, relationships, social support and chronic conditions would be asked.

To establish eligibility for the study, women were asked if they had ever had an intimate partner since the age of 18 and if so, the number of total partners since age 18. An intimate partner was defined as someone with whom the participant was involved in a romantic relationship with for at least a week, not necessarily a sexual relationship. Participants were asked relationship details about their three most recent partners, including their current relationship status, when the relationship began and ended, and the partner's gender. If the participant reported four or more partners since turning 18, the total number of partners was recorded, but no details about the relationships were gathered.

Women were paid \$25 for participating in the study. During this phone call, consent was obtained and recorded from all women and a “safety phrase” (“I don’t want vinyl siding”) was established to allow women to terminate the call at anytime.

## **Measures**

*BRFSS Abuse Measures.* During the telephone survey participants were asked to respond with “yes” or “no” answers to 5 questions from the Behavioral Risk Factor Surveillance System (BRFSS). These 5 BRFSS questions were used to assess exposure to physical and non-physical IPV suffered since age 18 (Stein, Lederman, & Shea, 1993).

The physical IPV questions were as follows:

- 1) Physical, defined as actions such as hitting, kicking and slapping (one question).
- 2) Forced intercourse, defined as vaginal penetration (one question).
- 3) Forced sexual contact that did not result in intercourse, such as attempted penetration (one question).

The nonphysical IPV questions were as follows:

- 1) Threats, defined as feelings of fear due to partner’s anger or threats (one question).
- 2) Control, defined as put-downs, name calling, or controlling behavior--clarified for participants as “controlling who you can talk to, where you can go, or what you can do” (one question).

Through these measures, exposure to physical, sexual, sexual contact, threatening and controlling abuse were assessed.

*Time Periods and Number of Occurrences.* Respondents indicated if they had ever (i.e., since turning age 18) suffered each type of abuse reported in the BRFSS (physical, forced sex, sexual contact, controlling behavior, and threats). If they responded that they had ever experienced a particular type of abuse, they then answered whether they had experienced that type within the past year. These questions determined a lifetime and an annual prevalence rate for each type of abuse for each participant.

*Chronicity of Violence.* Participants were asked the number of times each type (physical, forced sex, sexual contact, controlling behavior, and threats) of abuse ever occurred and the number of partners who ever perpetrated each type, and the number of years they were a victim of that type of abuse.

*Severity of Violence.* Participants were asked to rate severity across all occurrences and for all abuse types (physical, forced sex, sexual contact, controlling behavior, and threats) on a Likert scale of 1 “I did not consider it violent” to 4 “I considered it to be extremely violent”. Participants were not asked about single incidents or partners; therefore these measurements reflect the participant’s overall perception of her collective violence experienced for each type of abuse.

*WEB Abuse Measures.* Women were also asked 10 questions from the Women’s Experience with Battering scale (WEB). This scale was used as a supplement to the BRFSS assessment of IPV exposure because of its ability to assess additional dimensions of abuse (Smith, Thornton, DeVellis, Earp, & Coker, 2002). The questions were designed to evaluate a woman’s fear and perceived loss of power and control due to interaction with the abusive partner, for example: “I feel/felt like my partner keeps/kept

me prisoner”. All WEB answers were recorded on a Likert scale of 1 “I strongly disagree” to 6 “I strongly agree”. Scores from each question were then added together resulting in a possible score of 10 to 60, with any score greater than or equal to 20 indicating abuse (Smith, Earp, & Devellis, 1995).

*History of Child Abuse.* Participants were asked whether or not they had ever been abused as a child, and if so, whether it was physical or sexual (or both) abuse. Physical abuse was defined as “punched, kicked, choked, or received a serious physical punishment from a parent or adult guardian” and sexual abuse was defined as whether “anyone ever touched you in a sexual place or touch them when you did not want them to”.

*Police Involvement.* Participants were asked whether, in the last five years, they had called the police about any type of physical abuse or forced sex.

## **Data Analysis**

Data analysis was performed in 2011. Annual and past year IPV prevalence rates were calculated using data from the BRFSS and the WEB for women age 18-25.

Descriptive statistics were also used to characterize demographic factors, history of child abuse, history of phone calls made to the police, and several abuse dimensions catalogued through the BRFSS questions (abuse frequency and severity, number of abusive partners, and time encompassed by abuse).

IPV probability as an exponential function of risk factors was estimated and nonlinear least squares estimation was used to obtain unbiased estimates of the relative risk of IPV exposure. Huber–White sandwich estimates for standard errors were used to compute 95% confidence intervals (CIs) for the association between IPV and demographic risk factors as well as child abuse exposure.

## **Results**

### **Sample Characteristics**

The sample was predominately Caucasian (72.8%) with at least some college, employed at least part-time, and not enrolled in school. Nearly half of the sample reported the lowest income bracket, less than \$25,000 a year. A majority were unmarried and dating or involved with a life partner (61.3%) and did not have a child for whom they were a guardian living in their home (See Table 2 for sample characteristics).

### **Prevalence of IPV**

Nearly one third (31%) of emerging adult women had experienced IPV since the age of 18, as assessed by either the BRFSS or WEB abuse instruments (see Table 3 for



prevalence statistics, by instrument). Half of those women (16.7%) reported experiencing any IPV within the last twelve months. Only 15.7% of the sample reported lifetime abuse on both the BRFSS and WEB instruments and only 3% reported abuse solely through the WEB scale. The majority of participants did not report any experiences of abuse on either measurement instruments (69%).

