2014-07-28

The Perceived Quality of Parent-Child Relationships and Dating Violence Experiences Among a Predominantly Heterosexual, Female, and Hispanic-Identified Sample of Emerging Adults

Amanda M. Cummings
University of Miami, a.cummings3@umiami.edu

Follow this and additional works at: https://scholarlyrepository.miami.edu/oa_dissertations

Recommended Citation
https://scholarlyrepository.miami.edu/oa_dissertations/1255

This Open access is brought to you for free and open access by the Electronic Theses and Dissertations at Scholarly Repository. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of Scholarly Repository. For more information, please contact repository.library@miami.edu.
UNIVERSITY OF MIAMI

THE PERCEIVED QUALITY OF PARENT-CHILD RELATIONSHIPS AND DATING VIOLENCE EXPERIENCES AMONG A PREDOMINANTLY HETEROSEXUAL, FEMALE, AND HISPANIC-IDENTIFIED SAMPLE OF EMERGING ADULTS

By

Amanda M. Cummings

A DISSERTATION

Submitted to the Faculty
of the University of Miami
in partial fulfillment of the requirements for
the degree of Doctor of Philosophy

Coral Gables, Florida

August 2014
THE PERCEIVED QUALITY OF PARENT-CHILD RELATIONSHIPS AND DATING VIOLENCE EXPERIENCES AMONG A PREDOMINANTLY HETEROSEXUAL, FEMALE, AND HISPANIC-IDENTIFIED SAMPLE OF EMERGING ADULTS

Amanda M. Cummings

Approved:

Kent F. Burnett, Ph.D.
Associate Professor Emeritus
of Educational and Psychological Studies

MarieGuerda Nicolas, Ph.D.
Associate Professor of Educational and Psychological Studies

Rosa M. Gonzalez-Guarda, Ph.D.
Assistant Professor of Nursing and Health Studies

Soyeon Ahn, Ph.D.
Associate Professor of Educational and Psychological Studies

M. Brian Blake, Ph.D.
Dean of the Graduate School
Dating violence has been identified as a serious public health problem among adolescents and emerging adults. Recently, there has been an increase in research focused on identifying risk and protective factors for dating violence across the individual-, relationship-, community-, and societal-levels, yet studies exploring associations between parent-child relationships and dating violence have been lacking. The present study examined the associations between the perceived quality of mother-child relationships and father-child relationships and dating violence victimization and perpetration experiences among a sample of emerging adults. A cross-sectional sample of 454 undergraduate men and women from three universities were assessed at one time point via an online survey that employed empirically valid and reliable measures of parent-child relationship quality and past year dating violence experiences. Structural equation modeling was used to explore the relationship between these variables and included gender, country of birth, and sexual orientation as covariates in the models. Results indicated that individuals who reported higher quality relationships with their mothers and fathers had fewer victimization and perpetration experiences. There were significant differences on dating violence perpetration experiences by gender, with women reporting higher means for psychological aggression only. Individuals born in the USA reported higher victimization and perpetration experiences, specifically
psychological aggression and physical assault, than those who identified as foreign-born.

Similar trends were found for those who identified with a sexual orientation other than heterosexual. Differences in dating violence experiences between subgroups are explained in detail. Limitations as well as implications for future research and clinical practice are discussed.
# TABLE OF CONTENTS

LIST OF FIGURES........................................................................................................ v
LIST OF TABLES........................................................................................................ vi

CHAPTER 1
INTRODUCTION ........................................................................................................... 1
  Background of the Study ........................................................................................... 1
  Overview of Dating Violence ...................................................................................... 3
  Summary of the Problem ........................................................................................... 5
  Definition of Terms..................................................................................................... 7
  Aim of the Study and Research Questions ............................................................... 10
  Significance of the Study .......................................................................................... 12

CHAPTER 2
REVIEW OF THE LITERATURE .................................................................................. 13
  Emerging Adulthood and Key Developmental Tasks ............................................ 13
  Prevalence of Dating Violence in Adolescence and Emerging Adulthood .......... 19
  Health and Social Consequences of Dating Violence ............................................ 25
  Risk and Protective Factors for Dating Violence Victimization and Perpetration .. 27
  A Review of Studies Examining Parent-child Relationship Quality and DV ....... 46
  Theoretical Models of Dating Violence ................................................................. 55
  Conceptual Framework ............................................................................................ 59
  Summary of Literature Review ............................................................................... 60

CHAPTER 3
METHODS .................................................................................................................. 64
  Participants ................................................................................................................. 64
  Measures .................................................................................................................... 64
  Procedures .................................................................................................................. 70
  Data Analysis Plan .................................................................................................... 72

CHAPTER 4
RESULTS ....................................................................................................................... 78
  Participant Characteristics ....................................................................................... 78
  Preliminary Analyses ............................................................................................... 80
  Primary Analysis ....................................................................................................... 86

CHAPTER 5
DISCUSSION ............................................................................................................... 96
  Main Findings .......................................................................................................... 96
  Findings for Covariates ........................................................................................... 98
  Significance of Current Study ............................................................................... 105
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 4.1</td>
<td>Structural Equation Model for Research Question 1</td>
<td>134</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Structural Equation Model for Research Question 2</td>
<td>135</td>
</tr>
<tr>
<td>Figure 4.3</td>
<td>Structural Equation Model for Research Question 3</td>
<td>136</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1  Demographic Characteristics of Participants……………………..137
Table 2  Cronbach’s Alpha Coefficient of Internal Consistency
         for Study Measures……………………………………………………..140
Table 3  Pearson Correlations for All Study Variables…………………141
Table 4  Mean, Standard Deviation, and Range for Study…………………142
Table 5  Frequencies by Item: Revised Conflict Tactics Scale……………..143
Table 6  Past Year Prevalence Rates of DV Perpetration and
         Victimization by CTS2 Subscales……………………………………149
Table 7  Comparison of Past Year Prevalence Rates of Endorsed
         DV Victimization and Perpetration by Country of Birth……….....150
Table 8  Comparison of Past Year Prevalence Rates of Endorsed
         DV Victimization and Perpetration by Gender……………………151
Table 9  Comparison of Past Year Prevalence Rates of Endorsed
         DV Victimization and Perpetration by Sexual Orientation………..152
CHAPTER ONE:
INTRODUCTION

Background of the Study

The formation of dating relationships is an important developmental task in adolescence, where the central focus of relationships typically shifts from same-gender peers to mixed-gender peer groups. Affiliation in mixed-gender peer groups is then associated with the emergence of dyadic romantic or dating relationships, although this may not be the developmental trajectory for all adolescents (Collins, 2003; Connolly, Craig, Goldberg, & Pepler, 1999, 2004). Developmental researchers have defined romantic or dating relationships as on-going and voluntary dyadic interactions between individuals who mutually acknowledge the relationship. These dyads may be opposite-gender or same-gender, depending on the individual’s preference, and typically vary in emotional and physical intensity (Collins, 2003). Adolescents report that dating relationships begin to have greater importance in their life at this time and studies show that dating often begins in early adolescence (Bennett & Westera, 1994). For example, a study by Foshee and colleagues (1996) found that 72% of the eighth and ninth grade students in their sample had been on at least one date. Another study found a significant number of adolescents reported experiences with dating relationships. Specifically, up to 50% of males and females ages 15 years and under and more than 70% of those 16 to 18 years reporting being in a dating relationship in the past 18 months (Collins, 2003). By the time individuals reach their late teens, most adolescents in America report having at least one dating relationship (Carver, Joyner, & Udry, 2003; Collins, 2003).
As individuals transition from adolescence to emerging adulthood, their likelihood of having a dating or romantic partner increases even more because of increased autonomy and opportunities to date. The types of romantic relationships desired and the goals for the relationship also shift as the individual transitions to this phase of development. Researchers studying romantic relationship development have found that the goals for having a dating relationship shift from being more focused on the self and identity development in adolescence to more relationship-oriented goals, including commitment and intimacy, in emerging adulthood (Connolly & Goldberg, 1999; Zimmer-Gembeck, Hughes, Kelly, & Connolly, 2012). Dating relationships early in life are important because they set the stage for what to expect in future dating relationships and play a unique role in later developmental phases (Feiring & Furman, 2000).

Furthermore, adolescence and early adulthood have been identified as phases of life when individuals are particularly vulnerable to experiencing violence within their dating relationships as a victim and/or a perpetrator. This is commonly known as dating violence (DV). Silverman and colleagues (2011) found that adolescents were at even greater risk for experiencing DV than adults. Experiencing abuse at such an important time in one’s life may interfere with further development, such as establishing healthy and loving relationships in the future (Foshee, 2005). Therefore, it is important that this phenomenon be better understood so that it may be prevented. Until recently, DV was thought to be a phenomenon that occurred in the context of older adults or longer-lasting relationships and has remained understudied amongst emerging adults by comparison (Hickman, Jaycox, & Aronoff, 2004). However, in recent decades researchers have
discovered that violence in dating relationships often begins prior to college and have increased efforts to examine DV among adolescents and emerging adults (Wekerle & Wolfe, 1999).

**Overview of Dating Violence**

According to the Centers for Disease Control and Prevention (CDC; 2012a) DV is a term used to define a variety of physical and nonphysical acts of violence against one’s dating partner, including physical, sexual, or emotional/psychological abuse as well as stalking. More specifically, adolescent DV has been defined as “a form of intimate partner violence that occurs between people who are 10–24 years old…who are current or former dating partners” (Vagi et al., 2013, p. 3). The age frame of early pre-teen years through mid-twenties are common in research on DV and has emerged over the past few decades to help distinguish between this group of individuals and older adults (Vezina & Hebert, 2007). Other terms for DV may include relationship abuse, teen dating violence, intimate partner violence (IPV), dating abuse, or domestic violence, but all of these words describe similar phenomenon (CDC, 2012a). However, terms such as domestic violence and IPV typically refer to partner violence among married or cohabiting adults, with a majority of research focusing on these populations until more recently (Lewis & Fremouw, 2001).

Adolescents and emerging adults may become involved in abusive relationships without being fully aware due to the ambiguity of many forms of abuse, lack of education on DV, and the lack of knowledge surrounding this area by educators and parents. DV prevention researchers (Foshee et al., 1998) have helped clarify examples of physical and non-physical forms of violence and developed specific measures for assessing such
behaviors. Physical abuse was differentiated from sexual and non-sexual violence. Examples of physical abuse include being scratched, slapped, kicked, pushed, and hit with a fist or inanimate object. These are often classified in terms of level of severity, ranging from mild to moderate to severe depending on the injuries sustained by the victim. Sexual violence includes forcible rape, which is being forced to have sexual intercourse, as well as being forced into any other sexual acts without giving consent. Furthermore, non-physical forms of abuse include psychological abuse, also commonly referred to as verbal or emotional abuse. Examples of psychological abuse include insulting and threatening one’s partner, controlling and excessively monitoring one’s behaviors, and damaging one’s belongings (Foshee et al., 1998). With the emergence of technologies we are seeing problems among adolescents and emerging adults that differ from the trajectories of abuse commonly found in older adults, thus making DV an important phenomenon to explore.

