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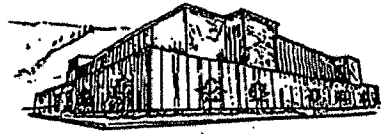
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WITNESSING INTERPARENTAL VIOLENCE AS A CHILD AND ADULTHOOD  
ATTITUDES TOWARD AGGRESSION AND VIOLENCE

by

Diana E. Marchetti

B.S. Santa Clara University, Santa Clara, California, 2001

Presented in partial fulfillment of the requirements

For the degree of

Masters of Arts

The University of Montana

Spring, 2005

Approved by:



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Chairperson



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Witnessing Interparental Violence as a Child and Adulthood Attitudes Toward Aggression and Violence

Chairperson: Christine Fiore



There is mixed evidence regarding the association between witnessing interparental violence (IPV) in one's family of origin and later inflicting, sustaining, and accepting violence in adulthood. Although a handful of protective and vulnerability factors have been identified for children who witness IPV, research in this area is scarce. The present study investigates a number of factors that may play a role in the relationship between witnessing IPV as a child and adulthood attitudes toward violence, including history of child physical abuse, family environment characteristics, witnessing IPV and parental response to witnessing IPV. The moderating effects of parental response is the primary area of interest; specifically considering how and if rationalizing violence responses and negating violence responses interact with witnessing IPV and adulthood attitudes toward aggression. The intent of the current study is to examine the role of witnessing IPV and if possible, provide useful information to parents and mental health professionals about the influence of parental response on IPV.

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## Witnessing interparental violence as a child and adulthood attitudes toward aggression and violence

Considering all instances of violent crimes, domestic violence (DV) is the most common (Widom, 1989). The way in which researchers define DV is inconsistent across the literature in this area, often making the study of DV complicated. For example, Straus, Gelles, & Steinmetz (1980) define abusive violence as, “an act which has the high potential for injuring for the person being hit” (Straus et al., 1980). These acts can include punching, kicking, biting, hitting with an object, beating, shooting, attempting to shoot, and stabbing or attempting to stab (Straus et al., 1980). This definition focuses on the intent of the perpetrator, but fails to account for the actual harm done to the recipient of the act (e.g., someone is punched, but not hurt, versus someone is punched and their jaw breaks). Thus, even with the definitions of violence proposed by esteemed researchers in the field, limitations are noted.

One specific form of DV is spousal abuse. Spousal abuse is a behavior pattern that may occur in physical, emotional, psychological and sexual forms (Kashani, Daniel, Dandoy, & Holcomb, 1992). In a representative study of American families in the United States, approximately 16%, or 1 in 6 married couples had engaged in at least one violent act against their partner in the year prior to the study (Straus et al., 1980; Straus & Gelles, 1990). Asking respondents in this study to consider the entire course of their marriage, this figure rises to 28%, or between 1 in 3 to 1 in 4 couples that engaged in spousal abuse (Straus et al., 1980). The most common violent acts among married couples in this study were pushing, shoving and slapping, and the least common violent act was using a knife or using a gun against a spouse (Straus et al., 1980). Of the couples

reporting any form of violence, 49% of these couples were mutually violent toward each other (Straus et al., 1980). Examining violent acts in the year prior to the study, about 27% of men were violent toward their wives and 24% of wives were violent toward their husbands without reciprocal violence from the other partner (Straus et al., 1980). These estimates remained fairly consistent in a 1985 National Family Violence Resurvey with 50% of couples reporting mutual violence, about 25% reporting only husband-to-wife violence and about 25% reporting only wife-to-husband violence (Straus & Gelles, 1990).

Overall, approximately 3.8%, or one out of 26 American wives are victims of abuse by their husbands, a total of almost 1.8 million women per year (Straus et al., 1980; Straus & Gelles, 1990). Moreover, about 1 out of 6 American couples, 8.7 million households, experience at least one violent incident (Straus & Gelles, 1988). However, there is some evidence that rates in intimate violence may have declined in more recent decades. In a 1995-1996 National Violence Against Women Survey of 8,000 men and 8,000 women, annual incidence of intimate partner violence was estimated at 1.8% for women and 1.1% for men (Tjaden & Thoennes, 2000). Regarding lifetime prevalence of intimate partner victimization, this survey found rates of 25.5% for women and 7.9% for men (Tjaden & Thoennes, 2000).

Often, the effects of spousal violence are not limited to the couple. Every year approximately 3.3 million children from the general population witness interparental violence (IPV; Carlson, 1984). This estimate is from earlier studies suggesting that 3.3 million households experience at least one seriously violent incident per year combined with an estimated number of households with children (55%) and multiplied by the

average number of children per household (2; Carlson, 1984; Straus et al., 1980). However, this number is probably an underestimate because it excludes mothers who divorced abusive fathers, families with children under the age of three, and exposure to serious violence that caused injury (Carlson, 1984).

Thus, as compared to the general population, households with children, primarily children younger than five years old, represent a significantly higher proportion of households in which spousal violence occurs (Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997). Moreover, conflict about childrearing is the most likely cause of IPV and the more often a couple disagrees about child related issues, the higher the rate of IPV (Straus et al., 1980). In one study, 70% (14 out of 24) of self-defined assaulted women reported that their children either witnessed IPV or it's after effects (e.g., the mother's bruises), and 55% (11 out of 24) report that their children were direct witnesses to the emotional and physical abuse they endured (Hilton, 1992). Although many parents tend to minimize or deny the presence of the children during IPV incidents, the majority of children are able to recall detailed accounts of IPV situations (Jaffe, Wolfe, & Wilson, 1990). Thus, given that parents may fail to recall, minimize, or deny presence of their children during instances of IPV, estimates of child witnesses, derived from parental reports, are likely deflated. The reality is that most children do either see or are aware of the majority of IPV incidents (Hilton, 1992).

### General Effects of Witnessing IPV

Research suggests that witnessing IPV can be as harmful as and a better predictor of child adjustment than being the direct recipient of child physical abuse (CPA;

O'Keefe, 1994; Widom, 1989). In general, children witnessing IPV tend to manifest a number of disturbances in developmental patterns including cognitive, emotional and behavioral adjustment. The consequences of observing IPV may include: internalizing reactions (e.g., increased anxiety, fears, withdrawal, and depression); externalizing behavior problems (e.g., conduct disorder, aggression, argumentativeness, fighting, bullying, and hyperactivity); somatic problems (e.g., headaches, stomach aches, and intestinal problems); sleeping difficulties (e.g., nightmares, insomnia, and bedwetting); interpersonal deficits; temperament problems; trauma symptoms; and school related complications (e.g., poor academic performance, school phobia, lack of concentration and erratic attendance; Cristopoulous et al., 1987; Davis & Carolson, 1987; Edleson, 1999; Hughes, 1982; Jaffe et al., 1990; Jouriles, Norwood, Mahoney, McDonald, & Vincent, 1996; Kaplan, Hendricks, Black, & Blizzard, 1994; Margolin, John, Ghosh, & Gordis, 1996; Rosenbaum & O'Leary, 1981).

The effects of witnessing IPV noted above depend in part on the age and the developmental stage of the child at the time of witnessing IPV. For example, infants may exhibit poor health, sleeping problems, eating problems, and excessive screaming or crying in reaction to witnessing IPV (Alessi & Hearn, 1984; Davidson, 1978). As child witnesses enter preschool, responses to IPV may include fear responses such as somatic complaints (e.g., headaches), regressive behaviors (e.g., enuresis and thumb sucking), nighttime problems (e.g., insomnia), and signs of terror (e.g., yelling, irritability, hiding, shaking and stuttering; Alessi & Hearn, 1984; Davidson, 1978). Furthermore, school-aged children generally tend to manifest emotional disturbance via school related problems (e.g., erratic attendance, poor academic performance, and school phobia), a

lowered sense of self-esteem, a difficult time interacting with peers, and a sense of guilt and shame about the abuse (Wolfe, Jaffe, Wilson, & Zak, 1985). In addition, some research suggests that at this age, witnessing IPV tends to affect females and males differentially. Specifically, witnessing IPV is more likely to increase externalizing behaviors for males and internalizing behaviors for females (Hilberman & Munson, 1977; O'Keefe, 1994). For example, boys are likely to exhibit more aggressive behaviors including the tendency to act-out, throw temper tantrums and become disobedient, destructive, disruptive and defiant (Hughes, 1982; Rosenbaum & O' Leary, 1981; Wolfe et al., 1985). On the other hand, girls in the same population are apt to be passive, withdrawn, clingy, dependant, and exhibit somatic complaints (Hughes, 1982).

As children developmentally mature into adolescents, aggressive problem solving, fighting, general hostility, running away from home, gun-carrying in school, anxious behaviors (e.g., nail biting and somatizing feelings), suicidal behaviors, projection of blame toward others, and increased interpersonal problems begin to emerge (Alessi & Hearn, 1984; Davidson, 1978; Yexley, Borowsky, & Ireland, 2002). Moreover, during adolescence, girls who witness IPV tend to generalize feelings of distrust to all men, and when they begin to date, often become victims of physical violence from their boyfriends (Carlson, 1984). Adolescent boys may, for the first time, intervene during IPV on behalf of their mothers or may identify with their fathers and in turn, direct violence towards their mother, sister, or girlfriend (Carlson, 1984).

In addition to developmental stage, the effects of witnessing IPV also vary with the severity, frequency, and type of the violence. Children who report more frequent and more severe IPV (e.g., physical rather than emotional and mental abuse), also report more

severe symptomology (Jouriles et al., 1996; O'Keefe, 1994). Furthermore, research repeatedly demonstrates the cumulative or additive effects of violence across multiple subsystems (Cummings, Hennessey, Rabideau, & Cicchetti, 1994; Hughes, Parkinson, & Vargo, 1989). Furthermore, the "double whammy" effect refers to children who both witness IPV and who are direct victims of CPA (Hughes et al., 1989). Usually children exposed to both of these violent acts exhibit more externalizing behavior problems compared to children only exposed to one type of familial violence (Hughes et al., 1989). Such additive affects were evident in a study comparing abused to non-abused young boys, in which physically abused boys who witnessed IPV were more reactive (e.g., verbal or physical expressions of anger, impulsive, overaroused), compared to boys who were only exposed to IPV (Cummings et al., 1994). In another sample of high school adolescents, adjustment outcome scores reflected both additive and independent effects of witnessing IPV and of CPA (O'Keefe, 1996). Results of this study suggest that when CPA was low, witnessing IPV had an adverse affect on adjustment, and when CPA was high, the effects of witnessing IPV were negligible (O'Keefe, 1996). Thus, it is important to account for other types of violence (e.g., CPA) when studying the effects of witnessing IPV.

Although the corpus of research focuses on the childhood effects of witnessing IPV, studies also suggest long-term psychological and developmental ramifications well into adolescence and adulthood (Carlson, 1990; Forsstrom-Cohen & Rosenbaum, 1985; Henning, Leitenberg, Coffey, Turner, & Bennett, 1996; Maker, Kimmelmeier, & Peterson, 1998; Silvern et al., 1995). In one study of adolescents, male witnesses of IPV during childhood reported more suicidal thoughts and depressive symptomatology

compared to male non-witnesses (Carlson, 1990). Although Carlson's results implicitly suggest that female well-being is not related to witnessing IPV, other studies find that these two variables are related (Carlson, 1990; Forsstrom-Cohen & Rosenbaum, 1985; Maker et al., 1998). For example, in a sample of college females, child witnesses of IPV showed greater symptomology consistent with depression, trauma, and antisocial behavior than did the nonwitnesses (Maker et al., 1998). In another college sample, both male and female child witnesses of IPV demonstrated higher anxiety compared to nonwitnesses (Forsstrom-Cohen & Rosenbaum, 1985). However, in this same study, only female witnesses were more depressed and more aggressive than nonwitnesses (Forsstrom-Cohen & Rosenbaum, 1985). Researchers attribute findings of heightened depression in female witnesses of IPV to the helplessness they learn by watching their mother's sustain IPV (Forsstrom-Cohen & Rosenbaum, 1985). On the other hand, Forsstrom-Cohen and Rosenbaum (1985) explain findings of lower depression scores for male witnesses by proposing that they are more likely to identify with the aggressor, usually the father. Despite such findings and explanations, other studies with college students found associations between witnessing IPV as children and adulthood depression, trauma and lower self-esteem for both genders (Silvern et al., 1995). Finally, in a study of adult women, child witnesses of IPV demonstrated greater psychological distress and lower social adjustment than nonwitnesses (Henning et al., 1996). These studies exhibit the sequelae of psychological and developmental disturbances that can persist into adulthood, as a consequence of witnessing IPV as a child.

## Intergenerational Hypothesis and Social Learning Theory

A variety of approaches (e.g., sociological perspective, attachment theory, developmental approach, and communication perspective) aim to explain the mechanism by which children who witness IPV later continue the cycle of violence. However, the most widely accepted theory used to explain this continued cycle of violence is the social learning theory. This theory addresses the intergenerational transmission of violence hypothesis. The intergenerational transmission of violence hypothesis suggests that maltreated children, either direct victims of abuse or witnesses of IPV, are more likely to continue the cycle of violence as adults. According to social learning theory, behaviors are learned through direct observation of models engaging in a behavior that is later imitated (Bandura, 1977). Children model both aggressive behaviors that are directed at them (e.g., CPA) and aggressive behaviors that are observed (e.g., IPV; Widom, 1989). The observation of this type of behavior provides the model for learning aggressive behavior itself and also provides the model for learning the appropriateness of such behavior, specifically within the family context (Bandura, 1977).

According to Bandura (1977), observing IPV can lead to three behavioral consequences: acquisition, inhibition or disinhibition, and response facilitation. Acquisition refers to learning and performing a novel response (e.g., violent act) consistent with the response performed by the model (e.g., perpetrator of the violence) in a similar situation (e.g., when family conflict arises). Inhibition or disinhibition refers to the likelihood that the observer (e.g., child witness) will perform the new behavior as a function of the observed consequences (e.g., reinforcements or punishments) incurred by the model. Thus, perceived consequences of the IPV witnessed play an important role in



the prediction of the use of later violence, particularly within the family. For example, if a child observes a desired or reinforcing outcome to IPV (e.g., regaining loss of control or ending a negative interaction), disinhibition of violence and the probability of the observer engaging in violence are apt to increase (Bandura, 1977; O'Leary, 1988). In contrast, an undesirable or punishing outcome (e.g., divorce, trouble with the law, or social disapproval) is more likely to inhibit violence, and thus, decrease the likelihood of aggression (Bandura, 1977; O'Leary, 1988). However, these types of punishments are usually delayed and lack strength to suppress modeling of violent behavior (O'Leary, 1988). Finally, response facilitation is the increased probability of an already existing response as a function of observing the model engaging in a similar response, thus increasing social desirability of the behavior. Moreover, response facilitation increases a socially desirable behavior performed by the observer; response disinhibition increases the occurrence of an undesirable response (e.g., violence; Bandura, 1977).

Bandura and Walters (1963) suggest that modeling is most probable when the model's sex matches the observer's sex. Thus, males who witness their fathers abusing their mothers or their girlfriends are more likely to later abuse their own wives or own girlfriends, than if they witness their mothers abusing their fathers or their boyfriends. Similarly, females who witness their mothers abusing their fathers or their boyfriends are more likely to later abuse their own husbands or own boyfriends, than if they witness their fathers abusing their mothers or their girlfriends. However, as is later discuss, these gender-modeling effects are not consistent throughout the literature. In general, the social learning theory places greater emphasis on observed consequences than on gender similarities between the model and the observer (Bandura, 1977).

Additional support for the social learning model is provided by the transgenerational triangles of abuse within which there exists a perpetrator, an observer, and a victim (Ney, 1992). The transgenerational triangles, also known as the rotating triquerta, explain the way in which the roles of the perpetrator, the observer and the victim can rotate or interchange (Ney, 1992). Thus, the child who is often the observer of IPV will, if he identifies with the aggressor, have a strong tendency to later become the perpetrator (Ney, 1992). For example, he might in the future select a mate similar to his mother to provoke with verbal abuse. However, if the child observer identifies more with the victim, he will have a stronger tendency to later become the victim himself (Ney, 1992). Thus, according to this rotating triquerta, the child observer has a greater probability of becoming the perpetrator and/or victim in future relationships.