*Prevalence of IPV Types.* My hypotheses were supported; controlling behavior was experienced by 18.8% of the total sample in their lifetime and by 67% of the sample that experienced any type of abuse, making it the most prevalent type of abuse for both lifetime and annual estimates. Physical abuse was the second most prevalent type of abuse with 14.3% experiencing it within their lifetime and 5.6% in the past year. My hypothesis was also supported concerning sexual violence; both variables of forced sex and forced sexual contact were less prevalent than any other type of abuse (4.3% forced sex; 5.6% sexual contact lifetime prevalence). Threats were less common than controlling behavior and physical violence. Overall, nonphysical (20.9%) violence was more prevalent than physical (18.8%) violence (see Table 4 for statistics of abuse by type).

*Prevalence in GHC Sample.* This sample was drawn from data reported by Thompson, et al. (2006). Because the data in this study was a sub-sample of a previous study, a comparison was made between the findings of this study and the full sample of women aged 18-64 reported in the Thompson paper. The lifetime prevalence rate for emerging adults was lower than the overall population, but the annual prevalence rate was higher. In the full sample, annual prevalence was 7.8%, roughly half of the

emerging adults' 16.7% results. For the lifetime prevalence, the young women reported a 31% rate, compared to the full sample's report of 44%.

*Co-occurrence of IPV.* The majority of participants with abuse histories reported experiencing more than one type of abuse. As shown in Figure 1, all five types of abuse were more likely to occur with at least one other type of abuse than they were to occur alone. Physical violence was less likely to occur independently than it was to occur with other forms of violence, with only 22% of physically abused women indicating that they experienced only physical abuse, and 17% reported experiencing 3-4 types of violence in addition to physical violence. Physical abuse most commonly occurred in conjunction with controlling behavior (33.8%). The second most common (30%) forms of abuse to experience together were threats and controlling behavior (see Table 5 for the percentage of abused participants who experienced two types of abuse).

Threats were the least likely type of abuse to occur alone, with only 10% of participants reporting that as their sole form of abuse (see Table 6 for percent of participants who experienced one vs. multiple types of abuse). Threatening behavior was most likely to co-occur with controlling abuse and physical abuse.

Sexual violence (unwanted sexual contact and forced sex) was more likely to co-occur with other types of abuse; twice as many participants reported experiencing forced sex with at least one other type of violence than reported only forced sex and three times as many participants reported experiencing unwanted sexual contact with at least one other type of violence than those that reported experiencing only unwanted sexual contact. Sexual abuse occurred most commonly with controlling behavior. The least

common types of violence to experience in conjunction with each other were threats and unwanted sexual contact.

*Annual Prevalence Rates of Abuse Co-occurrence.* As exposure time increased, the percentage of participants who experienced multiple types of abuse also rose. Comparisons between annual and lifetime rates provided in Table 6 reveal that participants were less likely to experience multiple types of abuse within the last 12 months than they were within their adult lifetime.

### **Chronicity of IPV**

*Number of Abusive Partners.* The majority of violence experienced by emerging adults was not chronic across partners-- most respondents reported only one abusive partner. However, 18% of abused women experienced abuse across two or more partners. The type of violence that was most likely to be chronic across partners was physical violence: 17.5% of participants who experienced physical abuse indicated that it occurred with two or more partners. The least likely type of violence to occur among multiple partners was forced sex, with 91.67% of participants who experienced this type of violence reporting it happened with only one partner. Further, as reported in Table 7, over half of those who experienced forced sex indicated that it happened only one time, therefore having only one perpetrating partner would be expected.

*Occurrences of IPV.* Despite the results for forced sex, it was uncommon for the other four types of abuse to occur only once. For physical abuse, nearly three quarters (72.5%) of those who experienced a violent act reported that it happened more than once; a majority reported two violent acts. The type of abuse with the most occurrences was

controlling behavior, with less than two percent of those who experienced a controlling act reporting only one occurrence. Indeed, more than half of those who experienced controlling behavior reported that it occurred more than six times. Over half of abused participants reported that they were threatened two times or less (53.3%). A total of 50% of participants who experienced unwanted sexual contact reported that it occurred two times or more and 33.3% of participants who experienced forced sex reported that it occurred two times or more (see Table 7 for more detailed results).

*Number of Years Encompassed by Abuse.* For each type of violence, the majority of women experienced that type of abuse for less than a year. As indicated in Table 7, controlling behavior was the most chronic type of abuse; nearly half of abused participants reporting that it occurred for over one year. Physical abuse was second to controlling abuse, with 44% of women indicating that it lasted for more than one year. Since 66.7% of women who experienced forced sex responded that it only happened once, 75% also reported that the abuse occurred for less than one year. The majority who experienced unwanted sexual contact also reported the duration of abuse lasting less than one year. Threatening abuse was similar to sexual violence, with the majority of those who received threats from a partner indicating that abuse lasted for less than one year. Mean duration of abuse across the sample was 1.15 years (SD +-1.57).