The CDC (2012a) and researchers in the field of violence prevention have identified DV as a serious public health problem with costs to individuals, families and society as a whole. Dating violence presents in many forms, with forms of physical abuse being of particular interest to prevent. While all forms have been associated with long-lasting negative consequences, physical abuse is of particular interest because it is associated with an increased risk for being killed by one’s partner (Violence Policy Center, 2012). Research on forms of both physical and non-physical violence has found DV to be stable over time, which demonstrates that this problem will not just go away on its own with time, nor will youth outgrow these behaviors as they get older (O’Leary & Smith Slep, 2003). Abuse or violence may be enacted against a current or past dating
partner, and levels of severity and frequency vastly range. Victimization experiences are not uncommon among adolescents in their early to mid-teens, with about 1 in 10 high school students reporting having experienced some form of physical violence, such as being hit or slapped, at the hands of their romantic partner in the past year (CDC, 2012b). In addition to physical injuries, DV is associated with significant mental health problems, such as emotional distress, depression, suicidal ideation, anxiety, low self-worth, post-traumatic stress disorder (PTSD) and dissociation (Banyard & Cross, 2008; Callahan, Tolman, & Saunders, 2003; Howard, Beck, Kerr, & Shattuck, 2005; Yan, Howard, Beck, Shattuck, & Hallmark-Kerr, 2010). Victimization has also been associated with an increased risk of experiencing other traumas and the revictimization of DV later in life (Hamby, Finkelhor, & Turner, 2012).

**Summary of the Problem**

As adolescents transition into emerging adulthood and experience increased opportunities for dating as well as more serious and intimate relationships, they also experience an increased risk for experiencing DV (CDC, 2012a; Connolly & Greenberg, 1999; Vagi et al., 2013). Until recently, the literature on the prevention of DV has been scarce. Some of the risk factors associated with being in a violent relationship in adolescence and emerging adulthood include childhood maltreatment and abuse, violence in the family of origin, and substance abuse (Vagi et al., 2013). The association of DV with violence in the family of origin and specifically interparental violence, commonly known in the field as domestic violence, is of interest because researchers have found that mothers who are victimized by their partners tend to be more physically and psychologically aggressive towards their children and display less supportive behaviors.
Also, these children more often grow up and replicate these violent and unhealthy behaviors in their own relationships (Taylor, Guterman, Lee, & Rathouz, 2009).

Recently, researchers have examined parenting practices and family dynamics in relationship to DV victimization and perpetration. However, studies examining DV tend to focus on parenting practices and behaviors, such as poor parenting practices, monitoring behaviors, and approval or use of aggression in the home (Howard et al., 2005; Maas, Fleming, Herrenkohl, & Catalano, 2010; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998; Tyler, Brownridge, & Melander, 2011). These studies evaluated the parenting behaviors but not the quality of the parent-child relationship as perceived by the child. Studies examining relationship quality typically focus on one characteristic of the relationship, such as warmth or trust, and do not provide a comprehensive assessment of parent-child relationship quality (Tyler et al., 2011; Yan et al., 2010). To date, there are no known studies that look at the effects of both mother-child and father-child relationship quality on DV experience. Additionally, studies in this area are often limited by a lack of diversity with regards to age, ethnicity or racial background, and nationality, in their samples.

Understanding the factors that may increase adolescents’ and emerging adults’ risk for experiencing violence in dating relationships is imperative to the development of effective prevention programs targeting youth nationwide. A recent Special Section published in 2012 by the Society for Prevention Research stated “…existing IPV prevention and intervention programs have had reduced effectiveness because they were designed prior to a full understanding of the etiology and complex dynamics associated with IPV” (Capaldi & Langhinrichsen-Rohling, 2012). In other words, we still have a
ways to go when it comes to developing programs that work on preventing violence in
dating and intimate relationships. Researchers have also called for studies examining
predictive variables in relationship to ethnicity and intragroup variability (Miller,
Gorman-Smith, Sullivan, Orpinas, & Simon, 2009; Yan et al., 2010). Importantly,
prevention efforts need to focus on both males and females and diverse samples in order
to be comprehensive and effective (O’Leary & Slep, 2012).

**Definition of Terms**

Terms of focus for this study are defined in a way that is consistent with the
research on the respective terms and were assessed using valid and reliable measures that
are well-established in the field of DV.

**Dating relationship.**

*Conceptual definition.* Dating has different meanings for individuals dependent
upon one’s culture and generation. In this study, dating relationships will be defined in a
manner that is consistent with developmental psychology research. Dating or romantic
relationships will refer to ongoing dyadic interactions between cross-gender or same-
gender individuals in which the relationship is intimate or romantic in nature and with the
nature of the relationship mutually acknowledged (Collins, 2003). The length of the
dating relationship can widely range from having been on only one date to dating
exclusively for several years. The level of intensity, both emotional and physical, may
also range from casual to serious.

*Operational definition.* In this study, dating relationship will be assessed by
asking if the participant has ever had an intimate relationship for any length of time,
including having been on one date, with an individual in which their feelings were
romantic towards the other person and with whom the objective to be together as a couple was mutually understood. This will include relationships of diverse sexual orientations and levels of commitment, intensity, and duration.

**Dating violence (DV).**

*Conceptual definition.* This study will focus on DV as defined by the CDC (2012a, 2012b), although research on domestic violence among older adults may be cited for additional support. This definition of both physical and non-physical acts of violence, including physical, sexual and emotional/psychological forms of abuse or aggression as well as stalking, will be used to provide a comprehensive examination of DV experiences among an undergraduate sample. It is important to note that the majority of research on DV to date has focused exclusively on heterosexual relationships and, thus, the literature review may feel heteronormative in nature.

*Operational definition.* In this study, DV will be assessed using the most widely-used and well-established measure of partner violence, the Revised Conflict Tactics Scale (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). Four subscales of the CTS2 will be used to assess experiences as both the perpetrator and victim on the domains of psychological aggression, physical assault, injury, and sexual coercion.

**Adolescence and emerging adulthood.**

*Conceptual definition.* The term adolescence will be used to capture the period between ages 10 to 24 years, which includes the pre-teen, teenage, and early adult years, and has been used to define adolescence by other DV researchers (Vagi et al., 2013). It has also been recognized that adolescence can be divided into several different stages,
with late adolescence being developmentally different than the earlier stages with regards to roles, tasks, and experiences. Historically, late adolescence referred to the period between ages 18 and 21 years. However, research over the past decade has begun to understand that what was once considered late adolescence actually extends into the mid-twenties due to this period of time continuing to serve as a transitional period into adulthood roles and responsibilities. Yet, the period of time between ages 18 and 25 is distinct from what was previously termed adolescence. The term “emerging adulthood” has been developed to capture this important and unique stage from ages 18 up to 25 years and will be used here to capture this developmental phase (Arnett, 2000). As such, the review portion of this dissertation will focus on adolescence and emerging adulthood to provide a comprehensive overview of DV and to explore how risk may change over this developmental period.

**Operational definition.** The proposed study will focus on the later period of adolescence now termed emerging adulthood and will include participants between the ages of 18 and 25 years.

**Perceived parent-child relationship quality.**

**Conceptual definition.** Parent-child relationship quality can be conceptualized as psychological closeness or attachment between the parent and adult-child and is characterized high levels of bonding and other positive affective components, including trust, healthy communication, warmth and empathy, emotional support, involvement, and mutual role understanding.

**Operational definition.** Perceived parent-child relationship quality will be operationalized as self-reported perceptions of parental bonding, attachment, and overall
positive affective components of the relationship such as cohesion, respect, and trust.

Two measures will be used to assess these different yet overlapping qualities of the relationship. These measures will include the Parental Bonding Inventory (PBI; Parker, Tupling, & Brown, 1979) and the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987). Moreover, healthy parent-child relationships are characterized as being generally positive and warm, with parents who are engaged and sensitive to the needs of their child.

**Aim of the Study and Research Questions**

The current study will explore the associations between the perceived quality of mother-child relationships, the perceived quality of father-child relationships, and DV experiences, including both victimization and perpetration, within a sample of emerging adults. The current study aims to advance the literature on DV by exploring relationship-level factors, specifically parent-child relationship quality, as risk and protective factors.

A retrospective cross-sectional survey of undergraduate students will be employed to explore the experiences of males and females in their dating relationships, as well as gain insight as to how they view their relationships with their mothers and fathers. Because most individuals have had at least one dating relationship by the time they get to college and are even more likely to experience dating relationships throughout emerging adulthood, a sample of undergraduate students ages 18-25 years was utilized to allow for the greatest likelihood of having had dating relationship experience (Collins, 2003). Further, this developmental period is one in which individuals are most vulnerable to experiencing DV and utilizing a sample of emerging adults will allow for a more
thorough examination of DV victimization and perpetration (CDC, 2012a; Silverman et al., 2011). Specifically, the following research questions and hypotheses will be tested:

1) **Are the perceived qualities of mother-child relationships associated with DV victimization and/or perpetration in an undergraduate sample of men and women?**

   H1. Perceived quality of mother-child relationships will be negatively associated with DV victimization.

   H2. Perceived quality of mother-child relationships will be negatively associated with DV perpetration.

2) **Are the perceived qualities of father-child relationships associated with DV victimization and/or perpetration in an undergraduate sample of men and women?**

   H3. Perceived quality of father-child relationships will be negatively associated with DV victimization.

   H4. Perceived quality of father-child relationships will be negatively associated with DV perpetration.

3) **Are the perceived qualities of both mother-child relationships and father-child relationships associated with dating DV victimization and/or perpetration in an undergraduate sample of men and women?**

   H5. Perceived quality of both mother-child relationships and father-child relationships will be negatively associated with DV victimization.

   H6. Perceived quality of both mother-child relationships and father-child relationships will be negatively associated with DV perpetration.
**Significance of the Study**

This research could contribute to the growing body of research on the prevention of DV as well as the risk and protective factors associated with victimization and perpetration. Descriptive information on the prevalence rates and types of DV victimization and perpetration experienced will add to the existing research on DV among emerging adults and supplement existing statistics already found in the literature. Additionally, this research has the potential to expand upon the literature on relationship-level factors associated with DV by assessing the perceived quality of both mother-child relationships and father-child relationships. This study can provide a better understanding of how parent-child relationships are related to experiences of DV in dating relationships and provide a deeper understanding how relationship quality may influence other types of relationships in the lives of emerging adults. Furthermore, findings from this study can be used to develop more effective DV prevention and intervention programs. It can also serve as a foundation for future research on the associations between parent-child relationship quality and DV experiences among emerging adults and encourage future researchers to be inclusive of relationship quality as opposed to focusing solely on parenting behaviors or practices.
CHAPTER TWO:

REVIEW OF THE LITERATURE

This chapter will review the existing literature on the problem of DV among adolescents and emerging adults. First, I will strengthen my rationale for focusing on emerging adults and set the stage for examining violence in dating relationships by highlighting dating as one of the key developmental tasks of this phase of life. I will review other important developmental tasks and the ways in which parent-child relationships may change over the course of these developmental stages. The diversity of family structures present in today’s society will also be acknowledged and briefly discussed. Next, this chapter will provide an overview of DV prevalence rates in the United States along with differences in rates found by gender and racial/ethnic identities. Additionally, I will provide a comprehensive overview of risk and protective factors for DV victimization and perpetration across four socio-ecological levels, including individual-, relationship-, community-, and societal-levels. I will then review research specifically focused on parent-child relationship quality and DV, which is of primary interest to this study. Two theoretical models of DV, social learning theory and attachment theory, will be reviewed before summarizing the research. Lastly, a conceptual framework of DV on which this study is based will be provided.