#### *Witnessing IPV and Subsequent Aggressive Behavior*

As previously mentioned, aggressive behaviors in both males and females are linked to witnessing IPV in one's family of origin. IPV is correlated with children's and adolescent's externalizing behavior problems in both clinic and shelter populations (Hughes et al., 1989; Jouriles et al., 1996; O'Keefe, 1996;). Externalizing behaviors for these groups may include aggressive disputes, delinquency, conduct disorder, fighting, bullying, and hyperactivity (Cristopoulous et al., 1987; Hughes et al., 1989). In addition to externalizing behaviors, witnessing IPV also impacts children's judgments of violence as an appropriate means of resolving conflict (Jaffe et al., 1990). Specifically, child witnesses of IPV tend to demonstrate a greater willingness to use violence compared to non-witnessing children (Jaffe et al., 1990). Such pro-violent attitudes and aggressive

behaviors tend to continue through adulthood and are exhibited in a variety of environments including, the home, the community, and subsequent intimate relationships.

*Aggression in the home.* In the home, research purports that children who witness IPV are more likely to assault their mothers and their siblings than are nonwitnesses (Carlson, 1990; Hilberman & Munson, 1977; Langhinrichsen-Rohling & Neidig, 1995; Straus et al., 1980). Furthermore, boys are more likely to assault parents than girls (Carlson, 1990; Hilberman & Munson, 1977; Langhinrichsen-Rohling & Neidig, 1995; Straus et al., 1980). Straus et al. (1980) estimated that sons who witness their father's severe aggressive actions toward their mothers are ten times more likely to perpetrate violence against their own parents compared to sons who do not witness IPV. In contrast to this finding, witnessing IPV was a significant inhibitor of perpetrating parental violence for at-risk female adolescents (Langhinrichsen-Rohling & Neidig, 1995). However, in the same sample, the combination of being a victim of CPA and witnessing IPV significantly predicted both male and female perpetration against parents and siblings (Langhinrichsen-Rohling & Neidig, 1995).

*Aggression in the community.* In conjunction with social learning theory, children imitate aggressive behaviors learned at home, in the community through fights at both school and in the neighborhood (Jaffe et al., 1990). Children who witness IPV, especially males, are more likely to engage in fighting with schoolmates (Hilberman & Munson, 1977). In a public school sample with 6<sup>th</sup>, 9<sup>th</sup>, and 12<sup>th</sup> graders, males who witness IPV were more likely to engage in fighting than males who were victims of CPA; this relationship was not statistically significant (Yexley et al., 2002). However, in the same study, children who were both CPA victims and IPV witnesses were more apt to make

suicide attempts, fight, and carry a gun at school than children exposed to only one type of violence (Yexley et al., 2002).

Furthermore, there is an association between witnessing IPV and perpetrating stranger aggression (Mangold & Koski, 1990). In a college sample of males and females, witnessing a mother aggress toward a father was associated with higher levels of perpetrating stranger violence (e.g., attacking, hitting, or punching; Mangold & Koski, 1990). However, when individuals witnessed a father aggress toward a mother, the relationship between witnessing IPV and perpetrating stranger violence was statistically significant only for males (Mangold & Koski, 1990). Moreover, a study of couples about to be married found that witnessing IPV predicted female non-intimate aggression and this effect was mediated by a women's aggressive disposition (Arias, 1984).

Multiple studies have demonstrated the association between witnessing violence in one's family of origin and becoming an adolescent and an adult violent offender (Bach-y-Rita & Veno, 1974; McCord, 1988; Spaccarelli, Coatsworth, & Bowden, 1995). In a study of adolescent males incarcerated for violent crimes, witnessing IPV was associated with the belief that aggression enhances self-image and this belief predicted violent behavior (Spaccarelli et al., 1995). In another sample, 53% of 62 habitually violent inmates from a prison population with a long history of assault had observed IPV as children (Bach-y-Rita & Veno, 1974). In a comparison of males reared by aggressive, punitive or non-aggressive parents, men reared by aggressive parents were most likely to become criminals with close to half (48%) being convicted of Index crimes (e.g., auto theft, burglary, assault, attempted rape, rape, kidnappings, attempted murder, and murder; McCord, 1988). In this study, aggressive parenting included couples in which at least

one parent was physically violent toward the other or couples in which there was considerable parental conflict, typically including yelling, throwing things, or attempting to injure someone when frustrated or annoyed (McCord, 1988).

*Aggression in intimate relationships.* Numerous studies have demonstrated the way in which intergenerational transmission of violence plays out in intimate dating and marital relationships (Foo & Margolin, 1995; Gwartney-Gibbs, Stockard, & Bohmer, 1987; Riggs & O'Leary, 1996; Riggs, O'Leary, & Breslin, 1990). Riggs and O'Leary (1996) suggest a model for dating violence which includes both contextual or background variables (e.g., witnessing IPV, parent-child abuse, and prior aggression) and situational or environmental variables (e.g., drinking and relationship problems). Exploring this model, researchers found that in a college sample, witnessing IPV increased acceptance and use of aggression for females, but had little or no effect on the acceptance and use of aggression for males (Riggs & O'Leary, 1996). However, there is also some evidence that witnessing IPV is associated with perpetrating intimate aggression for both sexes. For example, in a study of college undergraduates, aggression in dating relationships was related to witnessing IPV for both males and females (Riggs, O'Leary, & Breslin, 1990).

Although some research does support the relationship between witnessing IPV and sustaining or perpetrating intimate aggression for both sexes, the preponderance of evidence for the existence of this association is illustrated primarily with males (Foo & Margolin, 1995; Gwartney-Gibbs, Stockard, & Bohmer, 1987). National survey results suggest that witnessing IPV tripled the use of physical abuse by men toward their female partners (Straus et al., 1980). In a sample of college students, witnessing IPV, as measured by the Conflict Tactics Scale, accounted for 13% of the unique variance in the

prediction of male dating aggression, but was inconsequential in predicting female dating aggression (Foo & Margolin, 1995). Observing more severe forms of IPV is significantly related to college males inflicting and sustaining more severe forms of courtship violence (Gwartney-Gibbs et al., 1987). For example, 64% of males who witnessed IPV sustained courtship violence, compared to 24% of males who never witnessed IPV (Gwartney-Gibbs et al., 1987). Although similar trends were found for females in this sample, the association was not statistically significant (Gwartney-Gibbs et al., 1987). Another study of African American and Caucasian college students yielded comparable results, witnessing one's mother hitting one's father is significantly related to males being the recipients of dating violence (DeMaris, 1987). In a study of couples about to be married, witnessing IPV was significantly associated with male aggression against a current female mate, but was not associated with female aggression (Arias, 1984). As this evidence suggests, it is necessary to consider gender differences in the study of the effects of witnessing IPV and later relationship violence.

Thus, there is a plethora a research supporting the relationship between witnessing IPV and sustaining or perpetrating dating aggression. However, studies also suggest that CPA plays a role in the association of these variables. Some research purports that it is the combination of CPA and witnessing IPV that is associated with dating violence (Bernard & Bernard, 1983). In one such study, 73% of abusive college males and 50% of abusive college females had witnessed IPV or experienced CPA, as compared to 32% of non-abusive college males and 23% non-abusive college females having witnessed IPV or experienced CPA (Bernard & Bernard, 1983). However, this study is problematic, as researchers did not differentiate the effects of observing IPV from those of experiencing

CPA, therefore, it is difficult to interpret their findings (Bernard & Bernard, 1983).

Other studies provide evidence that observing IPV may be a better predictor of later involvement in intimate violence compared to CPA (O'Keefe, 1997). For example, in a study of high school students, witnessing IPV was an important predictor of males inflicting dating violence, but there was no association between CPA and inflicting dating violence for either gender (O'Keefe, 1997). One reason given for such findings is that IPV models are usually husband and wife, and thus, IPV is more likely to teach the acceptability of marital aggression compared to parent-child aggression in which the models are a parent and a child (Kalmuss, 1984). Therefore, parental models engaging in IPV more closely match the roles in which IPV witnesses later find themselves as adults, in intimate relationships.

In addition to dating violence, research asserts that witnessing IPV is also associated with adult marital violence (Kalmuss, 1984; Straus et al., 1980; Widom, 1989). In a review of empirical studies, Hotaling and Sugarman (1986) assert that witnessing IPV is the most consistent risk marker for husband-to-wife violence in both genders. Approximately 16-17% of individuals who report witnessing IPV also report involvement in marital aggression (Widom, 1989). In a national survey, men who report witnessing at least one IPV situation, are approximately three times as likely as non-witnesses to report hitting their wives (Straus et al., 1980). Moreover, 1 out of 3 male witnesses of IPV had abused their wives compared to 1 out of 10 non-witnesses (Straus et al., 1980). Straus et al. (1980) also suggest that males exposed to IPV as children have a rate of wife abuse significantly greater than sons of non-violent parents. The results of one study supporting these national statistics indicated that there was a significant

association for men who witnessed IPV and perpetrated intimate abuse toward their wives (Rosenbaum & O' Leary, 1981). Similar findings showed that 70% of abusive men in marital relationships had witnessed IPV, specifically hearing or seeing their fathers hit their mothers (Pagelow, 1981). For women, it is estimated that about 26.7% of IPV witnesses hit their husbands, compared to 8.9% of non-witnesses (Straus et al., 1980). That is, daughters of IPV parents have a rate of husband abuse six times greater than daughters of non-violent parents (Straus et al., 1980).

Furthermore, as is consistent with dating violence, some research provides evidence that witnessing IPV is a better predictor of marital violence than is CPA (Kalmuss, 1984). In a national probability sample, although teenager abuse by parents and witnessing IPV, were both correlated with marital violence, IPV was a stronger predictor (Kalmuss, 1984). In addition, a study involving a clinical sample of men with a history of DV reveals that witnessing IPV but not CPA, uniquely contributes to the predictability of psychological spousal abuse (Bevan & Higgins, 2002).

Despite the preponderance of evidence linking witnessing IPV with intimate adult violence, some results point to weak trends but not statistical significance in the relationship of these variables (DeMaris, 1987; Gray & Foshee, 1997; Jonson-Reid & Bivens, 1999). In a small sample of 77 6<sup>th</sup> to 12<sup>th</sup> grade students, witnessing IPV was not significantly related to mutual male to female and female to male dating violence (Gray, & Foshee, 1997). In a foster youth population, results revealed a weak, but positive, association between male perpetrators of dating violence and witnessing IPV (Jonson-Reid & Bivens, 1999). In another study comparing abused wives (AB), satisfactorily married couples (SC), and nonviolent discordant couples (NV), there was no association



between female witnesses of IPV and victimization in marriage (Rosenbaum & O'Leary, 1981). Furthermore, in a sample of married battered women, only 43%, less than half had witnessed IPV as children (Pagelow, 1981). Thus, abused wives were no more likely to have witnessed IPV, than women in non-violent discordant and satisfactorily married couples.

Furthermore, despite some evidence that witnessing IPV is a better predictor of dating and marital violence than is CPA, other studies found that dating aggression is more strongly associated with CPA compared to witnessing IPV (DeMaris, 1987). In a college sample, male intimate violence was associated with harsh childhood punishment, but witnessing IPV was not significantly associated with perpetrating intimate violence for either gender (DeMaris, 1987). Therefore, there is an apparent need for continued research regarding the link between witnessing IPV as a child, adult violent behaviors, and possible moderators between these two variables.

#### *Witnessing IPV and Attitudes toward Violence*

Observation of IPV is not only associated with perpetrating and sustaining abuse, but is also associated with cognitive imitation of pro-violence attitudes (Kaplan et al., 1994; Ulbrich & Huber, 1981). Specifically, observing violence in one's family of origin is associated with approval of violence toward a spouse, boyfriend, or girlfriend (Owens & Straus, 1975; Riggs & O'Leary, 1996; Ulbrich & Huber, 1981). Males and females learn that violence is the appropriate and acceptable way of resolving conflicts and is an integral part of close relationships (Straus et al., 1980). Children are likely to understand that it is acceptable to hurt those you love, an idea reinforced by observing parents constantly engaging in violence to solve disagreements (Carlson, 1984; Straus et al.,

1980).

Furthermore, females, and to a lesser extent males, learn from watching their own mothers that victimization is inevitable and nobody can help them change this fate. Thus, even for women who do not approve of the violence, these observers are more prone to accept threats and violence from boyfriends as an inevitable reality (Jaffe et al., 1990). Although the women might not condone the violence, they tend to feel powerless to arrest it and are consequently victimized in their relationships (Follingstad, Rutledge, McNeill-Harkins, & Polek, 1992).

In a national survey investigating the link between exposure to childhood violence and adult attitudes toward violence, witnessing IPV was moderately correlated with adult approval interpersonal violence (e.g., approval of spanking and approval of husband slapping wife; Owens & Straus, 1975). The correlation between childhood violence and approval of interpersonal violence was twice as large for men compared to women with an overall moderate association (Owens & Straus, 1975). Researchers proposed that violence witnessed in childhood provides a role model for face-to-face violence comparable to that of adult interpersonal conflicts (Owens & Straus, 1975). In another study using telephone interviews, men's approval of wife hitting was positively associated with witnessing IPV (Ulbrich & Huber, 1981). In the same study, observing the mother hit the father increased women's tendency to approve of wife hitting by husbands (Ulbrich & Huber, 1981). In contrast, observing the father hit the mother strongly affected women's disapproval of wife hitting (Ulbrich & Huber, 1981). Finally, in a sample of college students, witnessing IPV increased women's acceptance of aggression in dating relationships, but had little or no effect on men's attitudes (Riggs &

O'Leary, 1996). Thus, as evidenced in the above studies, there is ample support for the link between witnessing IPV and approving of violence in adult intimate relationships for both genders.

### Resilience and Vulnerability Factors

Although witnessing violence in one's family of origin may influence the involvement in and attitudes regarding violence in intimate adult relationships, it does not fully explain them. There are many cases of individuals who witness familial violence, but later refrain from inflicting or sustaining abuse in intimate relationships (O'Keefe, 1998). In a limited sample of adolescents ages 14 to 19 that witnessed high levels of familial violence, 49% reported perpetrating dating violence, while 51% denied ever perpetrating dating violence (O'Keefe, 1998). In the same sample, 55% of adolescents reported victimization of dating violence and 45% denied ever sustaining this type of violence (O'Keefe, 1998). These findings suggest that even in this sample of high-risk adolescents, the intergenerational transmission of violence hypothesis held true for only about half of the participants (O'Keefe, 1998). Furthermore, as discussed above, some studies suggest only weak, non statistically significant trends in the relationship of these variables between observing IPV and later intimate violence (DeMaris, 1987; Gray & Foshee, 1997; Jonson-Reid & Bivens, 1999). Thus, it is faulty to assume that children who witness IPV are doomed to continue the cycle of violence. Conversely, there are individuals who never witnessed IPV and later engage in violent relationships (Straus et al., 1980). Thus, witnessing IPV partially explains the intergenerational transmission of violence, but there are clearly other variables playing a role in the association of

witnessing IPV and adult involvement in and attitudes toward violence.

### *Defining Vulnerability and Protective factors*

Although a history of familial violence is a risk factor for continuing the cycle of violence, this pathway is not direct and likely involves a number of other variables. In order to better understand the cycle of violence, specifically the relationship between witnessing IPV and later attitudes toward aggression, one must consider vulnerability and protective factors that moderate or change the consequences associated with witnessing IPV. The importance of examining vulnerability and protective factors is especially emphasized in resilience research (Luthar & Zigler, 1991).