*Percentage of Adult Lifetime Encompassed by Abuse.* The majority of abused participants reported less than 10% of their adult life was encompassed by any type of abuse. To further these results, an analysis was conducted on the percentage of the adult lifetime (years since age 18) each participant experienced abuse (detailed results can be

seen in Table 8). Controlling behavior was the most chronic form of abuse, with approximately one quarter of participants who experienced this abuse type indicating that it encompassed all (100%) of their adult lifetime. Forced sex was the least encompassing type of violence; no participants reported that all of their adult life was encompassed by this abuse and only 8.33% reported that the majority of their life had been encompassed by this form of abuse. Of those participants who reported experiencing threats, 20% indicated that all of their adult lifetime was encompassed by threatening abuse. Nearly 15% of those who reported physical abuse said that it encompassed all of their adult lifetime.

### **Severity of IPV**

Of those who experienced physical abuse, half reported that it was moderately to extremely violent. Over 80% of women who reported controlling abuse indicated that it was not violent or only slightly violent. The severity of physical abuse, threats, and controlling behavior were significantly correlated, reiterating the results found concerning the likelihood of these types of violence to co-occur with one another (see Table 9 for correlations among severity and type of violence).

For physical abuse, severity ratings were positively correlated with the number of occurrences and duration of abuse, both in number of years and percent of adult life encompassed by abuse. The results for forced sex were similar, with correlations between number of occurrences and duration (number of years and percent of life encompassed). Participants were more likely to rate their controlling abuse as more severe only in relation to the percentage of life encompassed by the abuse and the

frequency of occurrences. There was no relation between participants' ratings of severity for unwanted sexual contact and threats for any measure of chronicity (See Table 9 for full results between chronicity measures and severity ratings).

### **History of Sexual Abuse and IPV**

The majority of the sample did not experience any abuse as a child (77.9%). For the abused women in the sample, 11.8% experienced some form of child abuse. Among the participants who experienced child abuse, the most prevalent type of was sexual (13%) with physical child abuse less than half as frequent (5%). Young women who experienced any kind of child abuse were more likely to report adult IPV victimization ( $\chi^2 = 19.67, p=.000$ ).

### **Police Involvement and IPV**

My hypothesis predicted that participants would have an increased likelihood of involving police if the severity ratings of the violence were more extreme. Overall, 14 of the 80 women who reported violence called the police in the last five years. Participants were significantly more likely to call the police if they reported exposure to more than one type of abuse than if they experienced only one type of abuse. Participants were moderately more likely to call the police if they experienced abuse for one year or longer than if they experienced abuse for one year or less. Women tended to make calls to the police if they experienced threats and/or physical violence than if they experienced controlling behaviors or sexual assault. The majority of these women reported their physical or threatening abuse to be moderately or extremely violent; therefore my

hypothesis was supported (see Table 10 for phone calls made to the police for each form of abuse).

### **Risk Factors for IPV**

IPV risk was higher among women with lower income; those who earned less than \$25,000 a year were about twice as likely to experience nonphysical or nonphysical violence, as measured by both the BRFSS and the WEB, than women who had a household income of \$75,000 or more (results reported in Table 11).

There were not many significant racial disparities in IPV risk, however, multi-racial participants were nearly twice as likely to report physical abuse on the BRFSS than Caucasians. Women who had achieved less than some college education were significantly more likely to experience non-physical abuse than women who reported some college education. Women who reported a child under the age of 18 in their home for whom they were guardian had a two and a half-fold greater chance of reporting abuse through the WEB than women who were not guardians for a child. There were no significant relationships between employment and IPV. Exposure to any history of abuse as a child (physical, sexual or both) was highly significant and indicative of adult exposure to any form of IPV, registered by the BRFSS or the WEB. Notably, women who experienced either physical or sexual abuse were three times as likely to report physical abuse through the BRFSS questions than those who had not been abused as a child.

## Discussion

The present paper's goal was to investigate the period prevalence, co-occurrence of abuse types, chronicity, and perceived severity of relationship violence within the cohort of emerging adult women, aged 18-25. These women were the youngest cohort sampled by the Health Cooperative Wellness study and they were insured, English-speaking, U.S. resident women who had at least one intimate partner since age 18. The results found herein were relatively consistent with limited previous research, and are a valuable contribution to the IPV literature. This is the first study to document IPV solely within an emerging adult population and provide a multi-dimensional description of the abuse experiences of emerging adult women in the United States.

*Prevalence Rates.* Previous studies found high prevalence rates of intimate partner violence among women in the 18-24 year age group and this study has confirmed these prior results. Nearly one third (31%) of women in this sample had experienced at least one incident of partner violence in their adult life (since turning 18). The prevalence rate in this study was not as pervasive as the overall 44% lifetime prevalence rate reported among 18-65 year old women in Thompson, et al. (2006). Perhaps the difference in these rates is due to the number of years the participants can report upon: A 60 year old woman has over 40 years of possible abuse history to report, while a 25 year old woman has only 7 years. Despite the differences in the lifetime rates for these two populations, this study's findings were consistent with previous studies' findings on emerging adults' abuse (Breiding, et al., 2008; Coker, et al., 2002; Snow Jones, et al., 1999).



