

ABSTRACT

AHERN, LISA SENATORE. Links Between Violence and Conflict in the Family of Origin and Conflict Resolution Strategies of Emerging Adults: An Examination of Gender Differences (Under the Direction of Dr. Mary Haskett).

The purpose of the present study was to examine the relation between family violence history and conflict resolution strategies among emerging adults (ages 18-19), a group largely overlooked in the research. Undergraduates ($N = 249$) completed self-report questionnaires regarding conflict strategies witnessed and experienced in the home during their adolescence and regarding the likelihood of using certain conflict resolution strategies with a romantic partner in response to hypothetical vignettes. Results indicated that family violence history did not predict conflict resolution strategies for the full sample. However, for a subsample of participants who had experienced physical aggression in the home, experiencing that aggression predicted later use of hostile strategies with a romantic partner. Witnessing aggression predicted later hostile strategy use for men, but not women. For both the full and subsamples, witnessing and experiencing reasoning in the home predicted later use of prosocial strategies.

LINKS BETWEEN VIOLENCE AND CONFLICT IN THE FAMILY OF ORIGIN AND
CONFLICT RESOLUTION STRATEGIES OF EMERGING ADULTS: AN
EXAMINATION OF GENDER DIFFERENCES

by

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DEDICATION

To the people who have:

supported me,

distracted me,

made me laugh,

teased me,

comforted me,

and generally put up with me

during this process.

I appreciate you more than you know.

And also to my grandfather, Patsy Senatore;

I know you are proud, and I miss you very much.

BIOGRAPHY

Lisa Ann Senatore Ahern was born November 4, 1978 in Edison, NJ, to the delight of her parents, John and Mary Grace Senatore. She lived in a little yellow house in Fords, NJ until she was three years old, at which point she moved to Iselin, NJ, a few blocks away from her grandparents (Omi and PopPop). At that point, the brother she had been asking her parents for was born (Michael Senatore), and he provided much love, fun, and annoyance for the rest of her childhood. Lisa attended Indiana Avenue school #18 in Iselin through the 3rd grade and spent much time at the Iselin library reading as many books as she could get her hands on. Lisa's family then moved to the "country" (read "suburban South Jersey") before she began fourth grade. She received the rest of her elementary education at Fleetwood Elementary School where she began her writing career as a writer for the Young Stars Opera Company. She then attended Harrington Middle School and Lenape High School, where she was a member of the choir and the colorguard. It was in colorguard that Lisa met her husband-to-be, David Ahern, who happened to be the drum major of the marching band. Lisa graduated from Lenape High School in 1996 and headed south to pursue her undergraduate education at the University of Richmond in Virginia.

After considering becoming a medical doctor, and then a teacher, Lisa took her first Psychology course during her Freshman year at Richmond and was inextricably linked to the discipline from that point forward. She spent many hours doing internships in the local elementary schools and in a juvenile detention center, experiences which helped her decide that she would like to work with children. At Richmond, Lisa also became involved in multiple extracurricular activities including University Choir, the university's co-ed a

cappella group (Choeur du Roi, pronounced “corduroy” or “Chords” for short), and Alpha Phi sorority. She was president of the UR chapter of the Golden Key National Honor Society, as well as a member of Psi Chi and the Omicron Delta Kappa Leadership honor society. As she worked toward her degree, she became a Technology Fellow for the Psychology department and learned a bit about computers and web design (and became a “Mac person”). She also became a Teaching Fellow during her senior year, co-teaching Introduction to Psychology laboratory sections.

With the help of the supportive Psychology faculty, in 2000 she graduated Magna Cum Laude with a Bachelor of Science degree and departmental honors in Psychology from the University of Richmond. She entered North Carolina State University for graduate study in School Psychology and received her Master of Science degree in May of 2004. During the first four years of graduate study, Lisa completed many hours of classwork, research, and practica. She also taught multiple undergraduate courses, such as Educational Psychology and Personality Psychology. She will receive her PhD in School Psychology in May of 2006 after spending two years working in the NCSU Psychoeducational Clinic and completing the extremely interesting document you are about to read. Lisa, her husband David, and their two dogs, Mia and Maggie, reside in Cary, NC.

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CHAPTER ONE

Introduction

Experiencing violence within the family can contribute to a host of cognitive, emotional, and social adjustment problems in childhood, adolescence, and beyond. Violence within the family includes violence between adults in the home as well as child abuse, and negative outcomes are associated with both witnessing violence between parents and experiencing violence directly. Children who experience family violence often have difficulties accomplishing the important developmental task of establishing good relationships with peers (Dodge, Petit, Bates, & Valente, 1995). They exhibit more aggressive behavior and internalizing problems in childhood in comparison to their non-abused peers (e.g. Egeland & Sroufe, 1981; Egeland, Sroufe, & Erikson, 1983; Kaufman & Cicchetti, 1989). Studies on adolescents and young adults who have either witnessed or experienced family violence suggest that they continue to have difficulties forming and sustaining relationships (Fatout, 1990) and that they are at risk for developing aggressive and delinquent behavior (e.g. Buehler, Anthony, Krishnakumar, & Stone, 1997; Wolfe, 1999). Abusive home environments have been found to predict physical aggression toward romantic partners in adolescence and early adulthood (Bank & Burraston, 2001). Overall, exposure to family violence can interfere with the development of positive relationships and appropriate behavior in society.

One specific skill that affects the development of healthy relationships and that children and adolescents often fail to learn when living in violent and high conflict families is the prosocial resolution of conflicts. The term conflict refers to any interaction between two

or more people that involves opposition, and conflict resolution strategies are behaviors enacted to end that opposition. These strategies can be peaceful and prosocial or they can include aggression and violence. The use of verbally aggressive or hostile strategies may lead to escalation of the conflict to the level of violence.

Conflict resolution often has been studied in terms of the strategies and goals used to resolve disputes (see Laursen & Collins, 1994; Shantz & Hartup, 1992). Although there has been much progress in research about children's conflict resolution skills, research on late adolescent and young adult conflict resolution skills is lacking. Although a few studies have shown that exposure to family violence affects conflict resolution skills in children and young adults, the association between family violence and conflict resolution has been largely ignored in the literature. Furthermore, available research is characterized by methodological difficulties and lack of attention to gender and developmental differences. Given the fact that there are documented developmental and gender differences in the use of conflict resolution strategies (e.g. Laursen, Finkelstein, & Betts, 2001), one might expect similar differences with regard to the relation between family violence and such strategies. Understanding gender and developmental differences in the link between family violence and conflict resolution could have relevance for informing interventions.

The purpose of the present study was to examine the relation between family violence history and conflict resolution strategies among emerging adults (ages 18-19), a group largely overlooked in the research. In national studies it has been determined that the prevalence of partner violence may increase by a factor of 2 to 5 in the years between adolescence and adulthood, depending on the behaviors studied (Halpern, Oslak, Young,

Martin, & Kupper, 2001); in addition, prevalence of physical violence among married and cohabitating young adults decreased over time in a longitudinal study, with the highest prevalence between the ages of 18 and 24 (55%) and the lowest between the ages of 27 and 33 (32%) (Morse, 1995). These findings suggest that partner violence may, in fact, peak as adolescents enter adulthood; therefore, closer attention must be paid to the development of skills necessary for maintaining healthy relationships during this transitional period. This peak may be due to the increased levels of commitment within intimate relationships that may occur once adolescents have left their family homes and are living on their own. Their relationships at this time may be more similar to those of their parents, and if they have witnessed their parents committing violence against each other, they may repeat that violence in their own romantic relationships. Given research suggesting that a history of violence in the family of origin is predictive of later partner violence (e.g., O'Keefe, 1998; Wekerlee, Wolfe, Hawkins, Pittman, Glickman, & Lovald, 2001), understanding the association between family violence and conflict resolution skills at this particular period may have implications for the understanding of the intergenerational transmission of violence.

Though family violence history is a risk factor for later perpetration of violence in intimate relationships, particularly during the transition to adulthood, it is possible that the development of prosocial conflict resolution strategies may serve as a protective factor for those at risk of repeating the violent strategies learned from their parents in their own relationships. There is a paucity of research designed to examine prosocial conflict resolution strategies in emerging adults. Research that has been conducted has focused primarily on very young children (e.g., Vestel & Jones, 2004), and has not been focused on the

development of appropriate skills as a protective factor for those at risk for perpetrating violence. In previous research, social problem solving skills were found to predict social competence and behavior for children who experienced abuse (Price & Landsverk, 1998), and some have speculated that strong social problem solving skills may serve as a protective factor for children at risk for social maladjustment (Masten, Best, & Garmezy, 1990; Werner, 1995). Given that conflict resolution involves the use of social problem solving skills and enactment of those skills within a particular dyadic relationship, strong conflict resolution skills also may be associated with more positive and peaceful outcomes in those relationships. If the development of prosocial conflict resolution skills leads to peaceful outcomes for those who have experienced family violence, research on appropriate skill development as a protective factor may contribute to the examination of resilience in maltreated individuals. Examining protective factors during the transition to adulthood may have important implications for the development of healthy adult relationships for these individuals. Therefore, the present study was designed to begin to address this gap in the literature by investigating the relation between prosocial conflict resolution in the family of origin and later use of prosocial strategies with a romantic partner during the transition to adulthood.

Another aim of the present study was to determine whether gender moderated the association between family violence history and conflict resolution strategies among emerging adults. This moderating role was hypothesized due to previous research suggesting gender differences for younger children and adolescents in the development of conflict resolution strategies and aggressive behavior (e.g. Coie & Dodge, 1998; Owens, Daly, &

Slee, 2005) and in the relations between inter-parental violence, child abuse, and behavior (e.g. Burns & Dunlop, 2002; Herrera & McCloskey, 2001; O'Keefe, 1998). Information about gender differences in the association between violence in the family of origin and later conflict resolution strategies could lead to better-informed interventions for emerging adults who are using conflict resolution skills within a changing context of peer and romantic relationships and who may be establishing important relationships outside of their family of origin.

CHAPTER TWO

General Overview

More research is needed regarding the link between family violence history and conflict resolution in general and regarding that link for emerging adults in particular. Additionally, moderators of the link, such as gender, need to be explored. In the following review, the relations between experiencing and/or witnessing family violence and child and adolescent adjustment will be discussed, with particular attention to gender differences. Next will be a discussion of the definition of conflict and developmental and gender differences in the use of conflict resolution strategies. Finally, the available literature on the association between family violence and conflict resolution strategies will be reviewed in depth.

Family Violence

An abundance of research has shown that violence within the family of origin, whether it is witnessed by children or experienced directly, can be related to child and adolescent maladjustment. Those relations can be seen even into adulthood, at which time violence in the family of origin is associated with an increased risk of violence in one's current family (see Stith, Rosen, Middleton, Busch, Lundeberg, & Carlton, 2000). The following section is a review of the literature regarding the relations between experiencing and witnessing violence and social functioning for children, adolescents, and young adults.

Experiencing Physical Abuse in the Family of Origin

Social outcomes. Physical child abuse and harsh discipline have been shown to negatively affect children's peer relations and social adjustment (Cicchetti & Toth, 2000). Abused children tend to be more aggressive and less prosocial with peers, and they

experience more peer rejection in comparison to non-abused children, especially if the abuse is chronic and persists over time (Alessandri, 1991; Bolger & Patterson, 2001; Hoffman-Plotkin & Twentyman, 1984; Salzinger, Feldman, Ng-Mak, Mojica, & Stockhammer, 2001). High levels of aggression and peer rejection are predictive of other problems such as psychopathology, delinquency, and low academic achievement (Rogosch & Cicchetti, 1994). Abused children tend to exhibit increased internalizing problems, such as withdrawal (Egeland et al., 1983). In addition, social information processing deficits have been found in abused children, with these children being more likely than their non-abused peers to attribute others' behavior to hostile intent and to use aggressive solutions in social situations (Crick & Dodge, 1994). In fact, the link between child maltreatment and aggression has been found to be partially mediated by hostile attributional biases (Dodge, Bates, & Pettit, 1990). In general, these difficulties have deleterious effects on children's abilities to develop and sustain healthy friendships with others.

Physical abuse can have lasting effects into adolescence and adulthood. Abuse has been repeatedly found to be a risk factor in the development of violent and delinquent behavior in adolescence (e.g., Bank & Burraston, 2001; Fergusson, Lynskey, & Horwood, 1996; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001; Wolfe, 1999). Young adults who have experienced abuse in the past are at increased risk for developing psychological disorders. In one longitudinal study it was found that 80% of men and 58.3% of women who were physically abused as children met the DSM-III-R criteria for at least one psychological disorder at age 21 (Silverman, Reinherz, & Giaconia, 1996). Finally, the experience of child abuse has been found to be related to perpetrating or experiencing dating and partner

violence in adolescence and young adulthood (e.g., Bank & Burraston, 2001; Smith & Williams, 1992; Wekerle & Wolfe, 1998). Literature regarding the relations between violence in the family of origin and subsequent dating and partner violence are further reviewed in a later section.

Gender differences in outcomes. Some studies suggest that there may be gender differences in the relations between physical abuse and later adjustment. Studies of children and adolescents suggest that boys who have been abused tend to exhibit more externalizing behaviors and aggression in comparison to girls who have been abused, and that girls tend to exhibit more internalizing behaviors and depressive symptoms (e.g., Bolger & Patterson, 2001). These tendencies may be related to the fact that, whether abused or not, males have a greater tendency to engage in physically and verbally aggressive behavior in comparison to females throughout the adolescent years and beyond (Coie & Dodge, 1998). Research shows that boys generally are more at risk for developing antisocial behavior and displaying overt aggression in comparison to girls (Patterson, Reid, & Dishion, 1992), and that boys tend to develop more externalizing behaviors while girls tend to develop more internalizing behaviors (Scarmella, Conger, & Simons, 1999). Due to these gender differences in social behavior, especially in relation to having been physically abused, it would likely be difficult to fully understand the relations between family violence history and later conflict resolution strategies accurately without considering the role of gender.

Witnessing Conflict and Violence in the Family of Origin

Clearly, there is a strong association between child abuse and later negative outcomes across childhood, adolescence and adulthood, and there are important implications for gender

and timing of abuse. Furthermore, research has shown that witnessing conflict and violence between parents can have deleterious effects on adjustment at many developmental stages. The associations between witnessing conflict or violence and adjustment in childhood, adolescence and young adulthood, as well as gender differences in those relations, are reported below.

Witnessing inter-parental conflict. Inter-parental conflict, also referred to as marital conflict, is often defined as conflict between parents regardless of actual marital status. Inter-parental conflict can be constructive or destructive, vary in frequency, and be comorbid with other family risk factors such as parental depression, child maltreatment, and divorce (Cummings, 1998). Inter-parental conflict has been shown to be related to children's and adolescents' maladjustment in a variety of ways. Children's distress and behavior problems increase when the conflict is more frequent and destructive (Cummings, 1998). It can be related to children's social maladjustment and can lead to the development of behavioral and emotional problems as well (Cummings, 1998; Cummings & Davies, 1994; Grych & Fincham, 1990; Reid & Crisafulli, 1990).

In a meta-analytic review of 68 studies, Buehler et al. (1997) determined that witnessing inter-parental conflict between ages 5 and 18 was related to a host of youth problem behaviors including aggression, delinquency, and substance abuse. Subsequent studies have examined the relations between witnessing inter-parental conflict and maladjustment at various developmental levels. Many children who have witnessed inter-parental conflict exhibit externalizing and internalizing behavior problems and trouble with peers, regardless of whether their parents were married or divorced (Vandewater & Lansford,

1998). Negative inter-parental conflict style has been directly linked to older children's conduct problems (Webster-Stratton & Hammond, 1999). In terms of long term effects of witnessing inter-parental conflict, children from high conflict families have been found to be more poorly adjusted and to have less success in forming and maintaining intimate relationships as young adults (Burns & Dunlop, 2002). One study was designed to examine the peer relations of children from preschool to elementary school who had witnessed inter-parental conflict. Preschool children with a low number of friendships who experienced harsh and hostile family environments, including inter-parental conflict, were more likely to be victimized by peers in elementary school; however, having more friends dissolved this relation (Schwartz, Dodge, Pettit, & Bates, 2000). The findings from this study suggest that although hostile family environments are related to young children's difficulties with peer relations, having friends may ameliorate this relation. It is possible that having friendships outside of the home may provide children the opportunity to learn more peaceful strategies and may provide protection from bullies.

Inter-parental conflict can also influence parenting, which in turn can affect peer and sibling relationships. Higher levels of inter-parental conflict are associated with lower levels of democratic parenting for fathers, with fathers exhibiting lower levels of support and engagement when talking with their children (Kitzmann, 2000). Additionally, inter-parental conflict is associated with angry and power assertive maternal parenting during problem solving interactions with children (O'Brien & Bahadur, 1998). Children can learn these behaviors from their parents and use them in interactions with others. For example, inter-parental conflict and negative parenting have been found to be associated with problematic

sibling and peer relationships in a sample of 7-10 year-old children (Stocker & Youngblade, 1999).