Resilience has been defined as an end product of buffering processes that do not eliminate risks and stress, but rather allow individuals to better cope with them (Rutter, 1987). A protective factor tends to moderate, ameliorate, or alter a person's response to risk and adversity to enhance developmentally appropriate outcomes, thus inhibiting pathogenic processes or maladaptive outcomes (Werner, 2000; Garmezy, 1981). Conversely, a vulnerability factor is one for which an individual with high levels of an attribute are more susceptible to increasing stress than other individuals with low levels of the same attribute (Luthar & Zigler, 1991). Vulnerability and protective factors include any personal attributes, environmental conditions, biological influences, and other positive or negative events that can impact adjustment by virtue of their interaction with risk variables (e.g., witnessing IPV; Garmezy, 1981; Luthar & Zigler, 1991). In short, resiliency is a dynamic interaction between a number of protective and vulnerability factors.

## *Vulnerability and Protective Factors for Children*

*Dispositional Factors.* Although, little is known about the specific vulnerability and protective factors for children who witness IPV, research has identified several consistent factors influencing the way in which children respond to difficult situations. Protective dispositional attributes of resilient children include the female gender, low emotionality, positive self-esteem, academic achievement, easy temperament, sociability, average or above average intelligence, impulse control, sense of humor, problem solving skills, special talents, foresight, strong religious orientation, and an internal locus of control (Garmezy, 1981, 1985; Luther & Zigler, 1991; Rutter, 1987; Werner, 2000; Werner & Smith, 1982; Wyman, Cowen, Work, & Parker, 1991). Vulnerability dispositional attributes of children include low socioeconomic status, belonging to a minority group, prenatal complications, child maltreatment and the male gender (Garmezy, 1987; Rutter & Quinton, 1977).

*Family Factors.* More recently, studies have focused attention on specific family variables that contribute to children's resilience. Research identifies the following protective factors of the family milieu that contribute to child resilience: less than four members in the family, maternal education, a cohesive and stable family climate, supportive parents or grandparents, affectionate and caring parents, absence of criticism, a positive relationship with at least one parent, a household with rules and structure, respect for individuality, and age appropriate demands from parents (e.g., assigning chores; Garmezy, 1985; Rutter, 1979; Rutter & Quinton, 1977; Slater & Power, 1987; Werner, 2000; Werner & Smith, 1982). In addition, compared to stress-affected children, stress-resilient children report more positive and constant discipline practices and a

stronger sense of parenting efficacy (Wyman et al., 1991). Also, caregivers report more frequent communication and emotional closeness with the child (Wyman et al., 1991). These variables considered, some researchers suggest that effective parenting is the most important protective factor influencing a child's coping abilities (Osofsky & Thompson, 2000). Family vulnerability variables associated with poorer outcomes for higher risk children include severe marital discord, family instability, disruptive and quarrelsome homes, low social status of the family, a large family size, paternal criminality, paternal occupation, and parental psychopathology (Garmezy, 1987; Rutter, 1979; Rutter & Quinton, 1977; Werner, 2000).

In addition to the general vulnerability and protective factors noted above, research has also identified specific risk factors of the family structure and environment that are associated with later aggressive behavior. For adolescents, these risk factors include lack of both parental affection and parental support (Saner & Ellickson, 1996). Furthermore, Jackson and Fosbee (1998) found that an authoritative parenting style has been repeatedly linked with lower levels of violence (e.g., hit peers, beat up peers, carried weapon, and threatened peer with weapon) in adolescence when compared to neglectful parenting (Jackson & Fosbee, 1998). Children of neglectful parents tend to have lower behavioral control and higher levels of antisocial behavior than children of authoritative parents (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Darling, Mounts, & Sornbosch, 1994).

#### *Risk and Compensatory Factors for Child Maltreatment*

The model child abuse risk and compensatory factors presented by Kaufman & Zigler (1987) is one of the most comprehensive. In an attempt to understand parent-child

relationships, the ecological model typically includes variables of both the immediate situation (e.g., characteristics of parents and family environment) and of larger social contexts (e.g., work factors and cultural determinants). Although Kaufman and Zigler's model (1987) was meant to explain some of the variables involved in the resilience of children who are abused, it is likely that some of these variables might also contribute to the understanding of resilience in children who witness IPV. Although research examining risk and protective factors for children who witness IPV is scarce, there are a few studies that explore such variables. Specifically, a national survey of American families in the United States considered a number of variables including race, religion, income, occupation, education, and unemployment as they relate to different types of abuse, including marital violence (Strauss et al., 1980). Thus, the present study descriptively explored some of these variables including parental religion, education, income, and furthermore, noted participant's gender and race.

#### The Role of Parental Response (PR) for Children Exposed to IPV

Research examining PR for children exposed to IPV is very scarce and primarily focuses on responses of blaming the child or relieving blame from the child for events witnessed. The marital issue that most likely leads to IPV is conflict over a child and it is estimated that IPV is blamed on children in 1 out of 5 homes (Fantuzzo et al., 1997; Straus et al., 1980). In one study, 9 out of 24 (45%) women, who were self-defined assaulted women, reported that the children were the focus of the arguments between themselves and their spouses (Hilton, 1992). For example, women report being assaulted because they could not keep the child quiet or because they spent too much time with the

child and not enough time with the abuser (Hilton, 1992). Although it is unknown whether the children were directly told that the violence was their fault, such findings imply that children were blamed for IPV (Hilton, 1992).

Grych and Fincham (1993) investigated the role of PR in a cognitive-contextual framework and suggested that children's responses to IPV are mediated in part by a child's processing of conflict, specifically the child's attributions of blame and responsibility (Grych & Fincham, 1990). Even if children are not directly blamed for IPV, young children often blame themselves for conflict, as situational cues and variables are cognitively unavailable to make sense of IPV (Jaffe et al., 1990). Especially children at the egocentric level of development tend to assume that they caused the IPV and make internal attributions for the violence (Grych & Fincham, 1990). In addition, children may blame themselves as it is safer to internalize the conflict and punish themselves rather than blame a parent on whom his existence depends (Ney, 1992). To the contrary, older children often learn to externalize IPV and make more appropriate casual attributions based on situational cues (Grych & Fincham, 1990; Jaffe et al., 1990).

In an attempt to examine the role of PR in absolving the child of blame in attenuating some of the negative effects of witnessing IPV, Grych and Fincham (1993) drew children from a community sample and had the children listen to audiotapes of married men and women involved in disagreements about various topics. At the end of the disagreements, an explanation was added in which parents either blamed the child for causing the conflict or explicitly absolved the child of fault and attributed the conflict to the parental problems (Grych & Fincham, 1993). Researchers found that absolving explanations reduced the child's perceptions of responsibility for the conflict, the



tendency of the child to believe they could resolve the conflict, and reduced the inclination of the child to endorse intervention as a coping strategy (Grynych & Fincham, 1993). However, explanations did not alleviate feeling sad, angry or ashamed when compared to the no explanation group (Grynych & Fincham, 1993). Therefore, the meaning of conflict (e.g., whether the child saw himself to blame or not) affected how a child responded to marital conflict (Grynych & Fincham, 1993). In addition to the above studies that examine a child's perception of blame as an IPV witness, researchers have briefly examined PR to child abuse (Hertzberger, 1983). Parent to child abuse, accompanied by verbal rationalization from parents, may make abuse seem reasonable and, thus, reinforce a child's positive attitude toward the violence (Hertzberger, 1983).

#### Purpose and Expectations of the Present Study

Millions of children witness IPV every year in the United States and the effects of the witnessing are not consistent across all children (Carlson, 1984). Research has yet to uncover all the mechanisms by which the intergenerational transmission of violence occurs. It is critical to understand these mechanisms, specifically vulnerability and protective factors, which moderate the relationship between witnessing IPV and later attitudes toward aggression. Knowledge about such factors has implications for the development of treatment programs for children, adolescents and even adults who witness IPV in their families of origin. The results of this study may provide educational information for health professionals and parents about the effects of witnessing IPV and provide suggestions for the most effective ways to respond to children after they witness these violent situations.

The present study seeks to lend knowledge to the existing literature by examining the relationship between witnessing IPV and attitudes toward violence and aggression. Furthermore, as noted above, there is little research on the protective and vulnerability factors that moderate the relationship between witnessing IPV and later violent attitudes. Therefore, the present study explored the relationship of a number of variables (e.g., CPA, family variables, witnessing IPV and PR) to adulthood attitudes toward aggression and violence. Given the high concordance rates between CPA and witnessing IPV, and given the conflicting literature regarding the contribution of each type of family violence to aggressive adult attitudes and behavior, it is especially important to consider both CPA and IPV in relation to attitudes toward aggression and violence (Bernard & Bernard, 1983; Higgins & McCabe, 2000; Kalmuss, 1984; Rosenbaum & O’Leary, 1981; O’Keefe, 1996, 1997). Furthermore, various types of family violence (e.g. IPV, CPA) often have additive or cumulative effects on adjustment (Hughes et al., 1989; O’Keefe, 1996). The “double whammy” is often used to refer to children who both witness IPV and are victims of CPA (Hughes et al., 1989). These children tend to have the highest rates of violence in their own marriages with approximately 1 out of 4 using physical violence toward their spouses (Straus et al., 1980). One study found that there was approximately a 12 times greater likelihood of child maltreatment in homes where IPV was present (Straus et al., 1980). Moreover, the frequency and severity of husbands’ aggression toward wives correlates positively with both mothers’ and fathers’ aggression toward boys but not girls (Jouriles & LeCompte, 1991).

In addition to CPA, the proposed study examined the relation of a number of family variables to attitudes toward violence and aggression. The Family Environment

Scale (FES) explores numerous variables that research has indicated in the resiliency of children, including family cohesion, structure, control in the form of rules and procedures, and conflict (Garmezy, 1985; Rutter, 1979; Rutter & Quinton, 1977; Slater & Power, 1987; Werner, 2000; Werner & Smith, 1982). Furthermore, the proposed study analyzed the effects of gender on attitudes toward violence and aggression. Literature suggests that the female gender is considered a protective factor for children exposed to adverse situations, while the male gender tends to be a risk factor (Garmezy, 1987; Rutter & Quinton, 1977). Furthermore, research provides mixed evidence regarding gender differences in the link between witnessing IPV and violent behaviors and attitudes (Arias, 1984; DeMaris, 1987; Gwartney-Gibbs, et al., 1987; Owens & Straus, 1975).

### Hypotheses

Hypothesis 1: Students who witness both physical and verbal interparental violence endorse the highest levels of responses on the Harshness Toward Perpetration factor of the Violence Attitudes Scale and on all three scales of the Attitudes Toward Aggression compared to the other two groups.

Hypothesis 2: Students who witness no IPV endorse the highest levels of responses on the Perpetrator Blame factor on the VAS.

Hypothesis 3: Rationalizing Parental Response moderates the relationship between witnessing IPV and all three scales of the ATA.

Hypothesis 4: Child Physical Abuse, witnessing IPV, FES (Family Cohesion, Expressiveness, Organization, Control, and Conflict), and Rationalizing PR, each account for a significant amount of variance in ATA scores.

## Methods

### Participants

Participants included 300 students attending The University of Montana who are currently enrolled in a psychology class, primarily Introduction to Psychology. The students were placed into 1 of 3 groups depending on their responses to the CTS: students who never witnessed any form of IPV, students who witnessed only verbal IPV, and students who witnessed verbal and physical IPV. A power analysis suggests a range of participants from 13 (small effect size), to 32 (moderate effect size), to 196 (large effect size) for each group. The study included 30 participants who never witnessed IPV, 161 participants who witnessed only verbal IPV, and 114 participants who witnessed physical IPV. The sample included 99 males and 209 females. The majority of students participating in the study were Caucasian (93.4%).

Participants were recruited via flyers posted around campus and given directly to psychology instructors to announce and post in class. Flyers included the date, time, and place that the study took place and other pertinent information (see Appendix A). There was no exclusion criteria for this study. The only inclusion criterion is that students must have been over 18 years old to participate.

## Procedure

When participants arrived at the study, a researcher introduced the purpose (e.g., to investigate the relationship of family variables to adulthood attitudes) and the procedure of the study. Each participant was given a consent form that the researcher briefly reviewed aloud (see Appendix B). Once the consent was signed, each participant was handed a packet of questionnaires to complete. Each packet included a group assignment cover sheet (see Appendix C), Demographics questionnaire (see Appendix D), the CTS2-CA (see Appendix E), the CTSPC (see Appendix F), the FES (see Appendix G), the VAS (see Appendix H), the ATA (see Appendix I) and the Parental Response measure (see Appendix J). As participants handed in packets, they were provided with an information sheet consisting of a brief list of referrals and contact information for additional questions about the study (see Appendix K). In addition, each participant was given a copy of the consent form to take home with them (see Appendix B).

## Measures

Demographics Questionnaires (see Appendix D). The demographics questionnaire gathered general background information about the respondent, including age, gender, and race. Furthermore, this questionnaire asked about a number of family characteristics, including parental education, parental religious affiliation, parental employment, parental income, parental divorce and police involvement in family disputes. The demographics questionnaire also asked respondents to select “referent” parents, the parental figures (e.g., biological, adopted, foster, step, parental boyfriend or girlfriend, relative, or other) they referred to when answering all subsequent

questionnaires. To further ensure consistency throughout the questionnaires, a reminder before each measure was included, asking the participant to answer questions about their “referent” parents that they selected on the demographics questionnaire.

Conflict Tactics Scale (CTS2-CA; Straus, 1979; see Appendix E). The CTS consists of a list of actions that a family member (e.g., husband or wife) might take in a conflict with another member. The items on the CTS2-CA start with those low in coerciveness (e.g., discussing an issue) and become, gradually, more coercive and aggressive (e.g., slapping; Straus, 1990). The response categories ask for the number of times the action occurred in the year the respondent considers the most violent, ranging from 0 (never) to 6 (more than twenty times). A score of 7 indicates that the incident did not happen in the year that the respondent is considering, but it did happen before or after that year.

The CTS2-CA consists of 62 questions covering three general tactics used to resolve conflict, including reasoning, physical aggression and verbal aggression (Straus, 1990). Examples of items from the reasoning scale include: “parent explained her or his side of a disagreement and parent suggested a compromise to a disagreement with the other parent.” Examples of items from the physical scale include slap, kick, bite, hit with a fist, and threaten with a gun or knife. Finally, examples from the verbal scale include yelled or insulted the other parent, sulked or refused to talk about it, and threw something, but not at the other parent. For the purposes of this study, questions regarding witnessing of sexual coercion were not included. Furthermore, scores of 7 are weighted into three separate scales: life reasoning scale, life physical scale, and life verbal scale. For purpose of this study, only the raw reasoning, raw physical, and raw verbal scales,

and not the life scales, will be considered. Responses on the raw scales range from 0 to 6, indicating the frequency with which an event occurred in a specific year, not within the respondent's entire life.

The CTS scale scores appear to be both reliable and valid. Internal consistent reliability was examined by two techniques: item analysis and the Alpha coefficient of reliability. The mean item-total correlation is .87 for the husband-to-wife violence index and .88 for the wife-to-husband violence index (Straus et al., 1980). Alpha coefficients from a sample of 2,143 couples are .83 for the husband-to-wife violence index, .82 for the wife-to-husband violence index, and .88 for the couple violence index (Straus et al., 1980). More specifically, reliability coefficients are .79 for husband-to-wife and .80 for wife-to-husband for the verbal aggression scale; .82 for husband-to-wife and .83 for wife-to-husband on the physical aggression scale; and .50 for the husband-to-wife and .51 for the wife-to-husband on the reasoning scale (Straus, 1990). It is suggested that the difference in reliability coefficients for the scale scores is due primarily to the small number of items making up the reasoning scale (three items; Straus, 1990).

Evidence for concurrent score validity comes from a study by Bulcroft and Straus (1975) in which students in two classes completed the CTS and then researchers sent the CTS to the homes of the students' parents (Straus et al., 1980). Comparing student and parent responses, the following correlations were obtained for students and their fathers: .19 for the reasoning scale, .51 for the verbal aggression scale and .64 for the violence scale. Comparing the responses of students and their mothers, the following correlations were obtained: -.12 for the reasoning scale, .43 for verbal aggression scale, and .33 for violence scale (Straus et al., 1980). Researchers suggest that higher correlations for the

verbal aggression and violence scales are due to the fact that items on these scales are more emotional and dramatic, and thus, tend to be better remembered (Straus et al., 1980).