Emerging Adulthood and Key Developmental Tasks

Emerging adulthood, the developmental stage occurring between ages 18 to 25 years, is a period of major life transitions and increased identity development. Psychologist Dr. Jeffrey Arnett describes this period of time as an “in-between age” where individuals transition between adolescence and adulthood (2006). It is also a
newer phenomenon in developmental research resulting from shifts in cultural norms surrounding increased pursuit of higher education and delayed age at first marriage in comparison to trends in the early-to-mid 20th century. Historically, the two most important developmental tasks for these ages have been identified as the formation of dating or romantic relationships and career development (Broderick & Blewitt, 2006; Erikson, 1950). Erikson identifies the key psychosocial “crisis” during emerging adulthood as intimacy versus isolation, which can only occur after formation of identity, and highlights the focus of intimate relationship formation during this time (1950). As research on emerging adulthood has increased over the 21st century, additional key developmental tasks have been identified. These include leaving home, pursuing higher education, decreased dependence on parents, increased autonomous functioning, continued identity development, and increased responsibility. More specifically, Arnett (2006) has identified five main features of emerging adulthood: (1) Identity exploration, specifically with work, school, and love; (2) instability; (3) self-focus; (4) feeling in-between; and (5) possibilities or optimism for the future. In sum, individuals in this phase of life experience numerous changes, including in their family and dating relationships.

**Parent-child relationships in emerging adulthood.** Parents play a primary role in the development of their children over the course of their lifetime and continue to have a significant influence throughout the phase of emerging adulthood. Further separation and individuation from one’s parents, a central task of childhood into adolescence, is important for healthy transition to independence and mature functioning as an adult (Mahler, Pine, & Bergman, 1973). As children transition out of the home and into the
world of adulthood, they typically become less dependent on their parents and more autonomous in their day-to-day functioning. These changes have implications not only for the interactional characteristics and relational dynamics of the parent-child relationship, but also for the quality of the attachment and the ways in which the adult-child perceives their relationships with their parents. The decreased dependence on parents is a main component of what makes this developmental stage unique from the earlier stages of development (Koepke & Denissen, 2012). Furthermore, longitudinal studies on parent-child relationships have shown that individuals during early-to-mid adolescence tend to have generally negative appraisals of their relationships with their parents and these perceptions typically fluctuate over the teenage years (Collins, Laursen, Mortensen, Luebker, & Ferreira, 1997; Koepke & Denissen, 2012). Significant changes in the parent-child relationship have been noted over the course of late adolescence and into emerging adulthood, including more stable, positive, and realistic appraisals of the parent by the child. This is in part due to the child’s increased maturity and the development of a more positive, adult-to-adult style of relating (Koepke & Denissen, 2012).

*Diversity in family structure and composition.* It is also important to note the changes in family structure that have taken place over the late 20th and early 21st centuries and that influence children’s development and relationships within their family of origin. There have been many cultural and political shifts that have resulted in changes to family structure and composition in America over recent decades. Whereas the norm historically seem among American families was for children to grow up in a heterosexual, two biological parent nuclear family, this is no longer the case. According
to the 2012 U.S. Census, only 63% of family groups with children under 18 are made up by married couples. Other notable changes in family structure include that families now look smaller with fewer members per household, there are more one-parent/single-parent households, children are less likely to live with both biological parents than in the past, and there are more multigenerational households. The numbers of children being raised in step-families or blended families is at an all-time high due to high rates of divorce and births outside of marriage, which means that many children experience a number of transitions in family living arrangements and relationships. There has also been a decrease in the numbers of stay-at-home mothers, which has implications for interpreting past research on attachment and child development (Vespa, Lewis, & Kreider, 2013).

Moreover, researchers suggest that youth may now often live in non-traditional families, such as extended family kinship systems, and this has been found to be more common among ethnic minority families that come from more collectivistic cultures. For example, Dr. Boyd-Franklin’s (2003) multisystemic research on African American families highlights the many diverse compositions and structures represented in these families at present. This researcher has found that African American families commonly have an extended family orientation that includes a number of relatives beyond the nuclear family and allows for greater role flexibility, which has important considerations for examining the quality of family relationships (Boyd-Franklin, 2003). Further, Black and Hispanic children as well as children from low-income families are more likely to live in single-parent households (Vespa et al., 2013).

It is also important that research on the associations between family relationships and child or adolescent well-being take into consideration the recent, more common
changes in family systems. One longitudinal research study by Brown (2006) on changes in family structure and adolescent well-being found that adolescents raised in families that undergo transitions in comparison to adolescents who remain in families with two biological parents reported decreased well-being as measured by higher levels of delinquency and depressive symptoms as well as lower rates of engagement in school. Specifically, it was found that cohabitation by non-biological parents, such as in step-families, was associated with poorer outcomes of adolescent well-being. Transitioning from a two-parent stepfamily into a single-mother family was not associated with decreased well-being more so than for children who remained in intact families, however, suggesting that this type of transition does not have significant consequences for adolescents. Due to limited sample, however, this study did not examine differences among racial or ethnic groups.

Research on changing family structures by Brown (2010) suggests that there are differences in child well-being outcomes across racial or ethnic groups, with less negative outcomes of family transitions for Black and Hispanic children. In addition, other researchers have found that adolescents raised in cohabitating or married stepfamilies and single-mother families, and as compared to in two biological married parent families, are more likely to engage in risky behaviors, including drinking alcohol and smoking (Brown & Rinelli, 2010). A major limitation of these research studies is that the involvement of fathers or the composition of single-father families are often not included, in part due to limited data or assessment, and researchers have highlighted that studies that include paternal involvement should be conducted in the future (Brown & Rinelli, 2010). The timing of the family transition in the child’s development and the role of socio-economic
status are also important factors to consider when examining the effects of family transitions on child and adolescent well-being (Brown, 2010).

**Dating in emerging adulthood.** Dating and the formation of romantic relationships have consistently been identified as one of the most significant developmental tasks of emerging adulthood. The majority of adolescents have had at least one date or dating experience by the time they reach the late teenage years (Carver et al., 2003; Collins, 2003). Not only does dating in general become of greater interest to adolescents over the years, but the types of relationships they desire and their goals for partnership also change as they mature. For example, Zimmer-Gembeck and colleagues (2012) found that as adolescents transition into emerging adulthood, their goals for a dating relationship become less focus on their sense of self or aspects of individual identity and more focused on the relationship. Individuals are more likely to desire increased intimacy and commitment during emerging adulthood than ever before (Zimmer-Gembeck et al., 2012).

While dating relationships can be a source of pleasure and strength for adolescents and emerging adults, they can also have negative consequences on further development depending on the experiences (Exner-Cortens, 2014). Adolescence into emerging adulthood is a time when dating relationships are most vulnerable to DV. A longitudinal study on DV among adolescent and college-age women found that 88% of women experienced at least one type of physical or sexual violence as a victim by the end of college (Smith, White, Holland, 2003). Noonan and Charles (2009) have also identified girls and women between the ages of 16 and 25 as at the highest risk for experiencing DV. Given the nature of this developmental phase as a time of increased
identity development and dating experiences, dating relationships are more vulnerable to experiencing DV. Adolescents lack experience with dating relationships as well as healthy coping skills and emotion regulation, which may also contribute to increased risk for DV experiences (Laursen & Collins, 1994). It is important to understand the nature of DV as it occurs during adolescence and emerging adulthood and recognize it as a public health issue given the long-last negative effects associated with DV. Also, relationships developed during this time often set norms and expectations for future dating relationships (Feiring & Furman, 2000).

**Prevalence of Dating Violence in Adolescence and Emerging Adulthood**

Results of the 2011 national Youth Risk Behavior Surveillance System (YRBSS) provides insight into the problem of DV. The YRBSS is a large national survey that monitors high risk behaviors among adolescents in grades 9 through 12. Results from 2011 included over 15,500 completed surveys from 158 schools across America. This data is unique in that it included a very large, diverse and representative sample of high school students. DV was assessed by asking the following question “During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?” (CDC, 2012b). The prevalence of dating violence in the past 12 months was 9.4% overall, with higher rates among 10th-grade, 11th-grade, and 12th-grade students than among 9th grade students. Rates were highest and equal for 11th and 12th grade students (10.3%), which illustrates how DV increases with age. Some states, such as Maryland and Georgia, found rates of DV as high as 16%. Furthermore, rates of forcible rape were 8.0% across the nation. Forcible rape was measured by asking participants “Have you ever been physically forced to have sexual intercourse when you did not want to?” (CDC,
Prevalence of having been forced to have sexual intercourse also increased from 9th to 12th grade, demonstrating that risk of being victimized increases with age and perhaps dating exposure. It is important to note that the data from the YRBSS provides us with information regarding physical and sexual forms of DV only.

Another large scale study that sheds light onto the problem of DV is the 2005 National Survey of Adolescents (NSA; Wolitzky-Taylor et al., 2008). This epidemiological study examined DV among 3,614 adolescents ages 12 to 17 years across the U.S. When looking at serious offenses of DV only, including physical and sexual assault, the prevalence was 1.6% overall. Although this number may seem lower than numbers previously cited, it equates to about 400,000 adolescents in the population. It is important to note that results from large-scale national studies such as the YRBSS and NSA provide more stable and consistent prevalence rates than single studies which may have greater range in their findings (Hickman et al., 2004). Still, smaller single-studies produce useful information about the phenomenon of DV. A review of the literature on perpetration and victimization of physical and sexual forms of DV found rates of perpetration to range widely from 26% to as high as 46% and rates of victimization to range from 9% to 23%. The rates of perpetration may be higher than reported rates of victimization because girls tend to include violence used in self-defense in this category whereas boys may not consider their fighting back as being victimized (Hickman et al., 2004).