Not only can inter-parental conflict be related to children's difficulties with relationships with peers and siblings in general, but, more specifically, children can learn conflict resolution strategies based on their experiences with their parents' inter-parental conflict. Inter-parental conflict patterns are linked to parent-child conflict patterns and conflict patterns used between siblings (Noller, Fenney, Sheehan, & Peterson, 2000). Goodman, Barfoot, Frye, and Belli (1999) found that, when inter-parental conflict was frequent, mothers' use of negative conflict strategies was significantly associated with children's poor problem-solving skills. In the case of lower frequency of conflict, mother's less frequent positive conflict characteristics were significantly associated with poor problem solving skills in children. This relation between parent conflict patterns and child conflict patterns provides further justification for the examination of the association between witnessing family violence and later conflict resolution strategies, as it seems that these strategies are learned early on.

Witnessing Inter-parental Violence. Inter-parental violence can be considered a subset of behaviors that may occur during conflict, and consists of physical aggression that causes pain or damage to another person. A substantial body of literature indicates that witnessing such violence between parents be related to children's social and emotional maladjustment. Children who have witnessed violence have shown symptoms of distress similar to those of children who have been abused (Jaffe, Wolfe, Wilson, & Zak, 1986). Some studies have shown that children who witnessed inter-parental violence, but were not abused themselves,

had more externalizing problems (such as aggression and antisocial behavior) and internalizing problems (such as fearfulness and social withdrawal) (Fantuzzo, DePaola, Lambert, & Martino, 1991; Hughes, Parkinson, & Vargo, 1989). More specifically, children who witnessed inter-parental violence were found to be more aggressive in comparison to non-witnesses and to demonstrate behavior problems ranging from temper tantrums to fights with other children (Fantuzzo & Lindquist, 1989; Kolbo, Blakely, & Engleman, 1996). Additionally, some studies have shown lower social competence among children who witnessed inter-parental violence compared to non-witnesses (Adamson & Thompson, 1998; Fantuzzo et al., 1991).

The negative social outcomes associated with witnessing inter-parental violence continue into adolescence and adulthood as children carry these destructive learned behaviors into later peer and romantic relationships. Among adolescents, a relation has been found between witnessing inter-parental violence and committing dating violence (e.g., O'Keefe, 1998). In young adults, witnessing inter-parental violence in the past was significantly predictive of violence in current peer relationships (Cantrell, MacIntyre, Sharkey, & Thompson, 1995). Additionally, there is evidence that for young adults, witnessing violence between parents in the past is related to becoming involved in subsequent abusive marital relationships (e.g., Stith et al., 2000). Further discussion of the relation between family-of-origin violence and dating violence in emerging adulthood occurs in a later section.

Gender differences. Some gender differences have been determined regarding the relation between witnessing violence or conflict and adjustment problems. Some studies have indicated that boys are more negatively and severely affected by witnessing inter-parental

violence in comparison to girls (Fantuzzo & Mohr, 1999). To illustrate, in a study of youth ages 6 to 12, male and female witnesses were equal in frequency of arrests, but boys were arrested more often for violent offenses (Herrera & McCloskey, 2001). Kerig (1998) also found that the relation between witnessing inter-parental conflict and childhood outcomes varied depending upon child gender. Specifically, for boys, associations were found between witnessing inter-parental conflict and externalizing problems, internalizing problems, and anxiety. Those associations were moderated by several cognitive processes including appraisal of parent conflict properties, self-blame for the conflict, and perceived control. For girls, a link was found between witnessing inter-parental conflict and internalizing problems only. That link also was moderated by appraisal of conflict properties and self blame, but not by perceived control. Therefore, although boys' feelings of control appeared to ameliorate the effects of witnessing conflict and some externalizing and internalizing problems, girls' feelings of control had no effect on the development of internalizing problems after witnessing conflict.

There continue to be gender differences in outcomes of witnessing inter-parental violence and conflict as children move into adolescence and young adulthood. For example, in a study of adolescents at a residential treatment center, witnessing violence was associated with negative functioning for males, including an increased likelihood of running away from home, reporting suicidal thoughts, and hitting their mothers. Witnessing inter-parental violence was not related to adolescent females' functioning (Carlson, 1990). Additionally, in a longitudinal study (Burns & Dunlop, 2002), females who had witnessed conflict as children were more depressed as adults in comparison to men from high conflict families. As

adolescents, females were found to be more anxious and depressed and to have lower self-esteem in comparison to males who had witnessed inter-parental conflict. It is possible that living in high conflict families may exacerbate females' general tendencies toward depression. More information on the relations between witnessed inter-parental violence (as opposed to conflict) and later social maladjustment is reviewed below in the section examining the association between violence in the family of origin and dating or partner violence.

Although the association between witnessing conflict or violence and children's adjustment appears to vary by gender, a meta-analytic review by Buehler et al. (1997) found no significant overall gender differences in the association between witnessing inter-parental conflict and a variety of youth problem behaviors. One possible explanation for this discrepancy is that gender differences may only moderate the relation between witnessing inter-parental conflict and youth problem behaviors during certain developmental periods. Also, it was noted that many researchers collapse externalizing and internalizing behavior into one total "problem behavior" score. This combination may be a limitation when examining gender differences due to previous research suggesting that boys tend to engage in externalizing behavior while girls tend to engage in internalizing behavior. Due to these disparate findings and the general lack of research examining gender differences in the effects of family violence for emerging adults, closer attention to gender differences in emerging adults is warranted.

Experiencing and Witnessing Family Violence

It has been reported that between 45% and 70% of children who have witnessed inter-

parental violence have also experienced physical abuse and that as many as 40% of abused children also witnessed inter-parental violence (Margolin, 1998). Children who have witnessed abuse and have been abused themselves may be at even greater risk for adjustment problems in comparison to children who have either witnessed violence *or* experienced abuse. Hughes et al. (1989) examined child witnesses of inter-parental violence (ages 4 to 12), half of whom were abused and half of whom were not abused, in comparison with non-witnesses from a similar background. It was found that children who had both witnessed and experienced abuse exhibited more parent-reported behavioral problems in comparison to children who had witnessed violence but not experienced abuse. Comparison children showed the least amount of behavioral difficulty, based on parent report. The authors did not examine gender differences in behavioral problems.

The combined effect of both witnessing violence and experiencing abuse has been examined in adolescents. In a study of an ethnically and socio-economically diverse group of 935 high school students, it was found that adolescents who had witnessed violence and had been abused had a significantly higher level of social adjustment problems in comparison to adolescents who had only witnessed violence, although those that had only witnessed violence still showed high levels of internalizing and externalizing problems (O'Keefe, 1996). Additionally, as the level of child abuse became more severe, the impact of witnessing violence on children's social adjustment diminished. As child abuse decreased, the impact of witnessing violence increased (O'Keefe, 1996). These findings suggest that child abuse not only exacerbates the effects of witnessing violence, but more severe child abuse overshadows the relation between witnessing violence and adjustment.

Violence in the Family of Origin and Later Dating and Partner Violence

Studies of the intergenerational transmission of violence have found that the experience of abuse in childhood and adolescence and the experience of witnessing interparental violence are both predictive of dating and partner violence (e.g., DeMaris, 1987; Stets & Pirog-Good, 1987; Kalmuss, 1984; MacEwen, 1994; Wolfe & Foshee, 2003). Partner violence (sometimes labeled marital violence, spouse abuse, domestic violence, or wife battering) is generally defined as violence between two committed romantic partners who usually are cohabitating or married. Dating violence is often defined as violence between individuals in a less committed relationship who are usually not cohabitating. Dating violence is examined most often among samples of adolescents and young adults.

The association between family violence and dating violence has been examined in adolescents who are just beginning to develop dating relationships. Among adolescent males, witnessing or experiencing family violence was predictive of perpetration of dating violence in a close relationship with a female (Wekerle & Wolfe, 1998). In another study, high school students (ages 13 to 19) who had been abused were more likely to be involved in an abusive dating relationship (Smith & Williams, 1992). These findings suggest that violence within the family of origin is related to both perpetration of dating violence and victimization. They also suggest that the intergenerational transmission of violence begins even before the children of violent families develop their own families.

This association between growing up in a violent family and later dating or partner violence continues into young adulthood. For example, abusive home environments have been found to be predictive of physical aggression toward a romantic partner in early

adulthood (Bank & Burraston, 2001). This association may be particularly strong for those who have experienced child abuse. In a study of 73 undergraduates, experiencing abuse as a child increased severe partner aggression over and above the impact of witnessing inter-parental violence in the family of origin (MacEwen, 1994). Those who have examined the intergenerational transmission of violence have documented this trend into later adulthood as well. In a meta-analytic review, witnessing or experiencing family violence was related to later involvement in a violent marital relationship (Stith et al., 2000).

Gender differences have been found in the association between witnessing violence, experiencing child abuse, and later committing dating violence, but these findings differ between younger and older adolescents/young adults. Among young adults, gender has been found to be a moderating variable, with the association between witnessing inter-parental violence and dating aggression stronger for males in comparison to females (DeMaris, 1987; Foo & Margolin, 1995; Gwartney-Gibbs, Stockard, & Bohmer, 1987). Additionally, Stith et al. (2000) suggested that there was a stronger association for males between experiencing violence within the home as a child and becoming the perpetrator of partner violence in adulthood, while females were more likely to become the victim of partner violence. Among college students, males who were abused as children were significantly more likely to inflict and sustain dating violence, while no such relations were found for females or for males who had witnessed inter-parental violence (DeMaris, 1987). Another study of young adults found a link between experiencing child abuse and inflicting dating violence for males only (Stets & Pirog-Good, 1987). However, in a study of younger adolescents (8th and 9th graders) witnessing family violence was only related to perpetrating dating violence for females (Wolf

& Foshee, 2003). In fact, it has been found that among younger adolescents, females perpetrated more dating violence toward their partners even when controlling for violence inflicted in self-defense (Foshee, 1996). This finding is different from the previously mentioned findings in adults, which indicate that men are more likely to perpetrate partner violence. It is possible that young adult men are less likely to report being the victim of dating violence. In addition, female participants in the study by Wolf and Foshee (2003) were dating older men, while male participants were dating younger women. The authors suggested that females may be having more serious romantic relationships like that of their parents and, therefore, are more likely to imitate behavior they have witnessed in their parents' relationships. Whatever the explanation, these findings indicate clear differences between adolescence and emerging adulthood in terms of the association between family-of-origin violence and dating or partner violence. It stands to reason that early adulthood may be an important transitional period for this relation.

Family Violence: Summary

In the previous section, evidence for the deleterious effects of family violence was presented. Witnessing destructive inter-parental conflict or violence, experiencing physical abuse, or the combination of both all are associated with problematic behavior and diminished emotional health of children, adolescents, and young adults. These associations appear to differ depending upon gender and developmental level. In general, males who come from violent families tend to exhibit more externalizing and violent behavior in comparison to females, and females tend to exhibit more internalizing behaviors and mental health problems. Despite the fact that most dating or partner violence in adulthood is reported

to be perpetrated by men, violent behavior by females toward dating partners has been found to occur, especially in adolescence. In addition, dating and partner violence may possibly peak in emerging adulthood.

Given the connection between family violence history and later aggressive/violent behavior, it is important to examine the use of conflict resolution strategies, whether hostile or prosocial, for both males and females. It is especially important to conduct this examination during a developmental period in which violent behaviors that were learned in the family of origin are being used to resolve disputes in more committed relationships. There are many ways to resolve conflicts, with violent strategies being only a small subset of these ways. It is possible that having witnessed or experienced hostile or violent strategies limits one's possible choices of conflict resolution strategies to hostile and violent ones. Along those lines, witnessing prosocial strategies may provide a context for choosing prosocial strategies in later conflicts. The examination of conflict resolution strategies used to resolve conflicts between partners in various situations might be useful in developing interventions to prevent the intergenerational transmission of violence. The next section is a review of relevant theory and literature related to conflict resolution, including differences in conflict resolution strategy usage at various developmental levels.

Conflict Resolution

Definition of Conflict and Theoretical Background

Laursen and Collins (1994) defined conflict as a "dyadic, interpersonal behavioral event involving opposition" (p.198). This definition can distinguish conflict from other terms often used interchangeably with conflict, such as competition and aggression. Competition

does not necessarily involve conflict; one simply works against others to achieve a goal that only a few people are able to attain (Johnson & Johnson, 1996). Aggression includes behavior that hurts others on purpose; although most aggression involves conflict, not all conflict involves aggression (Shantz, 1987). Therefore, conflict does not have to be solved using aggression, but the use of hostile and aggressive strategies for solving conflict can have deleterious effects on relationships and emotional functioning.

The strategies one uses to resolve conflict situations are important in determining the outcome of the situation and the relations between those outcomes and social functioning. In order to understand how people develop and use conflict resolution skills, the social information processing framework can be useful. In the social information processing model (Crick & Dodge, 1994), it is proposed that people process social cues encountered in the environment by going through six steps leading to behavioral enactment: (a) encoding of cues, (b) interpretation of those cues including attributions of intent, (c) clarification of goals, (d) response access, (e) response evaluation and decision, (f) behavioral response or enactment. Each of these steps influences the other and each step is informed by a database of social knowledge the person has developed over time through interactions with others and their environment (Crick & Dodge, 1994). The first three steps are important for developing strategies to resolve social conflicts. Being aware of the conflict, interpreting the intent of the opposing person, and understanding one's own goals all influence the types of strategies one might consider during the response access step. During response access, one considers many ways of responding in a social situation, and during response decision, these strategies are evaluated in terms of their consequences and likelihood of attaining a desired goal.

Of relevance to the present study, there is evidence that the database of social information one draws from during the processing of social information is influenced by previously learned social behavior, particularly in the context of an upbringing that includes exposure to family violence. In the case of families in which violent and hostile strategies were often used, those types of strategies might be more numerous and available to the family members for use during conflictual situations. The database of social knowledge can be conceptualized as a *knowledge structure* or schema acquired through life experience. Knowledge structures have been defined as “internal mental representations which have been derived from memories of past experiences and are a major determinant of how people represent, categorize, and interpret ongoing social events” (Burks, Laird, Dodge, Petit, & Bates, 1999, p. 221). The experience of family violence can result in generally hostile knowledge structures. It has been found that children with hostile knowledge structures process social information in a more hostile way, and display externalizing problems (Burks et al., 1999). Therefore, social information processing problems may be based in narrow and hostile knowledge structures.

Research suggests that social information processing problems are related to later adjustment problems and violent behavior, while strong social information processing skills may be protective for children at risk for behavior problems. In previous research, poor social information processing skills in children who had experienced violence were shown to be related to later adjustment problems (Dodge et al., 1995). In one study, deviant social information processing scores among abused third and fourth graders were related to externalizing behavior problems such as aggression (Dodge et al., 1995). Additionally, the

risk of developing later conduct problems increased by four times for children with processing problems (Dodge et al., 1995). Social problem solving can be affected by the experience of family violence. Family violence is associated with the inability to produce a variety of solutions to problems and the tendency to produce negative or aggressive solutions, which may contribute to poor social outcomes for children. For example, impairment in social problem solving has been found in abused preschoolers. Young abused children generated significantly fewer solutions to social problems in comparison to nonabused children (Haskett, 1990). Generating fewer solutions increases the risk that a child will generate only one or two, possibly aggressive, solutions and will have no other options available when it is time for behavioral enactment to occur.

In summary, children's social information processing can be related to family violence, and social information processing skills tend to be related to children's behavior and adjustment. The social information processing framework suggests that the experience of family violence creates hostile knowledge structures and a social information processing database comprised of antisocial strategies for use in various conflict situations. The social information processing framework allows us a window into the cognitive processes used to interpret social cues and develop solutions to general social problems. Studies in the literature on conflict resolution tend to focus on the actual behavior people engage in to solve conflicts. Both areas of literature are relevant to the present research. Of interest in the present research are the strategies young adults use to resolve conflicts in friendships and romantic relationships, and how family violence history and gender might influence the use of those strategies during the transitional period between adolescence and adulthood. In the

following section, developmental and gender differences in the use of conflict resolution strategies are reviewed.

Developmental and Gender Differences in Conflict Resolution

The types of conflict resolution strategies people use change as they age. In a meta-analysis of peer conflict resolution across development, Laursen, Finkelstein, and Betts (2001) used three categories to describe strategies that may be used to resolve conflicts: negotiation (compromise and third-party resolution), disengagement (withdrawal from the conflict or refusal to resolve the conflict resulting in a stand-off), and coercion (hostile strategies). It was found that children (2-10 years old) tended to choose coercion as their preferred method of resolving disputes rather than choosing strategies associated with disengagement and negotiation. Meanwhile, adolescents (11-18 years old) and young adults (19-25 years old) tended to choose negotiation most often, with adolescents choosing coercion and disengagement less often (Laursen et al., 2001). These findings corroborated previous suggestions that coercion tends to be replaced by negotiation over time (Laursen et al., 1996; Newcomb & Bagwell, 1995). The use of disengagement also increased over time (Laursen et al., 2001).