A number of analyses provide evidence of score construct validity. The CTS has been successful at obtaining high rates of occurrence for socially unacceptable acts of both verbal and physical aggression. Such rates are similar to rates obtained in interview studies (Gelles, 1974). The CTS data for the extent to which patterns of violence are transmitted from one generation to another, are consistent with other empirical findings on the social learning theory and the intergenerational transmission of violence (Hotaling & Surrarman, 1986; Straus, et al., 1980). The use of the CTS in National Violence Surveys supports the existence of hypothesized risk factors for family violence including drinking, poverty, unemployment and lack of community support (Straus et al., 1980).

However, Rhodes (1985) points out a number of limitations to the CTS, some of which are fundamental to the proposed study. The CTS does not consider the antecedents or consequences, both short-term (e.g., PR) and long-term (e.g., divorce and legal ramifications) of IPV (Rhodes, 1985). Thus, violent behavior is taken out of the context in which it occurs, possibly contributing to inaccuracies in analysis. Furthermore, it is important to consider how consequences of witnessing IPV impact attitudes toward violence and aggression. Thus, the proposed study examined one immediate consequence of witnessing IPV, parental response.

In the present study the CTS was used to group participants into three groups: those who never witnessed IPV, those who witness verbal IPV and those who witness physical IPV.



Conflict Tactics Scale-Parent-Child (CTSPC; Straus, Hamby, & Warren, 2003; see Appendix F). The CTSPC consists of 22 self-report items that ask about the frequency of specific nonviolent and violent parent-child (PC) interactions. These items are grouped into three content areas including Nonviolent Discipline, Psychological Aggression, and Physical Assault. The original version of the CTSPC asked respondents to consider the past year when responding to items. However, for the purpose of the current study, respondents were asked to consider the worst year of conflict they can remember between their referent parents and themselves. Participants responded to items by indicating the frequency with which the item occurred in the worst year of conflict ranging from 0 (never) to 6 (more than twenty times). A score of 7 indicates that the incident did not happen in the year that the respondent is considering but it did happen before or after that year.

As mentioned above, the CTSPC consists of three scales. The Nonviolent Discipline scale consists of four items that measure the use of discipline practices that are used as alternatives to corporal punishment (e.g., explanation, time out, substitute activity, and deprivation of privileges). This scale is comparable to the Reasoning scale of the CTS2-CA (Straus, 1979). The Psychological Aggression scale has five items measuring verbal acts intended to cause psychological fear or pain (e.g., shout, threaten, insult). Finally, the 13 items that make up the Physical Assault Scale cover a wide range of physical discipline strategies (e.g., spank, grab, shake, knock down). Furthermore, scores of 7 are weighted into three separate scales: life reasoning scale, life psychological scale, and life physical scale. For purpose of this study, only the raw reasoning, raw psychological, and raw physical scales, and not the life scales will be considered.

Responses on the raw scales range from 0 to 6, indicating the frequency with which an event occurred in a specific year, not within the respondent's entire life.

The CTS scale scores appear to be both reliable and valid. Internal consistency estimates in the form of Cronbach's alpha are .70 for the Nonviolent Discipline scale, .60 for the Psychological Aggression scale and .55 for the Physical Assault scale (Straus et al., 2003). Furthermore, in a study using the CTSPC to gather retrospective reports of parental maltreatment from adult women, internal consistency estimate was .72 for Psychological Aggression and Physical Assault scales combined (Parks & Zetes-Zanatta, 1999). Although test-retest reliability estimates for the CTSPC scales are not available, a number of studies have derived estimates from a parent-to-child adaptation of the original CTS (Straus et al., 2003). Test-retest coefficients for this modified version ranged from .49 to .80 indicating good test-retest reliability of scores (Amato, 1991; McGuire & Earls, 1993).

In addition to reliability, a number of analyses provide evidence of CTSPC score construct validity. Results of studies using the CTSPC align with the theory that stress increases the risk of child abuse (Straus, Kaufman-Kantor, 1987; Straus et al., 2003). In addition, research utilizing the CTSPC provided evidence that parents who were victims of abuse as children have a higher rate of abuse toward their own children, findings consistent with the social learning theory (Straus, 1983; Straus et al., 1980). As indicated by these studies CTSPC produces findings consistent with the aspect of abuse that it purports to measure (Straus et al., 2003).

This measure had to be adapted for the purpose of this study to ask respondents to think about which of the statements on the CTSPC applied to them as children.

However, even before the development of the CTSPC, the original CTS was modified to obtain retrospective reports from adults about the behavior of their parents toward them as children, as the proposed study has done (Straus et al., 2003). The studies using this modified form of the CTS produce evidence of concurrent and construct validity of the CTS as a measure of child maltreatment (Straus et al., 1998; Yodanis, Hill, Straus, 1997). For the current study, the CTSPC was used to identify adults who experienced physical child abuse (CPA).

Family Environment Scale-Form R (FES-R; Moos, 1974; see Appendix F). The FES was designed to measure a variety of aspects of the family environment judged to be relevant to an individual family member's functioning. The FES-R is a self-report 90-statement questionnaire to which respondents check true or false to each statement provided. The FES is used to assess an individual's perceptions of their family's functioning on three dimensions, including the Relationship Dimension, the Personal Growth Dimension, and the System Maintenance Dimension. Each of these domains covers ten 9-item subscales. For the purposes of the current study, subscales of the Relationship Dimension and System Maintenance Dimension were explored. The Cohesion, Expressiveness, and Conflict subscales measure the Relationship Dimension. The Cohesion subscale evaluates the amount of commitment, help and support between family members; the Expressiveness subscale assesses the degree to which members are encouraged to act openly and communicate feelings directly; and, the Conflict subscale measures the amount of openly expressed aggression, conflict and anger within the family. The System Maintenance Dimension is measured by the Organization and Control subscales. The Organization subscale measures the importance of organization

and structure in family planning. The Control subscale assesses the degree to which a family uses set rules and procedures to run the family.

The FES subscale scores have been found both valid and reliable. Based on three ongoing projects of depressed and control families, alcoholic and control families, and families of children with rheumatic disease, it is apparent that the FES has internal consistent reliability for the five scale scores used in this study (Moos, 1990). Considering these samples, the average alphas for the subscales reveal coefficients ranging from .76 to .79 for the Cohesion subscale, .58 to .69 for the Expressiveness subscale, .72 to .78 for the Conflict subscale, .60 to .76 for the Organization subscale, and .58 to .67 for the Control subscale (Moos, 1990). The alphas for the Cohesion and Conflict subscales are almost identical to those reported in the FES Manual (Moos & Moos, 1986).

Furthermore, using the depressed, alcoholic, and rheumatic disease samples referred to above, the FES subscale scores show good test-retest reliability. Eight-week test-retest reliabilities are moderate to good with a range of .73 to .86, 4-month test-retest reliabilities are fair to moderate and range from .66 to .78, and 12-month test-retest reliabilities are fair to moderate and range from .63 to .81 (Moos, 1990; Moos & Moos, 1986). In addition, 12-month, 36-month, and 48-month intervals for 676 individuals assessed at all three time intervals in the sample of depressed and control families reveal fair long-term test-retest reliability (Moos, 1990).

Moreover, the FES subscale scores seem to have good content validity. The FES items were assigned to dimensions on the basis of item content and conceptual connection to specific family constructs (Moos, 1990). The assignment was empirically

validated because items were selected that were more highly correlated with their FES subscales than with any other subscale (Moos, 1990).

Construct validity demonstrates that the various domains of family functioning measured by subscales of the FES are related to family stressors (Moos, 1990). The FES Cohesion subscale is related to dyadic and marital relationships and self-reports of support from family members (Moos, 1990). Furthermore, the FES Conflict subscale is related to family arguments and FES Organization and Control subscales are related to a family's dependence on regular and schedules routines (Moos, 1990). In addition, the FES dimensions demonstrate predictive and concurrent validity (Moos, 1990).

For the purpose of the present study, data analysis will examine scores yielded from the FES subscales of Cohesion, Expressiveness, Conflict, Organization, and Control.

Violence Attitudes Scale-Revised (VAS-R; Jackson, Brown, Davis, & Pitman, 1999; see Appendix G). The VAS-R was created to address two main problems with the original version of the VAS: gender differences across all the scales and weakness on the ethnicity factor (e.g., poor internal consistency and poorly worded questions). The VAS-R consists of an item pool of 29 questions representing the general blame factors of the Harshness Toward Perpetration, Social Morality, Victim, and Perpetrator Characteristics. Thus, the ethnicity factor on the original VAS has been removed. All items are scored on a six point, forced choice continuum ranging from 1 (strong disagreement) to 6 (strong agreement). In general, the higher the mean score for a factor, the greater responsibility or blame the individual places on that construct for the occurrence of violence (Jackson et al., 1999).

The VAS-R was administered to a sample of 528 university students over a 1 year period (Jackson et al., 1999). In this sample, internal consistency for each factor ranged from .7 to .8 (Jackson et al., 1999). The Harshness Toward Perpetration factor consists of seven items measuring preferred consequences for the perpetration of violence. High scores on this factor suggest the belief that tougher consequences will lower crime. In the standardization sample, this factor yielded a mean of 4.48, indicating strong agreement that offenders should be treated more harshly in order to decrease violent crime. The Social Morality Blame factor, with the second highest mean of 4.33, consists of eight items that attribute blame for violence to societal values and norms. High scores indicate that decrease in morals of the country, a loss of family traditional values and increase of alcohol and drugs, contribute to societal violence. The Perpetrator factor includes eight items that assign blame to internal traits of the offender. Thus, high scores on this factor suggest that lack of temper control and low frustration tolerance of the offender are to blame for the violence. The mean for the standardized sample of 3.47 indicates near ambivalence (e.g. 3.5) on this factor. Finally, the Victim Blame is composed of six items that assign blame to the victim. High scores suggest that victims are accountable for the violence due to bad judgment or carelessness in exposing themselves to violence. The mean from the standardized sample for this factor is 2.39.

Attitudes toward Aggression (ATA; Herzberger & Rueckert, 1997; see Appendix H). This 20-item questionnaire requires the respondent to make judgments about the blame for violence, justification for violence and the tendency to punish. The items tap aggression in three areas, including verbal, sexual, and physical violence. Using Cronbach's alpha, internal consistency for men is reported at .77 and for women at .82.

Construct validity is established in that men tend to score higher on the ATA with a mean of 42.98 (SD=13.51), than woman with a mean of 32.05 (SD=12.86).

Parental Response to Witnessing IPV (PR; see Appendix I). For the purpose of this study, a measure was developed to tap PR to children immediately following an IPV situation. Responses fall into one of two general PR categories: Negating violence responses (NVRs) and rationalizing violence responses (RVRs). Responses blaming the child, an environmental situation (e.g., bad day at work), the victim, and lack of any response (e.g., avoiding any discussion of the situation), are considered RVRs because in their excusing or justifying IPV, these responses will most likely spur pro-violent attitudes. As previously mentioned, for situations in which there are no explanations for IPV, children tend to blame themselves for conflict as situational cues are cognitively unavailable to make sense of IPV (Jaffe et al., 1990). However, a NVR that blames without excusing the perpetrator or a NVR that negates the use of violence by explaining the wrongfulness of the act, decreases the likelihood of pro-violent attitudes. The premise for this measure is the social learning theory that indicates that consequences, reinforcements (e.g., rationalizations) and punishments (e.g., negating the violence), play an essential role in determining whether an observed behavior is imitated (Bandura, 1977). Thus, RVRs with their reinforcing qualities encourage the imitation and acceptance of IPV or aggression, whereas NVRs, with low to no reinforcing qualities, decreases the likelihood of imitation and acceptance of IPV or aggression.

Five different situations are presented on the questionnaire covering varying degrees of verbal and physical IPV with examples taken from the CTS (Straus, 1979). Each situation is presented twice, one in which the mother is the victim and one in which

the father is the victim, making for a total of ten situations. Furthermore, for each situation, the respondent is asked to check all the responses that apply for their mother and all the responses that apply for their father. The responses will yield two sum scores: one for NVRs (e.g., blaming the perpetrator) and RVRs (e.g., blaming the child witness). Total scores for RVRs could be as high as 80 if the respondent checks all possible rationalizing violence responses (RVRs) for both parents on all ten situations and as low as 0 if the child never witnessed the situations at all and, thus, the parents had nothing to respond to. Total NVRs could be as high as 40 if the respondent checked every possible negating violence response (NVR) for both parents on all ten situations and as low as 0 if the child never witnessed the situations at all and, thus, the parents had nothing to respond to. Study data illustrates the participant scores on RVR ranged from 0 to 42 and on NVR ranged from 0 to 20.

#### Data Analyses

1. Descriptive statistics were run for the demographic variables collected, including referent parent information.
2. Independent Sample T-tests compared means of child physical abuse (CPA) participants and non-CPA students on Attitudes Toward Aggression (ATA) and Violence Attitudes Scale (VAS) scores. Significant differences were used to determine the use of separate MANOVA analysis for gender and CPA groups.
3. Independent sample T-tests compared gender means on ATA and VAS scales. Significant differences were used to determine the use of separate MANOVA analysis for gender and CPA groups.
4. MANOVAs compared the gender means and CPA means on ATA and VAS



scores. The three groups include those who never witnessed IPV, students who witnessed only verbal IPV and those who witnessed physical IPV. Four MANOVAs (3 x 2) were run. Two MANOVAs, entering ATA scales as the dependant variable on one (physical, verbal, and sexual) and VAS scales as the dependant variable on the other (harshness perpetrator, social-morality, victim blame, and perpetrator characteristics), explored main effects of witnessing IPV and the interaction. For the other two MANOVAs, the same two sets of dependant variables were considered and analysis included the main effects of CPA, witnessing IPV and the interaction. Significant MANOVAs were followed up with One-Way ANOVAs to analyze where the difference exists.

5. Originally, a series of Multiple Regression (MR) to analyze the moderating effect of rationalizing parental response on the relationship between witnessing IPV (either physical or verbal) and ATA scores. However, the assumption of normality for data scores of witnessing IPV was not met. Thus, the extremely skewed data did not allow for such analysis.
6. Similarly, three separate MR analyses were planned for each ATA scale (verbal, physical and sexual) to explore the amount of unique variance that each of the following continuous variables contributed to those scores: child physical abuse (CPA); FES variables (Cohesion, Expressiveness, Conflict, Organization and Control); IPV witnessed; and RVRs. Variables were entered in stepwise fashion. Stepwise regression allows variables with the highest correlations to ATA scores to be entered first followed by the next variable that explains the greatest amount of variance in ATA scores and so forth, until the influence of any of the variables

increases above the significance of .20, at which the variable is excluded from the regression equation. Again, given that assumptions of normality were not met for many of those variables, such an analysis was not possible. However, exploratory analyses with these variables were conducted and are discussed below.

## Results

### Demographic Characteristics

According to the Group Assignment Questionnaire, based on CTS criteria, 127 (41.6%) of participants identified themselves as never having witnessed interparental violence (IPV), 135 (44.3%) of participants identified themselves as witnesses to only verbal IPV, and 43 (14.1%) of participants identified themselves as witnesses to physical IPV. However, these group percentages are discrepant with those yielded from the CTS-CA. According to the CTS-CA, 30 (9.8%) never witnessed IPV, 161 (52.8%) witnessed only verbal IPV, and 114 (37.4%) witnessed physical IPV. Differences for group membership numbers will be explored in the discussion section. Participant's ages ranged from 18 to 55 ( $M=21.9$ ;  $SD=6.49$ ). The sample included 99 (32.5%) males and 206 (67.5%) females. The majority of participants, 93.4%, identified themselves as Caucasian, followed by 3.0% Asian & 2.3% American Indian. Parental divorce had been experienced by 121 (39.7%) of participants. Finally, 34 (11.1%) participants experienced police intervention resulting from a domestic dispute (see Table 1).