As previously stated, DV is defined as not only physical and sexual forms of violence, but also as emotional and psychological forms of abuse and aggression. While large-scale studies provide important information on physical and sexual abuse, the
studies cited above are limited by not being inclusive of emotional and psychological abuse included in the broader definition of DV. This is problematic because research shows that some women may only experience psychological or emotional abuse and still suffer severe negative consequences (Coker, Sanderson, Cantu, Huerta, & Fadden, 2008; Eshelman & Levendosky, 2012). A review of the literature on aggression in romantic relationships also concluded that victims of DV perceived psychological aggression to be more damaging and have longer lasting negative consequences in comparison to physical aggression (Williams, Richardson, Hammock, & Janit, 2012). With regards to the type of violence most commonly perpetrated, a review of the literature on DV found that emotional abuse was the most common form of abuse endorsed by victims, followed by physical then sexual abuse and that these findings were similar across populations of high school students, college students, and adults (Williams, Ghandour, & Kub, 2008). One study found that psychological aggression was perpetrated more than three times as often in comparison to physical aggression and was more significantly associated with symptoms of distress (Jouriles, Garrido, Rosenfield, & McDonald, 2009). In sum, prevalence of emotional or psychological forms of DV have been estimated to range from about 42% to as high as 91% (Hickman et al., 2004; Williams et al., 2012).

**Gender differences.** Furthermore, estimates of DV in the literature range widely for females and males. For physical victimization, rates among females have been found to range from 8% to 57% and from 6% to 28% for males (Hickman et al., 2004). Some forms of DV victimization, such as forcible rape, are consistently found to occur at higher rates among females than their male counterparts (CDC, 2012b). Results from a large nationally representative sample of adolescents found prevalence rates of serious
forms of DV, including physical and sexual assault, to be four and a half times higher among females than males (Wolitzky-Taylor et al., 2008). Another study found that females in grades 10 through 12 were 3.5 times more likely than males to be hit, pushed or threatened by their dating partner (Marquart, Nannini, Edwards, Stanley, & Wayman, 2007).

Yet, studies yield mixed results regarding gender differences in the perpetration and victimization of DV. Newer research suggests females are just as likely, if not more likely, to perpetrate violence against their dating partners than their male counterparts (Banyard & Cross, 2008; Swahn, Simon, Arias, & Bossarte, 2008). For example, Jouriles, Mueller, Rosenfield, McDonald, and Dodson (2012) found higher rates of self-reported DV perpetration among females (n = 19) than males (n=11). In a study examining age and gender differences of relationship violence among teens in high school, researchers found that females were more likely to perpetrate emotional and physical abuse, whereas males were more likely to perpetrate sexual abuse (Hokoda, Del Campo, & Ulloa, 2012). Deal and Wampler (1986) also found that among a sample of college students, females perpetrated violence more frequently, with males reporting three times as many experiences as victim where violence was not reciprocated.

Although perpetration rates widely vary among males and females, researchers argue that girls are more likely to perpetrate less severe forms of violence, sustain more severe injuries when victimized by their male partners, and are more likely to perpetrate in self-defense than their male counterparts (Foshee, 1996; Hamby & Turner, 2012; Keenan-Miller, Hammen, & Brennan, 2007; O’Keefe, 1997). Additionally, one study of physical DV reported that females were almost three times more likely than males to
suffer an injury (Hamby et al., 2012). However, one study found that females were more likely to perpetrate violence even after controlling for violence perpetrated in self-defense (Foshee, 1996). Rates of perpetration of physical violence have been estimated from 28% to 33% for females and 11% to 20% for males. Although females have been reported to perpetrate physical violence equally as often or more often than males, males have been consistently found to perpetrate sexual violence at higher rates than female (Banyard & Cross, 2008; Hickman et al., 2004; Hokoda et al., 2012). The recent shift in research findings implicating females as perpetrators of emotional and physical violence more frequently than their male counterparts may represent generational and cultural changes not only in gender roles and dating norms, but also in the acceptability of using violence in dating relationships by females.

**Racial/ethnic differences.** Research on the prevalence of DV consistently shows differences between racial and ethnic groups (CDC, 2012b; Foshee, 2005; Silverman, Decker, & Raj, 2006). The national prevalence rates of DV are found to be higher among ethnic minorities in America such as Black (12.2%) and Hispanic (11.4%) students than among their White counterparts (7.6%; CDC, 2012b). However, rates of forcible rape were highest among White females (12.0%) in comparison to Black (11.0%) or Hispanic (11.2%) female students. One study researched DV among a predominantly rural sample of 20,274 racially White adolescents in grades 10 through 12 and found the prevalence rate to be as high as almost 16%. This study found that adolescents living in the South were at greater risk for experiencing DV than students in other geographical regions in the US, suggesting subcultural differences among a racially homogeneous sample depending on where they live in America (Marquart et al., 2007). Findings from other
studies on region and rural versus urban areas have supported these claims (McDonell, Ott, & Mitchell, 2010).

With regards to perpetration, Foshee (2005) found that Black adolescents were significantly more likely than White adolescents to perpetrate DV when exposed to violence in the family of origin. More specifically, these results were significant for Black adolescents from single-parent families. There was also a significant association between parents’ use of corporal punishment and DV perpetration for Black adolescents who came from two-parent families and whose mothers had lower levels of education, which in this study was a proxy of socio-economic status (SES). Thus, this study highlights racial differences in the effects of violence in the family of origin as a risk factor for DV experience in adolescence (Foshee, 2005)

Although research has been emerging on racial and ethnic differences among individuals who experience DV, much of this focuses on adults as opposed to differences among adolescents (Maker & deRoon-Cassini, 2007). Still, it has been documented that ethnic and racial minorities in the U.S. experience DV at disproportionate rates in comparison to White men and women (Howard, Wang, & Yan, 2007; Maker & deRoon-Cassini, 2007). However, a recent study utilizing a sample of 1,565 ethnically diverse high school students from Texas found no difference in DV prevalence when comparing White, Black, and Hispanic youths from low socio-economic backgrounds (Temple & Freeman, 2010). Various explanations have emerged as for why racial and ethnic minorities experience DV at higher rates than White adolescents. Some researchers have suggested that violence more frequently occurs among the poor and socio-economically disadvantaged, and these societal conditions disproportionately affect racial/ethnic
minorities (O’Keefe, 1997). In addition to higher rates of DV being found among those from lower SES, differences may be accounted by the neighborhood of residence. Poor neighborhoods tend to have higher rates of crime which is a known predictor of DV.

Furthermore, there may be cultural characteristics which account for the differences between groups, including gender role norms, normalcy of violence in cultural or origin, and family orientation. Some ethnic minorities in the U.S. may face additional stressors including immigration and acculturation (Gonzalez-Guarda, Ortega, Vasquez, & De Santis, 2010; Yan et al., 2010). It is important to note that differences in experiencing DV are found not only with regards to prevalence rates, but also with regards to risk and protective factors. While such differences are of interest to this study, it should be noted this study is not primarily focusing on racial and ethnic differences in relation to DV experience.

Health and Social Consequences of Dating Violence

Violence in dating relationships during adolescence and emerging adulthood is associated with serious mental and physical health problems as well as social consequences. DV victimization has been associated with both internalizing and externalizing mental health problems. Internalizing mental health problems may include distress, depression, suicidal ideation or suicide attempts, anxiety, disordered eating, low self-esteem or self-worth, PTSD and dissociation. Externalizing problems may include substance abuse, sexual risk behaviors, and use of violence in interpersonal relationships (Banyard & Cross, 2008; Callahan et al., 2003; Howard et al., 2005; Silverman et al., 2011; Yan et al., 2010). Victims may also experience fear, shame and social stigma which contribute to a lower likelihood of seeking help for the DV. Furthermore,
psychological distress and internalizing mental health problems are risk factors for DV, thus putting the individual at higher risk for victimization in future dating relationships. Research has shown that individuals who experience victimization once are at greater risk for experiencing revictimization again later in life in subsequent dating relationships (Hamby et al., 2012).

In addition, victimization of more severe levels of physical DV is associated with injury and physical health problems. Physical violence is of particular interest to prevent because of the increased risk for being murdered, especially for females who are physically victimized by their male partners. In 2010, an estimated 1,800 females were murdered by males, and 7% of these females were under the age of 18 years (Violence Policy Center, 2012). Sexual violence victimization has been associated with increased sexual risk behaviors including early initiation of sexual activity and having multiple sex partners, thus putting these individuals at higher risk for unwanted pregnancy and sexually transmitted infections (Silverman et al., 2011). In a study of 499 college females, experiencing multiple forms of DV, including physical, psychological, and sexual abuse, was significantly associated with higher rates of depression, PTSD, and physical injuries (Eshelman & Levendosky, 2012). Females who experienced physical and/or sexual DV are also more likely to have problems with unhealthy eating behaviors and weight management (Silverman et al., 2011). Importantly, researchers have found negative health and social outcomes among females and males who experienced DV, demonstrating that both genders experience mental and physical health consequences as a result of victimization (Amanor-Boadu et al., 2011). Perpetration of violence carries with it the potential for legal consequences as well. These could include incarceration, court-
mandated treatment, court orders to stay away from the victim and their family, and completion of therapeutic services. Psychological treatment may be required for victims as well, especially when children are involved (Cornelius, Shorey, & Kunde, 2009). Moreover, prevention of DV is important because victimization is significantly associated with serious negative consequences for both males and females.

**Risk and Protective Factors for Dating Violence Victimization and Perpetration**

When it comes to violence prevention, socio-ecological models provide a useful framework for conceptualizing and understanding the problem of DV and how to most effectively implement prevention strategies. The CDC recently adapted a four-level socio-ecological model for violence prevention to illustrate that factors associated with violence occur at the individual, relationship, community, and societal levels (CDC, 2009). Such models have been referred to as the “gold standard” by leaders in the field of prevention, such as the World Health Organization (2010) and are being used more frequently to better understand risk and protective factors (Krug, Hilbert, Mercy, Zwi, & Lozano, 2002). A recent review of the literature demonstrated the utility of this socio-ecological model in understanding risk and protective factors related to IPV among Hispanics (Cummings, Gonzalez-Guarda, & Sandoval, 2012). Furthermore, the socio-ecological model used by the CDC and WHO will be implemented here to better understand risk and protective factors related to DV among adolescents and emerging adults. While some reviews of the literature in the past have separately focused on victim and perpetrator characteristics, a significant amount of overlap have been found between the two (Lewis & Fremouw, 2001). For purposes of this study and to reduce the
redundancy of the literature cited here, risk factors for both victimization and perpetration will be reviewed together, with distinctions made between them where appropriate.

**Individual.** Studies have documented a variety of individual-level characteristics related to an increased risk for being victimized by a dating partner during adolescence and emerging adulthood. Individual-level characteristics may include those related to biology or personal history such as age, race or ethnicity, education level, socio-economic status, history of abusing substances or history of experiencing abuse or maltreatment (CDC, 2009) As previously discussed above, one’s risk for DV victimization may vary depending on demographic characteristics such as gender and race/ethnicity, with females, specifically Black and Hispanic females, at greatest risk (CDC, 2012b; Foshee, 2005; Hamby et al., 2012; Maker & deRoon-Cassini, 2007; Marquart et al., 2007; O’Keefe, 1997, 1997; Silverman et al., 2006; Temple & Freeman, 2010; Wolitzky-Taylor et al., 2008). Adolescence is a developmentally vulnerable period for experiencing DV, and studies show that adolescence through emerging adulthood is actually the period of greatest risk for experiencing physical DV in one’s life (Noonan & Charles, 2009; O’Leary & Smith Slep, 2003). Older age among adolescents is also a risk factor, with 15 to 17 year olds at greater risk than younger teens (Banyard & Cross, 2008; Noonan & Charles, 2009; Silverman et al., 2006; Wolitzky-Taylor et al., 2008). On the other hand, researchers have found comparable rates of DV among younger samples. Miller and colleagues (2009) found that 3 out of 10 sixth grade students reported perpetrating an act of physical violence in the past three months. As adolescents approach their later teen years, they seek, and frequently obtain, greater independence from their parents, often resulting in less supervision with dating partners. Decreased
parental supervision and inadequate monitoring may play a role in the increase seen in DV during the later teen years (Noonan & Charles, 2009). Thus, the risk for being victimized increases with age but reaches its peak in adolescence and emerging adulthood.