Gender and age differences in the use of conflict resolution strategies have been found specifically among adolescents, as well (Owens, Daly, & Slee, 2005). In a large group of 591 Australian adolescent boys and girls (ages 12-16), girls were found to use higher levels of compromise, obliging, and avoidance in comparison to boys. Both boys and girls were found to use the same levels of overt anger (e.g., get angry and yell, hurt other's feelings, get angry and walk away, get sarcastic, etc.), though this was likely due to the fact

that the items on that scale tapped both direct and indirect anger. Owens et al. (2005) also found evidence that older students (grade 10; mean age 15.4) tended to use compromise more often in comparison to younger students (grade 8; mean age 13.3). However, older teenagers were found to use just as much overt anger as younger teenagers despite the fact that they tried to find more collaborative ways to solve conflicts.

Although typically developing adolescents and young adults tend to trade coercion for negotiation as they get older, literature on dating violence suggests that violence in romantic relationships may peak during the transition to young adulthood (e.g., Halpern et al., 2001; Morse, 1995). That may seem contrary to typical development of conflict resolution skills because the use of negotiation should preclude the use of hostile and violent conflict resolution strategies. This discrepancy reflects the need to determine what might influence adolescents to use more hostile strategies to deal with conflict during a developmental period in which negotiation is the prevailing tactic.

Family Violence and Conflict Resolution Strategies

Despite the connections that have been found between violence in the family of origin and aggressive behavior throughout childhood, adolescence, and young adulthood, little research has been conducted to examine the association between family violence history and the use of specific conflict resolution strategies other than aggression. This connection is important to examine given research linking current partner violence and deficits in conflict resolution skills among adult men (Anglin & Holtzworth-Munroe, 1997; Dutton & Browning, 1988) and, less often, among women (Anglin & Holtzworth-Munroe, 1997). To

review, violence is considered only one type of strategy used to resolve a conflict. Many other strategies (including reasoning or verbal aggression) may be used.

A careful review of the literature uncovered seven published studies in the area of family violence history and current conflict resolution strategies, four of which examined this relation in emerging adults. The studies varied not only in age of participants, but also in the ways that family violence and conflict resolution were measured. In two studies, conflict resolution was examined using hypothetical conflict situations. Participants were asked to consider hypothetical conflicts between romantic partners or friends and to report which strategies they would use in that situation. In three studies, participants were required to recall strategies they had used during actual conflicts in the past, and in two studies couples were observed engaging in conflict resolution in a laboratory setting. Additionally, the studies vary by research design. In two studies, comparisons between groups of participants were made with respect to family violence history (i.e., comparisons of those who had witnessed violence or experienced abuse to those who had not witnessed or experienced violence) while correlational designs were employed in the others. Finally, the studies varied by attention to gender differences, with four studies including an examination of gender differences, two studies including men only, and one study including both men and women but not examining gender differences. These studies are reviewed in depth below, followed by a summary of findings.

Examining Family Violence and Conflict Resolution in Children

In the only study to date examining these constructs simultaneously in children, Ballif-Spanvill, Clayton, and Hendrix (2003) examined the use of violent and peaceful

strategies among a sample of children (ages 6-11 years) who had and had not witnessed inter-parental violence. The “witness” sample included 27 boys and 35 girls in shelters, transitional housing, or afterschool programs for a high inter-parental violence incidence neighborhood. The comparison sample included 20 boys and 33 girls from a small educational cooperative in the same area as the “witness” group.

To measure conflict resolution strategies, the children were each shown a picture book with a series of short stories about conflict situations with peers. They were shown the beginning of the conflict and the ending with a peaceful resolution. The children were then asked to fill in the middle part of the story by describing what the children did to reach the peaceful solution. Five different types of conflicts were presented, including conflicts over limited resources, exclusion, intimidation, overt aggression, and jealousy. The children’s responses were coded in terms of the type of strategy the children described (from destructive to altruistic) and in terms of the child’s motivation for performing the behavior. It was found that girls who witnessed violence reported the most peaceful strategies, and male witnesses of violence reported the fewest peaceful solutions overall. Girls who did not witness violence developed fewer peaceful strategies compared to girls who witnessed violence, but the types of strategies generated depended on type of conflict. As an explanation for the counterintuitive finding that girls who had witnessed violence used more peaceful strategies than girls who had not witnessed violence, the authors suggested that the girls who had witnessed violence had an internal commitment to peace, demonstrated by their consistent endorsement of peaceful strategies across all types of conflict. The girls may have been imitating their mothers’ tendencies to be intimidated and respond in peaceful ways for self-

preservation purposes. In contrast to the pattern shown by the girls in the study, boys who did not witness violence developed more peaceful strategies in comparison to boys who witnessed violence. In fact, boys who witnessed violence offered more violent strategies. However, it was noted that this difference might have been accounted for by a few boys in the witness sample with outlying scores (Ballif-Spanvill et al., 2003). Nevertheless, the authors suggested that these boys were likely imitating the violent behavior of their fathers toward their mothers.

Should the findings in this study be taken at face value, they indicate gender differences exist in the use of conflict resolution strategies among child witnesses of interparental violence. However, there are several major limitations of this study. First, the difference between the “witness” sample and the comparison sample is not clear. Some of the “witness” children simply came from a high domestic violence incidence area. If the comparison sample came from the same area, they might have been characterized by family violence in their homes. There was no matching of demographic characteristics between the groups, so it is unknown whether these groups were different on dimensions that may have influenced the findings.

Examining Family Violence and Conflict Resolution: Observation of Couples

Two studies were designed to examine the relation between family violence and later conflict resolution through observation of couples’ strategy use while engaged in an actual conflict. One was designed to examine conflict resolution among dating college students, though the students were slightly older than those in the present study. The other study was designed to examine conflict resolution of engaged couples close to age 30.

In an attempt to examine conflict resolution strategies as correlates of dating violence, Follette and Alexander (1992) examined the relation between witnessing and experiencing violence in the family of origin and current relationship violence among 100 dating couples on a southern university campus. The mean age of the male participants was 22.41 ($SD=4.69$), the mean age of the female participants was 21.16 ($SD=4.28$), and approximately 80% of participants were White. Sixty-nine percent of the couples described their relationship as serious but not cohabitating, 17% were cohabitating, and 13% described their relationship as casual. Forms of the Conflict Tactics Scale (CTS) were used to measure conflict between parents in the family of origin, between parent and child, and between dating partners. Both the verbal and physical aggression subscales were used, though items referring to slapping, spanking, or hitting were omitted because the researchers thought many people considered these behaviors to be “acceptable forms of discipline.” A modified version of the Dyadic Adjustment Scale was used to measure relationship satisfaction.

Couples were observed as they discussed two problems in their relationship. To complete a Post Interaction Questionnaire, participants rated how satisfied they were with the interaction and how similar it was to other interactions they had with each other (1 = very satisfied/very similar to 7 = very dissatisfied/very dissimilar). The interactions were also coded using the Marital Interaction Coding System. There were 30 codes collapsed into three summary categories: positive behaviors (e.g., agree, approve, humor, smile), problem solution behaviors (e.g., compromise, paraphrase, accept responsibility), and negative behaviors (e.g., criticize, disagree, put down, mind read, excuse).

Results indicated that females' reports of their own violent behavior in their dating relationships were significantly related to abuse perpetrated by their fathers. For males, no such association was found between family violence history and verbal or physical aggression toward their dating partner. In terms of communication, the frequency of positive communication in the couple interactions was not related to family history of violence for females; however, couples' negative communication during the interactions was related to non-specific family violence variables. For males, neither positive nor negative communication was found to be related to family violence. The authors noted that although some hypotheses were supported, others were not, and that the lack of findings related to communication might have been due to the artificial nature of the laboratory interaction (Follette & Alexander, 1992).

One major problem with this study is the fact that slapping, hitting, and spanking were not included in measures of violence in the family of origin. Although the authors' assertion that many people consider these behaviors acceptable forms of discipline may be true, the behaviors are known predictors of negative outcomes and should have been included to allow a fuller examination of the link between family violence history and conflict resolution. Additionally, communication styles were only observed for a single interaction about one particular issue in the couples' relationships. Therefore, the researchers did not address the general style of conflict resolution that might be used in a variety of situations or across different relationships. Finally, the CTS was used to examine both family of origin conflict variables and present relationship conflict variables, which increases shared method

variance and makes finding artificial relations between family violence history and conflict resolution more likely.

An additional study designed to examine the association between witnessing violence and conflict management in young adulthood involved a population somewhat older than the one in the current study. Seventy-one engaged Australian couples (mean age 29-32) were recruited to participate in an intervention program called the Prevention and Relationship Enhancement Program (Halford, Asanders, & Behrens, 2000). To participate, couples could not be married but had to have stated an intention to remain together, and they both had to score at least a 90 on the Dyadic Adjustment Scale, indicating no significant relationship distress. No participants were receiving psychological or psychiatric treatment. Sixty percent were living together and 24% had children living with them.

The participants were administered a self-report battery consisting of the Dyadic Adjustment Scale and the Marital Status Inventory to measure current relationship functioning, as well as the Conflict Tactics Scale to measure exposure to violence between parents in the family of origin. Because violence from father to mother was associated with violence from mother to father, exposure to family violence was determined to have either occurred or not occurred, with no distinction by gender of the perpetrator. Couples were determined to be either “male-exposed” if the male partner had witnessed inter-parental violence or “female-exposed” if the female partner had witnessed inter-parental violence. In only a small number of couples had both partners witnessed violence ($n=4$) so effects of both partners being exposed to violence could not be examined. Conflict resolution strategies were examined via observation of couple interaction. Two 10-minute interactions were observed

and videotaped, one including discussion of a topic chosen by the male and one by the female partner. Each partner then individually watched the tape and paused it every 30 seconds to write down any thoughts they had at that point in the interaction. Videotaped interactions were then coded for verbal and non-verbal communication, with types of communication collapsed into categories including positive discussion (problem describe, positive solution), validation (accept, agree), invalidation (disagree, justify), and conflict (disagree, criticize, negative solution). Cognitions were coded for the subject of the cognition (partner- vs. self-referent) and the types of thoughts experienced (negative or neutral/positive).

An association was found between male exposure to inter-parental violence and more nonverbal negative affect and behavioral negativity in couples' conflict management. However, no association was found between male exposure to inter-parental violence and more negative reported cognitions during conflict. In addition, no association was found between female exposure to inter-parental violence and negative affect or behavioral negativity during conflict management. There was, however, an association between female exposure to inter-parental violence and more negative reported cognitions. Relative to couples in which males had not been exposed to inter-parental violence, couples in which males had been exposed were more negative in their interactions even if the female partner had not been exposed to inter-parental violence (Halford, Sanders, & Behrens, 2000). These findings suggest that exposure to inter-parental violence may influence males' *behavior* in conflict situations more negatively. However, in females, exposure to inter-parental violence may be associated with more negative *cognitions* during the conflict situation.

The findings of Halford et al. (2000) support previous findings that family-of-origin violence may influence use of conflict resolution strategies and expand the literature by using observation of actual conflict and examining gender differences. One weakness of the study, similar to Follette and Alexander (1992), was that by examining actual conflict resolution in engaged couples on specific topics, it is difficult to determine the association between violence exposure and an individual's general approach to conflict situations or differences in those effects depending upon the type of relationship in which the conflict takes place.

Examining Family Violence and Conflict Resolution: Self-Report Ratings

The remaining studies included adult participants and used primarily self-report ratings of conflict resolution strategies. In some studies, participants rated strategies used in hypothetical conflicts and in other studies strategies used in recent conflicts with a romantic partner were examined. A study of 32 young adult men (ages 18-22) was conducted to determine the relation between family violence history (as measured by the CTS) and responses to hypothetical conflict situations (Burnett & Daniels, 1985). Sixteen of the men were chosen from a larger pool of 200 undergraduates because they had endorsed at least two incidents of violence within their families of origin in the past 10 years on the CTS. Another 16 who had not reported family violence were chosen as a matched control group. Stress was examined as a possible moderator of the relation between family violence history and use of conflict resolution strategies. All participants were seated in cubicles and asked to write personality sketches of themselves that they were told another student would read and evaluate. Half of the participants in each group were given slightly negative evaluations (the High Stress group) and the other half was given slightly positive evaluations (the Low Stress

group). Then the participants individually viewed a series of 15 videotaped simulations of interpersonal conflicts between a man and a woman and were asked to state how they would respond in each conflict situation.

No differences between high and low stress groups were found, but men from the non-violent family group were able to successfully resolve significantly more conflicts through use of prosocial strategies in comparison to men in the violent family group. This study involved an extremely small sample size. However, it is one of the only published studies designed to examine the relation between family violence history and conflict resolution strategies in young adults. Because only men were included, gender differences could not be examined.

The relation between witnessing family violence and using hostile conflict resolution strategies was examined in 1,836 men (ages 18 to 90; mean age = 41.83) who participated in the Second National Family Violence survey (Choice, Lamke, & Pittman, 1995). Adult males of all ages who were either married or living with a woman at the time of the survey were included, and the men were asked about strategies they used in actual conflict with their wives as opposed to strategies they would use in a hypothetical conflict situations.

Witnessing family violence was determined by asking the men during a phone interview whether, as a teenager, they had witnessed their fathers hit or throw something at their mothers and if they had, how often that behavior occurred. The men were then administered the Verbal Aggression scale of the CTS to measure participants' ineffective conflict resolution strategies used with their wives. A measure of marital distress and a measure of wife battering (the Violence subscale of the CTS) were administered. It was found that men

who witnessed violence between their own parents were more likely to use ineffective conflict resolution strategies, and the use of ineffective strategies was associated with a higher likelihood of marital conflict and wife battering.

The researchers reported that only men were included in the study because previous research on conflict resolution and general effects of family violence indicated gender differences, implying that men and women needed to be examined separately. Gender differences, therefore, could not be examined. In addition, the ages of the men in the study varied considerably, and it was found that age was negatively related to wife battering, having distressed marriages, using ineffective conflict resolution strategies, and having witnessed inter-parental violence in their family of origin, such that older men had these experiences less often than younger men. This finding suggests important age differences in the use of conflict resolution strategies and the intergenerational transmission of violence among men.

Another study was designed to examine family violence and conflict resolution among military recruits, and conflict resolution strategies were measured in terms of strategies actually used with a current partner. Merrill, Hervig, and Milner (1996) examined the relations among parenting received as a child and later intimate partner conflict resolution as well as adult risk for abusing their own children. The study was done to examine factors related to, and examine gender differences in, the intergenerational transmission of violence. Participants were 882 female and 662 male incoming Navy basic trainees with a mean age of approximately 20 years. A large percentage of participants (53.4% of the women; 64.9% of the males) were excluded due to issues such as missing data or response distortions (i.e.,

“faking good”). The authors noted that this level of exclusion is not unusual for large national studies. The majority of the participants were Caucasian (70.8% of women and 81.3% of men) and single (87.5% of women and 89.7% of men). Participants completed a demographic and family history questionnaire which asked participants to indicate how often they had observed a parent or stepparent deliver physical blows to the other parent during an average month when the participant was growing up. The CTS – Parent-Child form was given to examine techniques their parents had used to solve parent-child conflicts during the “worst year” of the participants’ lives before age 18. The CTS – Intimate Partner form was given to assess conflict resolution between the participants and their current romantic partners (“dating, seeing, going steady with, or married to”). In addition, participants were asked if they had been physically injured by an intimate partner.

In the first set of analyses examining infliction of physical partner violence, it was found that the experience of having been abused as a child by a parent predicted infliction of current partner violence for females, but not for males. For both genders, infliction of partner violence was the strongest predictor of the receipt of violence, indicating the bi-directional nature of intimate partner violence. In the second set of analyses involving receipt of physical partner violence, it was found that, for males, both the experience of having been abused as a child and the infliction of intimate partner violence predicted the receipt of intimate partner violence; in contrast, for females, only the infliction of intimate partner physical violence predicted the receipt of physical partner violence. Having been abused as a child did not significantly predict being abused by a partner, for females. The childhood

experience of physical violence (either directly experienced or witnessed) was not found to predict being physically injured by an intimate partner for either gender.

In general, this study suggests that there is an association between family violence history (specifically the experience of child abuse), later intimate partner violence, and child abuse risk. The study further indicates that this association may vary by gender.

Unfortunately, the association between family violence history and specific conflict resolution strategy types was not examined. In fact, only physically violent strategies were included in the analyses even though data on the use of reasoning and verbal aggression strategies were also collected. Additionally, over half of their sample was excluded due to missing or invalid data, and no attempt was made to account for those data. Excluding such a large percentage could restrict variability within the sample and may contribute to the lack of support for some hypotheses. It may also reduce the ability to generalize the findings to a larger population. The sample, though large, may not have been representative of the general population to begin with because all participants were military recruits.