Regarding the selection of the referent mother, 286 (93.8%) participants selected their biological mother and 8 (2.6%) selected stepmother. Similarly, 257 (84.3%) participants selected their biological father and 29 (9.5%) participants selected stepfather. In this sample, 101 (33.1%) participants identified referent mothers as having some

college or vocational education, 78 (25.6%) participants identified referent mothers as being college graduated and 72 (23.6%) participants identified referent mothers as having some high school education or a GED. Similar partners were found for educational background of referent fathers. In this sample, 80 (26.2%) participants identified referent fathers as being college graduates, 77 (25.2%) participants identified referent fathers as having some high school education or a GED, and 70 (23%) participants identified referent fathers as having some college or vocational education. Catholicism was the most frequently identified religion for referent parents with 90 (29.5%) participants reporting that this was the religion of choice for both referent mothers and fathers. For referent mothers, 69 (22.6%) participants identified Protestant/Lutheran as the religion of choice, 68 (22.3%) participants identified “other” as the religion of choice, and 60 (19.7%) participants identified referent parents as having no religious preference. For referent fathers 81 (26.6%) participants identified referent father as having no religious preference, 57 (18.7%) participants identified “other” as the religion of choice, and 55 (18%) participants identified Protestant/Lutheran as the religion of choice. Nearly half of the sample, 146 (47.6%) participants report referent parent income above \$50,000, with a mean income of \$35,001-40,000 (see Table 2).

### T-Tests

*Child Physical Abuse(CPA)*. Before running t-tests, assumptions of normality were tested. For t-tests comparing means for those who experience CPA with those who do not experience CPA, one outlier was removed from the data set. T-tests suggest that the mean scores of participants who report CPA differ compared to those who report no

CPA on only one outcome variable. Those who report CPA have higher scores on the physical scale of the ATA, thus approving of physical aggression significantly more than those who do not report CPA ( $t=-3.43$ ;  $p=.001$ ; see Table 3). An additional exploratory analysis compared those who experience verbal child abuse with those who do not experience verbal child abuse. However, no significant mean differences were found for outcome scores of participants who report child verbal abuse compared with those who report no child verbal abuse.

*Gender.* For t-test comparing gender means, 2 outliers were removed from the data set. T-tests reveal a number of mean gender differences on ATA and VAS scores. Male participants have higher scores on the Perpetrator Characteristic scale of the VAS, which dictates that males believe more than females that perpetrator characteristics are to blame for violence (e.g., personality;  $t=2.88$ ;  $p=.004$ ); higher scores on the Victim Blame scale of the VAS, which indicates that males tend to blame violence on victim characteristics more than females (e.g., carelessness;  $t=2.62$ ;  $p=.009$ ); higher scores on the Verbal scale of the ATA, which notes that males are apt to approve of verbal aggression more than females ( $t=4.96$ ;  $p=.000$ ); and higher scores on the sexual scale of the ATA, indicating that males tend to approve of sexual aggression more than females ( $t=3.19$ ;  $p=.002$ ) compared to female participants (see Table 4).

### MANOVAs

A series 3 x 2 between subjects multivariate analysis of variance (MANOVA) were performed on dependant variables, one MANOVA included the four VAS scales and the second MANOVA included the three ATA scales. Independent variables were CTS groups (witness no IPV, witness verbal IPV, and witness physical IPV) and gender

(male and female). Before running analysis, assumptions of normality were checked and three outliers were removed from the data set for each MANOVA. Looking at analysis results from the first MANOVA with the VAS scales as the dependant variable, and using Pillai's Trace criterion, there was a main effect for gender ( $F(4, 293) = 4.08$ ,  $p < .05$ ;  $\eta^2 = .053$ ). No significant main effects for CTS groups and no significant interaction between CTS groups and gender were observed (see Table 5). In subsequent one-way ANOVA analysis, findings suggest that males score higher than females on VAS perpetrator characteristic scale, ( $F(1, 300) = 7.96$ ,  $p < .05$ ) and VAS victim blame scale, ( $F(1, 300) = 6.70$ ,  $p < .05$ ; see Table 6).

Regarding the second MANOVA with ATA scales as the dependant variable and using Pillai's Trace criterion, results show a main effect for gender, ( $F(3, 294) = 8.51$ ,  $p < .05$ ;  $\eta^2 = .080$ ). No significant main effects for CTS groups and no significant interaction between CTS groups and gender were observed (see Table 7). In subsequent one-way ANOVA analysis, results indicate that males scored higher than females on ATA verbal, ( $F(1, 300) = 29.78$ ,  $p < .05$ ), ATA sexual, ( $F(1, 300) = 13.65$ ,  $p < .05$ ), and ATA physical scales, ( $F(1, 300) = 4.15$ ,  $p < .05$ ; see Table 8).

Given that T-Tests also indicated significant differences between children who experienced child physical abuse (CPA) and those who did not, a series 3 x 2 between-subjects MANOVAs was performed on dependant variables, one MANOVA included the four VAS scales and the second MANOVA included the three ATA scales. Independent variables were CTS groups (witness no IPV, witness verbal IPV, and witness physical IPV) and CPA (those who did experience CPA and those who did not experience CPA).

Regarding the MANOVA with VAS scales as the dependant variable, assumptions of normality were tested and six outliers were pulled from the data. Using Pillai's Trace criterion, results show a main effect for CTS groups, ( $F(8, 582) = 2.23$ ,  $p < .05$ ;  $\eta^2 = .030$ ). No significant main effects for CPA and no significant interaction between CTS groups and CPA were observed (see Table 9). In subsequent one-way ANOVA analysis, results indicate that the PIPV group scored lower on the social morality scale of the VAS than both the NIPV group and the VIPV group, indicating that the witnessing physical IPV group blames society (e.g., loss of traditional values) for violence more so than the other two groups ( $F(2, 296) = 4.87$ ,  $p < .05$ ; see Table 10). Looking at analysis results from the MANOVA with the ATA scales as the dependant variable, and using Pillai's Trace criterion, no main effects for CTS groups or CPA and no interaction between the independent variables display statistical significance (see Table 11).

Exploratory ANOVAs do indicate a number of differences for scores on family environment variables between the three groups. According to ANOVAs, non-witnesses of IPV scored higher on the cohesion ( $F(2, 299) = 13.23$ ,  $p < .05$ ) and expressiveness subscales ( $F(2, 299) = 3.19$ ,  $p < .05$ ) of the FES than did witnesses of physical IPV. In addition, witnesses to only verbal IPV scored higher on the cohesion subscale than did witnesses to physical IPV ( $F(2, 299) = 13.23$ ,  $p < .05$ ). Both non-witnesses of IPV and witnesses of only verbal IPV both scored higher on the organization scale of the FES than did witnesses of physical IPV ( $F(2, 299) = 8.09$ ,  $p < .05$ ). Given the exploratory nature of the analysis, replication of results is needed before statements regarding the relationship between the variables can be made with confidence.

Furthermore, ANOVAs indicate that the non-witnesses of IPV score lower on the conflict scale of the FES than witnesses to verbal IPV and witnesses to physical IPV, and in addition, witnesses to only verbal IPV also score lower on the conflict scale than witnesses of physical IPV ( $F(2, 299)=30.49, p<.05$ ). Interestingly, ANOVAs did not reveal any significant differences between the three groups on control scale of the FES (see Table 12).

### Multiple Regression Analysis

Although proposed analysis called for multiple regression (MR) analysis to test if parental response acts as a moderator in the relationship between witnessing IPV (physical or verbal) and attitudes toward aggression, a number of data complications did not allow for this type of analysis. Given the skewness of scores for witnessing physical and verbal IPV, no assumption of normality could be made. In addition, the option of using only extreme cases of witnessing IPV was considered. However, selecting only scores over 75 for witnessing physical violence results in an N of only 14, after a few additional outliers are removed. Thus, even if parental response did play a moderating role, lack of power would make it very difficult to detect any statistical significance.

A similar barrier arises for MR planned to explore the amount of unique variance that a number of variables contribute to ATA scores. If run, this analysis would yield meaningless results as the scores related to witnessing IPV, child physical abuse, and parental response were too extremely skewed and assumptions of normality could not be made.

As an exploratory analysis, and given the non-normal distribution of scores for witnessing IPV, child physical abuse, and parental response, MR analysis were run separately for each of the three groups (non-witnesses, witnesses to verbal IPV, and witnesses to physical IPV) to assess the unique contribution of only family environment variables and parental response to ATA scores. Separating the sample into the three groups, allowed assumptions for normality to be met, after outliers were removed. Results suggest that expressiveness accounts for 6.3% ( $F(1, 109) = 7.38, p < .05$ ) and conflict accounts for 5.6% ( $F(2, 108) = 7.32, p < .05$ ) of the variance in physical ATA scores for those who witness physical violence. Furthermore, for individuals who witness verbal IPV, organization accounts 2.8% ( $F(1, 156) = 4.42, p < .037$ ) of variance in ATA physical scores. No independent variables had a unique significant contribution to the variance in ATA verbal and sexual scales for those who witness physical or only verbal IPV.

## Discussion

This study investigated a number of factors that may play a role in the relationship between witnessing interparental violence (IPV) as a child and adulthood attitudes toward violence. Descriptive statistics indicate that between 44.3-52.8% of this sample of university students witnessed only verbal IPV, and between 14.1% and 37.4% witnessed physical IPV. These ranges represent discrepancy of subject responses on the Group Assignment Questionnaire, developed from the Conflict Tactic Scale (CTS), and the CTS itself. Thus, although items on these two measures were identical, student's identification as non-witnesses to IPV, witnesses to only verbal IPV, or witnesses to only physical IPV varied from measure to measure. However, a representative sample of



American families found that approximately 16% of married couple had engaged in at least one violent act against their partner in the year prior to the study, a percentage that falls into the range of students from this sample who endorse witnessing physical IPV (14.1-37%; Straus et al., 1980; Straus & Gelles, 1990).

There are a number of factors that may have contributed to this variation in percentages yielded by the two measures. The Group Assignment measure asked participants to check which group of the three groups of statements best applied to their home environment during childhood, thus, identifying each subject as never witnessed IPV, witnessed only verbal IPV, or witnessed physical IPV. However, participants filled out this Group Assignment questionnaire before choosing their “referent parents” whom they were to refer to when filling out the CTS. Thus, for participants who lived with a variety of “parent” combinations as children, their set of “referent parents” for the two questionnaires could have been different, thus, placing them in different groups for witnessing or not witnessing IPV. However, filling out these two measures based on different “referent parents” still should not account for much discrepancy as the majority of participants choose both biological mother (93.8%) and biological father (84.3%) as referent parents.

A more likely explanation for discrepancy of subject responses is that many participants were in part motivated to participate in the study to fulfill required experiment credit for their introduction to psychology course. Furthermore, credit given was determined by the projected time needed to complete the study, approximately an hour and a half. Despite the amount of time it actually took each participant to finish the study, averaging about 45 minutes, and regardless of how the participant filled out the

measures, each individual was given the same amount of credit. In addition, participants had the option to withdraw from the study at anytime without credit penalty. Thus, participants may have neglected instructions or may have rushed through the study without attending to the details of the questionnaires and items. Given the group identification inconsistency, statistical analyses were run using CTS groupings as it was more guaranteed that this questionnaire was answered based on “referent parents.” Also, given the discrepancy and the potential for misidentification of group, it was especially important to attend to outliers and assumptions to normality in the data.

Contrary to what was hypothesized, the three groups participants (non-witnesses, witnesses to only verbal IPV, and witnesses to physical IPV) did not differ significantly on the Harshness Toward Perpetrator or Perpetrator Blame scales of the VAS or on any ATA scales. However, those who witnessed physical IPV scored significantly lower on the social-morality blame scale of the VAS than both the non-witness and verbal witness groups, indicating that those who witness physical IPV tend to blame society for violence. This finding was not hypothesized, but emerged in MANOVA analysis.

Study results do provide some evidence for the “double whammy effect” which refers to children who both witness IPV and are victims of CPA (Hughes et al., 1989). Although interactions did not reach statistical significance, plotted graphs demonstrate the possibility of an interaction between child physical abuse and IPV for attitudes toward aggression. The lack of significance in this apparent interaction suggests that there may not be enough power to detect the interaction. For example, the effect size for the interaction in this study was .011 and the observed power was .454. O’Keefe (1996) found a significant interaction between parent-to-child violence and witnessing

interparental violence in the prediction of externalizing behavior scores for children. This interaction accounted for 2% of the variance in those scores (O'Keefe, 1996). Thus, it is likely that the moderate effect size estimated for this study was inaccurately estimated and more power is needed to detect the significance. Previous studies on child abuse and IPV note that children who experience both of these types of childhood violence tend to have the highest rates of violence in their own marriages (Straus et al., 1980). In addition, the frequency and severity of husbands' aggression toward wives has been shown to correlate positively with both mother's and father's aggression toward male children (Jouriles & LeCompte, 1991).

In addition to family violence, study results raise the question of influences of the greater societal impact on children's attitudes toward aggression. In general, male participants tend to blame violence on the perpetrator's characteristics (e.g., temper control) and on the victims (e.g., carelessness) more than females, thus, exhibiting a greater inclination to blame violence on others. Moreover, males collectively exhibit higher approval of verbal, sexual, and physical violence than do females. This finding is consistent with gender differences noted for both criminal populations and controls in which male mean scores on the ATA are significantly greater than female scores (Herzberger & Rueckert, 1997). Although the present study did not find an interaction of gender and witnessing IPV, gender differences indicate that higher rates of violence among males is in line with research noting that males who witness IPV or experience child abuse are more apt to be violent compared to female counterparts (Bernard & Bernard, 1983; Jonson-Reid & Bivens, 1999; Owens & Straus, 1975). In addition resiliency research indicates that the female gender tends to be a general protective factor

for children and male gender, a vulnerability attribute for children (Garmezy, 1987; Rutter & Quinton, 1977).

Besides gender differences of respondents, Bandura & Walters (1963) suggested the importance of the model's gender stating that modeling is most probable when the model's sex matches the observer's sex. Specifically, males who witness their fathers abusing their mothers or their girlfriends are more likely to later abuse their own wives or own girlfriends than if they witness their mothers abusing their fathers or their boyfriends. Similarly, females who witness their mothers abusing their fathers or their boyfriends are more likely to later abuse their own husbands or own boyfriends than if they witness their fathers abusing their mothers or their girlfriends. However, given that the social learning theory places greater emphasis on observed consequences than on gender similarities between the model and the observer, the present study focused on parental response instead of gender modeling (Bandura, 1977). This was a limitation to the present study. Moreover, future studies may want to consider investigating the effects of same-sex modeling.

Given these gender differences and lack of significance regarding the influence of witnessing IPV, attention must be turned to other childhood factors influencing the formulation of attitudes and approval of aggression. Media (e.g., television, films, video games) exposure during childhood is one such factor that may be contributing to such socialization of violence (Anderson et al., 2003). Exposure to violence in these contexts was linked to adulthood physical assaults and spouse abuse (Anderson et al., 2003). However, there seems to be a number of moderating variables influencing media violence on aggressive behavior, amongst which is gender (Anderson et al., 2003). Anderson et

al. (2003) suggests that gender differences may exist due to difference in how males and females are depicted in the media and that these characters usually employ different types of violence (Anderson et al., 2003). Anderson et al. (2003) adds that changes in societal gender roles are making it increasingly acceptable for females to be more aggressive. Researchers discuss the link between media violence and adulthood attitudes toward and actions of violence in the context of the observational learning theory of Bandura, the same premise utilized in the current study (Anderson et al., 2003).

In addition to a broader scale socialization of violence, greater family factors, besides parental response, as measured in this study, seem to play a role in the formation of adulthood attitudes toward violence and aggression. This study points to a number of family of origin differences between the three groups that suggest the influence of family structure on adulthood attitudes. As would be expected, non-witnesses report significantly more cohesion and significantly less conflict within their family environment compared to the other two groups. Furthermore, non-witnesses report more family expressiveness than witnesses to physical IPV. This indicates that families of non-witnesses tend to encourage significantly more open and free communication of feelings. It is understandable that families in which there existed IPV tend to discourage such open and free communication and, in fact, such expressiveness may be punished with a violent response. Furthermore, there is some significant support that both non-witnesses and witnesses to only verbal IPV both recall more organization (e.g. structure in family planning) than did witnesses to physical IPV. These results may reflect a broader sense of chaos experienced by those who witness physical IPV.