Half of the participants who reported any violence in this sample experienced abuse in the past year (16.72% annual, 31% lifetime). The annual prevalence rate was the highest among all previous studies conducted on emerging adults by Breiding et al. (2008), Coker et al. (2002), or Snow Jones et al. (1999). Differences in methodology, sampling and definitions may account for much of the variance in final prevalence rates. For example, the nearest lifetime prevalence rate to this study was Snow Jones, et al. (1999) of 35.7%. Both studies used small, localized samples, with limited generalizability to the overall population. Breiding, et al. (2008) and Coker, et al.'s (2002) studies produced lower rates of lifetime prevalence and both utilized large, nationally representative datasets (see Table 1).

Further, the methods that were employed by this study were different. No uniform scaling instrument was used to assess abuse in Breiding's study; instead questions were designed specifically for the paper, making cross-comparison of results difficult. The opposite was true for Coker's paper, which used data gathered from the National Violence Against Women Survey in which three commonly employed scales were utilized. Although results differed by methodology, these studies showed the high prevalence of partner abuse among emerging adult women which support the findings of this study: Thompson et al. (2006) found that emerging adult women reported twice as much abuse prevalence in the past five years on the physical and non-physical BRFSS as well as the WEB than any other age group and Snow Jones et al. (1999) found that 21-29 year-olds had the highest annual rate of physical or sexual IPV prevalence.

*Abuse Types and Co-occurrence.* In addition to the lifetime and annual prevalence rates reported in this paper, many more valuable insights were gleaned from other measures, such as the prevalence of different types of partner abuse and co-occurrence of IPV types. Of the women who experienced a violent intimate partnership, the majority experienced more than one type of violence; over 20% experienced three or more types in their lifetime. Controlling behavior was the most common form of abuse that participants experienced individually as well as occurring with other types of abuse (67.5% of abused participants reported exposure to controlling behaviors). The finding that non-physical violence was more commonly reported than physical violence by women in this sample provides support to a growing body of literature that asserts that non-physical abuse is more prevalent but just as destructive to a woman's physical and mental health (Coker et al., 2002; Bonomi, et al., 2009).

The most common types of abuse to co-occur were physical abuse and controlling behaviors, with 33.8% of abused participants reporting both forms of violence. Physical abuse was the second most reported form of violence and was less likely to occur independently than with another form of abuse.

*Chronicity of Abuse.* My intent for this paper was to create a profile for abuse chronicity, as measured by several variables: Number of abusive partners, number of occurrences and length of abuse. Of the 80 abused participants, 68 reported that they were abused by only one partner. In addition, of all abused participants, the majority (56.25%) only reported having two or less total partners in their adult lifetime, regardless of abuse perpetration. It was extremely unlikely for a woman to have multiple abusive

partners; depending on type of violence, only 3.0-7.5% of participants reported more than one abusive partner. Therefore, the possibility that the number of violent occurrences would be perpetrated by more than one partner was very slim in this sample. That being said, the number of occurrences of violent acts was surprising: 33%-98% of abused participants reported two or more occurrences of their abuse, depending on type of abuse. Less than two percent of women experiencing controlling abuse experienced it a single time. More than 70% of abused participants experienced two or more violent physical acts. Although the likelihood that these results may contain rates from more than one partner is less than 8%, research would benefit if future studies would allow participants to respond how many times each type of violence happened in *each* violent relationship.

The third measure by which I assessed abuse chronicity was through length of exposure in a violent partnership. The majority of women were in an abusive relationship for less than one year. Given the young age of the sample, this finding is unsurprising. However, I conducted further analysis to determine the percentage of adult lifetime encompassed by abuse and these findings were more illuminating. With the exception of controlling abuse, over half of abused participants reported that their violence lasted for less than 10% of their adult lifetime. For controlling abuse, the majority reported that it encompassed less than 33% of their adult lifetime. For 20% of the sample who experienced controlling or threatening behavior from a partner, this abuse encompassed all (100%) of their adult lifetime (since turning 18).

*Severity Ratings.* Despite the likelihood for abused participants to experience more than one type and more than one occurrence of violence, the majority of

participants viewed their abuse as slightly violent or not violent at all. Those who reported the most severe (moderately to extremely violent) abuse were those who experienced physical abuse (50%).

The associations between perceived severity and chronicity of violence have important implications for future research. Women were more likely to view their abuse exposure as severe if it occurred more than once or lasted for a greater percentage of their adult lifetime, although these results were not consistent across all types of abuse. The number of partners who perpetrated abuse was insignificant across all types of abuse, indicating that perhaps sample sizes were too small or the age cut-off was too short a time to allow for multiple cultivations of violent relationships. It would be beneficial to conduct this study with a larger sample of emerging adults to see if sample size or age was the confounding factor among the results of this paper.

*Police Intervention.* Cho and Wilke (2010) found that arrests were a pivotal tool to stop incidences of IPV, but a minority of women in this sample called the police. Research has shown that as age increases, exposure to IPV also increases (Cole et al., 2008), therefore it is important that future research considers the impact a call to the police could make to end a violent relationship and subsequent violent relationships.

*Risk Factors.* The risk factors explored within this paper supported previous research findings: Women who reported any form of child abuse, lower income, children in the home, or low educational attainment were at high risk of IPV. These women were more likely to have increased risk of non-physical violence; however the results were not

always consistent for physical violence. The most significant risk factor for adult IPV victimization found within this study was a history of any type of child abuse.