In one of the few studies to examine the relation between abuse in the family of origin and conflict resolution in emerging adults, Styron and Janoff-Bulman (1997) examined these constructs as well as attachment and depression among 879 undergraduates at a large northeastern university. Previous experience of child abuse was examined via three questions embedded in an 18-item life event scale which asked participants to indicate whether as a child they had experienced “verbal abuse,” “nonsexual physical abuse,” or “incest or sexual abuse.” Due to overlap across abuse experiences, these were collapsed into “Abuse” (those who had experienced one or more types of abuse) and “No-Abuse” categories. The number

of participants in each category was not reported. A large proportion of the abuse was primarily verbal in nature, though 42% of the verbally abused respondents also reported experiencing another kind of abuse (physical, sexual, or both). Conflict resolution was measured using a 15-item questionnaire which assessed ways of responding during conflicts with a romantic partner. Participants were asked to note how often they used each behavior during conflicts in their most important romantic relationship on a scale of 0 (never) to 4 (11 or more times). Ratings were coded into three categories: Resolve, Insult, and Hitting. Based on hierarchical regression analyses, abuse history was the strongest predictor of use of destructive conflict resolution behaviors (Insult and Hitting) over and above childhood attachment to parents. Furthermore, those in the “Abuse” group were more likely to insult and engage in physical violence with their partners in comparison to those in the “No-Abuse” group. In summary, the findings from the seven studies reviewed above provide moderate support for an association between violence in an individual’s family of origin and the manner in which young adults resolve interpersonal conflicts. Unfortunately, the extant literature is quite limited in both number and quality of investigations.

CHAPTER THREE

Statement of the Problem

Past research indicates that the experience of violence in the family of origin can affect the behavioral, social, and emotional functioning of children, adolescents, and adults. According to the basic tenets of social learning theory, the modeling of violent behavior by parents can contribute to children learning violent behavior and carrying out that behavior in later relationships. Children and adolescents who have either been abused or have witnessed inter-parental violence have been found to be more aggressive and to have difficulty forming relationships with others. In addition, abusive home environments have been found to predict dating/partner violence in adolescence and early adulthood (Bank & Burraston, 2001). Findings from national studies suggest that partner violence may, in fact, peak as adolescents enter adulthood (Halpern et al., 2001; Morse, 1995) and, therefore, closer attention must be paid to the development of skills necessary for maintaining healthy relationships during this transitional period. Conflict resolution skills can be considered key among those skills.

To date, there have been very few investigations of late adolescent and young adult conflict resolution skills. In addition, although there have been many studies designed to examine the link between family of origin violence and later partner violence, very few studies have actually examined the association between family violence and the use of conflict resolution strategies in different types of relationships, and even fewer of these specifically focused on the use of these strategies among emerging adults. Although violence itself is certainly damaging to a relationship, there are various other ways of solving conflicts, such as the use of prosocial and non-violent hostile strategies; use of those non-

violent strategies should be explored. Finally, research that has been conducted suffers from methodological difficulties, such as small sample size or lack of attention to the definitions of constructs, and little attention has been paid to gender differences.

The purpose of the present study was to examine the association between family violence history and later conflict resolution strategies used with a romantic partner. A group largely overlooked in the research, emerging adults (ages 18-19), was the focus of this investigation. Another aim of the present study was to determine whether gender plays a moderating role in the association between family violence history and conflict resolution strategies for this age group. Some previous research had been designed to address gender differences, but several studies included only men. The present study was designed to address some methodological limitations of prior studies. For example, whether or not family violence occurred was defined in the present study by the responses of participants on a rating scale rather than by assumption or by a single item on a rating scale. This allowed examination of the full range of conflict resolution strategies participants had witnessed or experienced in their family of origin, including violent strategies. Additionally, regression analyses were used rather than analysis of variance. In using an analysis of variance approach, previous researchers divided participants into two or more vaguely defined groups, thereby possibly limiting variability and reducing sample size and power in the process. A sample size larger than many of the previous studies was used in the current study to allow more sophisticated analyses of the data (including examination of gender as a moderator). The use of hypothetical conflict situations in the present study, as opposed to asking participants to report actual strategies used in the past or observing strategies used in a

specific, contrived conflict situation, allowed examination of types of conflict strategies that might be used in a variety of situations with a romantic partner. Additionally, a completely separate questionnaire was used to measure conflict resolution strategies instead of using the CTS to measure both family violence and later conflict resolution strategies. Though this measurement was still based on self-report, the use of a different questionnaire was expected to reduce shared method variance.

Finally, the measurement of the experience of family violence in previous studies has varied. In some studies, participants were asked to report whether or not they had ever been abused as a child or witnessed inter-parental violence. In other studies, rating scales were completed to determine the level of violence experienced either overall or in the “past several years.” It is possible, according to social learning theory, that emerging adults may be more likely to learn behavior that they more recently observed or experienced. They may be more likely to observe conflict between parents during adolescence and then use their parents’ strategies in their own relationships if their relationships are more similar to that of their parents. In the present study, participants were asked to indicate what types of conflict strategies (including violent and non-violent strategies) they witnessed between parents in the past three years or experienced in conflict directly with parents during their high school years.

Hypotheses and Research Questions

The associations between violence and hostile conflict resolution strategies in the family of origin and the use of conflict resolution strategies with a romantic partner were examined. Given previous research suggesting gender differences in the use of conflict

resolution strategies and aggressive behavior and in the relations between family violence and behavior, it was expected that gender would be a moderator of these associations. For the following hypotheses, the terms child abuse and witnessing inter-parental violence include both verbal and physical aggression either from the parent to the child or between parents.

The specific hypotheses of this research were as follows:

Association Between Family Violence and Conflict Resolution Strategies

1. Scores on a measure of Experienced Aggression would account for a significant amount of the variance in reported likelihood of using Hostile conflict resolution strategies, such that there would be a positive association between Experienced Aggression and use of Hostile strategies.
2. Scores on a measure of Experienced Aggression would account for a significant amount of the variance in reported likelihood of using Prosocial conflict resolution strategies, such that there would be a negative association between Experienced Aggression and use of Prosocial strategies.
3. Scores on a measure of Witnessed Aggression would account for a significant amount of the variance in reported likelihood of using Hostile conflict resolution strategies such that there would be a positive association between Witnessed Aggression and Hostile strategies.
4. Scores on a measure of Witnessed Aggression would account for a significant amount of the variance in reported likelihood of using Prosocial conflict resolution strategies such that there would be a negative association between Witnessed Aggression and Prosocial strategies.

Gender Differences in Conflict Resolution Strategies

5. Males would endorse a significantly higher likelihood of using Hostile conflict resolution strategies in comparison to females, regardless of family violence history.
6. Females would endorse a significantly higher likelihood of using Prosocial strategies in comparison to males, regardless of family violence history.

Gender as a Moderator

7. The association between scores on a measure of Experienced Aggression and scores on a measure of likelihood of using Hostile conflict resolution strategies would be moderated by gender such that the association would be stronger for men than for women.
8. The association between scores on a measure of Witnessed Aggression and scores on a measure of likelihood of using Hostile conflict resolution strategies would be moderated by gender such that the association would be stronger for men than for women.

Research Questions

Given insufficient extant literature on the use of Reasoning strategies, there was a limited basis for directional hypotheses and the following areas of investigation were therefore examined as research questions:

1. Would scores on a measure of Experienced Reasoning strategies used by parents with their adolescent account for a significant amount of variance in reported likelihood of using Hostile conflict resolution strategies?
2. Would scores on a measure of Experienced Reasoning strategies used by parents with their adolescent account for a significant amount of variance in reported likelihood of using Prosocial conflict resolution strategies?

3. Would scores on a measure of Witnessed Reasoning used between parents account for a significant amount of the variance in likelihood of using Hostile conflict resolution strategies?
4. Would scores on a measure of Witnessed Reasoning used between parents account for a significant amount of the variance in likelihood of using Prosocial conflict resolution strategies?
5. Would the association between scores on a measure of Experienced Aggression and scores on a measure of likelihood of using Prosocial strategies be moderated by gender?
6. Would the association between scores on a measure of Witnessed Aggression and scores on a measure of likelihood of using Prosocial strategies be moderated by gender?

CHAPTER FOUR

Method

Participants

Data for the present study were collected in the process of conducting a larger study of family violence history, conflict resolution, attachment, and mental health functioning among emerging adults. Participants were 249 (133 male, 116 female) undergraduate student volunteers enrolled in Introduction to Psychology courses at a large southeastern university during the Spring and Fall 2005 semesters. The racial distribution of participants was approximately 78% Caucasian. Relationship status among the participants included approximately 54% of participants not currently dating, 36% dating one person exclusively, and 9% dating more than one person (See Table 1). As part of requirements for the Introduction to Psychology course, students were required to complete either six research credit hours or a three-page journal article review. Participants in the present research earned two research credits. Students were required to be 18 or 19 years of age to participate in the study (mean age = 18.4 years). Students of all ethnicities and majors were eligible to participate. No married students were included.

Procedures

Participants were recruited from the Introduction to Psychology course via a web site established for the purpose of recruiting research participants. This web site lists many experiments available for participation for research credit. For this study, participants were scheduled for data collection in small groups of 15 or fewer students. It was expected that collecting data in many small groups at various times would increase levels of comfort for

Table 1.

Demographic Characteristics of Male (n = 133) and Female (n = 116) Participants and the Full Sample (N = 249)

	Male	Female	Full Sample
Year			
Freshman	107 (80.5%)	88 (75.9%)	195 (78.3%)
Sophomore	25 (18.8%)	28 (24.1%)	53 (21.3%)
Junior	1 (00.8%)	0 (00.0%)	1 (00.4%)
Major			
Psychology	4 (03.0%)	9 (07.8%)	13 (05.2%)
Physical Science or Engineering	54 (40.6%)	17 (14.7%)	71 (28.5%)
Life Science	12 (09.0%)	31 (26.7%)	43 (17.3%)
Liberal Arts	6 (04.5%)	9 (07.8%)	15 (06.0%)
Other	57 (42.9%)	50 (43.1%)	107 (43.0%)
Race			
White/Caucasian	103 (77.4%)	91 (78.4%)	194 (77.9%)
Black/African American	14 (10.5%)	12 (10.3%)	26 (15.3%)
Asian	6 (04.5%)	5 (04.3%)	11 (04.8%)
More than one race	3 (02.3%)	6 (05.2%)	9 (03.6%)

Table 1 (continued).

	Male	Female	Full Sample
Hispanic or Latino	4 (03.0%)	2 (01.7%)	6 (02.4%)
Pacific Islander	2 (01.5%)	0 (00.0%)	2 (00.8%)
American Indian	1 (00.8%)	0 (00.0%)	1 (00.4%)
Relationship Status			
Not Currently Dating	82 (61.7%)	52 (44.8%)	134 (53.8%)
Dating One Person	43 (32.3%)	46 (39.7%)	89 (35.7%)
Dating Several People	8 (06.0%)	15 (12.9%)	23 (09.2%)
Engaged	0 (00.0%)	3 (2.6%)	3 (01.2%)

the participants and accommodate undergraduate course schedules. The time to collect data averaged about 45 minutes per session. If participants did not attend their scheduled session or did not cancel with more than 24 hours notice they had one credit hour deducted from their total research credits, in accordance with course expectations.

After participants were seated in the testing room, a trained undergraduate research assistant introduced herself and distributed and reviewed a consent form to be signed by each participant. The informed consent form included a description of the study and the process of awarding research credit. The form also included a confidentiality statement and information about the participant's right to terminate data collection at any time without penalty. After reviewing and signing the consent form, participants were handed questionnaire protocols

and Opscan sheets for the various measures in the study. Instructions for the first measure were read and once all participants had completed that measure, the research assistants administered the next measure. Each week, one set of three questionnaires was switched with the second set of three questionnaires for counter balancing purposes. One group of questionnaires included two measures of relationship functioning (not included in the present study) and the Conflict Tactics Scale (CTS). The other group of questionnaires included a measure of adolescent attachment (not included in the present study), the Conflict Resolution – Adolescent Measure (CRAM), and a measure of mental health (not included in the present study), in that order.

Once all participants had completed all measures, the research assistant read aloud a debriefing statement that explained the nature and purpose of the study. Participants showing signs of distress or expressing distress to the examiner after completing the questionnaires were given a flyer with information about the university counseling center. All data were coded by participant number and stored in a locked filing cabinet accessible only to research team members.

Measurement

Participants first completed a demographics questionnaire (See Appendix A), which allowed the researcher to determine the gender of the participants and the general demographic variability of the sample. This information was important for determining generalizability of the findings. In addition, participants completed measures of the major variables being investigated in the larger study. For the purposes of the present study,

measures of family violence history and conflict resolution strategies were used. These measures are described in detail below.

Family violence and conflict history. The Conflict Tactics Scale (CTS; Straus, 1979) served as the measure of family violence history (See Appendix B). The measure consists of two forms, each of which contains three subscales (Reasoning, Verbal Aggression, and Physical Aggression). All three subscales were used in the present study, and these subscales have been substantiated by factor analysis (Straus & Gelles, 1989). To complete the parent-to-parent form, participants used a 6-point scale (Once = 1, Twice = 2, 3-5 times = 3, 6-10 times = 4, 11-20 times = 5, more than 20 times = 6, Don't know = 0) to indicate the frequency with which their parents used 19 different conflict resolution strategies (e.g., “discussed an issue calmly,” “insulted or swore at him/her,” “beat him/her up”) during arguments with each other in the past three years. Non-violent reasoning based methods are placed first in the scale followed by verbally aggressive then physically aggressive items. The intent of this organization is to reduce the refusal rate of participants to highly sensitive information. Items are presented that allow respondents to endorse socially appropriate conflict tactics before less desirable outcomes (Straus & Gelles, 1989). Items from each of the three subscales were summed and then divided by the total number of items to create mean scores ranging from 0 to 6. One score was for the Reasoning scale, and this score is referred to as “Witnessed Reasoning” for the purposes of the present study. The second was a combination of the Verbal Aggression and Physical Aggression subscales, and this score is referred to as “Witnessed Aggression” for the purposes of the present study. These two

subscales were combined because few participants endorsed physical aggression at high levels of severity.

To complete the parent-to-child form of the CTS, participants used the same 6-point scale to indicate the frequency with which their parents used the same conflict resolution strategies during arguments with the participant during his or her high school years. Ratings were summed for each subscale in the same manner as for the partner-to-partner form. For the purposes of the present study, the score derived from the Reasoning subscale on the parent-to-child form is referred to as “Experienced Reasoning,” and the score derived from the combination of the Verbal and Physical Aggression subscales is referred to as “Experienced Aggression.”

In terms of psychometric properties of the CTS, Cronbach’s alpha, used as a measure of internal consistency, has been found to range from .42 to .96 across different forms of the CTS and across the three subscales (Straus, 1990). For parent-to-parent CTS scores, the alphas ranged from .50 for the Reasoning scale to .80 and .83 for the Verbal and Physical Violence scales. The low reliabilities of the Reasoning score are likely the result of (a) the limited number of items (i.e., three) that assess this construct (Straus & Gelles, 1989) and (b) difficulty people might have in recall of the non-emotionally charged resolution tactics. Internal consistency alpha coefficients for the CTS for the present sample were as follows: Witnessing Aggression = .87; Experiencing Aggression = .86; Witnessing Reasoning = .69; Experiencing Reasoning = .73.

Concurrent validity of the CTS was determined by correlations between college students’ retrospective accounts of family violence and parental reports of such violence.

Correlations ranged from a low of .19 for Reasoning scale items to .51 and .64 for the Verbal Aggression and Violence scales respectively (Straus, 1990). Construct validity of the scales was measured by comparison between CTS scores and empirical studies assessing marital violence. The CTS was chosen for the present research because of its wide application in family violence research (e.g. Grych, Seid & Fincham, 1992; Holden & Ritchie, 1991; Kolbo et. al., 1996), with many studies supporting its strong construct validity.

Conflict resolution strategies. The use of strategies in conflict situations was assessed with a measure adapted by Little (2004) from a measure that was originally developed by Rose and Asher (1999) and later modified by Kaluk, Asher, and Parkhurst (2001). The Conflict Resolution – Adolescent Measure (CRAM) consisted of 15 vignettes designed to assess adolescents’ strategies in hypothetical conflict situations with peers. There were five vignettes for each of three relationship types (i.e., best friends, romantic partners, and roommates). The hypothetical vignettes represented interpersonal conflicts of moderate intensity in social situations between two individuals’ needs or interests. (See Appendix C). For the purposes of the present study, only the data from the five vignettes related to conflict with a romantic partner were used.

After reading each vignette, participants were asked, “what would you do in this situation?” Participants then rated the likelihood that they would enact each of five different conflict resolution strategies on a scale of 1-7 (1 represents “very unlikely” and a rating of 7 represents “very likely”). The strategies included Withdrawal, Emotional Manipulation, Verbal Aggression, Accommodation, and Compromise. In addition to the questions about strategies for resolving the conflict, the original CRAM also included questions about goals

for each hypothetical conflict. However, these questions were removed for the study currently in progress due to greater interest in conflict resolution strategies (as opposed to goals) among the current investigators and due to a need to reduce the length of the questionnaire.

Based on results of a cluster analysis, Little (2004) combined the five strategies into two clusters. A cluster analysis conducted by Rose and Asher (1990) yielded similar results. The first cluster was labeled “Hostile,” and that cluster included three strategy types - Withdrawal, Emotional Manipulation, and Verbal Aggression. Scores for all Hostile strategies were then summed and divided by the total number of hostile strategies to create mean scores with a possible range of 0 to 6. An example of a withdrawal strategy is “I would not call my friend.” An example of a verbal aggression strategy is “I would say something insulting to my friend.” An example of an emotional manipulation strategy is “I would act cold and distant toward my friend.”