Study results regarding family environment support resiliency literature that focuses on family variables as they contribute to child health. For example, cohesive and stable family climate and household rules and structure, variables that seem to be most present in nonwitnessing families, are apt to contribute to child resiliency and ability to cope (Garmezy, 1995; Rutter, 1979; Werner & Smith, 1982). To the contrary, higher rates of family instability and disruptive and quarrelsome homes, such as those in which physical IPV tends to exist, are associated with poorer child outcome (Garmezy, 1987; Rutter, 1979; Rutter & Quinton, 1977; Werner, 2000). Finally, literature suggests that stress-resilient children tend to come from homes in which communication and emotional closeness is encouraged, findings similar to the higher expressiveness rates among adults from families in which physical IPV did not exist (Werner & Smith, 1982). Thus, it becomes increasingly apparent that the framework from which a family operates (e.g. organization, expressiveness) may impact children's long-term development greater than specific response recall of specific family circumstances (e.g. IPV).

No conclusions could be drawn because the majority of the variables entered into the multiple regression (MR) analysis. As previously discussed, given the skewness of scores for witnessing physical IPV, for child physical abuse and for parental response, running MRs could have led to meaningless results, increasing the chance for Type I error.

Finally, there are a number of limitations to the study that are worth mentioning. The uniform placement of measures across all packets creates the potential for ordering effects. Future studies should consider counter-balancing the questionnaires in order to decrease the chances for this effect. Furthermore, social desirability may have also

inhibited participants from answering items truthfully. Thus, individuals may distort information to make responses more socially acceptable, especially regarding issues of violence. To try and increase participant honesty on questionnaires, participants were not to write their names on any study material and were assured that all material would be kept confidential. Future studies might consider the use of a social desirability measure to provide the opportunity to covary its effect on results.

The nature of the study presents yet another limitation. Self-report and retrospective studies can influence a subject to memory biases. Furthermore, the study asks respondents to reflect on their childhood and it is expected that some of this information might be lost in memory, but given the emotional and sometimes traumatic context of childhood violence, information might be repressed. For the CTS, it is especially difficult to pinpoint events that took place within a specific year of childhood and screen out events that happened in other years. Thus, retrospective studies suffer from inaccurate data because of self-report weaknesses. Multiple participants from the same family (e.g., psychology student and a parent) filling out the same measures would allow for cross checking of recall of childhood events. This was not a viable option for the present study.

Regarding parental response, the data of the present study suggests that this variable does not have a significant relationship with adulthood attitudes toward aggression of violence attitudes. Research on the role of parental response is very limited (Grych & Fincham, 1990; Grych & Fincham, 1993; Hertzberger, 1983). Thus, this study was designed to provide a basis for looking at the of role parental response. The measure created to analyze this variable may have a number of limitations. The measure

specifically asked about parental response to IPV situations. Thus, participants who reported more physical IPV reported more rationalizing and negating parental responses than participants who reported only verbal IPV. This is expected because those who witnessed physical IPV have more situations on the Parental Response measure to which parents had the opportunity to respond, either rationalizing or negating. Future research could consider studying parental response in more broadly, perhaps looking at parental response to common childhood events (e.g. fighting with a sibling, exposure to media violence) as well as parental response to IPV or to child abuse. In addition, qualitative research could be useful to gather information from adults on the way in which their parents did respond to violent situations. The parental response options were fairly limited in number and, thus, the design of the parental response measure may have created floor effects for scores of participants who never witnessed IPV.

Finally, given the demographics of this college sample, external validity is very limited and caution must be taken when generalizing results to other populations. The participants are all currently residing in Northwestern United States and primarily Caucasian. Moreover, this study is correlational and, therefore, no causal relationships can be concluded from results.

The ultimate goal of this study is to lend to the already existing literature regarding the role of the social learning theory. If, then, findings were significant regarding the impact of parental response and witnessing IPV, educating and providing suggestions for the most effective ways of responding to children after they witness IPV would have been possible. Although this study did not find a moderating relationship between witnessing IPV and attitudes for aggression and violence, it does provide a basis for future research



regarding the role of parental response. Specifically, noting study limitations with the measurement of parental response might guide the future development of a more sound measure of this construct. Also, given group differences in gender and a number of family variables, future research might explore the role of both these variables in contributing to adulthood attitudes toward aggression, adulthood attitudes toward violence, and general resiliency for children.

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## Appendix A

### Flier

No need to sign-up, JUST SHOW UP! First come, first serve ... So get there on time!

WHO: All U of M students, at least 18 years of age.

WHAT: A study about family interactions and attitudes in adulthood.

RECEIVE: 3 experimental credits toward your psychology 100 class credit requirements

DATE: TBA

WHERE/TIME: (about 1.5 hours)  
TBA

[Code: DM1]

\*\*\*Remember to bring your experimental credit sheets

## Appendix B

### Consent Form

#### Principal Investigator:

Diana Marchetti, B.S.  
Clinical Psychology Trainee  
Department of Psychology  
University of Montana  
Missoula, MT 59812  
(406) 243-4523

#### Faculty Advisor:

Christine Fiore, Ph.D  
Clinical Psychologist  
Department of Psychology  
University of Montana  
Missoula, MT 59812  
(406) 243-2081

#### Research Assistants:

TBA

#### Purpose:

The purpose of this study is to investigate the relationship between family of origin characteristics and environment and adult attitudes.

#### Procedures:

If you agree to take part in this research study, you will be given a packet of questionnaires to fill out today before you leave this meeting. These questionnaires should take approximately 1 and 1/2 hours and will take place in a building on campus at the University of Montana. You will receive 3 credits for participating in this research if you are an Introduction to Psychology student; you will receive extra credit for participating if your psychology instructor has previously agreed to this arrangement; OR you will receive \$10.00 for your participation if you are NOT receiving experimental credit or extra credit. The questionnaires will ask you about violence you witnessed between your parents as a child, about other family of origin characteristics and environment, and about your current attitudes toward violence and aggression.

This study is voluntary, and you are free to answer only those questions you choose to answer. You are also free to withdraw from participating at any time during the study without prejudice. If you choose to withdraw from the study, you will still receive your experimental credits, extra credit, OR \$10.00. The researcher will answer any questions you might have during the study. You are also free to contact the principal investigator (Diana Marchetti) or research supervisor (Christine Fiore, Ph.D.) at a later time to discuss any concerns.

#### Risks and Discomforts:

Some people experience increased emotional discomfort when they answer questions concerning potentially difficult aspects of their lives. If you do feel distressed during this period, please let the investigator know how you are feeling. The investigator will talk with you about your feelings. All participants will be provided with a list of referrals for psychological services at the end of the study.

Confidentiality:

All information that you will provide will be kept strictly confidential. ONLY this informed consent form will have your name on it. NONE of the questionnaires will have your name on them. Instead, a code number will be assigned to all of the questionnaires, and we ask you not to write any identifying information on your questionnaires. Your informed consent and all research data will be stored in a locked filing cabinet, and only research staff will have access to it. If the results of this study are written in a scientific journal or presented at a scientific meeting, your name will NOT be used.

Compensation for Injury:

Although this research does not involve any physical contact or risk of injury, the following liability information is provided:

“In the event that you are injured as a result of this research, you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the Authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may be obtained from the University’s Claims Representative or University Legal Council.”

Statement of Consent:

I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that a member of the research team will answer any future questions I may have. I voluntarily agree to take part in this study and I understand that I will receive a copy of this consent form.

\_\_\_\_\_  
Printed Name of Participant

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Investigator

Appendix C

Group Assignment

ID# \_\_\_\_\_

CHOOSE **ONLY 1** OF THE FOLLOWING. Place a check on the line next to 1, 2, or 3 according to which scenario **BEST** describes your home environment during your childhood. Please make sure to read all 3 before making your selection.

1. \_\_\_\_\_ **I have witnessed any of the following:**

- My mother/father insult or swore at my father/mother
- My mother/father called my father/mother fat or ugly
- My mother/father yelled or shouted at my father/mother
- My mother/father threatened to hit or throw something at my father/mother

2. \_\_\_\_\_ **I have witnessed exchanges described in #1 above AND I have also witnessed ANY of the following:**

- My mother/father punched or hit my father/mother with something that could hurt
- My mother/father went to, or needed to go but didn't go to, the doctor because of a fight with my father/mother
- My mother/father twisted my father/mother's arm or hair
- My mother/father had a bruise, sprain, or small cut because of a fight with my father/mother
- My mother/father pushed, shoved, grabbed, kicked, beat up, or slapped my father/mother
- My mother/father used a gun or knife on my father/mother
- My mother/father passed out from being hit by my father/mother
- My mother/father choked, burned, or scalded my father/mother
- My mother/father slammed my father/mother against the wall
- My mother/father threw something at my father/mother

3. \_\_\_\_\_ **I have NOT witnessed any situations described above in #1 or #2.**

Appendix D

Demographics Questionnaire

ID# \_\_\_\_\_

1. Your Age Now: \_\_\_\_\_
2. Gender (circle one)    M    F
3. Your race? (check one)
 

White	African American
Hispanic	American Indian
Asian	Other
4. Were your parents divorced? (circle one)    Y    N

When answering the following questions (#5-9) AND for all the questions you answer today, **PLEASE refer to the SAME set of parents (BE CONSISTENT).**

5. Place **one** check in the mother column and **one** check in the father column to indicate the parental figures that you will be referring to for all questions you answer throughout the rest of the study. The following are guidelines to select your referent parental figures:

NOTE:

- **If you checked scenario 1 or 2** as best describing you on the first sheet you filled out (Group Assignment), then you must choose (a) or (b) below in selecting your referent parents.
- **If you checked scenario 3** as best describing you on the first sheet you filled out (Group Assignment), then choose (c) below in the selection of your referent parents.

(a) If you have ever WITNESSED violence between “parental” figures in a home in which you lived, either verbal and/or physical, refer to these parents consistently throughout your answers

EXAMPLE: if I lived with my biological father and his abusive girlfriend, I would put a check in the mother column next to parent’s girlfriend and a check in the father column next to biological.

(b) If a parent has been in more than 1 violent relationship, choose the violent “parental” relationship with whom you lived the longest.

(c) If you have NEVER witnessed parental violence in your home, refer consistently to the parents that you lived with the longest.

Place 1 check in the mother column and 1 check in the father column to indicate your referent parental figures:

MOTHER	RELATIONSHIP	FATHER
	Biological	
	Adopted	
	Foster	
	Step	
	Parent's girlfriend/boyfriend	
	Relative (e.g. uncle, aunt)	
	Other (please specify)	

6. Indicate your referent parent's highest level of education by placing 1 check in the mother column and 1 check in the father column.

MOTHER	Education	FATHER
	8 <sup>th</sup> grade or less	
	Some high school/GED	
	Some college/vocational school	
	College graduate	
	Some graduate school	
	Graduate degree	
	I do not know	

7. Indicate your referent parent's religious affiliation at the time you were living with them by placing 1 check in the mother column and 1 check in the father column.

MOTHER	Religion	FATHER
	Catholic	
	Jewish	
	Protestant/Lutheran	
	Muslim	
	Buddhist	
	Other (specify):	
	No religious affiliation	
	I do not know	

8. Indicate your referent parent's job at the time you were living with them by placing 1 check in the mother column and 1 check in the father column.

MOTHER	Job	FATHER
	Homemaker	
	*Blue collar	
	*White collar	
	Full time	
	Part time	
	Unemployed	

\*Blue-collar workers usually do some type of manual or technical labor such as in a factory or in technical maintenance trades. Examples include: neighborhood job, factory, restaurant, bar or a situation descriptive of use of manual effort or strength.

\*White-collar workers usually perform clerical or knowledge work such as those in clerical, professional, managerial or administrative positions, or other "desk" jobs.

9. Estimate the combined annual income before taxes of your referent parents:

_____ none	_____ \$25,001 to \$30,000
_____ \$5,000 or less	_____ \$30,001 to \$35,000
_____ \$5,001 to \$10,000	_____ \$35,001 to \$40,000
_____ \$10,001 to \$15,000	_____ \$40,001 to \$45,000
_____ \$15,001 to \$20,000	_____ \$45,001 to \$50,000
_____ \$20,001 to \$25,000	_____ more than \$50,000

10. Did the police ever have to get involved with your referent parents, to intervene in a domestic dispute? (circle one)

Yes

No

Appendix E  
Conflict Tactics Scale Form CTS2-CA

No matter how well parents get along, there are times when they disagree, get annoyed with each other, want different things, or just have spats or fights because they are in a bad mood, are tired, or for some other reason. Parents also have many different ways of trying to settle their differences with each other. This is a list of things that might happen when your parents had differences or were angry at each other.

Please circle how many times each of your referent parents did the things on the list in the worst year of conflict between them that you remember. If a referent parent did not do one of those things in the year you are thinking of but it happened some other year before or after that, circle "7".

**REMEMBER TO ANSWER THESE QUESTIONS ABOUT YOUR REFERENT PARENTS**

How many times did this happen in the worst year of conflict that you remember:

- 1=Once that year
- 2= Twice that year
- 3= 3-5 times that year
- 4= 6-10 times that year
- 5=11-20 times that year
- 6=More than 20 times that year
- 7=Not that year, but it did happen before or after
- 0= This never happened

1. Mother showed she cared about father even when they disagreed	1	2	3	4	5	6	7	0
2. Father showed she cared about mother even when they disagreed	1	2	3	4	5	6	7	0
3. Mother explained her side of a disagreement to father	1	2	3	4	5	6	7	0
4. Father explained his side of a disagreement to mother	1	2	3	4	5	6	7	0
5. Mother insulted or swore at father	1	2	3	4	5	6	7	0
6. Father insulted or swore at mother	1	2	3	4	5	6	7	0
7. Mother threw something at father that could hurt	1	2	3	4	5	6	7	0
8. Father threw something at mother that could hurt	1	2	3	4	5	6	7	0
9. Mother twisted father's arm or hair	1	2	3	4	5	6	7	0
10. Father twisted mother's arm or hair	1	2	3	4	5	6	7	0
11. Mother had a sprain, bruise or small cut because of a fight with father	1	2	3	4	5	6	7	0
12. Father had a sprain, bruise or small cut because of a fight with mother	1	2	3	4	5	6	7	0
13. Mother showed respect for father's feelings about an issue	1	2	3	4	5	6	7	0
14. Father showed respect for mother's feelings about an issue	1	2	3	4	5	6	7	0
15. Mother pushed or shoved father	1	2	3	4	5	6	7	0
16. Father pushed or shoved father	1	2	3	4	5	6	7	0



## REMEMBER TO ANSWER THESE QUESTIONS ABOUT YOUR REFERENT PARENTS

How many times did this happen in the worst year of conflict that you remember:

- 1=Once that year
- 2= Twice that year
- 3= 3-5 times that year
- 4= 6-10 times that year
- 5=11-20 times that year
- 6=More than 20 times that year
- 7=Not that year, but it did happen before or after
- 0= This never happened