### **Limitations**

As explored above, the sample of this study was a limitation. This study would have benefited from a larger sample size. Having only 287 participants within the required age range limited the breadth of analyses that could be conducted. The small sample size also contributed to problems with external validity, thereby eliminating any data found within this study from generalizing to the population. Secondly, as the BJS statistical findings indicated, women between the ages of 16 and 24 are the most vulnerable to intimate partner violence (National Center for Crisis Management) therefore, an ideal sample would have extended the sample recruitment size to include girls as young as 16. It is also important that I point out that of 287 participants, 80 were abused, however not all 80 women had completed emerging adulthood (reached the age of 25). In fact, only 5.6% of abused women were 25 years old. Therefore, the majority of abused participants did not reside in adulthood for an adequate number of years to analyze a more abundant abuse history.

There was a selection bias with this sample, due to the requirement of all participants' enrollment with GHC for greater than three years. Women who were abused are less likely to have insurance than women who were not abused (Hathaway, et al. 2000; Thompson, 2006), therefore one can assume that these prevalence rates were underreported due to the exclusion of uninsured women (or women who were insured, but for less than three consecutive years).

The response rate was relatively low (48.8%). Although propensity analysis was conducted and concluded that there were no significant differences between responders and non-responders on demographic factors, it is impossible to determine if they differed by abuse history. Research has shown that women at risk are less likely to participate in these studies and underreporting is a serious problem faced by IPV researchers (Johnson, 1995; Emery, 2010). A second factor that may have contributed to a low response rate was the possibility that participants had transient living conditions and means of communication. Many emerging adults change residence several times a year and frequently move back to parental households. This instability may have caused misplacement of enrollment letters or missed phone calls from researchers. A higher response rate would have helped further prove the validity of this study; however, due to the age of participants in this study, it seems unlikely that any future study focusing entirely on emerging adults would be able to garner higher response rates from this particular population.

I was limited when interpreting the number of times abuse occurred and the severity rating of that abuse because participants were asked to rate their ‘collective violence experience’ when answering questions concerning how many times a certain form of abuse (physical, sexual, sexual contact, control, and threats) occurred within their adult lifetime. This was also the case for severity rates, as participants were asked for one severity rating for each type of violence they experienced, not for each violent occurrence. Because severity and frequency of violence were not delineated by partner, no conclusions can be drawn concerning specific abuse relationships, therefore further

research should consider carefully the context and method by which they survey participants concerning IPV.

### **Future Research Implications**

These limitations provide a jumping off place for future research. Literature on partner violence would greatly benefit from a combination of current efforts: If large, nationally representative datasets were combined with the depth of questions offered in the current dataset and administered to girls nationwide as young as 16 years old then the impact of relationship abuse at a young age could be more fully understood. Also, a longitudinal study would greatly benefit this field by providing more concrete associations between early IPV exposure and subsequent exposure, in addition to the effect multiple abusive relationships have across the life course.

### **Conclusion**

The main purpose of this research endeavor has been to inform the profile of partner abuse among emerging adult women. Among women who have just begun to form intimate attachments in adulthood, IPV is occurring with one third of the women who reported at least one violent experience with an intimate partner. Given what we know of IPV effects, intervention and prevention efforts focusing on this segment of the population could have a lasting positive impact on not only victims, but on society as a whole (Bonomi et al., 2009).

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*Table 1: Lifetime and past year prevalence estimates of violence among emerging adults as found within previous studies.*

Study	IPV Definition	Sample	Annual Prevalence	Lifetime Prevalence
			%	%
<b>Snow Jones, et al. 1999</b>	Three dimensions of physical and sexual abused based on questions modified from the Abuse Assessment Screen.	1,138 Women aged 21-29 who lived in the metropolitan Washington D.C. area	8.2%	36.7%
<b>Coker, et al. 2002</b>	The timing of violence (past or present) and the type of violence (physical, sexual, battering or perceived emotional abuse)	8,005 Women aged 18-25 who participated in the NVAWS.	N/A	19.7%
<b>Brieding, et al. 2005</b>	Based on the CDC's uniform definition of Physical and Sexual Violence by an Intimate Partner	70,156 <sup>2</sup> Men and Women aged 18-24 who lived in a sample of ten U.S. states (AZ, HI, IA, MO, NV, OH, OK, RI, VT, VA), Puerto Rico, and the U.S. Virgin Islands.	3.8%	24.1%
<b>Thompson, et al. 2006</b>	Violence that was physical, sexual, or psychological between adults who were present and/or past sexual/intimate partners in a heterosexual or homosexual relationship.	3,429 Women aged 18-64 enrolled for >3 at GHC HMO who lived in the greater Washington State or Northern Idaho area	N/A	29.9% <sup>1</sup>
<b>Current Study, 2011</b>	Physical, sexual or psychological violence between adults who were present and/or past sexual/intimate partners in heterosexual relationships.	287 Women aged 18-25 enrolled for >3 at GHC HMO who lived in the greater Washington State or Northern Idaho area	16.7%	31%

<sup>1</sup>Estimate is not true lifetime estimate, but prevalence reported in last 5 years

<sup>2</sup>Sample includes both men and women, however the prevalence rates reported in this table represents only women