The second cluster was labeled “Prosocial”, and it included Accommodation and Compromise strategies. Scores for Prosocial strategies were summed and divided by the total number of prosocial strategies to create mean scores with a possible range of 0 to 6. An example of an accommodation strategy is “I would tell my partner that he/she could pick the movie.” An example of a compromise strategy is “I would tell my partner that he/she could pick the movie this time if I could pick it next time.”

A third cluster, labeled Self-Interest was also identified, but consisted of only one type of strategy. For example, in a conflict between romantic partners over which partner chooses a movie the couple will watch together, a Self Interest strategy might be “I would watch my

movie anyway.” The Self-Interest strategy was related to both hostile and prosocial strategies, and was, therefore, considered its own cluster. Self-Interest strategies were not examined in the primary analyses of the current study.

In terms of psychometric properties of the CRAM, internal consistency reported by the original authors by means of Cronbach’s alpha was considered “satisfactory,” though no coefficients were reported (Kaluk et al., 2001). Coefficient alpha for the scale for younger children from which the CRAM was adapted (Rose & Asher, 1999) ranged from .92 to .98. Little (2004) found internal consistency to range from Cronbach’s alphas of .77 to .96 for each strategy cluster, indicating good internal consistency overall. Additionally, conflict resolution strategies were related to conflict goals in the ways that were originally hypothesized (e.g., prosocial strategies were related to prosocial goals such as maintaining a friendship), which provides some evidence of the validity of the CRAM. Internal consistency alpha coefficients for the CRAM for the present sample were as follows: Prosocial = .37 (Accommodation = .42; Compromise = .49) and Hostile = .86 (Verbal Aggression = .80; Emotional Manipulation = .80; and Withdrawal = .52).

CHAPTER FIVE

Results

Prior to addressing the hypotheses put forth in the present study, procedures were conducted to account for missing data. In addition, descriptive statistics, such as means and standard deviations, were conducted to check for data entry accuracy and to determine distribution of scores. The next set of analyses, conducted to test hypotheses, was a series of linear regressions to examine the relation between family conflict and later likelihood of use of conflict resolution strategies. The third set of analyses included *t*-tests to examine gender differences in likelihood of conflict strategies use. The fourth set of analyses included tests to determine whether gender moderated the relation between family conflict and later likelihood of conflict strategies use. The fifth set of analyses included linear regressions and tests of moderation models to address research questions.

Procedures to Account for Missing Data

Due to the nature and format of the Conflict Tactics Scale (CTS), there was a significant amount of missing data from all subscales (See Table 2), which is consistent with some previous studies using the CTS (e.g., Merrill et al., 1996). For instance, participants were asked to rate the number of times they witnessed or experienced reasoning and aggression on a scale of 1 to 6 (1 = one time; 6 = more than 20 times). They also were given the options of “N” for “never” and “0” for “Don’t Know.” Ninety-two participants (approximately 37% of the sample) took advantage of the “Don’t Know” option for at least one item, and many used “Don’t Know” for multiple items on various subscales. In addition, on the CTS participants were asked to rate the number of times various strategies were used

by their mothers and their fathers separately. Thirty participants left the “Father” ratings blank, and two participants left the “Mother” ratings blank presumably because they did not have either mother or father figures in their homes during their adolescent years. Possibly for this same reason, 27 participants did not complete any ratings for Part 1 (Witnessing Parent-to-Parent Conflict). In order to account for the missing data and increase the amount of usable data, the following procedures were employed.

First, scales for which more than 20% of the items were left blank or endorsed as “Don’t Know” were eliminated from analyses. Therefore, if one out of the three items on the Reasoning subscale was missing (i.e., left blank or endorsed as “Don’t Know”), the Reasoning subscale for that participant was not included in analyses. If two or more of the six items on the Verbal Aggression subscale were missing, the Verbal Aggression subscale for that participant was not included in analyses. If three or more of the nine items on the Physical Aggression subscale were missing, the Physical Aggression subscale for that participant was not included in analyses. Subsequently, for the participants whose subscales contained an acceptable amount of missing data (less than 20%), the mean for that subscale was substituted for the missing pieces of data. When the Verbal and Physical Aggression subscales were combined for the planned analyses, if one subscale was considered unusable due to missing data, the mean for the other subscale was used in place of the mean for the Verbal and Physical Aggression aggregate score. Nineteen such substitutions were made.

In addition to missing data due to the “Don’t Know” ratings, data were also missing for participants’ ratings of individual parent’s conflict tactics (mother or father). These missing data posed a problem due to the fact the “Mother” and “Father” scales for each part

of the CTS were combined to create overall Experienced Aggression, Witnessed Aggression, and Reasoning scores. Therefore, in the absence of a “Father” scale, the mean for “Mother” was used in place of aggregate scores and vice versa. In the 27 cases for Part 1 of the CTS in which neither “Mother” nor “Father” scores were responded to, no scores were available for the Witnessed Aggression or Witnessed Reasoning composites. See Table 2 for information regarding percentages of valid data.

Table 2.

Available Data for Each Primary Variable (N = 249)

	Available Sample (<i>n</i>)	Percentage of Total Sample
CRAM		
Hostile Strategies	240	96.4%
Prosocial Strategies	240	96.4%
Conflict Tactics Scale (CTS)		
Witnessed Aggression	210	84.3%
Experienced Aggression	227	91.2%
Witnessed Reasoning	172	69.1%
Experienced Reasoning	212	85.1%

Descriptive Statistics

Descriptive statistics were calculated for the major variables used in the present analyses; means, standard deviations, and ranges for each variable are shown in Table 3. Correlations between all major study variables are shown in Table 4. To aid in interpretation of scores, the possible range for all variables was 0 to 6. In terms of the CTS family conflict variables, the means for Witnessed Aggression ($n = 210$, $M = .64$, $SD = .54$, Range = 0 - 2.91) and Experienced Aggression ($n = 227$, $M = .54$, $SD = .49$, Range = 0 - 2.19) were low and the variables were positively skewed. An examination of the frequencies indicated that a large percentage of participants did not indicate having witnessed or experienced aggression in their family of origin. Less than half ($n = 105$) indicated that they had ever witnessed or experienced physical aggression in the family of origin at any level. The means for Witnessed Reasoning ($n = 172$, $M = 3.09$, $SD = 1.02$, Range = 0 - 5.67) and Experienced Reasoning ($n = 212$, $M = 3.09$, $SD = 1.15$, Range = 0 - 6) were higher than those for the aggression variables, and scores on reasoning scales were normally distributed.

In terms of the CRAM conflict resolution variables, the mean for Hostile Strategies ($n = 240$, $M = .95$, $SD = .74$, Range = 0 - 4.2) was also low given the possible range of 0 - 6. The distribution for Hostile Strategies was also positively skewed. The mean for Prosocial Strategies ($n = 240$, $M = 3.75$, $SD = .62$, Range = 1.6 - 5.5) was higher than the mean for the Hostile scale, and the distribution was normal.

Prediction of Conflict Strategies by Family Conflict Variables

Data for analyses addressing hypotheses 1 through 4 are shown in Table 5. For hypothesis one, it was expected that Experienced Aggression scores would account for a

Table 3.

Means and Standard Deviations for Variables for Full Sample (N = 249)

	<i>M</i>	<i>SD</i>	Range
CRAM			
Hostile Strategies (<i>n</i> = 240)	.95	.74	.00 - 4.20
Prosocial Strategies (<i>n</i> = 240)	3.75	.62	1.60 - 5.50
Conflict Tactics Scale (CTS)			
Witnessed Aggression (<i>n</i> = 210)	.65	.54	.00 - 2.91
Experienced Aggression (<i>n</i> = 227)	.54	.49	.00 - 2.19
Witnessed Reasoning (<i>n</i> = 172)	3.09	1.02	.00 - 5.67
Experienced Reasoning (<i>n</i> = 212)	3.09	1.15	.00 - 6.00

Note. Possible scores range from 0 to 6 for all variables.

significant amount of the variance in the reported likelihood of using Hostile conflict resolution strategies, such that there would be a positive association between Experienced Aggression and use of Hostile strategies. This hypothesis was not supported, $\beta (218) = .10, p > .05$. For hypothesis two, it was expected that Experienced Aggression scores would account for a significant amount of the variance in the reported likelihood of using Prosocial conflict resolution strategies, such that there would be a negative association between Experienced Aggression and use of Prosocial Strategies. This hypothesis also was not supported, $\beta (217) = .03, p > .05$.

Table 4.

Internal Consistency Scores and Pairwise Pearson Product-moment Correlations Among Primary Variables

Variables	1	2	3	4	5	6	α
1. Experienced Aggression	-	.67**	.03	.12	.10	.03	.86
2. Witnessed Aggression		-	.00	.05	.08	-.01	.87
3. Experienced Reasoning			-	.67**	.05	.07	.73
4. Witnessed Reasoning				-	.02	.17*	.69
5. Hostile Strategies					-	-.12	.86
6. Prosocial Strategies						-	.36

* $p < .05$ ** $p < .001$

For hypothesis three, it was expected that Witnessed Aggression scores would account for a significant amount of the variance in the reported likelihood of using Hostile conflict resolution strategies, such that there would be a positive association between Witnessed Aggression and use of Hostile strategies. This hypothesis was not supported, $\beta (201) = .08, p > .05$. For hypothesis four, it was expected that Witnessed Aggression scores would account for a significant amount of the variance in the reported likelihood of using Prosocial conflict resolution strategies, such that there would be a negative association between Witnessed Aggression and use of Prosocial Strategies. This hypothesis also was not supported, $\beta (201) = -.01, p > .05$.

Table 5.

Univariate Regression Analyses Examining Prediction of Strategies by Family Violence

Variables	B	SE B	β	r^2
Hostile Strategies				
Witnessed Aggression ($n = 201$)	.11	.09	.08	.01
Experienced Aggression ($n = 2180$)	.15	.10	.10	.01
Prosocial Strategies				
Witnessed Aggression ($n = 201$)	-.01	.08	-.01	.00
Experienced Aggression ($n = 217$)	.04	.08	.03	.00

Note. No predictions were statistically significant.

Tests of Gender Differences in Likelihood of Conflict Resolution Strategy Use

See Table 6 for descriptive statistics by gender and Table 7 for information regarding *t*-tests. For hypothesis five, it was expected that males would endorse a significantly higher likelihood of using Hostile conflict resolution strategies in comparison to females. A significant difference was found between males and females, $t(1, 238) = -2.38, p < .05$. However, the difference was not in the expected direction. The mean for female likelihood of using Hostile conflict resolution strategies ($M = 1.07; SD = .77$) was higher than the mean for males ($M = .84; SD = .69$), indicating that females actually rated themselves as having higher likelihood than males of using Hostile conflict resolution strategies with a romantic partner. However, the mean ratings were low for both genders.

For hypothesis six, it was expected that females would endorse a significantly higher likelihood of using Prosocial conflict resolution strategies in comparison to males. This hypothesis was supported, $t(1, 238) = -2.61, p < .05$. The mean for female likelihood of using Prosocial conflict resolution strategies ($M = 3.86; SD = .57$) was higher than the mean for males ($M = 3.65; SD = .64$).

Table 6.

Means and Standard Deviations for Variables for Males (n = 133) and Females (n = 116) for Full Sample

	<i>n</i>		<i>M</i>		<i>SD</i>		Range		
	Males	Females	Males	Females	Males	Females	Males	Females	
CRAM									
Hostile Strategies	126	114	.84	1.07	.69	.78	.00 - 2.93	.00 - 4.20	
Prosocial Strategies	127	113	3.65	3.86	.64	.58	1.60 - 5.10	1.90 - 5.50	
Conflict Tactics Scale (CTS)									
Witnessed Aggression	110	100	.56	.74	.45	.62	.00 - 1.81	.00 - 2.91	
Experienced Aggression	117	110	.48	.61	.47	.50	.00 - 2.18	.00 - 2.19	
Witnessed Reasoning	92	80	3.04	3.15	.94	1.12	1.00 - 5.33	.00 - 5.67	
Experienced Reasoning	108	104	3.01	3.17	1.14	1.16	.50 - 6.00	.00 - 6.00	

Note. Possible scores range from 0 to 6 for all variables.

Table 7.

t-tests Comparing Likelihood of Using Conflict Resolution Strategies in Romantic Relationships on the CRAM for Males and Females

	Males (<i>n</i> = 133)			Females (<i>n</i> = 116)			<i>t</i>	<i>p</i> -value
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
Hostile Strategies	126	.84	(.69)	114	1.07	(.78)	-2.38	.02
Prosocial Strategies	127	3.65	(.64)	113	3.86	(.58)	-2.61	.01

Tests for Gender as a Moderator

In order to address both Hypotheses 7 and 8, regression analyses were employed according to the moderation model as described by Baron and Kenny (1986) and according to procedures from Aiken and West (1991). Each of the conflict resolution strategy types, Hostile and Prosocial ($Y_{1,2}$), were regressed on family violence scores, Experienced and Witnessed Aggression ($X_{1,2}$) and the moderator variable, Gender (Z), in separate equations. Moderation would be indicated if there was a significant effect of the interaction term (XZ) while family violence and gender were controlled.

For hypothesis seven, it was expected that the association between Experienced Aggression and likelihood of using Hostile conflict resolution strategies would be moderated by gender such that the association would be stronger for men than for women. The

interaction between Experienced Aggression and gender was not significant, $\beta (218) = -.12, p > .05$. Therefore, no moderation was found and the hypothesis was not supported.

For hypothesis eight, it was expected that the association between Witnessed Aggression and likelihood of using Hostile conflict resolution strategies would be moderated by gender such that the association would be stronger for men than for women. The interaction between Witnessed Aggression and gender was not significant, $\beta (201) = .07, p > .05$. Therefore, no moderation was found and the hypothesis was not supported.

Tests for Research Questions

For research questions one and two, it was suggested that Experienced Reasoning strategies used by parents with their adolescent might account for a significant amount of variance in adolescents' reported likelihood of using Hostile and Prosocial strategies. No support was found for the relation between Experienced Reasoning and Hostile strategies, $\beta (204) = .05, p > .05$ or Prosocial strategies, $\beta (203) = .07, p > .05$.

For research question three, it was suggested that Witnessed Reasoning strategies used between parents might account for a significant amount of variance in reported likelihood of using Hostile strategies. No support was found for this relationship, $\beta (164) = .02, p > .05$. For research question four, it was suggested that Witnessed Reasoning strategies used between parents might account for a significant amount of variance in reported likelihood of using Prosocial strategies. In fact, witnessing reasoning strategies between parents as an adolescent did predict the likelihood of using Prosocial conflict resolution strategies with a romantic partner in early adulthood, $\beta (163) = .17, p < .05$.

Table 8.

Univariate Regression Analyses Examining Prediction of Strategies by Reasoning in the Family of Origin

Variables	B	SE B	β	r^2
Hostile Strategies				
Witnessed Reasoning ($n = 201$)	.01	.06	.02	.00
Experienced Reasoning ($n = 218$)	.04	.05	.05	.00
Prosocial Strategies				
Witnessed Reasoning ($n = 201$)	.10	.05	.17	.03*
Experienced Reasoning ($n = 217$)	.04	.04	.07	.01

* $p < .05$

For research question five, it was suggested that the association between Experienced Aggression and likelihood of using Prosocial strategies may be moderated by gender. The interaction between Experienced Aggression and gender was not significant, $\beta (217) = -.02, p > .05$. Therefore, no support was found for moderation. For research question six, it was suggested that the association between Witnessed Aggression and likelihood of using Prosocial strategies may be moderated by gender. The interaction between Witnessed Aggression and gender was not significant, $\beta (201) = -.09, p > .05$. Therefore, no support was found for moderation.

CHAPTER SIX

Discussion

The purpose of the present research was to contribute to the understanding of the relation between conflict patterns in the family of origin and later conflict in intimate relationships. Due to previous research linking the experience of family violence to the perpetration of violence in one's own family (Stith et al., 2000), the relation between aggressive strategies used in the family of origin and later use of conflict resolution strategies was of particular interest. Though the use of violence is one strategy for solving conflicts, it may not always be the immediate choice for solving conflicts in romantic relationships for most people. Other types of conflict resolution strategies may contribute to either the peaceful resolution of conflict or the escalation of the conflict to violence. The use of those strategies may be predicated upon strategies learned in one's family of origin. Although there are many studies examining the intergenerational transmission of violence, relatively fewer studies have been designed to examine maladaptive conflict resolution strategies other than violence. Even fewer studies have been designed to examine links between the learning of appropriate and peaceful conflict resolution skills in the family and use of such prosocial strategies in emerging adulthood.

The present study was designed to examine conflict resolution strategies in a population largely neglected in the research: emerging adults. Previous research suggests that there is an increase in partner violence as adolescents transition into adulthood (Halpern et al., 2001; Morse, 1995), yet attention to conflict resolution by this age group was lacking in the existing literature. Also, some differential relations have been found between males and

females of various ages for both use of conflict resolution strategies and the experience of family violence. However, previous research has paid little attention to gender differences, and several studies have focused solely on males due to partner violence research indicating that adult males are most likely to be the perpetrators of relationship violence (Stith et al., 2000). For this reason, gender differences in learned conflict resolution strategies also were of interest, and the examination of gender as a moderator of the relation between family violence and conflict resolution strategies was expected to add a richer layer of analysis to the present investigation.