Studies have yielded mixed results when examining the association between SES, often operationalized as parents’ education level, income, employment status, or some combination of the three, and DV (Vezina & Hebert, 2007). Individuals from lower SES backgrounds have been found to be at higher risk for experiencing DV (O’Keefe, 1998). Another study on never married young adults also found low SES to be associated with increased risk for physical aggression in dating relationships (Stets & Henderson, 1991). Living in rural areas as opposed to suburban or urban areas has also been found to be associated with an increased risk for DV (McDonell et al., 2010; Vezina & Hebert, 2007). For example, Reuterman and Burcky's (1989) study on DV in a high school sample found that female victims were more likely to reside in rural areas. There may be a link between the findings on SES and rural areas as risk factors for DV such that both may indicate problematic living conditions or serve as barriers to accessing resources.

Additional individual-level factors for DV include those within the individual over which they may have little conscious control. These include personality traits or styles, beliefs and attitudes. Researchers have linked narcissistic styles of personality with DV. Narcissism may play a role because individuals with these personality styles may have a sense of entitlement or seek to exploit others through use of violence and feel justified in doing so (Ryan, Weikel, & Sprechini, 2008). Studies on personality styles or traits and DV have typically focused on adults populations, however. For example, one
A study on the personalities of men who were abusive to their partners found a positive association with borderline personality traits among these perpetrators (Dutton, Starzomski, & Ryan, 1996). Abusiveness and aggression may be reflected in one’s personality, but they may also be associated with other unconscious processes such as cognitions. Another study utilizing a sample of adolescents found that aggression in automatic cognitions was related to DV perpetration at baseline and over the follow-up assessments (Jouriles, Grych, Rosenfield, McDonald, & Dodson, 2011). Interestingly, these findings held true even after controlling for self-reported attitudes regarding DV.

Furthermore, self-reported attitudes about sex or gender roles and acceptability of the use of violence in relationships have been investigated with regards to their association with DV. Sex role attitudes refer to the degree to which people endorse viewing men and women as playing more traditional roles based on gender in relationships and have been associated with DV risk (Berkel, Vandiver, & Bahner, 2004). Researchers have found that males more often than females endorse traditional sex role attitudes, with females having more egalitarian views on their roles in relationships (Berkel et al., 2004; Bernard & Bernard, 1983; Hilton, Harris, & Rice, 2003). Furthermore, individuals with more traditional attitudes towards women’s roles may feel that DV against a female partner is acceptable because men are viewed as superior to women. However, some studies have failed to find a significant relationship between traditional sex role attitudes and perpetration of dating violence (Bernard & Bernard, 1983; Hilton et al., 2003).

Williamson and Silverman (2001) examined college male’s attitudes on relationships through the concept of communal orientation, defined as the dispositional
belief that partners should mutually respond to each other’s needs. These researchers hypothesized that males high in communal orientation would be less likely to perpetrate DV than those low in communal orientation because they would be more considerate of their partner’s needs and hold personal beliefs about the way people should be treated in interpersonal relationships. As hypothesized, these researchers found that males low in communal orientation were more likely to perpetrate DV against their female partner. They were also more likely to belong to a peer group in which members held more accepting attitudes towards the use of violence against women or even modeled such behavior in their own relationships (Williamson & Silverman, 2001). The influences of and interactions with peers will be further explored in the Relationships section.

Numerous studies have found a positive relationship between attitudes towards aggression and/or violence and outcomes of DV in subsequent relationships. An 18-month longitudinal study of eighth and ninth grade students by Foshee, Linder, MacDougall, and Bangdiwala (2001) found that the perpetration of DV by both males and females against a dating partner was predicted by acceptance of prescribed norms, yet the correlation was stronger for males than females. Thus, more accepting attitudes of violence in a relationship predicted actual use of DV. Other researchers have also found attitudes tolerant of aggression and violence to be predictive of DV as well (Connolly, Friedlander, Pepler, Craig, & Laporte, 2010; Kelley, Edwards, Dardis, & Gidycz, 2014). Kelley and colleagues (2014) found that women with more accepting attitudes of violence were more likely to perpetrate DV against their partners as a way to express their emotions or cope with conflict. Furthermore, externalizing behaviors such as fighting and delinquent acts of violence have been found to also predict DV among
males and females (Cleveland, Herrera, & Stuewig, 2003; Herrenkohl, Kosterman, Mason, & Hawkins, 2007; O’Donnell et al., 2006). For males, a history of perpetrating DV, including verbally, physically or sexually aggressive behaviors, has also been found to be a risk factor for perpetrating that type of DV in the future (Gidycz, Warkentin, & Orchowski, 2007).

A history of mental health problems may also increase the risk for experiencing DV (Vagi et al., 2013). Internalizing problems such as depression, anxiety and low self-esteem during adolescence have been found to be associated with severe violence victimization in early adulthood (Cleveland et al., 2003; Keenan-Miller et al., 2007; Vezina & Hebert, 2007). DV has also been found at higher rates among adolescents who have had suicidal ideation or attempts (Howard et al., 2007; Vezina & Hebert, 2007). Moreover, a study by Kerr and Capaldi (2011) concluded that suicide attempts among males in adolescence predicted DV experience and poorer relationship quality overall in early adulthood. Another study of adult female victims of partner violence found increased rates of depression and decreased self-esteem among women were associated with physical aggression as it increased in frequency and severity (Cascardi & O’Leary, 1992). Self-esteem, which may be a proxy of psychological well-being (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995), has been found to correlate with DV in studies of adolescents as well. For example, females who have a stronger sense of self have been found to report DV at lower rates than females with low self-worth (Yan et al., 2010). One problem with assessing the relationship between mental health problems as risk factor for experiencing DV is inferring causality or directionality. Often times mental health problems are discussed as consequences of experiencing victimization, so it
is not clear if mental health problems lead to increased risk for DV or result from experiencing it, or both (Kaura & Lohman, 2007; Rutter, Weatherill, Taft, & Orazem, 2012). It is important to keep this consideration in mind when discussing these issues in relationship to DV, but also important to note that there is a strong positive association between the two no matter what the direction.

Experiencing stressful life events, including a traumatic events, has also been associated with increased risk for victimization (Wolitzky-Taylor et al., 2008). The CDC (2012b) and other researchers have also identified that those with trauma histories and symptoms as being at greater risk for re-victimization (Wolfe, Wekerle, Scott, Straatman, & Grasley, 2004). One study including a nationally representative sample of adolescents aged 12 to 17 years found high co-morbidity for victimization of DV and other forms of victimization. For example, those who endorsed experiencing DV were about two times as likely to also endorse experiencing other forms of violence such as childhood maltreatment, sexual harassment and rape (Hamby et al., 2012). Thus, victimization in and of itself appears to be a risk factor for re-victimization in the future. Victimization is also associated with higher risk of developing PTSD and dissociation (Callahan et al., 2003).

Data from the YRBSS has demonstrated a strong positive relationship for numerous risky behaviors and DV victimization, with females who engage in risky behaviors at greater risk for victimization than males (CDC, 2012b). Such risky behaviors included risky or permissive sex and use of alcohol or illicit drugs (Gover, 2004). Silverman and colleagues (2006) also reported that teens who engaged in sexual activity have also been found to be significantly more likely to experience DV than their
non-sexually experienced counterparts. Risky sexual behaviors such as having multiple sex partners and not consistently using condoms have been related to DV as well (Howard & Qi Wang, 2003). Again, one cannot infer directionality or causation between risky behaviors and DV experiences due to the correlational nature of the research. Using alcohol and/or drugs have been consistently shown to increase one’s risk for both perpetrating DV and being victimized (Foshee et al., 2001; Herrenkohl et al., 2007; Howard et al., 2007, 2007; Stets & Henderson, 1991; Vezina & Hebert, 2007). In addition to risky behaviors, problems in school also predicted experiences of DV demonstrating that adolescents exhibiting problems across numerous domains may be at increased risk for becoming involved in a violent relationship (O’Keefe, 1998; Schnurr & Lohman, 2008).

Cultural factors and acculturation may also influence one’s risk for experiencing DV during adolescence and emerging adulthood. A review of the literature on acculturation and violence in adolescence by Smokowski, David-Ferdon, and Stroupe (2009) found evidence to support acculturation as a risk factor for DV. Moreover, they found that lower acculturation levels most often served as a protective factor for DV victimization among Latino adolescents whereas higher acculturation levels were associated with more violence (Smokowski et al., 2009). Another study on Hispanic immigrants found that their immigrant status served as a protective factor from experiencing DV; however, these researchers also found that this difference was not true for immigrants who were sexually active (Silverman et al., 2006). Lastly, research by (Ramos, Green, Booker and Nelson (2011) found that Hispanic females with lower levels of acculturation had only one-fourth of the risk for experiencing DV in comparison to
females rated as more highly acculturated. Thus, research on acculturation and culture-related variables suggests that adolescents more assimilated into American culture may be at greater risk for experiencing DV.

**Relationships.** The most significant relationships in adolescence and emerging adulthood commonly associated with DV can be broken down into three subcategories: Family of origin, friendships or peers, and dating partners/couple relationships. Literature will now be reviewed and summarized in accordance to these three major relationships.

**Family of origin variables.** Arguably, parents and family are the central and most important relationships in children’s lives prior to reaching adulthood. Thus, experiences in the family of origin will play an important role when it comes to forming relationships later in life. The association between violence and/or conflict in the family of origin and adolescent DV experiences has been well documented in the literature (Foshee, 2005). For example, results from a study on college females suggested that DV experiences during adolescence were predicted by verbal and physical abuse by the parents during childhood (Rich, Gidycz, Warkentin, Loh, & Weiland, 2005).