17. Mother used a knife or gun on father	1	2	3	4	5	6	7	0
18. Father used a knife or gun on mother	1	2	3	4	5	6	7	0
19. Mother passed out from being hit on the head by father in a fight	1	2	3	4	5	6	7	0
20. Father passed out from being hit on the head by mother in a fight	1	2	3	4	5	6	7	0
21. Mother called father fat or ugly	1	2	3	4	5	6	7	0
22. Father called mother fat or ugly	1	2	3	4	5	6	7	0
23. Mother punched or hit father with something that could hurt	1	2	3	4	5	6	7	0
24. Father punched or hit mother with something that could hurt	1	2	3	4	5	6	7	0
25. Mother destroyed something belonging to father	1	2	3	4	5	6	7	0
26. Father destroyed something belonging to mother	1	2	3	4	5	6	7	0
27. Mother went to a doctor because of a fight with father	1	2	3	4	5	6	7	0
28. Father went to a doctor because of a fight with mother	1	2	3	4	5	6	7	0
29. Mother choked father	1	2	3	4	5	6	7	0
30. Father choked mother	1	2	3	4	5	6	7	0
31. Mother shouted or yelled at father	1	2	3	4	5	6	7	0
32. Father shouted or yelled at mother	1	2	3	4	5	6	7	0
33. Mother slammed father against a wall	1	2	3	4	5	6	7	0
34. Father slammed mother against a wall	1	2	3	4	5	6	7	0
35. Mother said she was sure they could work out a problem	1	2	3	4	5	6	7	0
36. Father said he was sure they could work out a problem	1	2	3	4	5	6	7	0
37. Mother needed to see a doctor because of a fight with father, but didn't go	1	2	3	4	5	6	7	0
38. Father needed to see a doctor because of a fight with mother, but didn't go	1	2	3	4	5	6	7	0
39. Mother beat up father	1	2	3	4	5	6	7	0
40. Father beat up mother	1	2	3	4	5	6	7	0
41. Mother grabbed father	1	2	3	4	5	6	7	0
42. Father grabbed mother	1	2	3	4	5	6	7	0

## REMEMBER TO ANSWER THESE QUESTIONS ABOUT YOUR REFERENT PARENTS

How many times did this happen in the worst year of conflict that you remember:

1=Once that year

2= Twice that year

3= 3-5 times that year

4= 6-10 times that year

5=11-20 times that year

6=More than 20 times that year

7=Not that year, but it did happen before or after

0= This never happened

43. Mother stomped out of the room or house or yard when she had a disagreement with father	1	2	3	4	5	6	7	0
44. Father stomped out of the room or house or yard when he had a disagreement with mother	1	2	3	4	5	6	7	0
45. Mother slapped father	1	2	3	4	5	6	7	0
46. Father slapped mother	1	2	3	4	5	6	7	0
47. Mother had a broken bone from a fight with father	1	2	3	4	5	6	7	0
48. Father had a broken bone from a fight with mother	1	2	3	4	5	6	7	0
49. Mother suggested a compromise to a disagreement with father	1	2	3	4	5	6	7	0
50. Father suggested a compromise to a disagreement with mother	1	2	3	4	5	6	7	0
51. Mother burned or scalded father on purpose	1	2	3	4	5	6	7	0
52. Father burned or scalded mother on purpose	1	2	3	4	5	6	7	0
53. Mother did something to spite father	1	2	3	4	5	6	7	0
54. Father did something to spite mother	1	2	3	4	5	6	7	0
55. Mother threatened to hit, or throw something at father	1	2	3	4	5	6	7	0
56. Father threatened to hit, or throw something at mother	1	2	3	4	5	6	7	0
57. Mother felt physical pain that still hurt the next day because of a fight with father	1	2	3	4	5	6	7	0
58. Father felt physical pain that still hurt the next day because of a fight with mother	1	2	3	4	5	6	7	0
59. Mother kicked father	1	2	3	4	5	6	7	0
60. Father kicked mother	1	2	3	4	5	6	7	0
61. Mother agreed to try a solution to a disagreement suggested by father	1	2	3	4	5	6	7	0
62. Father agreed to try a solution to a disagreement suggested by mother	1	2	3	4	5	6	7	0

## Appendix F Conflict Tactics Scales Form CTSPC

DO NOT ANSWER THESE QUESTIONS ABOUT YOUR OWN CHILDREN. ANSWER THESE QUESTIONS CONSIDERING WHAT YOUR REFERENT PARENTS DID TO YOU. Children often do things that are wrong, disobey, or make their parents angry. We would like to know what YOUR REFERENT PARENTS DID WHEN YOU did wrong or did something that made them upset or angry, or when they were angry for other reasons.

Here is a list of things that your referent parents might have done TO YOU. Please think about how often these things occurred in the **worst year of conflict you remember**. If a referent parent did not do one of those things in the year that you remember but it did happen in some other year before or after, circle "7."

For example:

#1: "Your parent explained why something was wrong to YOU."

#2: YOU were put in time out..."

#3: YOU were hit on the bottom..."

1: Once in that year	2: Twice in that year	3: 3-5 times in that year	4: 6-10 times in that year	5: 11-20 times in that year	6: More than 20 times in that year	7: Not in the year I am thinking about but it happened in another year	0: never
----------------------	-----------------------	---------------------------	----------------------------	-----------------------------	------------------------------------	--	----------

- |  |   |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|---|
| 1. You explained why something was wrong.....  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 2. You put your child in "time out" (or sent the child to his or her room)....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 3. You shook your child.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 4. You hit your child on the bottom with something like a belt, hairbrush, stick, or some other hard object.....                                     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 5. You gave your child something else to do instead of what he or she was doing wrong.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 6. You shouted, yelled, or screamed at your child.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 7. You hit your child with a fist or kicked your child hard.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 8. You spanked your child on the bottom with your bare hand.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 9. You grabbed your child around the neck and choked him or her.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 10. You swore or cursed at your child.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 11. You beat your child up )hit him or her over and over as hard as you you could.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 12. You said you would send your child away or kick him or her out of the house.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 13. You burned or scalded your child on purpose.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 14. You threatened to spank or hit your child but did not actually do it....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 15. You hit your child on some other part of the body besides the bottom with something like a belt, hairbrush, stick or some other hard object..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 16. You slapped your child on the hand, arm, or leg.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 17. You took away privileges or grounded the child.....  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 18. You pinched your child.....  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 19. You threatened your child with a knife or gun.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 20. You threw or knocked your child down.....  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 21. You called your child dumb or lazy or some other name like that.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |
| 22. You slapped your child on the face, head, or ears.....   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 0 |

Appendix G

Family Environment Scale

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Instructions

If you think the statement is *true* or mostly *true* of the family, make an X in the box labeled T (true) on the answer sheet.

If you think the statement is *false* or mostly *false* of the family, make an X in the box labeled F (false) on the answer sheet.

REMEMBER TO BASE ANSWERS ON REFERENT PARENTS

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FES Form E Item Booklet

### Work Across

1. Family members will really help and support one another.
2. Family members will often keep their feelings to themselves.
3. Members will fight a lot.
4. Members will not do things on their own very often.
5. Members will feel that it is important to be the best at whatever you do.
6. Members will often talk about political and social problems.
7. Members will spend most weekends and evenings at home.
8. Members will attend church, synagogue, or Sunday School fairly often.
9. Activities in the family will be pretty carefully planned.
10. Family members will rarely be ordered around.
11. Members will often seem to be killing time at home.
12. Members will say anything they want to around home.
13. Family members will rarely become openly angry.
14. In the family, we will strongly be encouraged to be independent.
15. Getting ahead in life will be very important in the family.
16. Members will rarely go to lectures, plays or concerts.
17. Friends will often come over for dinner or to visit.
18. Members will not say prayers in the family.
19. Members will generally be very neat and orderly.
20. There will be very few rules to follow in the family.
21. Members will put a lot of energy into what they do at home.
22. It will be hard to "blow off steam" at home without upsetting someone.
23. Family members will sometimes get so angry they throw things.
24. Members will think things out for themselves in the family.
25. How much money a person makes will not be very important to family members.
26. Learning about new and different things will be very important in the family.
27. Nobody in the family will be active in in sports, Little League, bowling, etc.
28. Members will often talk about the religious meaning of Christmas, Passover, or other holidays.
29. It will often be hard to find things when you need them in the household.
30. There will be one family member who makes most of the decisions.

31. There will be a feeling of togetherness in the family.
32. Members will tell each other about their personal problems.
33. Family members will hardly ever lose their tempers.
34. Members will come and go as they want to in the family.
35. Member will believe in competition and "may the best man win."
36. Family members will not be that interested in cultural activities.
37. Members will often go to movies, sports events, camping, etc.
38. Members won't believe in heaven or hell.
39. Being on time will be very important in the family
40. There will be set ways of doing things at home.
41. Members will rarely volunteer when something has to be done at home.
42. If members feel like doing something on the spur of the moment they often pick up and go.
43. Family members will often criticize each other.
44. There will be very little privacy in the family.
45. Members will always strive to do things just a little better the next time.
46. Members will rarely have intellectual discussions.
47. Everyone in the family will have a hobby or two.
48. Family members will have strict ideas about what is right and wrong.
49. People will change their minds often in the family.
50. There will be a strong emphasis on following rules in the family.
51. Family members will really back each other up.
52. Someone will usually get upset if you complain in the family.
53. Family members will sometimes hit each other.
54. Family members will almost always rely on themselves when a problem comes up.
55. Family members will rarely worry about job promotions, school grades, etc.
56. Someone in the family will play a musical instrument.
57. Family members will not be very involved in recreational activities outside work or school.
58. Members will believe there are some things you just have to take on faith.
59. Family members will make sure their rooms are neat.
60. Everyone will have an equal say in the family decisions.

61. There will be very little group spirit in the family.
62. Money and paying bills will be openly talked about in the family.
63. If there's a disagreement in the family, members will try hard to smooth over and keep the peace.
64. Family members will strongly encourage each other to stand up for their rights.
65. Family members won't try that hard to succeed.
66. Family members will often go to the library.
67. Family members will sometimes attend courses or take lessons for some hobby or interest (outside of school).
68. In the family each person will have different ideas about what is right and wrong.
69. Each person's duties will be clearly defined.
70. Members will be able to do whatever they want to in the family.
71. Members will really get along well with each other.
72. Members will usually be careful about what they say to each other.
73. Members will often try to one-up or out-do each other.
74. It will be hard to be by yourself without hurting someone's feelings in the household.
75. "Work before play" will be the rule in the family.
76. Watching TV will be more important than reading in the family.
77. Family members will go out a lot.
78. The Bible will be a very important book in the home.
79. Money will not be handled very carefully in the family.
80. Rules will be pretty inflexible in the household.
81. There will be plenty of time and attention for everyone in the family.
82. There will be a lot of spontaneous discussions in the family.
83. Family members will believe that you don't ever get anywhere by raising your voice.
84. Family members will not really be encouraged to speak up for themselves.
85. Family members will often be compared with others as to how well they are doing at work or school.
86. Family members will really like music, art, and literature.
87. The main form of entertaining in the family will be watching TV or listening to the radio.
88. Family members will believe that if you sin you will be punished.
89. Dishes will usually be done immediately after eating.
90. You won't be able to get away with much in the family.

## Appendix H

### Violence Attitudes Scale

In this survey violence is defined as physical assault between two or more people. For the purposes of this survey, the assailant or initiator of the violence will always be the *perpetrator*, and the person being assaulted will be the *victim*. Listed below are several statements sometimes used to account for the occurrence of violence. Please indicate your agreement or disagreement with these statements. Although some of these statements might be offensive to you, please remember that they do not represent facts, but are attitudes often used to account for the occurrence of violence. If you agree with a statement, please choose the number that matches your level of agreement. If you disagree with a statement, choose the number that matches your level of disagreement.

For example:

Strongly Disagree							Strongly Agree
1	2	3	4	5	6		

  5   a. Most tooth decay is caused by lack of careful brushing.

A choice of 5 would indicate a strong amount of agreement. Please answer the following questions based on your opinion only. There are no right or wrong answers. Always use the scale presented below and write in your choice in the space next to the item number.

Strongly Disagree							Strongly Agree
1	2	3	4	5	6		

   1. People are victims of crime because they deserve it.

   2. Violent offenders need to be dealt with more harshly.

   3. Victims of violence should be held responsible for actions that place them in jeopardy.

   4. As alcohol or drug abuse increases, so does violent crime.

   5. Violence is a product of a morally unhealthy society.

   6. Violent perpetrators lose their temper easily.

   7. People can avoid violence by staying out of dangerous situations.

   8. Most violent perpetrators are adolescents or young adults.

   9. Whenever a person is frustrated, that person will act violently.

   10. Stricter laws will decrease violent acts.

   11. Victims provoke violence by using bad judgment.



Strongly  
Disagree

Strongly  
Agree

1

2

3

4

5

6

- \_\_\_ 12. Feelings of loss of control lead to violent crime.
- \_\_\_ 13. Violent crime is increasing due to the increase of gang activities.
- \_\_\_ 14. Murders should be executed.
- \_\_\_ 15. There is a strong relationship between alcohol/drug usage and violent crimes.
- \_\_\_ 16. A high percentage of violent perpetrators are members of an ethnic minority.
- \_\_\_ 17. Due to the decreased emphasis on family values, there is a high rate of violent crime.
- \_\_\_ 18. There are certain types of people who become victims of violent crimes.
- \_\_\_ 19. As stress increases, so does the likelihood an individual will become violent.
- \_\_\_ 20. Violent offenders should be allowed fewer privileges in prison.
- \_\_\_ 21. Whenever a person behaves violently, it is because the person was frustrated.
- \_\_\_ 22. There is a relationship between the present morality and the incidence of violent crime.
- \_\_\_ 23. People set themselves up to be victimized.
- \_\_\_ 24. Punishing perpetrators is the only way to reduce violent crimes.
- \_\_\_ 25. Drug addicts and dealers are responsible for a significant amount of violence.
- \_\_\_ 26. The rate of violent crime is directly related to our societal values.
- \_\_\_ 27. People who commit violent crimes should be imprisoned for their offenses.
- \_\_\_ 28. The death penalty should be enforced in every state.
- \_\_\_ 29. Most violent crimes are committed by people under the influence of alcohol.

## Appendix I

### ATTITUDES TOWARD AGGRESSION SCALE

Attitudes are important to study because they shape how a person reacts to other people and events. This survey is designed to look at people's attitudes about various ways of dealing with problems in dating or other intimate relationships. In the list below you will find statements about situations that can occur in intimate relationships. As you think about the situation described, remember that pressures in relationships sometimes lead people to do things they wouldn't normally do. We want to know your honest reaction to each situation. Don't think about how you "should," answer the question or how the "perfect person" would answer it. Instead, answer the questions according to how you honestly feel. Use the following scale to note your answer. Circle:

- SD if you *strongly disagree* with the statement
- D if you *disagree*
- LD if you *lean towards disagreement*
- LA if you *lean towards agreement*
- A if you *agree*
- SA if you *strongly agree*

- |  |    |   |    |    |   |    |
|--|----|---|----|----|---|----|
| 1. A joke at another person's expense is basically harmless  | SD | D | LD | LA | A | SA |
| 2. If my partner best me up, I would call the police.  | SD | D | LD | LA | A | SA |
| 3. A sexually unfaithful partner should be slapped.  | SD | D | LD | LA | A | SA |
| 4. Slapping your partner when you're drunk is unforgivable.  | SD | D | LD | LA | A | SA |
| 5. A person who tolerates being sworn at deserves to be sworn at.  | SD | D | LD | LA | A | SA |
| 6. If my partner slaps me, I am justified in slapping back.  | SD | D | LD | LA | A | SA |
| 7. It is hard to understand why someone would hit a partner who lied.  | SD | D | LD | LA | A | SA |
| 8. People should accept that yelling and screaming is just part of being in a relationship.                      | SD | D | LD | LA | A | SA |
| 9. If a women gets raped when she's drunk, she is partially to blame.  | SD | D | LD | LA | A | SA |
| 10. If people stay in physically abusive relationships, then they deserve the treatment they get.                | SD | D | LD | LA | A | SA |
| 11. A women who flirts all evening is in no way responsible if she is raped.                                     | SD | D | LD | LA | A | SA |
| 12. I would consider ending the relationship if my partner slapped me.   | SD | D | LD | LA | A | SA |
| 13. It's worse for a man to slap a women than it is for a women to slap a man.                                   | SD | D | LD | LA | A | SA |
| 14. If you push your partner around when you're drunk, you should be forgiven because your judgment is impaired. | SD | D | LD | LA | A | SA |
| 15. If a boyfriend forces his girlfriend to have sex, she should call the police.                                | SD | D | LD | LA | A | SA |
| 16. It is okay to hit your partner jokingly.   | SD | D | LD | LA | A | SA |
| 17. If you're naked in bed with someone, you're agreeing to have sex.  | SD | D | LD | LA | A | SA |
| 18. Physical fighting between intimate partner's is nobody's business but their own.                             | SD | D | LD | LA | A | SA |
| 19. Being sexually aggressive makes men more attractive.   | SD | D | LD | LA | A | SA |
| 20. Cutting your partner down when you are angry is understandable.  | SD | D | LD | LA | A | SA |

Appendix J

PARENTAL RESPONSE

**REMEMBER TO THINK ABOUT YOUR REFERENT PARENTS (when providing responses to the following situations**

- Please respond to the following situations-**Check all responses that apply.** Think about how your referent mother and father responded to you after you witnessed the situation presented and **check all responses that apply.** You must have **at least 1** check in the mother column and in the father column.
- If you never witnessed the situation, check "Never witnessed this type of situation" below the response box.