The present study also was designed to address methodological issues characteristic of prior research. Those limitations included small sample size, a focus on particular relationships rather than general conflict resolution style, and limited scope in terms of the definitions of family violence and conflict variables. The sample for the present study was a large group ($N = 249$) of 18- and 19-year-olds who were given the opportunity to rate their likelihood of using various types of conflict resolution strategies in response to hypothetical vignettes. This method was designed to examine general conflict resolution styles with a romantic partner at a major developmental period of transition into adulthood. Participants' experiences of family violence were examined along with their experience of general family conflict resolution strategies, both aggressive and peaceful. Examination of a variety of conflict patterns adds to information about the learning of conflict strategies in the family of origin beyond physical violence. The following sections will be a discussion of the results and post hoc analyses conducted to examine these relations more closely.

Examination of Family Violence Factors in the Prediction of Conflict Strategy Use

Family violence, such as witnessing aggression between parents or experiencing first hand aggression from a parent, was expected to predict subsequent use of maladaptive conflict resolution strategies in intimate relationships. Gender differences also were expected in these relations. However, no support was found for these hypotheses. There are multiple possibilities as to the reasons for these non-significant results. These reasons include the interrelatedness of the constructs, the combination of various types of aggression for the family violence variables, and the use of self-report methodology, which may have limited the variability for some constructs.

First, the present study was designed to examine witnessed and experienced aggression as separate influences on later conflict resolution strategies. However, in reality, one is likely to witness aggression (including domestic violence) as well as experience aggression (including child abuse) in the same household (e.g., Hughes et al., 1989, Lee, Kotch, & Cox, 2004). This link also was evident in the present study; there was a significant correlation between Witnessed Aggression and Experienced Aggression ($r = .67, p < .05$). Therefore, it was suspected that although Witnessed and Experienced Aggression did not predict conflict resolution strategies in separate analyses, they might have an additive effect when experienced together or they may interact to predict conflict resolution strategy use. In order to address this possibility, Witnessed and Experienced Aggression were entered together into a regression model designed to predict hostile strategies, along with an interaction term, in a post hoc analysis. However, no main effects or interactions occurred when both Witnessed and Experienced Aggression were included in the same model to

predict Hostile strategies or to predict Prosocial strategies (See Appendix D). In summary, although there was a relation between Witnessed and Experienced Aggression, including both predictors and their interaction in a regression model did not help to explain the non-significant results obtained when the analyses were conducted separately.

Second, it was suspected that the initial non-significant results may have been due to the combined nature of the family of origin aggression variables in the present study. More specifically, measures of aggression in the family were combinations of the maternal and paternal aggression subscales, as well as the verbal and physical aggression subscales on the CTS. These subscales were combined for hypothesis testing due to their highly intercorrelated nature, especially because correlations continued to be significant with a Bonferroni correction that reduced alpha to .002. However, there were several correlations between maternal physical aggression and other subscales that were not significant even before the Bonferroni correction (See Appendices E, F, G, H, and I). Consequently, some might argue that by combining these subscales, important differential associations between maternal and paternal aggression (or of verbal and physical aggression) and conflict resolution strategies may have been masked. In an attempt to determine whether specific types of aggression and/or the gender of the perpetrators of aggression would predict subsequent conflict resolution strategy use, a series of post hoc regression analyses was conducted. Predictor variables included witnessed and experienced Maternal Aggression (combined verbal and physical maternal aggression), Paternal Aggression (combined verbal and physical paternal aggression), Verbal Aggression (combined maternal and paternal verbal aggression), and Physical Aggression (combined maternal and paternal physical

aggression). These variables were then further broken down into the following predictor variables: witnessed and experienced Maternal Verbal Aggression, Maternal Physical Aggression, Paternal Verbal Aggression, and Paternal Physical Aggression. A Bonferroni correction was used to control for the inflation of alpha given the large number of univariate regression analyses. Results of these analyses are shown in Appendices J and K. Of the 32 analyses, only one was significant. Specifically, Experienced Maternal Physical Aggression did predict later use of Hostile strategies, $\beta(222) = .14, p < .05$. However, this finding was not significant when a Bonferroni correction reduced alpha to .002. Therefore, in the present sample, witnessing or experiencing *any* type of aggression from *either* a mother or a father figure did not significantly predict conflict resolution strategy use.

Overall, these non-significant findings suggest that aggregating these subscales was likely the appropriate action to take given the intercorrelation between the subscales and lack of variability in findings across variables. Also, at least in the present sample, type of aggression and gender of the perpetrator did not appear to be differentially related to various conflict resolution strategies. Thus, the aggregation of aggression scores for the original analyses did not appear to mask any underlying significant relations.

A third factor that may have contributed to the non-significant findings is the fact that self-report methodology was used to examine family violence constructs and conflict resolution strategies. The use of self-report to examine conflict resolution was considered appropriate for the present study due to interest in participants' responses to conflicts in general relationships rather than specific ones. Other methodology, such as observation, would be more appropriate if the investigator were interested in current, specific

relationships. The use of self-report methodology, however, may have contributed to limited variability in reports of such sensitive behaviors as family violence and hostile strategy use. Lack of variability and positively skewed distributions are common in research designed to examine hostile and aggressive behavior, especially when self-report methodology is used and especially for university samples (e.g., Burnett & Daniels, 1985; Stryon & Janoff-Bulman, 1997). One reason self-report methodology may lead to limited variability is because participants often have a self-serving bias that influences them to respond in socially appropriate ways despite assurances of confidentiality.

The use of a self-report measure to examine conflict resolution in the present sample seemed appropriate due to prior research suggesting that even with limited variability, significant and meaningful findings could emerge. To illustrate, despite low variability for use of Hostile strategies on the CRAM, Little (2004) found that the Hostile strategies variable provided meaningful information regarding conflict resolution in emerging adults. For example, both males and females rated likelihood of using Hostile strategies highest for relationships with roommates, but males rated the Hostile strategy lowest for relationships with romantic partners while females rated use of Hostile strategies lowest for relationships with Best Friends. Therefore, due to the meaningful information Little (2004) found using the Hostile Strategies composite, it was believed that the composite could indeed provide important information regarding the conflict resolution skills of emerging adults despite limited variability.

There was also limited variability for the family violence variables on the CTS (Witnessed and Experienced Aggression). It appeared likely that lack of variability in

violence in the family of origin among participants in the present sample could have contributed to lack of support for the hypotheses. More than half of the participants did not report having witnessed or experienced any violence in their family of origin. Similar results have occurred in other studies using university samples, leading some researchers to dichotomize their samples into “abused” and “non-abused” categories (e.g., Burnett & Daniels, 1985; Stryon & Janoff-Bulman, 1997). Due to the large number of participants who did not report presence of family violence, any influence family violence constructs may have had on conflict resolution may have been masked for the present sample. Therefore, post hoc analyses were conducted to examine whether witnessing or experiencing aggression in the family predicted use of conflict resolution strategies for the subsample of participants who reported at least some degree of physical aggression within the family of origin ($n = 117$; approximately 47% of the total sample). That is, their mean scores on the Physical Aggression subscale on the CTS were greater than zero. Descriptive statistics for this subsample are included in Table 9.

Results (See Table 10) indicated that, for this subsample, Experienced Aggression significantly predicted Hostile Strategies $\beta (105) = .21, p < .05$. Witnessing aggression did not predict likelihood of Hostile Strategy use, $\beta (100) = .17, p > .05$. However, when gender was entered into the model as a moderator, the interaction between Witnessed Aggression and participant gender was significant, $\beta (100) = .39, p < .05$, indicating that gender moderated the relation between Witnessed Aggression and Hostile Strategies, with the relation being stronger for males than for females and such that there appeared to be no relation at all for females (Male regression line $\beta (100) = .42, p < .05$; Female regression line

Table 9.

Means and Standard Deviations for Variables for Subsample (n = 117)

	<i>M</i>	<i>SD</i>	Range*
CRAM			
Hostile Strategies (<i>n</i> = 113)	.95	.64	.00 - 3.07
Prosocial Strategies (<i>n</i> = 113)	3.75	.58	1.90 - 5.20
Conflict Tactics Scale (CTS)			
Witnessed Aggression (<i>n</i> = 105)	.90	.58	.00 - 2.91
Experienced Aggression (<i>n</i> = 109)	.76	.58	.00 - 2.19
Witnessed Reasoning (<i>n</i> = 84)	3.06	1.01	.00 - 5.33
Experienced Reasoning (<i>n</i> = 105)	3.09	1.20	.00 - 6.00

Note. Possible scores range from 0 to 6 for all variables.

$\beta(100) = -.01, p > .05$). These findings support original hypotheses that gender would serve as a moderator of the relation between witnessed aggression and hostile conflict resolution strategies, and results support the hypothesis that the relation would be stronger for males than for females. No moderation by gender was found for the relation between Experienced Aggression and Hostile Strategy use, though the fact that Experienced Aggression predicted Hostile Strategy use did support the first hypothesis. Finally, it should be noted that a t-test was conducted to compare the mean hostile strategy use for those who were and were not part of the subsample of people who had experienced any violence in the home. The means

were not significantly different from one another, $t(1, 238) = .086, p > .05$. Therefore, results found within the subsample should be interpreted with caution and other variables should be considered that may influence the development of hostile strategy use in future research.

These findings add to the present research on conflict resolution in emerging adults. One of the purposes of the present study was to examine conflict resolution as an important Table 10.

Prediction of Strategies by Family Violence and by Reasoning Variables for the Subsample of People who had Experienced Physical Aggression (n = 117)

Variables	B	SE B	β	r^2
Hostile Strategies				
Witnessed Aggression (n = 100)	.19	.11	.17	.03
Experienced Aggression (n = 105)	.24	.11	.21	.04
Witnessed Reasoning (n = 81)	-.04	.07	-.06	.00
Experienced Reasoning (n = 101)	.01	.06	.03	.00
Prosocial Strategies				
Witnessed Aggression (n = 100)	.09	.10	.09	.01
Experienced Aggression (n = 104)	.16	.10	.15	.02
Witnessed Reasoning (n = 79)	.18	.07	.30**	.09
Experienced reasoning (n = 100)	.09	.05	.20*	.04

* $p < .05$, ** $p < .01$

intermediate step between experiencing violence in the home and choosing violence as a conflict resolution strategy in later intimate relationship. As it turns out, for people who have actually experienced physical aggression in the home, the findings provide further evidence that not only does aggression in the family predict use of hostile conflict resolution strategies but also that there are important gender differences to be considered with regard to that relation for emerging adults. These findings were consistent with previous research indicating relations between witnessing and experiencing violence in the home and later aggressive behavior (e.g., Bank & Burraston, 2001), and with findings indicating a stronger relation between family violence history and later partner violence perpetration for males than females (Stith et al., 2000). These findings also are consistent with previous observational research suggesting that family violence variables were related to males' negative behavior during observations of conflict situations but were not related to females' behavior in those situations (Halford et al., 2000). The present findings are not consistent with the findings of Follette and Alexander (1992), which indicated a relation between paternal violence in the family of origin and later dating violence for females, and no association between family violence and later dating violence for males. It is important to note, however, that in the study by Follette and Alexander, violent items such as slapping, hitting, and spanking were not included on the CTS because they were considered acceptable forms of discipline to some people. This omission may have influenced their findings.

Having witnessed aggression in their own household during the high school years may lead young men to use more hostile strategies in conflicts with their own romantic partners. According to the framework of social learning theory, these men might have

learned maladaptive ways of resolving conflicts in intimate relationships by witnessing hostility between their parents. Further, social learning theory would indicate that people are likely to imitate a model that is similar to them (Bandura, 1977). Given previous research on relationship violence in adults (Stith et al., 2000), males are more likely to witness perpetration of violence by their fathers than by their mothers. Therefore, it is possible that for males, witnessing their father's aggressive behavior may be a stronger influence than witnessing their mother's aggressive behavior when it comes to the development of conflict resolution strategies. Though the investigation of these patterns is beyond the scope of the present study, future research should explore the possibility of learning conflict resolution strategies from a same-sex parent.

In sum, family violence history did not predict later use of hostile conflict resolution strategies for the full sample. However, in a subsample of participants who had experienced physical aggression in the home, many of the original hypotheses were supported with regard to the link between family violence and later conflict resolution strategies. Having experienced aggression from parents predicted later use of hostile strategies with romantic partners, and having witnessed aggression between parents predicted later use of hostile strategies for males but not for females. Future research should be designed to further examine whether gender of *parents* of emerging adults might also moderate the relation between aggression in the family and later conflict resolution strategies.

Gender Differences in Use of Hostile and Prosocial Conflict Resolution Strategies

Due to previous research suggesting that there were gender differences in use of conflict resolution strategies (e.g. Laursen et al., 2001; Little, 2004), it was suspected that

there would be gender differences in the current sample as well. Originally, it was expected that females would be more likely than males to use prosocial or peaceful strategies to resolve conflict, and that males would be more likely to use hostile ones. It was found that females did indeed report that they would be more likely than males to use prosocial strategies; however, females also reported a greater likelihood than did males of using hostile strategies. This finding was in opposition to the original hypothesis and suggested that females were more likely than males to endorse the use of conflict resolution strategies in general on the CRAM. There are multiple explanations for this unexpected gender difference, and these explanations are based on characteristics of the sample, characteristics of the way conflict resolution strategies were measured, and issues due to the use of self-report methodology.

First, characteristics of the sample may have contributed to the finding that females were more likely than males to endorse both prosocial and hostile strategies. Those characteristics included the presence of outlying scores for females and a gender difference in relationship status. It is important to note that the range of responses for hostile strategies was greater for females than males. There were several females who endorsed a high likelihood of use of hostile strategies, such that the highest scores for Hostile strategies among females was 4 (on a scale of 0 to 6). Meanwhile, the high end of the range of scores for Hostile strategies among males was 2, and there were no outlying scores among the male participants. Also, there were fewer females in comparison to males who had a mean Hostile Strategies score of 0 on the 0 to 6 scale. These findings suggest that although females in general appeared more likely than males to use hostile strategies with a romantic partner, a

small number of females had an even greater likelihood than the others of using those strategies. Those few outlying females likely raised the overall mean score for females on Hostile Strategies.

Another variable that could have contributed to the gender difference in use of conflict resolution strategies was relationship status of females and males. That is, 82 out of 133 male participants (61.7%) were not currently dating at the time of the study in comparison to 52 out of 116 female participants (44.8%). Responses on the CRAM regarding use of conflict resolution strategies could have been affected by this relationship status difference. Although the focus of the present study was on conflict resolution strategies used in relationships in general (rather than in a specific relationship), participants who were currently dating at the time of the study may have had a more specific context to which they could apply the hypothetical conflict vignettes. For these participants (of which there was a greater percentage of females than males), the characteristics of a current relationship may have been an important factor in determining which strategies they would be likely to use, and having a specific relationship on which to draw might have resulted in increased variability for these (largely female) participants.

Second, characteristics of the way conflict resolution strategies were measured also may have influenced the unexpected gender findings. To provide a higher degree of specificity in understanding gender differences in likelihood of using hostile and prosocial strategies, aggregate scores for hostile and prosocial strategies were disaggregated. Specifically, prosocial strategies initially were represented by a combination of scores for Compromise and Accommodation strategies and Hostile strategies were a combination of

scores for Withdrawal, Emotional Manipulation, and Verbal Aggression strategies. To determine whether there may have been variability between genders in terms of their ratings for individual strategies, post hoc *t*-tests were conducted to examine gender differences on the specific types of strategies that comprised the hostile and prosocial clusters. Results are presented in Table 11.

It was found that females were more likely than males to use Verbal Aggression and Emotional Manipulation (components of the Hostile composite), as well as Compromise strategies (component of the Prosocial composite) with a romantic partner. However, no significant difference was found between males and females for use of Withdrawal or Accommodation strategies. These results indicate that men and women may vary in terms of the types of hostile and prosocial strategies they would be likely to use with a romantic partner. In fact, females may be more likely than males to use active conflict resolution strategies (Compromise, Verbal Aggression, Emotional Manipulation), while females and males are equally likely to use passive strategies (Accommodation, Withdrawal). Combining the types of Hostile and Prosocial strategies could have resulted in a misrepresentation of actual gender differences in the likelihood of use of conflict resolution strategies. In future research it is suggested that the various conflict resolution strategies on the CRAM be evaluated as separate strategies rather than as (or in addition to) Hostile or Prosocial composites, especially when gender differences are of interest. However, it may be important to expand the CRAM or add additional strategies to increase the number of items addressing each type of strategy given the relatively low internal consistency for some these individual strategy scales (e.g., Accommodation scale $\alpha = .42$). If additional strategies were added,

further psychometric evaluation of the CRAM would be warranted to establish reliability and validity.

Table 11.