*Table 2: Characteristics of respondents aged 18 to 25.*

Demographics	Total n=287	
	n	%
<b>Household Income</b>		
<\$25,000	128	44.6
\$25,000-\$49,999	72	25.1
\$50,000-74,999	30	10.5
>\$75,000	43	15
Missing	14	4.9
<b>Employed (at least part time)</b>		
No	82	28.6
Yes	205	71.4
<b>Student</b>		
Yes	52	18.1
<b>Education</b>		
High school graduate or less	68	23.7
At least some college	219	76.3
<b>Race/ethnicity</b>		
White	209	72.8
African American	8	2.8
Asian	20	7
American Indian	8	2.8
Multiracial	35	12.2
Other	7	2.4
<b>Marital Status</b>		
Married	20	7
Separated/Divorced	70	24.4
Dating/Life Partner	176	61.3
Other	21	7.3
<b>Children in home for whom respondent is guardian</b>		
No	249	86.8
Yes	38	13.2
<b>Currently a parent for children &lt;18 years</b>		
No	282	98.3
Yes	5	1.7
<b>History of Child Abuse</b>		
Not abused	218	77.9
Physical Only	15	5.4

Sexual Only	36	12.9
Both Physical or Sexual	11	3.9
<b>Number in Household</b>	<b>Mean</b>	<b>S.D.<sup>1</sup></b>
	3.5	1.7

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<sup>1</sup>S.D., standard deviation

*Table 3: Prevalence of IPV, by instrument of detection and time period.*

<b>Women aged 18 to 25</b> <i>(n= 287)</i>	<b>Last 12 Months</b>		<b>Adult Lifetime<sup>1</sup></b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
Any IPV (BRFSS or WEB)	48	16.7	89	31
IPV by any positive on BRFSS	40	13.9	80	27.9
IPV by any positive on WEB <sup>2</sup>	21	7.3	54	18.8
BRFSS (WEB-)	27	9.4	35	12.2
WEB (BRFSS-)	8	2.8	9	3.1
Both (WEB+ BRFSS+)	13	4.5	45	15.7
Neither (WEB- BRFSS-)	239	83.3	198	69.0

<sup>1</sup>Adult lifetime is age 18 to present age

<sup>2</sup>WEB was defined as positive if the WEB summary score is >+20 and the woman reported having those feelings for more than 1 week in duration  
BRFSS, Behavioral Risk Factor Surveillance Survey; IPV, intimate partner violence; WEB, Women's Experience with Battering Scale



*Table 4: Prevalence of IPV by type as delineated by the BRFSS in 287 women aged 18 to 25.*

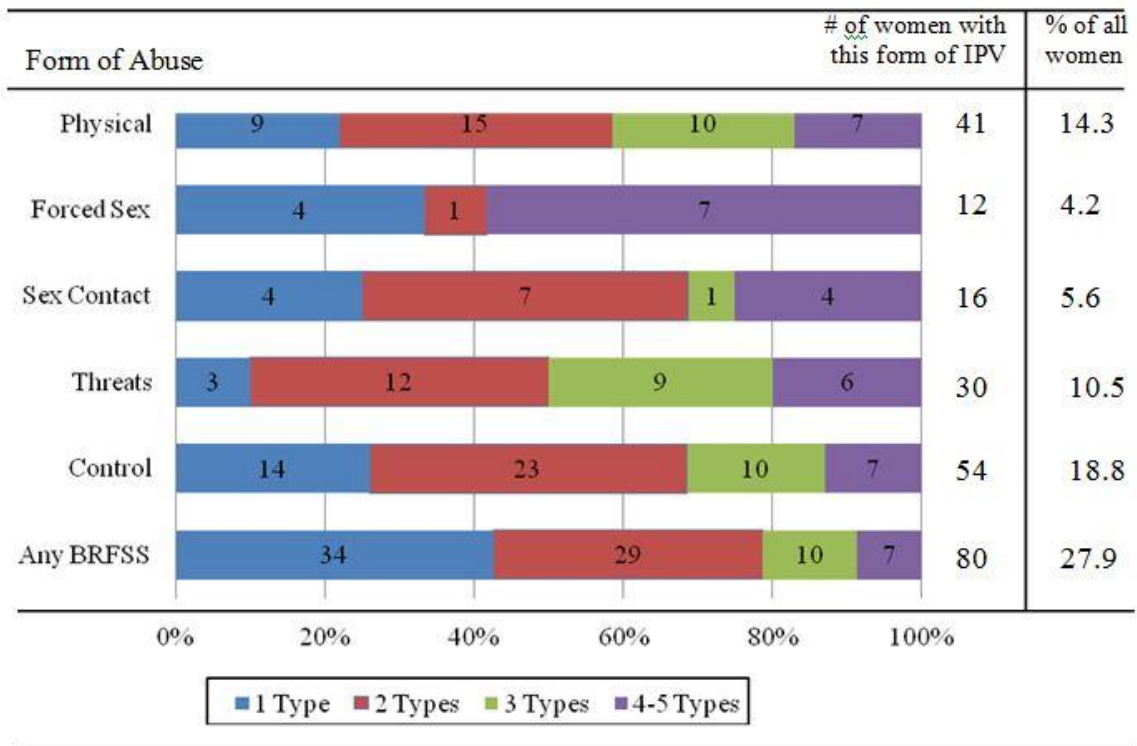
	Past Year Prevalence (n=40)		Lifetime Prevalence <sup>1</sup> (n=80)	
	n	Prevalence	n	Prevalence
<b>Any BRFSS<sup>2</sup></b>	40	13.9	80	27.9
<b>Physical</b>	24	8.4	54	18.8
Physical	16	5.6	41	14.3
Forced Sex	7	2.4	12	4.2
Sexual Contact	6	2.1	16	5.6
<b>Non-Physical</b>	28	9.8	60	20.9
Controlling Behavior <sup>3</sup>	23	8	54	18.8
Threats	15	5.2	30	10.5