**SITUATION #1 You witness your FATHER insult (e.g. call her ugly), swear at, shout at or threaten your mother. How does each referent parent respond?**

RESPONSE from...	MOTHER	FATHER
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")		
Blame your MOTHER (victim)		
Blame Your FATHER (perpetrator) without making excuses for him		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

Never witnessed this type of situation \_\_\_\_\_

**SITUATION #2 You witness your MOTHER insult, swear at, shout at or threaten your father. How does each referent parent respond?**

RESPONSE from...	MOTHER	FATHER
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")		
Blame your FATHER (victim)		
Blame Your MOTHER (perpetrator) without making excuses for him		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

Never witnessed this type of situation \_\_\_\_\_

**SITUATION #3 You witness your FATHER push, shove, hit, or kick you mother.  
How does each referent parent respond?**

<b>RESPONSE from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g., " your father just had a rough day at work; it's just trying times")		
Blame your MOTHER (victim)		
Blame Your FATHER (perpetrator) without making excuses for him		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

Never witnessed this type of situation \_\_\_\_\_

**SITUATION #4 You witness your MOTHER push, shove, hit, or kick your Father.  
How does each referent parent respond?**

<b>RESPONSE from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g., " your father just had a rough day at work; it's just trying times")		
Blame your FATHER (victim)		
Blame Your MOTHER (perpetrator) without making excuses for her		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

Never witnessed this type of situation \_\_\_\_\_

**SITUATION #5 You witness your FATHER use a weapon or object against your mother. How does each referent parent respond?**

<b>RESPONSE</b>	<b>from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")			
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")			
Blame your MOTHER (victim)			
Blame Your FATHER (perpetrator) without making excuses for her			
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong			
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation			
PLEASE SPECIFY by writing the response below:			

Never witnessed this type of situation \_\_\_\_\_

**SITUATION #6 You witness your MOTHER use a weapon or object against your father. How does each referent parent respond?**

<b>RESPONSE</b>	<b>from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")			
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")			
Blame your FATHER (victim)			
Blame Your MOTHER (perpetrator) without making excuses for her			
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong			
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation			
PLEASE SPECIFY by writing the response below:			

Never witnessed this type of situation \_\_\_\_\_

**SITUATION #7 You witness your FATHER stomp out of the room, house, or yard after a disagreement with your mother. How does each referent parent respond?**

<b>RESPONSE from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")		
Blame your MOTHER (victim)		
Blame Your FATHER (perpetrator) without making excuses for her		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

**Never witnessed this type of situation** \_\_\_\_\_

**SITUATION #8 You witness your MOTHER stomp out of the room, house, or yard when she has a disagreement with your father. How does each referent parent respond?**

<b>RESPONSE from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")		
Blame your FATHER (victim)		
Blame Your MOTHER (perpetrator) without making excuses for her		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

**Never witnessed this type of situation** \_\_\_\_\_

**SITUATION #9 Your FATHER injured your mother to the extent that your mother needed medical attention or was seriously injured (e.g. bruises, broken bones). How does each referent parent respond?**

<b>RESPONSE from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")		
Blame your MOTHER (victim)		
Blame Your FATHER (perpetrator) without making excuses for her		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

Never witnessed this type of situation \_\_\_\_\_

**SITUATION #10 Your MOTHER injured your father to the extent that your father needed medical attention or was seriously injured. How does each referent parent respond?**

<b>RESPONSE from...</b>	<b>MOTHER</b>	<b>FATHER</b>
Blame YOU (e.g., "If you would have just behaved")		
Blame an environmental situation (e.g. " your father just had a rough day at work; it's just trying times")		
Blame your FATHER (victim)		
Blame Your MOTHER (perpetrator) without making excuses for her		
Discuss the situation without making excuses for the violence AND with clear indication that the violence was wrong		
Avoid any discussion of the situation; pretend it did not happen; disregard the fact that you saw the situation		
PLEASE SPECIFY by writing the response below:		

Never witnessed this type of situation \_\_\_\_\_

## Appendix K

### POST STUDY INFORMATION SHEET

#### Debriefing:

The purpose of the study is to investigate current adult attitudes toward violence and aggression as it relates to childhood witnessing of interparental violence (IPV) and parental response. Results of the present study seek to extend the existing literature regarding the effects of witnessing IPV and provide useful information to parents and mental health professionals about helpful ways to respond to children who may witness IPV.

#### Referrals

Clinical Psychology Center (sliding fee scale)	243-4523
Counseling and Psychological Services (UM students only)	243-4711
Curry Health Center (after hours-UM students only)	243-2122
Partnership Health	523-4769

If you have any further questions or if you are interested in the results of this study you can contact Christine Fiore, Ph.D or Diana Marchetti at 243-2081 or write to

Diana Marchetti or Christine Fiore, Ph.D.  
c/o Department of Psychology  
University of Montana  
Missoula, MT 59812



Table 1  
 Summary of Means, Standard Deviations, and Percentages of Demographic Variables

	M	SD	N	%
Group (group assignment)	2.28	.631		
NIPV			127	41.6
VIPV			135	44.3
PIPV			43	14.1
Group (CTS)	2.28	.631		
NIPV			30	9.8
VIPV			161	52.8
PIPV			114	37.4
Gender	1.67	.469		
Male			99	32.5
Female			206	67.5
Race	1.21	.898		
Caucasian			285	93.4
Asian			9	3
American Indian			7	2.3
Other			4	1.3
Divorce	1.61	.502		
Yes			121	39.7
No			182	59.7
N/A			2	0
Police	1.90	.339		
Yes			24	11.1
No			267	87.5
Missing			4	1.3

N=305

Table 2  
 Summary of Mean, Standard Deviations, and Percentages of Referent Parent  
 Demographic Variables

	M	SD	N	%	N	%
Referent Parent			Mother		Father	
Mother	1.17	.780				
Father	1.47	1.21				
1=Biological			286	93.8	257	84.3
2=Adopted			7	2.3	9	3.0
3= Foster			0	0	1	.3
4=Step			8	2.6	2	9.5
5=Boyfriend/Girlfriend			1	.3	4	1.3
6=Relative			2	.7	3	1.0
7=N/A			1	.3	2	.7
Referent Parent Education						
Mother	3.54	1.35				
Father	3.67	1.54				
1=8 <sup>th</sup> grade or less			1	.3	7	2.3
2=some high school or less			72	23.6	77	25.2
3=some college/vocational rehab			101	33.1	70	23.0
4=college graduate			78	25.6	80	26.2
5=some graduate school			2	.7	6	2
6=graduate degree			48	15.7	58	19
7= don't know			3	1	7	2.3
Referent Parent Religion						
Mother	4.05	2.49				
Father	4.32	2.62				
1=Catholic			90	29.5	90	29.5
2=Jewish			4	1.3	2	.7
3=Protestant/Lutheran			69	22.6	55	18
4=Buddhist			4	1.3	4	1.3
5= other			68	22.3	57	18.7
6=no religion			60	19.7	81	26.6
7=don't know			10	3.3	16	5.3

N=305

Table 3  
Means and Standard Deviations for Child Physical Abuse (CPA) and No Child Psychological Abuse (NCPA)

	CPA		NCPA	
	M	SD	M	SD
ATA Verbal	9.75	3.24	9.33	3.71
ATA Physical	29.92*	7.82	26.71*	6.94
ATA Sexual	11.43	3.84	11.43	4.41
VAS-harshness toward perpetrator	3.96	.942	3.86	.907
VAS-social-morality blame	3.81	.747	3.76	.854
VAS-perpetrator characteristics	2.97	.621	2.96	.599
VAS-victim blame	2.40	.750	2.23	.803

CPA N= 224; NCPA N=80

\*  $p < .05$  (two tailed)

Note: two outliers pulled from data set

Table 4  
Means and Standard Deviations for Males and Females

	Males		Females	
	M	SD	M	SD
ATA Verbal	11.01*	3.44	8.98*	3.14
ATA Physical	30.14	8.72	28.55	7.17
ATA Sexual	12.51*	4.34	10.88*	3.72
VAS-harshness toward perpetrator	4.01	1.04	3.89	.876
VAS-social-morality blame	3.77	.797	3.81	.768
VAS-perpetrator characteristics	3.11*	.582	2.90*	.620
VAS-victim blame	2.52*	.753	2.28*	.765

Male N=99; Female N=204

\*  $p < .05$  (two tailed)

Note: one outlier pulled from data set

Table 5  
 MANOVA Means and Standard Deviations of gender, and CTS groups for 4 VAS scales

	Group	Gender	Mean	SD	N
VAShp	NIPV	Male	4.33	.479	9
		Female	4.06	.714	19
	VIPV	Male	3.96	1.06	59
		Female	3.85	.890	102
	PIPV	Male	3.99	1.12	31
		Female	3.90	.903	82
VASsm	NIPV	Male	3.93	.834	9
		Female	4.00	.540	19
	VIPV	Male	3.84	.815	59
		Female	3.86	.790	102
	PIPV	Male	3.60	.749	31
		Female	3.67	.750	82
VASpc	NIPV	Male	3.37	.532	9
		Female	2.98	.321	19
	VIPV	Male	3.07	.558	59
		Female	2.90	.612	102
	PIPV	Male	3.09	.636	31
		Female	2.89	.648	82
VASvb	NIPV	Male	2.70	.633	9
		Female	2.50	.726	19
	VIPV	Male	2.47	.715	59
		Female	2.19	.759	102
	PIPV	Male	2.57	.859	31
		Female	2.34	.764	82

Note: 3 outliers pulled from data set

Table 6  
 Follow-up One-Way ANOVA Means and Standard Deviations for genders on 4 VAS  
 scales

Group	Gender	M	SD
VASsm	Male	3.77	.797
	Female	3.89	.879
VASHp	Male	4.01	1.04
	Female	3.89	.879
VASpc	Male	3.11*	.582
	Female	2.90*	.605
VASvb	Male	2.52*	.753
	Female	2.28*	.761

N: Male= 99; Female = 203

\*  $p < .05$  (two tailed)

Table 7  
 MANOVA Means and Standard Deviations of gender, and CTS groups for 3 ATA scales

	Group	Gender	Mean	SD	N
ATAphysical	NIPV	Male	30.11	7.11	9
		Female	29.57	7.85	21
	VIPV	Male	29.91	8.07	58
		Female	27.44	6.77	101
	PIPV	Male	31.55	8.67	31
		Female	29.63	7.31	82
ATAverbal	NIPV	Male	12.44	3.71	9
		Female	9.38	3.56	21
	VIPV	Male	11.21	3.50	58
		Female	8.72	3.07	101
	PIPV	Male	10.39	3.14	31
		Female	9.06	2.95	82
ATAsexual	NIPV	Male	12.89	3.82	9
		Female	10.48	4.20	21
	VIPV	Male	12.89	4.48	58
		Female	10.70	3.69	101
	PIPV	Male	11.90	4.17	31
		Female	11.22	3.65	82

Note: 3 outliers pulled from data set

Table 8

Follow-up One-Way ANOVA Means and Standard Deviations for genders on 3 ATA scales

Group	Gender	M	SD
ATAphysical	Male	30.44*	8.20
	Female	28.56*	7.15
ATA verbal	Male	11.06*	3.42
	Female	8.93*	3.06
ATAphysical	Male	12.58*	4.31
	Female	10.83*	3.59

N: Male= 98, Female= 204

\*  $p < .05$  (two tailed)

Note: 3 outliers pulled from data set



Table 9  
MANOVA Means and Standard Deviations of CPA and CTS groups for 4 VAS scales

	Group	Gender	Mean	SD	N
VAShp	NIPV	No CPA	4.21	.744	11
		CPA	4.23	.503	17
	VIPV	No CPA	3.78	.900	50
		CPA	3.94	.979	110
	PIPV	No CPA	3.73	.887	17
		CPA	3.93	.962	94
VASsm	NIPV	No CPA	3.95	.687	11
		CPA	4.13	.711	17
	VIPV	No CPA	3.83	.896	50
		CPA	3.86	.754	110
	PIPV	No CPA	3.37	.705	17
		CPA	3.67	.727	94
VASpc	NIPV	No CPA	3.07	.445	11
		CPA	3.23	.514	17
	VIPV	No CPA	2.96	.603	50
		CPA	2.97	.560	110
	PIPV	No CPA	2.83	.632	17
		CPA	2.94	.629	94
VASvb	NIPV	No CPA	2.57	.742	11
		CPA	2.62	.658	17
	VIPV	No CPA	2.12	.778	50
		CPA	2.37	.733	110
	PIPV	No CPA	2.17	.720	17
		CPA	2.40	.729	94

Note: 6 outliers pulled from data set

Table 10

Follow-up One-Way ANOVA Means and Standard Deviations for groups on VAS scales

Group	Group	M	SD
VAShp	NIPV	4.22	.596
	VIPV	3.89	.956
	PIPV	3.90	.950
VASsm	NIPV	4.06	.695
	VIPV	3.85	.798
	PIPV	3.63*	.729
VASpc	NIPV	3.17	.489
	VIPV	2.96	.599
	PIPV	2.92	.628
VASvb	NIPV	2.60	.679
	VIPV	2.29	.754
	PIPV	2.36	.729

N: NIPV= 28, VIPV=160, PIPV=111

\*  $p < .05$  (two tailed)

Note: 6 outliers pulled from data set

Table 11  
 MANOVA Means and Standard Deviations of CPA, and CTS groups for 3 ATA scales

Group		CPA	Mean	SD	N
ATAphysical	NIPV	No	20.09	8.14	11
		CPA	30.11	7.34	19
	VIPV	No CPA	26.58	6.44	50
		CPA	29.18	7.61	109
	PIPV	No CPA	25.67	7.78	18
		CPA	31.10	7.53	96
ATAverbal	NIPV	No CPA	9.54	4.39	11
		CPA	10.74	3.49	19
	VIPV	No CPA	9.04	3.15	50
		CPA	9.82	3.43	109
	PIPV	No CPA	9.44	4.26	18
		CPA	9.52	2.94	96
ATAsexual	NIPV	No CPA	11.73	3.69	11
		CPA	10.89	4.51	19
	VIPV	No CPA	11.68	4.59	50
		CPA	11.40	3.89	109
	PIPV	No CPA	10.28	4.36	18
		CPA	11.63	3.64	96

Note: 2 outliers pulled out of data set

Table 12  
Means and Standard Deviations for FES variables

	Group	M	SD
FEScohesion	NIPV	55.57	8.17
	VIPV	50.19	15.00
	PIPV	41.97	17.97
FESexpressiveness	NIPV	52.17	9.86
	VIPV	47.20	13.63
	PIPV	45.31	13.54
FESconflict	NIPV	40.70	6.60
	VIPV	50.81	11.85
	PIPV	58.77	13.61
FESorganization	NIPV	56.40	11.56
	VIPV	51.95	11.47
	PIPV	47.70	12.09
FEScontrol	NIPV	50.50	11.65
	VIPV	54.66	13.31
	PIPV	56.40	13.78

N: NIPV= 30, VIPV=161, PIPV=111

Note: 3 outliers were pulled from the data set