Furthermore, results of a study by Wekerle and others (2009) found childhood emotional abuse alone was a predictor of DV during adolescence. One study utilizing a large, diverse sample of high school students grades 9 through 11 found various forms of abuse and neglect in childhood to be a significant risk factor for DV in adolescence (Wolfe et al., 2004). This is often referred to as the transmission of intergenerational violence when violence from the family of origin is carried over into subsequent dating or family relationships.
In addition to childhood victimization, witnessing violence and abuse between one’s parents during childhood has also been well documented as a risk factor for DV during adolescence and emerging adulthood (Garrido & Taussig, 2013; Hickman et al., 2004; Malik, Sorenson, & Aneshensel, 1997; O’Keefe, 1997, 1998; Vezina & Hebert, 2007). More specifically, witnessing interparental violence, otherwise referred to as IPV in the literature on adult partner violence, is a strong predictor of DV perpetration, especially for males (McDonald, Jouriles, Tart, & Minze, 2009). Garrido and Taussig (2013) also found that exposure to IPV during childhood was positively associated with teen DV victimization for adolescents ages 12-15 years. Researchers Moretti, Obsuth, Odgers and Reebye (2006) conducted a study to examine the effects of gender of the violent parent on adolescent males’ and females’ use of physical aggression in their dating relationships. Results of this study suggested that mothers’ use of IPV against their partners was significantly related to both males’ and females’ use of DV, but fathers’ use of IPV was not related. However, fathers’ IPV against their partners was strongly related to males’ use of violence in peer relationships (Moretti et al., 2006). Similarly, Milletich, Kelley, Doane and Pearson (2010) conducted a study on childhood exposure to interparental physical violence and the use of physical aggression against a dating partner among a college sample of men and women. These researchers found that gender mattered with regards to violence exposure such that use of physical aggression by women was predicted by exposure to mother-to-father violence whereas to father-to-mother violence predicted men’s use of physical aggression towards their dating partner (Milletich et al., 2010). These findings suggest that gender of both the parents and child may influence the way in which violence transmits from one generation to the next.
In addition, nonphysical forms of interparental conflict, such as verbal aggression, poor conflict resolution and frequent arguments have also been documented as risk factors for DV (Tschann et al., 2009). For example, negative family communication patterns exhibited during adolescence have been associated with DV perpetration in later dating relationships (Andrews, Foster, Capaldi, & Hops, 2000). An additional parental factor that has been suggested to play a role in the use of DV is family structure and parental divorce. Researchers found among a sample of college students that those whose parents were divorced as opposed to still married reported experiencing higher rates of violence and verbal aggression within their dating relationships (Billingham & Notebaert, 1993). Banyard, Cross and Modecki (2006) also reported that children of divorced parents reported more perpetration of DV. Thus, the dissolution of the parents’ marital relationship may be indicative of other relationship problems, such as interparental conflict or poor conflict resolution.

Parenting practices and behaviors have recently been discussed with regards to family of origin characteristics that may contribute to risk of experiencing DV later in life. These may include styles of parenting, monitoring behaviors, discipline tactics, or communication skills. Harsh parenting, which may also include various forms of abusive behaviors like corporal punishment, has been associated with DV perpetration even after controlling for the effects of witnessing interparental IPV (Moretti et al., 2006). In a recent study of 88 adolescent-mother dyads who were involved in the juvenile justice system, researchers found that frequency of recent harsh parenting was significantly related to DV perpetration (Jouriles et al., 2012). Harsh parenting was measured by the Corporal Punishment and Psychological Aggression and Severe Physical Assault
subscales of the Parent-Child Conflict Tactics Scale (CTSPC; Straus et al., 1998). The adolescents completed these scales for both their mother and their mother’s partner to assess for overall harsh parenting but were not analyzed separately by gender of parent. Furthermore, additive effects were found for lifetime exposure to severe parental IPV. Another study found that positive parenting practices, as rated by the child’s caregiver, moderated the relationship between witnessing IPV in childhood and experiencing DV as a victim or perpetrator during adolescence (Garrido & Taussig, 2013).

A more controversial form of childhood violence that has been linked to DV outcomes is corporal punishment. Corporal punishment has been thought to be a behavior used by parents qualified as having a harsh parenting style. Harsh and inconsistent discipline methods by one’s parents during childhood have been identified as risk factors for DV perpetration and victimization (Simons, Lin, & Gordon, 1998; Windle & Mrug, 2009). One study found that corporal punishment was positively associated with DV for adolescents, however, results varied by race and socioeconomic status (Foshee, 2005). Research by Simons, Burt and Simons (2008) sampled 760 male undergraduates to examine the effects of harsh corporal punishment in childhood and their use of DV with dating partners. These researchers found that males who experienced harsh corporal punishment were more likely to engage in DV as well as sexual coercion toward their female dating partners. In sum, the use of corporal punishment and other physically abusive behaviors associated with harsh parenting have been identified as risk factors for experiencing DV during adolescence and emerging adulthood.
In addition to finding harsh parenting to be a predictor of DV, Lavoie and colleagues (2002) found insufficient parental monitoring to be predictive of DV experiences among adolescent males ages 16 to 17 years who exhibited anti-social behavior. Parental monitoring in this study was assessed at ages 10 through 12 years by asking two questions, “Do your parents know of your whereabouts when you go out?” and “Do your parents know with whom you are spending time when you go out?” (Lavoie et al., 2002). Furthermore, another study on parenting in relationship to DV perpetration concluded that unskilled parenting, defined as poor monitoring and discipline, was strongly related to males’ aggressive behaviors towards a female dating partner in early adulthood. This association was even stronger than reports of interparental aggression (Capaldi & Clark, 1998). Adequate parental monitoring has also been identified as a protective factor against DV (Howard, Qiu, & Boekeloo, 2003).

Research conducted by Yan and fellow researchers (2010) found that in addition to parental monitoring behaviors, parental academic encouragement and higher levels of family connectedness decreased female’s risk for DV victimization among a sample of Latino adolescents ages 11 to 13 years. Family connectedness, but not academic encouragement, served as a protective factor for victimization among males. Other studies have found that adolescents with highly involved parents were less likely to perpetrate DV against their partner than those whose parents were not as involved in their activities (Miller et al., 2009). Results from a longitudinal study of males from two-parent families beginning in grade 7 and following them through grade 12 showed that low parental involvement and support were associated with adolescent antisocial behaviors, such as delinquency and substance use, which then predicted DV perpetration.
against a female partner (Simons et al., 1998). These findings suggest that family and parenting factors, such as closeness, involvement and support, play an important role in influencing adolescents’ risk for experiencing DV.

Research on childhood maltreatment and poor parenting has also included parental neglect. Neglect may be intentional or unintentional on the part of the parents, but either way they fail to behave in a responsible manner that results in the developmental needs of the child not being appropriately met (Straus & Savage, 2005; Straus et al., 1998). Such behaviors may include, but are not limited to, leaving a child home without supervision, failing to provide adequate meals and not seeking sufficient medical care for a child (Straus et al., 1998). Yet, what constitutes neglect may depend on one’s culture. Data from the International Dating Violence study, which was collected from 6,900 students from 33 universities around the world, found that roughly half of the sample endorsed having experienced one of the eight neglectful behaviors assessed, with males disproportionately affected in comparison to females. This study found cumulative effects for neglect experienced in childhood on perpetrating DV in later adolescence. In other words, the more neglectful behaviors endorsed, the greater one’s risk was for physically assaulting a dating partner (Straus & Savage, 2005). Another study on adolescents and young adults reported that higher levels of neglect were related to increased likelihood for experiencing DV perpetration and victimization (Tyler et al., 2011). These results were subsequently replicated with a sample of homeless young adults (Tyler & Melander, 2012).

Although research on parent-child relationship quality and its association to DV is limited, this research will be reviewed in a separate section below. See A Review of
Studies Examining Parent-child Relationship Quality and DV for a review of the literature on this topic.

Friendships and peer relationships. Relationships with friends and peers during adolescence can also serve as a risk or protective factor for DV. This may be due in part to the fact that friendships play an increasingly important role in the lives of adolescents over the course of development (Connolly et al., 2010). The literature has demonstrated that socializing with violent and antisocial peers is related to an increased risk for DV perpetration and victimization (Lewis & Fremouw, 2001; Vezina & Hebert, 2007).

Williamson and Silverman (2001) reported that college males who associated with peers who advocated violence and perpetrated DV were more likely to perpetrate DV against their female partners. Similar results were found for associating with aggressive or antisocial peers in earlier adolescence for both males and females (Brendgen, Vitaro, Tremblay, & Wanner, 2002; Foshee, Reyes, & Ennett, 2010; Schnurr & Lohman, 2008).

Another study found high-quality friendships, such as those characterized by supportiveness, closeness, and warmth, at age 16 years served as a protective factor for DV perpetration and victimization at age 21 years (Linder & Collins, 2005).

In addition to peers serving as models for violent behaviors through their own actions and attitudes, adolescents have identified peer pressure as a risk factor for DV. More specifically, a qualitative study of middle school youth’s experiences with dating relationships demonstrated how males and females experienced pressure to conform to traditional yet maladaptive gender norms. Males reported that it was not seen as “manly” to treat their partners too nicely and that they may be teased by both male and female peers for not abiding by masculine gender roles in the context of their dating
relationships. These participants, specifically the males, also reported that being teased by their peers for not engaging in sexual activity would contribute to boys forcing their girlfriends into sexual acts against their wishes or without consent (Noonan & Charles, 2009). Another study showed that experiencing negative peer interactions, such as relational aggression, was related to increased risk for DV among female adolescents (Chiodo et al., 2012). Experiencing sexual harassment from one’s peers has also been identified as a risk factor for DV (Boivin, Lavoie, Hebert, & Gagne, 2011; Chiodo et al., 2012).

Dating and couple relationship. Couple and dating relationship characteristics are among the risk factors at the relationship level. Researchers have identified physical aggression to be stable in adolescent dating relationships (O’Leary & Smith Slep, 2003). Additionally, forms of DV qualified as less severe, including non-physical acts of verbal or emotional abuse, have been identified as risk factors for physical abuse later in the relationship (O’Leary & Smith Slep, 2003; Stith, Smith, Penn, Ward, & Tritt, 2004). These findings are congruent with previously mentioned associations between histories of abuse or victimization and subsequent DV victimization. Lovestyles, as researched by Bookwala, Frieze and Grote (1994), identified manic or obsessive relationship styles as a risk factor for aggression. Manic tendencies in relationships may be associated with attempts to control the partner resulting from issues of jealousy, which has been associated with DV as well (Bookwala et al., 1994; Follingstad, Bradley, Laughlin, & Burke, 1999).

Additionally, couples in abusive or violent relationships report lower levels of relationship satisfaction (Bookwala et al., 1994; Follette & Alexander, 1992).
relationship dissatisfaction may result from or contribute to the use of DV by one’s partner. A study by Orpinas, Hsieh, Song, Holland and Nahapetyan (2013) reported less caring dating relationships were associated with DV victimization and perpetration. Other risk factors for DV use by one’s partner may be characterized by poor/negative communication and controlling or jealous behaviors exhibited in the relationship (Follingstad et al., 1999). Couples engaged in these negative interaction cycles may find it hard to break free from these patterns and thus may escalate into more severe and abusive forms of DV.