Likelihood of Using Conflict Resolution Strategies in Romantic Relationships on the CRAM for Males and Females

	Males (<i>n</i> = 133)			Females (<i>n</i> = 116)			<i>t</i>	<i>p</i> -value
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
Hostile Strategies								
Verbal Aggression	128	.69	(.83)	116	.93	(.97)	-2.07	.04
Emot. Manipulation	129	.90	(.94)	114	1.30	(1.06)	-3.13	.00
Withdrawal	129	.93	(.76)	116	.99	(.71)	-.66	.51
Prosocial Strategies								
Accommodation	127	3.84	(.75)	114	3.76	(.83)	.79	.43
Compromise	130	3.47	(1.05)	116	3.94	(.87)	-3.82	.00
Other Strategies								
Self Interest	130	2.38	(1.07)	116	2.69	(.99)	-2.38	.02

Previous research on conflict resolution strategies among adolescents and adults indicates results similar to those of the present study regarding gender differences in the use of active and passive strategies. Feldman and Gowen (1998) found that among high school students, females were more likely to use compromise and overt anger (i.e., sarcasm), but

both genders were just as likely to avoid conflict. Additionally, some studies of conflict resolution in young adults indicate that women are more likely to use a collaborative style while men are more likely to avoid conflict (e.g., Brahnam, Margavio, & Hignite, 2005). Bookwala, Socin, and Zdaniuk (2005) found that among young married couples (ages 20-39), females reported using calm discussion to settle conflict less often and having heated arguments more often in comparison to males. Strategy use may, therefore, vary depending upon gender and the level of aggression used. Males may be more likely to use violent strategies or no strategies at all, while females may be more likely to use a range of strategies, both hostile and prosocial. Further research is needed to examine this possibility in relation to family violence history.

Strategy use may vary with age as well. The findings from the present study are not entirely consistent with previous findings with a sample of adolescents (ages 12-16) (Owens et al., 2005). Although, similar to the present study, girls were more likely than boys to use compromise, girls also were more likely than boys to use obliging and avoidance. Boys and girls used approximately the same levels of overt aggression, which was attributed to the fact that both directly and indirectly aggressive strategies were included under the umbrella of “overt aggression.” This discrepancy between previous and current findings could be due to the difference in age between the samples. Further examination of developmental differences between adolescents and emerging adults regarding conflict resolution strategy use is warranted.

Third, response bias due to the self-report methodology also could help to explain the pattern of gender findings. In examining gender differences, Little (2004) found that

likelihood of using different types of strategies varied across gender and relationship type. That is, males rated the likely use of hostile strategies lowest for conflicts involving romantic partners, while females rated hostile strategies the lowest for conflict with best friends. One could speculate that males view the use of hostile strategies with a romantic partner as less socially desirable than the use of hostile strategies with roommates or best friends and therefore did not endorse such strategies on the self-report measure, even if they might use those strategies in real life. Females may not have the same notion of social desirability when it comes to romantic relationships.

Males' reluctance to endorse strategies on the CRAM may have been further influenced by response bias due to the gender of the survey administrators (all of whom were female). In previous research, the gender of the interviewer for surveys of sexual behavior influenced responses such that males were less likely to report perpetration of sexual violence to a female interviewer than to a male interviewer (Catania, Binson, & Canchola, 1996). Though the present study did not include actual interviews, and the questionnaire did not address issues as sensitive as sexual violence, it is possible interviewer gender may have had a similar but possibly weaker influence on males' responses.

In sum, females appeared more likely than males to endorse the use of active conflict resolution strategies and males were just as likely as females to choose passive strategies. Other variables such as relationship status and level of relationship commitment may further influence gender differences at this age. Additionally, the use of self-report methodology may make it difficult for participants to endorse less socially desirable strategies, especially for males in the presence of a female experimenter. In future research, further examination of

the various types of active and passive strategies appears warranted. Research questions might focus on whether active or passive strategies are learned in the family. Future research also should be designed to examine whether differences exist between those who are currently dating or not dating in terms of the types of strategies endorsed on the CRAM. The level of commitment in those relationships and its relation to conflict resolution also might be explored. Relationship status may be an additional variable, in combination with gender, which might explain gender differences in conflict resolution strategy use.

Discussion of Analyses to Address Prosocial Strategy Use

Little research had been conducted prior to the current study to examine the development of appropriate conflict resolution strategies in emerging adults. This lack of research is troubling given the possibility that the development of appropriate conflict resolution skills may help attenuate the influence of family violence history on later use of hostile conflict resolution strategies or later perpetration of violence. That is, knowledge of how to compromise with or accommodate another person within a relationship may serve as a protective factor for those who have experienced violence in their family of origin, perhaps helping to prevent the use of more hostile or even violent strategies to solve conflicts. In order to address this gap in the literature, a series of research questions were posited to further explore the use of prosocial conflict resolution strategies for emerging adults.

As previously noted, it was hypothesized that witnessing or experiencing family violence would predict later use of prosocial strategies such that increased family violence would predict decreased use of prosocial strategies. Extant literature did not exist regarding whether such a relation would be stronger for males or females. However, due to previous

research suggesting gender differences for the relation between family violence and later partner violence, it seemed possible that gender might influence the relation between family violence and the development of peaceful conflict resolution strategies as well. Therefore, it was suggested that the relation between family violence history and the use of peaceful strategies in later relationships might be influenced by gender. Due to previous research suggesting that females tend to use more peaceful strategies than males even when those females have experienced abuse in the home (e.g., Ballif-Spanvill et al., 2003), it was expected that the relation between family violence history and prosocial strategy use with a romantic partner would be stronger for females than for males.

Neither witnessing nor experiencing family violence predicted later use of prosocial strategies with a romantic partner, and these relations were not found to be moderated by gender. One might be tempted to assume that the lack of variability for the family violence variables in the present sample would be to blame for these non-significant findings, but this pattern also emerged for the subsample of participants who reported that they had witnessed or experienced some level of physical aggression at home at some level (i.e., their mean for Physical Aggression was greater than zero). It appears that although one may learn to use hostile strategies from observing parents or experiencing abuse, previous experience with hostility in the family of origin does not necessarily preclude the learning of peaceful strategies for use with romantic partners.

Two possibilities are proposed to explain the non-significant findings for prosocial strategies. One is that factors other than family violence history influence the development of prosocial strategies. It is possible that although aggression may be used at times as a conflict

resolution strategy in the family of origin, peaceful strategies may also be used at other times within the same family. In fact, additional post hoc analyses for the subsample of participants who had experienced physical aggression in the home revealed that witnessing parents peaceably resolving conflicts and experiencing reasoning directly from parents each predicted later use of prosocial strategies. It appears that those who have experienced at least some physical aggression in the home may still be able to learn positive strategies within the family of origin. Prosocial conflict resolution strategies also may be learned outside of the home, possibly from peers or in school. More information on the influence of witnessing and experiencing reasoning strategies in the family of origin on later conflict resolution strategies is discussed below. A second possibility for the lack of relation between family violence constructs and prosocial strategies is that participants are likely to endorse positive strategies that are socially acceptable on self-report measures. Participants in the present study may have rated themselves as more likely to use prosocial responses to hypothetical problems than they were actually likely to use in real-life conflict situations.

Witnessing strategies involving reasoning between parents, such as calm discussion of an issue, and experiencing such strategies during conflicts with parents were also examined as possible factors predicting later use of prosocial strategies. It is important to note that the internal consistency of the Reasoning scale on the CTS (used to measure prosocial strategies used in the family of origin) was relatively weak, especially when the scale was examined for mothers and fathers separately. This was due in part to the small number of items (three for each parent) that comprised the Reasoning scale. The large amount of missing data from the Witnessing Reasoning scale was due to the fact that many

people endorsed “don’t know” when asked about witnessing reasoning between parents. Despite this lack of internal consistency and missing data, it was found that having witnessed the use of peaceful strategies in the home predicted later use of prosocial strategies with a romantic partner. This finding suggests that those who have seen peaceful conflict resolution strategies used when their parents were in conflicts may have learned these strategies from their parents and put them to use in later romantic relationships. The implications of this finding are that parents should try to solve conflict peacefully in front of children rather than attempting not to argue or disagree in front of them. Indeed, Davies and Cummings (1994) found that heated marital conflicts that were resolved in a way that was satisfactory to both parents might have reduced the stress of children who often observed angry conflicts and may have provided positive models for resolving conflicts (Cummings, 1998).

Although having experienced the use of reasoning strategies from parents did not predict participants’ later use of prosocial strategies, post hoc analyses were conducted to examine experienced maternal and paternal reasoning separately. When experienced maternal reasoning and experienced paternal reasoning scores were entered into a regression equation simultaneously, each predicted later prosocial strategy use, and the interaction between experienced maternal and paternal reasoning was significant. This finding suggested that experiencing reasoning from both parents may provide a “double dose” of prosocial learning or that a general home environment of reasoning may be the key to developing prosocial conflict resolution strategies.

In sum, results suggested that individuals may learn and use peaceful conflict resolution strategies despite having experienced family violence, and that, like the use of

hostile strategies, the prosocial resolution of conflicts also may be learned in the family of origin. Witnessing peaceful strategies used by parents in conflicts with each other or being in a family environment in which reasoning is used by both parents to resolve parent-child conflicts may help adolescents develop more appropriate conflict resolution strategies that they can then use in their own intimate relationships. It is suggested that, for future research, the CTS be expanded to include a larger number of items that address multiple types of prosocial conflict resolution strategies, such as the use of compromise, accommodation, and negotiation. Additionally, research should be designed to pay closer attention to the development of appropriate conflict resolution skills, especially for those who may be predisposed to developing inappropriate skills (such as those who have experienced or witnessed family violence). It is also suggested that the moderating role of gender be examined in relation to the learning of prosocial strategies, given previous findings that girls tend to be more prosocial than boys in their conflict resolution as children (Laursen et al., 2001). Due to the lack of research in the area of prosocial conflict resolution skills in general and due to the weak internal consistency of the CTS Reasoning scale, the examination of reasoning in the present study was limited to research questions as opposed to specific hypotheses. Thus, it was not originally suggested that gender be examined as a moderator of the link between witnessing or experiencing reasoning in the family of origin and later use of prosocial strategies. Future research should explore the possibility of gender as a moderator using a more reliable measure of parental reasoning, though there may not be such a measure available currently.

Limitations and Future Directions

There were some limitations of the present study and directions for future research that are important to note. These limitations and areas for future research are embedded within issues of the measurement of conflict resolution strategies, the restricted variability inherent when studying family violence constructs, and the measurement of reasoning strategies used in the family of origin.

In measuring conflict resolution strategies, findings were somewhat limited by the use of self-report methodology and hypothetical vignettes via the CRAM. Although the use of the CRAM was appropriate for the present sample, its use possibly resulted in limited variability in use of hostile strategies. As with any research designed to examine negative conflict resolution strategies or violence, it is difficult to receive valid information via self-report methods due to participants' tendencies to endorse socially appropriate responses. One option that could help in gathering more information about conflict resolution skills might be to use open-ended questions such as, "What would you do to solve this conflict?" that can be later coded into types of strategies in addition to the strategies provided on the CRAM.

The use of hypothetical vignettes, though useful for examining general conflict resolution style across many situations, may not provide information about conflict resolution in more naturalistic situations. The type of situation may be an important predictor of the likelihood of conflict resolution strategies use. For example, situations describing infidelity or situations involving the misuse of money or other important resources may evoke more emotional or aggressive reactions. In future studies, situation types should be analyzed to determine which situations are more likely to elicit hostile responses and whether individuals

who have experienced aggression in the family may be more likely to respond in a hostile way in stressful situations. As another option, the use of observation of couples in conflicts (e.g., Follette & Alexander, 1992) may provide more variability than self-report, though the information would be situation- and relationship-specific. Also, whether or not participants were in dating relationships may have affected the ways in which participants in this study responded to the hypothetical vignettes. Further research should be conducted to determine whether or not having a context to which a person can apply the hypothetical vignettes affects endorsement of strategies.

The present research also was limited due to the restricted variability inherent when studying family violence constructs. There was a lack of witnessed and experienced aggression reported by participants, but the positively skewed distributions for these variables are somewhat common in university samples because they reflect the relatively low incidence of family violence (e.g., Burnett & Daniels, 1985; Styron & Janoff-Bulman, 1997). In the future, the conflict resolution skills of those who did indicate high levels of aggression in the family should be further analyzed. Post hoc analyses revealed support for the learning of hostile conflict resolution strategies in the family of origin for this relatively smaller group of individuals who reported family violence, and participant gender was revealed as a moderator.

One focus of the present study was to examine gender as a moderator of the relation between family violence and later use of conflict resolution strategies in emerging adults. Other variables may influence this relation as well, including parent gender (Stith et al., 2000), attachment variables (Stryon & Janoff-Bulman, 1997), mental health variables

(Levendosky, Huth-Bocks, & Semel, 2002), sibling conflict resolution (Reese-Weber & Kahn, 2005), peer mediation (Burrell, Zirbel, & Allen, 2003), and conflict resolution skills learned in the school setting (Chen, 2003).

Finally, the measurement of reasoning strategies within the family of origin was limited by the lack of internal consistency for the Reasoning scale of the CTS. This was due in part to the small number of items (three for each parent) that comprised the Reasoning scale which resulted in a large amount of missing data when participants rated items as “don’t know.” It is suggested that for future research, the CTS be expanded to include more reasoning items that represent multiple prosocial conflict resolution strategies, such as compromise and accommodation strategies. These scales may be further validated against variables assumed to be related to parent-to-child reasoning (including parental warmth and sensitivity) and to parent-to-parent prosocial resolution of conflicts (including parents reports of their own conflict resolution strategies with their partners). Future research should further examine the development of appropriate conflict resolution strategies, especially in people who are at risk for developing hostile and violent strategies such as those who have experienced family violence. The findings in the present study suggest that prosocial strategies can be learned even by those who have experienced more aggressive strategies in the home. Understanding the factors that contribute to the learning of appropriate strategies for maltreated individuals may provide important information for the study of resilience among those individuals and for the later development of intervention strategies.

Summary, Conclusions, and Treatment Implications

The results of the present study suggest that emerging adults might learn conflict resolution strategies for later use in intimate relationships by observing how their parents dealt with conflict with each other and by experiencing their parents' use of those strategies in parent-child conflict situations during adolescence. Further, it appears that both aggressive and prosocial strategies can be learned. For those who have witnessed some level of physical aggression in the home, parents' use of aggressive strategies with each other may have more of an influence on the development of conflict resolution skills for males as opposed to females. It also appears that individuals may learn prosocial strategies even if they have also experienced hostile strategies in the home.

Further research is needed to expand current knowledge of the development of conflict resolution strategies for emerging adults, especially for those who have experienced violence in their family of origin. The present results provide a first step by examining this limited age group using more complex measurement of family violence and conflict variables, by examining a larger sample size in comparison to some other previous studies, by focusing on general conflict resolution style rather than on particular relationships, and by expanding the focus to include an examination of prosocial conflict resolution skills.

Development of appropriate conflict resolution skills may serve as a protective factor for adolescents who have experienced hostile conflict in their families as they transition into adulthood and develop more serious and committed relationships. Additionally, development of these strategies may help to prevent them from repeating the maladaptive conflict patterns of their parents in their own relationships. The present findings point to the need for targeted

conflict resolution training for adolescents who have experienced or witnessed family violence, especially for males. Also, it may benefit children and adolescents if parent training programs are designed to include a focus on modeling positive resolution of conflicts between parents. Finally, school psychologists may help high school students by providing treatment groups designed to teach appropriate conflict resolution skills between romantic partners, as they may need to learn these skills outside of the home.

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APPENDICES

Appendix A.

Please describe yourself:

1. What is your gender?
 - a. male
 - b. female

2. How old are you?
 - a. 18
 - b. 19
 - c. 20
 - d. 21

3. What year are you in school?
 - a. freshman
 - b. sophomore
 - c. junior
 - d. senior
 - e. graduate student, special student, or other

4. Your major is best described as?
 - a. Psychology
 - b. Physical Science or Engineering
 - c. Life science
 - d. Liberal Arts
 - e. Other

5. How would you best describe your relationship status?
 - a. not currently dating
 - b. dating one person exclusively
 - c. dating several people
 - d. engaged
 - e. married

6. What best describes your racial/ethnic identity?
 - a. American Indian or Alaska Native
 - b. Asian
 - c. Black or African American
 - d. Hispanic or Latino
 - e. Native Hawaiian or Other Pacific Islander
 - f. White
 - g. More than one race

7. Have you ever received any type of peer mediation or conflict resolution training?
 - a. Yes
 - b. No

Appendix B.

Conflict Resolution – Adolescent Measure

This questionnaire contains 15 hypothetical conflicts involving you and another person. After reading each situation, please rate the likelihood that you would do each of the statements in the given situation. You will rate each statement on a 0-6 point scale, with **0** indicating you would be **extremely unlikely** do what the statement says and **6** indicating you would be **extremely likely** to do what the statement says.

Please rate each statement without thinking about your ratings for other statements. For instance, when you are asked about what you would do, you can give more than one statement a high (or low) rating if you wish. You will be asked to imagine hypothetical conflicts with two different people, including a best friend, and a romantic partner. Please imagine these as two separate people (i.e., your best friend is not also your romantic partner).