<sup>1</sup>Adult lifetime is age 18 to present age

<sup>2</sup>BRFSS, Behavioral Risk Factor Surveillance Survey

<sup>3</sup>Controlling behavior includes put-downs, name calling, or controlling who participant talks to, where they go or what they do

Figure 1: Percent of participants reporting single or multiple types of abuse in their adult lifetime.



*Table 5: Co-occurrence<sup>1</sup> of forms of abuse in 80 abused participants aged 18 to 25.*

<b>Form of Abuse</b>	<b>Prevalence<sup>2</sup></b>			
	Physical Abuse	Forced Sex	Unwanted Sexual Contact	Threats
Forced Sex	8.8			
Unwanted Sexual Contact	8.8	6.3		
Threats	22.5	7.5	3.8	
Controlling Behavior	33.8	8.8	11.3	30

<sup>1</sup>Co-occurrence of two or more types of violence

<sup>2</sup>Results in table presented as percentages of abused participants

*Table 6: Women experiencing IPV: Overlap between different types delineated by BRFSS in 80 abused women aged 18-25.*

	<b>Last 12 months (n = 40)</b>			<b>Adult Lifetime (n= 80)<sup>1</sup></b>		
	<b>n</b>	<b>% only this abuse</b>	<b>% with other abuse</b>	<b>n</b>	<b>% only this abuse</b>	<b>% with other abuse</b>
<b>Physical abuse</b>						
Physical violence	16	37.5	62.5	41	22	78
Forced sex	7	28.6	71.4	12	33.3	66.7
Unwanted sexual contact	6	33.3	66.7	16	25	75
<b>Nonphysical abuse</b>						
Threats/anger	15	20	80	30	10	90
Controlling behavior	23	43.5	56.5	54	26	74
<b>One type of IPV</b>		57.5			42.5	
<b>Multiple types of IPV</b>			42.5			57.5

<sup>1</sup>Adult lifetime is age 18 to present age

BRFSS, Behavioral Risk Factor Surveillance Survey; IPV, intimate partner violence; WEB, Women's Experience with Battering Scale

Table 7: Chronicity and Severity of IPV by type in adult lifetime (since age 18)<sup>1</sup>

	Physical Abuse n= 41		Forced Sexual Intercourse n= 12		Unwanted Sexual Contact n= 16		Threats n= 30		Controlling Behavior n= 54	
	n	%	n	%	n	%	n	%	n	%
<b>Number of different abusive partners</b>										
1	33	82.5	11	91.7	13	86.7	29	96.7	50	92.6
2	5	12.5	0	0.0	2	13.3	1	3.3	4	7.4
≥3	3	5.0	1	8.3	0	0.0	0	0.0	0	0.0
<b>Number of occurrences</b>										
1 Time	11	27.5	8	66.7	8	50.0	9	30.0	1	1.9
2 Times	10	25.0	0	0.0	2	12.5	7	23.3	7	13.0
3-5 Times	9	22.5	1	8.3	3	19.8	8	26.7	17	31.5
6-10 Times	3	7.5	1	8.3	2	12.5	2	6.7	8	14.8
11-20 Times	3	7.5	1	8.3	0	0.0	2	6.7	8	14.8
20-50 Times	2	5.0	1	8.3	1	6.3	0	0.0	7	13.0
≥50 Times	2	5.0	0	0.0	0	0.0	2	6.7	6	11.1
<b>Years encompassed by IPV</b>										
<1	22	53.7	9	75.0	11	68.8	19	63.3	28	51.9
1 year	8	19.5	2	16.7	2	12.5	2	6.7	11	20.4
2 years	6	14.6	0	0.0	2	12.5	4	13.3	7	13.0
3 Years	2	4.9	1	8.3	0	0.0	1	3.3	4	7.4
4 Years	0	0.0	0	0.0	1	6.3	2	6.7	0	0.0
≥5 Years	3	7.3	0	0.0	0	0.0	2	6.7	4	7.4
<b>Years of abuse</b>										
Mean (standard deviation)	1	(1.5)	0.4	(.90)	0.6	(1.1)	1.0	(1.6)	1.07	(1.5)
<b>Severity of Abuse</b>										
Not Violent	4	10.0	5	41.7	9	56.3	6	20.0	25	46.3
Slightly Violent	16	40.0	4	33.3	5	31.3	12	40.0	19	35.2
Moderately Violent	12	30.0	2	16.7	2	12.5	8	26.7	9	16.7
Extremely Violent	8	20.0	1	8.3	0	0.0	4	13.3	1	1.9

<sup>1</sup>BRFSS Only

<sup>2</sup>Controlling behavior includes put-downs, name calling, or controlling who participant talks to, where they go or what they do

<sup>3</sup>Years encompassed by IPV computed to the nearest year, so <1 year indicates a period of <12 months

BRFSS, Behavioral Risk Factor Surveillance Survey; IPV, intimate partner violence

*Table 8: Participants' percentage of life encompassed by abuse<sup>1</sup> by severity of abuse.*

<b>Perceived Severity of Abuse</b>	<b>Percentage of Life Encompassed by Abuse<sup>2</sup></b>									
	<1%	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	100%
Not Violent	32	1	2	0	6	1	0	2	0	5
Slightly Violent	32	2	5	1	5	1	2	0	1	7
Moderately Violent	13	2	3	4	1	1	1	1	0	7
Extremely Violent	4	0	2	0	1	1	0	1	0	5

<sup>1</sup>Percentage of life encompassed by abuse is the percent of years encompassed by abuse since respondent became an adult, turned 18.