Community. Community-level risk factors for DV have been documented in various settings such as schools and neighborhoods. O’Keefe (1998) suggested that adolescents with exposure to violence at school and in the community may be at increased risk for using violence within a dating relationship. Additional research has found that exposure to violence in the community is associated with increased risk for DV perpetration and victimization. For example, Malik and colleagues (1997) reported that exposure to weapons and injury in the community was a strong predictor of DV experience for males and females. Similar to intergenerational transmission of violence accounting for an increased risk for DV experience, these researchers suggested a cross-over effect for exposure to violence in the community and DV (Malik et al., 1997). In other words, the more violence one experiences overall, the more likely they may be to have more accepting attitudes about violence and employ these behaviors in their close relationships.

Research on neighborhood characteristics provides important insight as to factors that may be more frequently associated with DV. Higher rates of DV have been found
among individuals from less cohesive and more dangerous neighborhoods. For example, researchers have reported that victims and perpetrators of DV more often came from neighborhoods with greater levels of poverty and lower levels of collective efficacy, which refers to social cohesion and social control (Jain, Buka, Subramanian, & Molnar, 2010). One study failed to find a significant association between neighborhood violence and DV perpetration; however, this study was comprised of a predominantly rural sample where exposure to community violence may be limited in general given the distance between homes (McNaughton Reyes, Foshee, Bauer, & Ennett, 2011). In addition, school environment may be considered part of an adolescent’s community given the amount of time they spend in this setting. A study of low-income ethnic minority adolescents reported that a lack of school safety increased African-American males’ risk of perpetrating DV when they also had experienced violence in the family of origin (Schnurr & Lohman, 2008). Furthermore, lower school attachment and low neighborhood monitoring have also been identified as risk factors for DV (Banyard et al., 2006). It is important to note that poorer school quality and unsafe school atmospheres may be reflective of more socio-economically disadvantaged neighborhoods overall. Thus, dangerous community settings, including both neighborhoods and schools, have been linked to greater risk for experiencing DV.

**Societal.** The fourth level of the socio-ecological model identifies societal-level factors that contribute to violence, including societal and cultural norms as well as systemic policies that may lead to inequalities between groups (Krug et al., 2002; World Health Organization, 2010). Attitudes and beliefs regarding gender roles more broadly are included here and individual variations in attitudes have been previously discussed
Furthermore, one researcher stated “…[p]articular cultural beliefs about gender roles may influence knowledge, attitudes, and norms about dating violence” (Yan et al., 2009, p.824). Such factors are more difficult to measure on a societal level and tend to be discussed more theoretically or measured at the individual level. Cultural norms and societal practices often lead to systematic discrimination of certain groups, such as racial/ethnic minorities, despite overt policies forbidding this. For example, researchers have explored how racism and other forms of discrimination sustain the intergenerational transmission of violence among underprivileged groups (Henry & Zeytinoglu, 2012). While these concepts are more difficult to measure, they are important to acknowledge when discussing DV among adolescents and emerging adults nonetheless.

Studies of DV often focus on risk and protective factors, but rarely focus on national policies regarding this public health problem. Due to variations in the definition, policies on DV tend to vary state to state. A recent study focused on DV policies in the United States and found that, overall, they are not very comprehensive. State policies were graded similarly to the educational system’s grading system, ranging A- F, by experts from Break the Cycle, a national nonprofit organization focused on ending DV (Break the Cycle, 2012). Over one-fifth of the states received a grade of an “F” with regards to their policies. They found that states with grades of “F” had the highest rates of DV at 13% whereas “A” states had rates of only 10%. However, it is important to note that states graded as “D” had the lowest prevalence rates at 8.75%, and the differences between the grades levels were not statistically significant. They also found a positive trend between higher grades on state policies and median household income (Hoefer,
Black, & Salehin, 2012). Furthermore, this study highlights the need for more comprehensive and standard policies for DV nationwide and more research on the effectiveness of such policies.

A Review of Studies Examining Parent-child Relationship Quality and DV

Within the past decade, researchers have started to focus more on parenting practices and family of origin characteristics in relation to DV experiences. As discussed above, research in this area has primarily focused on witnessing or experiencing violence in the family of origin, like childhood maltreatment, interparental conflict, as well as parenting styles and parenting practices such as involvement, use of discipline and monitoring behaviors. These studies tend to focus more on behavioral factors of parenting as opposed to relational quality and attachment. They often rely on the self-report of the parent or caregiver with regards to their parenting practices, which is an additional limitation. Furthermore, developmental psychologists and violence prevention researchers have begun to highlight the importance of exploring parent-child relationship factors, also sometimes referred to as attachment, in association to child development outcomes. For example, research on child development has demonstrated a positive effect of parent-child attachment on outcomes such as brain development, mental health outcomes, emotional intelligence, educational outcomes and school performance. (Alegre, 2012; Coleman, 2003; Orthner et al., 2009; Pace, Cacioppo, & Schimmenti, 2012; Priddis & Howieson, 2010). Much of this research is focused on infancy and early childhood outcomes, however. Yet, we now know that the quality of parent-child relationships can affect a child’s growth and success across a variety of domains.
As of late, researchers have begun to examine parent-child relationship quality in regards to mental health outcomes and externalizing behaviors (Brook, Lee, Finch, & Brown, 2012). For example, one study found among a sample of Dutch adolescents and their parents that the quality of their relationships predicted depression symptoms for both males and females. Results of this longitudinal study demonstrated that adolescents who had lower quality perceived parent-child relationships reported more symptoms of depression, and that changes over time were correlated with parent-child relationship quality. While perceived quality of relationship with mothers predicted outcomes for both males and females, perceived quality of relationship with fathers predicted outcomes for males only. As we saw with witnessing interparental violence, the effects on the children depends on the gender of the parent (Branje, Hale, Frijns, & Meeus, 2010). Additionally, researchers examining alcohol use among adolescents suggested that children with higher quality relationships to their parents had lower levels of reported alcohol use over time and that promoting healthy parent-child relationships is important step in prevention efforts (Kuntsche, Vorst, & Engels, 2009). Research conducted by Raudino, Fergusson and Horwood (2013) further suggested modest relationships between parent-child relationships, defined as bonding and attachment, in adolescence and psychosocial functioning in later adulthood. Moreover, strong and positive parent-child relationships may serve as a protective factor for mental health outcomes.

The literature on parent-child relationship quality and DV outcomes will now be reviewed, highlighting areas of discrepancy and limitations. In examining parent-child relationship quality, researchers often examined concepts related to attachment. For example, Chapple (2003) aimed to examine the intergenerational transmission of
violence by examining parental control, which was operationalized as parental attachment and parental monitoring. Parental attachment in this study was measured by six items assessing the affective component of the parent-child bond in terms of affection, caring and mutual respect. Regardless of witnessing inter-parental violence in childhood, results from this study suggested that individuals with higher levels of attachment had a lower perceived likelihood of engaging in DV, but that actual behaviors were not significantly affected by parental attachment (Chapple, 2003). Another study explored attachment styles of couples in dating relationships using an undergraduate sample. Results from this study supported previous research on attachment such that males with anxious attachment styles were significantly more likely to perpetrate physical violence against their partners. However, anxious attachment was not a significant predictor of victimization for males and females or perpetration for females alone (Rapoza & Baker, 2008).

Numerous other studies have found associations between attachment styles, specifically insecure styles of attachment such as anxious and avoidant, and increased risk for perpetration and victimization of DV (Follingstad, Bradley, Helff, & Laughlin, 2002; Grych & Kinsfogel, 2010; McDermott & Lopez, 2013; Weiss, MacMullin, Waechter, & Wekerle, 2011). However, these studies often fail to separate out attachment to mother and father and typically assume the mother to be the primary caregiver for attachment research. Furthermore, attachment alone may not provide insight as to how the adult children view their relationship with their parents at present the way that assessing their perceptions of relationship quality could. Assessing adolescents’ perceptions of the quality of their relationship with their parents through
self-report allows for a more direct assessment of their feelings and thoughts about each parental figure in a way that may not be captured in attachment. Another study explored the relationship between domestic violence between one’s parents and subsequent attachment, but did not assess DV outcomes for the child later in the life (Sternberg, Lamb, Guterman, Abbott, & Dawud-Noursi, 2005).

In addition, a study by Maas and colleagues (2010) examined the childhood predictors associated with adolescent DV victimization and found parent-child bonding to be a protective factor against victimization during adolescence for both males and females. However, their scale of bonding was comprised of only 6 items and no other assessment of the parent-child relationship was collected (Maas et al., 2010). Another study on Latinos between the ages of 11 and 13 years old assessed family connectedness, conceptualized as closeness and companionship, through three questions and found it to also be a protective factor against victimization (Yan et al., 2010). Furthermore, other researchers (Cleveland et al., 2003) assessed parent-child relationship separately for mother and father with four questions regarding closeness, communication, and warmth. Mother-child relationship was associated with a higher risk of being abused for females only. This study assessed only male-to-female physical abuse and failed to measure exposure to violence in the family of origin (Cleveland et al., 2003). These studies suggest that the quality of parent-child relationships can help predict DV experience but may be limited in their conclusions due to insufficient assessment of the parent-child relationship quality or lack of control variables.

Another aspect of parent-child relationships that researchers have measured as an indicator of the quality of these relationships is parental support. Results of one study on
male perpetrated DV found no direct effects of low parental trust and support as rated by the participants but did find that lack of support was associated more broadly with antisocial behaviors which in turn predicted DV (Simons, Burt, & Simons, 2008). Additionally, low maternal closeness and support has been linked to low self-esteem, which has been demonstrated to mediate the relationship to DV victimization in adolescence (Pflieger & Vazsonyi, 2006). High levels of support from one’s parents has also been linked to decreased risk for externalizing and risky behaviors for adolescents (Ryan, Jorm, & Lubman, 2010). Thus, parental support is an important parenting factor to assess when examining risk and protective factors for DV experience.

The literature demonstrates much agreement for parental warmth as a measure of relationship quality and low levels of such have been identified as a risk factor for maladaptive outcomes among adolescents (Brook et al., 2012; Gray & Steinberg, 1999; Rodgers & McGuire, 2012; Tyler & Melander, 2012; White & Renk, 2012). In a recent study on poor parenting and DV among adolescents, parental warmth was evaluated as a predictor of DV victimization and perpetration. Results suggested that low ratings of parental warmth were associated with increased risk of DV perpetration and victimization. However, their factor of parental warmth consisted of only 6 items and no other parent-child relationship factors were measured (Tyler et al., 2011). These results are consistent with findings from other studies on low parental warmth as a risk factor for DV. Researchers have suggested that interventions aimed at strengthening the parent-child relationship may help decrease adolescent’s negative outcomes (Brook et al., 2012).