If there is a statement that you do not want to rate, you may skip it. If at any time you want to stop filling out the questionnaire or stop participating in this study, you may do so without any penalty to your research credits or class grade. Please read carefully and take your time, as you will be asked to stay until everyone in the room is finished with the questionnaire. When you are finished, please go back and make sure that you did not accidentally skip any items. Please do not write or make any marks on this questionnaire. Please let me know if you have any questions. Thank you.

SAMPLE: It is your **best friend's** turn to clean the apartment you share. You have company on the way over and would like the apartment to be clean by the time they get there. Your best friend is studying for a big test right now, however, and says he/she can't clean it right now.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

51. I would tell my best friend to clean the apartment.
52. I would act cold and distant towards my best friend.
53. I would suggest that my best friend finish studying and clean after he/she finishes studying.
54. I would say something insulting to my best friend.
55. I would just not have the apartment cleaned.
56. I would tell my best friend to finish studying, and I will clean the apartment

PLEASE STOP UNTIL THE RESEARCH ASSISTANT CONTINUES WITH FURTHER INSTRUCTIONS.

A. You and your **best friend** are planning to organize a dinner outing for a bunch of your friends. You want everyone to go out for Italian food, but your best friend tells you that he/she wants to have Mexican food. You tell your best friend that you really want to have Italian food, but he/she insists on having Mexican food.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

57. I would tell my best friend that we could go out for Mexican food.

58. I would tell my best friend we could have Mexican food this time if next time we could have Italian food.

59. I would say something insulting to my best friend.

60. I would tell my best friend that we would go out for Italian food.

61. I would just not make arrangements for the outing.

62. I would act cold and distant towards my best friend.

B. Every Friday night, you and your **boyfriend/girlfriend** take turns picking a restaurant to eat at and making the reservations for dinner. This Friday is his/her turn and he/she calls you an hour ahead and tells you he's/she's had a really busy day and was not able to make the arrangements. He/she asks you to decide on a restaurant and make the reservations.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

- 63. I would tell my boyfriend/girlfriend to make the reservations himself/herself.
- 64. I would make the reservations for my boyfriend/girlfriend.
- 65. I would say something insulting to my boyfriend/girlfriend.
- 66. I would act cold and distant towards my boyfriend/girlfriend.
- 67. I would tell my boyfriend/girlfriend that I would make the arrangements this time, but next time was his/her turn.
- 68. I would just not go to dinner.

C. You and your **best friend** always go bowling together on Monday nights. One week, your best friend gets an invitation to do something else and wants to accept the invitation and not go bowling with you. You still want to go bowling, though, and wish your best friend would refuse the other invitation.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

- 69. I would act cold and distant towards my best friend.
- 70. I would just not go bowling.
- 71. I would tell my best friend to refuse the other invitation.
- 72. I would suggest that we all go bowling together.
- 73. I would tell my best friend to accept the other invitation.
- 74. I would say something insulting to my best friend.

D. You have an important test to study for and need your **boyfriend's/girlfriend's** help because he/she is very familiar with the material that you need to know. When you ask for help, your boyfriend/girlfriend tells you he/she really needs to go to the gym for physical therapy. You tell your boyfriend/girlfriend that you really need his/her help, but he/she still tells you that he/she needs to go to the gym.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

75. I would suggest that my boyfriend/girlfriend go to the gym after he/she helped me.

76. I would just not study.

77. I would act cold and distant towards my boyfriend/girlfriend.

78. I would say something insulting to my boyfriend/girlfriend.

79. I would tell my boyfriend/girlfriend to go to the gym.

80. I would tell my boyfriend/girlfriend to help me.

E. You and your **best friend** are planning to go to his/her grandparents' beach house this weekend. You want to visit his/her grandparents' just with your best friend, but he/she asks another friend to come with you without asking you if it is okay first.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

81. I would just not go.

82. I would tell my best friend that we should just go alone.

83. I would suggest that we go alone this time, but bring someone else with us the next time if he/she wanted to.

84. I would act cold and distant towards my best friend.

85. I would say something insulting to my best friend.

86. I would tell my best friend it was okay if someone else came with us.

F. You and your **boyfriend/girlfriend** are renting a movie and there is one you really want to see. Your boyfriend/girlfriend, however, tells you that he/she wants to see another movie. When you tell him/her that you had your heart set on your choice, he/she continues to insist on renting his/her choice.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

87. I would just not rent a movie.

88. I would tell my boyfriend/girlfriend that he/she could pick the movie.

89. I would tell my boyfriend/girlfriend we would rent my choice.

90. I would tell my boyfriend/girlfriend that he/she could pick this time if I could pick the next time.

91. I would say something insulting to my boyfriend/girlfriend.

92. I would act cold and distant towards my boyfriend/girlfriend.

G. You and your **best friend** take turns making a fun breakfast on Saturday mornings. This week is his/her turn and he/she calls you an hour before your usual meeting time and tells you that he/she does not have anything to prepare and could you run to the store and get something and make it because he/she just got up and still needs to take a shower.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

- 93. I would get something to prepare for my best friend.
- 94. I would just not have breakfast with my best friend.
- 95. I would tell my best friend to go and get something for breakfast.
- 96. I would tell my best friend I would get breakfast this week, but that next week was his/her turn.
- 97. I would act cold and distant towards my best friend.
- 98. I would say something insulting to my best friend.

H. You are really sick in bed with a cold and ask your **best friend** to get you some medicine before he/she goes to class. Your best friend tells you that he/she doesn't have time because he/she can't be late for class, but you really need the medicine.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

99. I would ask my best friend if he/she would get the medicine after class.

100. I would just not get the medicine.

101. I would say something insulting to my best friend.

102. I would get the medicine myself.

103. I would act cold and distant towards my best friend.

104. I would tell my best friend to get my medicine before class.

I. You and your **boyfriend/girlfriend** usually go to concerts alone and you are looking forward to spending time alone with him/her tonight at a concert. At the last minute, though, he/she invites another friend to come with you without asking if it is okay first.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

105. I would just not go to the concert.

106. I would act cold and distant towards my boyfriend/girlfriend.

107. I would tell my boyfriend/girlfriend we should go to the concert alone.

108. I would say something insulting to my boyfriend/girlfriend.

109. I would go to the concert with my boyfriend/girlfriend and his/her other friend.

110. I would tell my boyfriend/girlfriend that we should go alone this time and bring someone else with us next time if he/she wanted to.

J. Your **boyfriend/girlfriend** goes to a different university and the two of you always meet for breaks and holidays so that you can spend time together. This year, your boyfriend/girlfriend tells you that he/she wants to spend Thanksgiving with his/her university friends, but you still want to be with him/her.

Using the scale provided, rate the likelihood that you would do each of the following statements in this situation:

- 0 = extremely unlikely
- 1 = very unlikely
- 2 = somewhat unlikely
- 3 = neither likely or unlikely
- 4 = somewhat likely
- 5 = very likely
- 6 = extremely likely

- 111. I would say something insulting to my boyfriend/girlfriend.
- 112. I would suggest that we spend Thanksgiving together with his/her friends.
- 113. I would act cold and distant towards my boyfriend/girlfriend.
- 114. I would tell my boyfriend/girlfriend to spend Thanksgiving with me.
- 115. I would just not spend Thanksgiving with my boyfriend/girlfriend.
- 116. I would tell my boyfriend/girlfriend it was okay if we didn't see each other.

Appendix C.

CT SCALES

If the parent(s) you lived with in the past three years was married or living with a partner at any time during your high school years, complete Part 1 of this questionnaire, then proceed to Part 2. If your parents were divorced and both were married or living with a partner, please complete this questionnaire for the parent with whom you lived most often.

If the parent(s) you lived with in the past three years was not married or living with a partner at any time during your high school years, do not complete Part 1. Instead, go directly to Part 2.

PART 1 No matter how well a couple get along, there are times when they disagree, get annoyed with the other person, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. Below are listed some things your parent and their partner might have done when they had an argument. Please circle the number that represents how many times *during your high school years*, your parent and her/his partner ...

N = never

1 = once

2 = twice

3 = 3-5 times

4 = 6-10 times

5 = 11-20 times

6 = more than 20 times

0 = Don't know

If never for both parents during your high school years, did this EVER happen? Circle Y or N

	Mother							Father							Y	N		
Discussed an issue calmly.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Got information to back up his/her side of things.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Brought in, or tried to bring in someone to help settle things.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Insulted or swore at the other person.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Sulked or refused to talk about an issue.	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Stomped out of the room, house, or yard..	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Cried.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Did or said something to spite the other...	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Threatened to hit or throw something at the other person.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Threw or smashed or hit or kicked something.	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Threw something <u>at</u> the other person.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Pushed, grabbed, or shoved the other.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		
Slapped the other person.....	N	1	2	3	4	5	6	0	N	1	2	3	4	5	6	0		

Kicked, bit, or hit the other person with a fist.	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Hit or tried to hit the other person with something.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Beat the other person up.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Choked the other person.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Threatened the other with a knife or gun..	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Used a knife or fired a gun.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N

PART 2: Parents and teenagers have many different ways of trying to settle differences between them. Below is a list of some of the things that you and your parent(s) might have done when you had a dispute. Please circle the number that represents how many times in conflicts with you during your high school years your parent(s) ... (Note: if you lived with only one parent, complete the questionnaire for that parent only).

- N = never
- 1 = once
- 2 = twice
- 3 = 3-5 times
- 4 = 6-10 times
- 5 = 11-20 times
- 6 = more than 20 times
- 0 = Don't know

If never for both parents during your high school years, did this EVER happen? Circle Y or N

	Mother							Father									
	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Discussed an issue calmly.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Got information to back up his/her side of things.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Brought in, or tried to bring in someone to help settle things.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Insulted or swore at the other person.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Sulked or refused to talk about an issue.	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Stomped out of the room, house, or yard..	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Cried.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Did or said something to spite the other...	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Threatened to hit or throw something at the other person.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Threw or smashed or hit or kicked something.	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Threw something <u>at</u> the other person.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Pushed, grabbed, or shoved the other.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N
Slapped the other person.....	N	1	2	3	4	5	6	N	1	2	3	4	5	6	0	Y	N

Kicked, bit, or hit the other person with a fist.	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Hit or tried to hit the other person with something.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Beat the other person up.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Choked the other person.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Threatened the other with a knife or gun..	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N
Used a knife or fired a gun.....	N 1 2 3 4 5 6 0	N 1 2 3 4 5 6 0	Y	N

Appendix D.

*Post Hoc Multivariate Regression Analyses Examining Family Violence Variables'**Prediction of Hostile and Prosocial Strategies*

Variables	B	SE B	β	r^2
Hostile Strategies				
Witnessed Aggression	.08	.18	.06	.00
Experienced Aggression	.15	.21	.10	.01
Witnessed X Experienced	-.02	.16	-.02	.00
Prosocial Strategies				
Witnessed Aggression	-.04	.14	-.04	.00
Experienced Aggression	-.04	.18	-.03	.00
Witnessed X Experienced	.06	.13	.08	.01

Note. No predictions were statistically significant.

Appendix E.

Pairwise Pearson Product-moment Correlations Among Maternal and Paternal Aggression

Variables	1	2	3	4
1. Witnessed Maternal Aggression	-	.70*** (<i>n</i> = 189)	.57*** (<i>n</i> = 190)	.47*** (<i>n</i> = 180)
2. Witnessed Paternal Aggression		-	.44*** (<i>n</i> = 181)	.74*** (<i>n</i> = 175)
3. Experienced Maternal Aggression			-	.48*** (<i>n</i> = 200)
4. Experienced Paternal Aggression				-

* $p < .05$, ** $p < .01$, *** $p < .001$

Appendix F.

Pairwise Pearson Product-Moment Correlations Among Verbal and Physical Aggression

Variables	1	2	3	4
1. Witnessed Verbal Aggression	-	.45*** (<i>n</i> = 197)	.64*** (<i>n</i> = 191)	.42*** (<i>n</i> = 190)
2. Witnessed Physical Aggression		-	.24*** (<i>n</i> = 204)	.58*** (<i>n</i> = 203)
3. Experienced Verbal Aggression			-	.41*** (<i>n</i> = 191)
4. Experienced Physical Aggression				-

* $p < .05$, ** $p < .01$, *** $p < .001$

Appendix G.

Pairwise Pearson Product-Moment Correlations Among Witnessed Maternal, Paternal, Verbal, and Physical Aggression

Variables	1	2	3	4
1. Witnessed Maternal Verbal Aggression	-	.38*** (<i>n</i> = 197)	.78*** (<i>n</i> = 188)	.24** (<i>n</i> = 189)
2. Witnessed Maternal Physical Aggression		-	.33*** (<i>n</i> = 188)	.33*** (<i>n</i> = 188)
3. Witnessed Paternal Verbal Aggression			-	.43*** (<i>n</i> = 187)
4. Witnessed Paternal Physical Aggression				-

* $p < .05$, ** $p < .01$, *** $p < .001$

Appendix H.

Pairwise Pearson Product-Moment Correlations Among Experienced Maternal, Paternal, Verbal, and Physical Aggression

Variables	1	2	3	4
1. Experienced Maternal Verbal Aggression	-	.46*** (<i>n</i> = 226)	.63*** (<i>n</i> = 204)	.33*** (<i>n</i> = 202)
2. Experienced Maternal Physical Aggression		-	.11 (<i>n</i> = 202)	.39*** (<i>n</i> = 205)
3. Experienced Paternal Verbal Aggression			-	.38*** (<i>n</i> = 200)
4. Experienced Paternal Physical Aggression				-

* $p < .05$, ** $p < .01$, *** $p < .001$

Appendix I.

Pairwise Pearson Product-Moment Correlations Among Witnessed and Experienced Maternal, Paternal, Verbal, and Physical Aggression

Variables	Witnessed MVA	Witnessed MPA	Witnessed PVA	Witnessed PPA
1. Experienced Maternal Verbal Aggression (MVA)	.66*** (n = 190)	.08 (n = 204)	.46*** (n = 182)	.16* (n = 189)
2. Experienced Maternal Physical Aggression (MPA)	.33*** (n = 190)	.19** (n = 205)	.23** (n = 182)	.56*** (n = 197)
3. Experienced Paternal Verbal Aggression (PVA)	.50*** (n = 182)	.12 (n = 197)	.65*** (n = 178)	.33*** (n = 192)
4. Experienced Paternal Physical Aggression (PPA)	.32*** (n = 182)	.30*** (n = 191)	.41** (n = 177)	.78*** (n = 191)

* $p < .05$, ** $p < .01$, *** $p < .001$

Appendix J.

Post Hoc Analyses For Witnessed Maternal, Paternal, Verbal, and Physical Aggression

Variables	B	SE B	β
Hostile Strategies			
Maternal Aggression ($n = 191$)	.10	.09	.08
Paternal Aggression ($n = 181$)	.08	.10	.06
Verbal Aggression ($n = 191$)	.07	.04	.11
Physical Aggression ($n = 205$)	.10	.18	.04
Maternal Verbal Aggression ($n = 190$)	.05	.04	.10
Maternal Physical Aggression ($n = 207$)	.14	.16	.06
Paternal Verbal Aggression ($n = 181$)	.06	.04	.10
Paternal Physical Aggression ($n = 198$)	-.09	.17	-.04
Prosocial Strategies			
Maternal Aggression ($n = 191$)	-.02	.07	-.02
Paternal Aggression ($n = 181$)	.03	.08	.03
Verbal Aggression ($n = 190$)	-.01	.04	-.01
Physical Aggression ($n = 205$)	.01	.15	.01
Maternal Verbal Aggression ($n = 189$)	-.01	.03	-.02
Maternal Physical Aggression ($n = 207$)	-.12	.13	-.07
Paternal Verbal Aggression ($n = 180$)	-.01	.04	-.03
Paternal Physical Aggression ($n = 198$)	.14	.14	.07

Note. No predictions were statistically significant.

Appendix K.

Post Hoc Analyses For Experienced Maternal, Paternal, Verbal, and Physical Aggression

Variables	B	SE B	β
Hostile Strategies			
Maternal Aggression ($n = 217$)	.14	.08	.12
Paternal Aggression ($n = 196$)	.05	.11	.03
Verbal Aggression ($n = 219$)	.04	.05	.06
Physical Aggression ($n = 217$)	.32	.20	.11
Maternal Verbal Aggression ($n = 219$)	.05	.04	.08
Maternal Physical Aggression ($n = 222$)	.24	.12	.14*
Paternal Verbal Aggression ($n = 200$)	.03	.05	.04
Paternal Physical Aggression ($n = 197$)	.00	.24	.00
Prosocial Strategies			
Maternal Aggression ($n = 216$)	.02	.07	.02
Paternal Aggression ($n = 195$)	.08	.09	.07
Verbal Aggression ($n = 218$)	.02	.04	.03
Physical Aggression ($n = 216$)	.12	.16	.05
Maternal Verbal Aggression ($n = 218$)	.00	.04	.01
Maternal Physical Aggression ($n = 221$)	.03	.10	.02
Paternal Verbal Aggression ($n = 199$)	.03	.04	.05
Paternal Physical Aggression ($n = 196$)	.24	.20	.09

* $p < .05$