<sup>2</sup>Percentages were rounded to the nearest whole number

*Table 9: Correlational Analysis from Chronicity Comparisons to Severity Ratings.*

Measures of Chronicity	Ratings of Severity, by Form of Abuse				
	Physical	Forced	Sex	Control	Threats
		Sex	Contact		
Duration (years)	0.01***	0.02*	0.10	0.15	0.21
Duration (percent of adult lifetime)	0.02*	0.02*	0.64	0.01**	0.65
Frequency of Occurrences	0.00***	0.01**	0.33	0.02*	0.18

\*\*\*  $p \leq .001$

\*\*  $p \leq .01$

\*  $p \leq .05$

*Table 10: Number of phone calls<sup>1</sup> made to police, organized by perceived severity of abuse type.*

<b>Perceived Severity of:</b>	Not Violent	Slightly Violent	Moderately Violent	Extremely Violent
Physical	0	1	3	8
Forced Sex	1	3	0	1
Unwanted Sexual Contact	1	0	1	0
Controlling Behavior	3	1	5	1
Threats	0	6	4	3

<sup>1</sup>n phone calls = 14. Numbers in this table are reported by type of violence, therefore each phone call is reported more than once if participant experienced more than one form of abuse.



Table 11: Relationship between demographic characteristics or history of child abuse and IPV (during lifetime, since turning 18).

Demographic Factors	BRFSS nonphysical		BRFSS physical		BRFSS any		WEB		Any WEB or BRFSS	
	RR <sup>1</sup>	95% CI	RR	95% CI	RR	95% CI	RR	95% CI	RR	95% CI
<b>Household income</b>										
<\$25,000	1.83	1.06-3.16	1.84	1.02-3.34	1.59	0.99-2.54	2.09	1.17-3.75	1.43	0.92-2.22
\$25,000-\$49,999	0.85	0.45-1.59	1.13	0.59-2.13	1.12	0.67-1.89	0.79	0.41-1.54	1.20	0.74-1.95
\$50,000-\$74,999	0.46	0.14-1.49	0.16	0.02-1.19	0.46	0.17-1.28	0.30	0.73-1.25	0.40	0.15-1.10
≥\$75,000	1	—	1	—	1	—	1	—	1	—
<b>Race/Ethnicity</b>										
Caucasian	1	—	1	—	1	—	1	—	1	—
African American	1.16	0.28-4.73	0.62	0.09-4.48	0.85	0.21-3.47	1.24	0.30-5.11	0.76	0.19-3.09
Asian/Pacific Islander	0.23	0.03-1.66	0.80	0.25-2.56	0.71	0.26-1.95	-	-	0.64	0.23-1.74
American Indian	1.26	0.31-5.18	0.72	0.10-5.18	0.95	0.23-3.88	1.51	0.37-6.21	1.31	0.41-4.15
Multiracial	1.06	0.50-2.24	1.94	1.02-3.69	1.59	0.90-2.79	1.33	0.65-2.73	1.50	0.87-2.57
Other	2.14	0.67-6.85	2.45	0.76-7.85	1.60	0.50-5.06	1.63	0.40-6.71	1.44	0.45-4.55
<b>Not Employed</b>	0.92	0.74-1.14	0.98	0.79-1.21	0.92	0.76-1.11	1.03	0.84-1.25	0.95	0.80-1.13
<b>Education: High school graduate or less</b>	0.57	0.32-0.99	0.59	0.32-1.07	0.64	0.39-1.05	0.62	0.34-1.14	0.69	0.43-1.12
<b>One or more children in the home for whom respondent is guardian</b>	1.81	0.97-3.36	1.56	0.80-3.04	1.54	0.89-2.68	2.47	1.35-4.49	1.52	0.90-2.56
<b>History of abuse as a child</b>										
Physically abused as a child	1.94	0.98-3.84	2.83	1.48-5.40	2.05	1.15-3.66	2.55	1.31-5.00	2.12	1.23-3.65

Sexually abused as a child	2.59	1.49-4.50	2.83	1.48-5.40	2.24	1.37-3.66	2.06	1.11-3.84	1.91	1.19-3.10
Physically or sexually abused	2.71	1.61-4.57	3.13	1.76-5.54	2.51	1.60-3.95	2.73	1.57-4.75	2.33	1.51-3.59

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<sup>1</sup>All RR's adjusted for age only.

BRFSS, Behavioral Risk Factor Surveillance Survey; CI, confidence interval; IPV, intimate partner violence; RR, Prevalence rate ratio; WEB, Women's Experience with Battering scale