Additional studies have measured more negative aspects of parent-child relationship quality in regards to DV risk. For example, in a longitudinal study of DV
predictors, Chiodo and others (2012) assessed perceived parental rejection among a sample of high school females. They found that females who perceived their parents to be rejecting were more likely to be involved in violent relationships in the future (Chiodo et al., 2012). Another longitudinal study found similar results; negative interactions with parents at age 13 years, such as interactions characterized by hostility and conflict, were predictive of DV victimization at age 21 years (Linder & Collins, 2005). Additionally, one study found poorer relationships with one’s parents significantly predicted using relational aggression in college students’ romantic relationships, but this study did not look at other forms of aggression (Linder, Crick, & Collins, 2002). Thus, both negative and positive attributes of parent-child relationships have been demonstrated as predictors of DV experiences among adolescents and are important factors to consider in prevention research. A 12-year-long longitudinal study which aimed to examine childhood and early adolescent predictors of DV in later adolescence included measures of parenting punishment and parent-child relationship quality as predictors in their study; however, harsh punishment and relationship quality were reported only by the caregivers and researchers did not assess the child’s perspective on the relationship. Further, neither of these predictors were found to be significantly related to DV victimization in later adolescence (Makin-Byrd, Bierman, & Conduct Problems Prevention Research Group, 2013). Studies which account for the perspective of the child/adolescent in assessing the quality of the parent-child relationship are needed.

Furthermore, studies examining parent-child relationship factors in relation to DV experience are limited in scope and sample diversity. For example, one study looked at three aspects of parent-youth relationship characteristics, including risk behavior
communication, closeness/respect, and rules/monitoring, with regards to controlling dating attitudes and self-reported substance use. This study did not, however, assess actual DV behaviors or experiences nor did it collect data on race or ethnicity of the participants. Findings from this study showed that risk behavior communication was not associated to controlling dating attitudes and that “… quality of the parent–child relationship, rather than communication about risk behaviors, was associated with healthy behaviors in the current sample” (Tharp & Noonan, 2012). Other studies measuring parent-child relationship quality have lacked comprehensiveness with their assessment of relationship quality. For example, Harrist and Ainslie (1998) explored mother-child and father-child relationship status with an item which asked parents to rate on a 5-point Likert scale “… the word that you feel best describes your child’s relationships with each of your family members” (p. 147). Similar single-item assessments of parent-child relationship quality as rated by the parents have been used in other studies as well (Lauterbach et al., 2007). Studies with more comprehensive measures of parent-child relationships are often lacking because they exclude participants of a certain gender, such as one study which used a measure assessing 13 different features of parent-child relationship quality but only assessed it only for mothers, not fathers (Reidler & Swenson, 2012). Focusing on the relationship between mothers and their children and the exclusion of fathers is a major limitation in the literature on DV and family-related factors (Stover & Morgos, 2013). Additional research is needed to elucidate the family factors that are associated with DV among diverse populations. This knowledge can serve as the foundation for more appropriate prevention and intervention services.
Perception versus behaviors. Studies tend to vary with regards to the method used to assess parent-child relationship quality. Some researchers have used observations and rated parent-child interactions using a standardized coding scheme, while others have asked the parents to give a rating of their relationship using a Likert rating scale (Aspland & Gardner, 2003; Tharp & Noonan, 2012). Some researchers may choose to obtain self-reports from mothers or parents, while others may directly ask the child about their perceptions. Of course, the results obtained depend on who you ask about the relationship and the preferred method depends on the research aims. This study aims to collect adolescents’ perceptions of the quality of their relationship with their parents, which other researchers have suggested to be a good method. For example, researchers have stated:

…when working to understand how individual and family functioning across domains is related to youth internalizing adjustment, these and prior findings suggest that it is important to understand the particular informant’s perceptions of functioning as these may be most relevant to understanding the informant’s unique perspective on the child’s internalizing adjustment. (Reidler & Swenson, 2012).

Another study adds support for using perceived parent-child relationship quality as reported by adolescents in their study of depressive symptoms. Branje and others (2010) found that relationship quality with mothers as reported by the adolescent participants predicted depressive symptoms for boys and girls. However, the quality of the relationship with fathers was predictive of depressive symptoms for boys only, not girls.
Moreover, research on discrepancies in child reports in comparison to parent reports of both relationship quality and child problem behavior outcomes have shown that the self-reported outcomes tended to align with the perceptions of relationship quality based on the respondent. For example, even if a parent rated their relationship with their child as very positive, if the child rated it more negatively then that would be associated with more negative youth outcomes, and visa versa. However, if the child perceived their relationship with the parent (mother) positively then they reported less internalizing distress regardless of their mother’s rating (Reidler & Swenson, 2012). Thus, discrepancies in reports on relationship quality may be indicative of relationship conflict or lack of cohesion. It is also important to note that cultural meanings about parenting must be considered. How parents’ behaviors are perceived by their child depends on the cultural context (Foshee, 2005). In examining dating violence outcomes, which only the child may know the truth about, I am only interested in measuring the adult-child’s perception of the parent-child relationship, not the parents’, and this method has been found to be effective by previous researchers.

Research in other areas of the social and behavioral sciences have highlighted the value of assessing perceptions through self-report as opposed to more objective measures of a given phenomenon. One example of this is perceived discrimination defined as the “subjective experience of being treated unfairly relative to others in everyday experiences” (Flores et al., 2008). It is our subjective interpretation of life experiences that comprise our inner reality and thus matter the most with regards to how we feel and internalize events. Still, researchers have compared subjective ratings with objective ratings to see how they compared. For example, one study examined the relationship
between perceptions of experiencing racial discrimination and peer nominations of being racially victimized and found a strong positive relationship, demonstrating congruence between self-perceptions of an experience and others’ perceptions of the experience (Seaton, Neblett, Cole, & Prinstein, 2012).

**Theoretical Models of Dating Violence**

Several different theories have emerged with regards to DV and the intergenerational transmission of violence in families. These theories imply that DV occurs in adolescents’ and emerging adults’ dating relationships as a consequence of experiences in the family of origin, but that the ways in which the family of origin contributes to DV experiences differ. The two most popular theories in the field of DV, social learning theory and attachment theory, will now be discussed.

**Social learning theory.** Albert Bandura’s (1978) social learning theory posits that aggressive behaviors are learned behaviors as opposed to natural instincts or drives, and that children learn to behave aggressively through observations of other people’s aggressive behaviors. Aggressive and violent behaviors are learned through modeling, and parents serve as models of behavior for their children in early life. Children who observe interparental conflict and violence or experience it firsthand from their parents are more likely to then exhibit similar behaviors in their own relationships, including romantic relationships (Bandura, 1978). As previously reviewed, substantial research exists in support of family of origin violence as a key risk factor for DV later in life. To date, social learning theory is one of the most widely researched theories in the area of DV and is most commonly used as the foundation for research studies examining the transmission of DV to today’s youth (Brendgen et al., 2002; Capaldi & Clark, 1998;
Follingstad et al., 1999; Fritz, Slep, & O’Leary, 2012; Luthra & Gidycz, 2006; Malik et al., 1997; Sellers, Cochran, & Branch, 2005; Simons et al., 1998).

More specifically, Akers’ social learning theory of crime and deviant behaviors has expanded upon this theory as a way of explaining why such behaviors occur (Akers & Jensen, 2006). Akers was among the first to explore social learning theory in regards to DV and found support for this theory in understanding stalking victimization and perpetration as a learned phenomenon (Fox, Nobles, & Akers, 2011). This research also suggests that having parents who use violence increases one’s acceptance of violence and aggression. Furthermore, this theory has been widely accepted in understanding how violence between parents gets passed down to children who then engage in violent relationships of their own. Yet, witnessing or experiencing abuse in childhood is not the only explanation as for why DV is experienced at such high rates among today’s youth. In fact, a number of children who see their parents engage in IPV do not go on to be victims or perpetrators of DV despite this being one of the most commonly cited and investigated risk factors for DV (Kinsfogel & Grych, 2004). It is important to understand what other family characteristics may contribute to the phenomenon of dating violence among adolescence. Further, recently researchers have begun to call attention to this issue and highlight the importance of incorporating other theoretical frameworks into DV prevention research (Exner-Cortens, 2014; O’Leary, Tintle, & Bromet, 2014).

**Attachment theory.** This study is based largely on Bowlby’s and Ainsworth’s attachment theory (Ainsworth & Bowlby, 1991) which posits that parents provide children with a prototype for relationships and these prototypes are the basis for which dating partners are selected by the child later in life. As discussed earlier, there is
research supporting the importance of attachments in understanding DV. Bowlby was instrumental in formulating the basic tenants of attachment theory and Ainsworth served the important role of taking this theory and using it to guide scientific research (1991). Both have highlighted the role of early attachment, often specifically a child’s attachment to the mother, in child development. Furthermore, children’s early attachment to their parents sets up their internal working models (IWMs), which play a large role in later psychological and interpersonal functioning. Internal working models are like templates for relationships; they are thought to be a mental framework for experiencing and understanding the self, others, and world based on these early attachments with caregivers. It is suggested that children who form healthy attachments to caregivers/parents in early childhood will be able to form healthy relationships as adults, and those who fail to form healthy attachments will experience difficulty with relationships in adulthood (Bowlby, 1978). Attachment is not objective or observable, but rather a subconscious, internal process that is subjective. Attachment theory goes beyond social learning theory to consider how early relational experiences in the family of origin may negatively affect an individual long into adulthood (Schwartz, 2006).

Additionally, attachment is often used to refer to the psychoanalytic term of object relations, which can be used to help understand the role of early attachment in later life. Although the terms are not necessarily synonymous, they connote meanings with regards to attachment. Thus, it is important to address this concept of attachment when talking about parent-child relationships. According to St. Clair and Wigren (2004), “object relations refers to interpersonal relations and suggests the inner residues of past relationships that shape an individual’s current interactions with people” (p.1). With
children, the way they form attachment to their primary caregiver is theorized to set up the ways in which they will attach and interact in significant relationships later in life, repeating the relationship throughout their life. When these early attachments are traumatizing or unstable, the client is assumed to repeat these unhealthy relationships again and again as an attempt of achieving mastery (Prior, 1996). The parent is thought to be internalized by the child and provide the “building blocks” for their later interactions and relationships as well as units of the self (Blum, 2010). Attaching to and internalizing a healthy, stable parent will allow the child to master their own internal processes such as differentiation and self-soothing, and form later healthy and mutual attachments to others without repeating unconscious patterns. Failure to form healthy attachments in childhood has been shown to lead to behavioral, emotional, psychological problems in adolescence and adulthood (Dunham, Dermer, & Carlson, 2011). Thus, children who experience unhealthy attachments during childhood are at increased risk of repeating unhealthy relationship patterns in adulthood. In addition to social learning theories and other theories on DV, attachment theory may provide an understanding for the rates at high DV is transmitted across generations.

It is important to acknowledge the numerous limitations of attachment theory for use of this theory as a framework in present-day research. Historically, attachment theories have focused on the bond between the mother-child dyad and made assumptions as to what constitutes “normal” behavior based on White, Western mainstream culture. Given that families in America are increasingly diverse as evidenced by the rise in the number of families from various ethnic and racial backgrounds, legalization of same-sex marriages, and changing family structures due to increased rates of single-parent homes,
divorce, and, births outside of marriage, it is important to take into account multicultural considerations for understanding attachment and child development. Studies on collectivistic cultures highlight the importance of children forming relationships with extended family members for healthy development as opposed to focusing on one relationship (i.e. mother) as the most important attachment (Brown, Hawkins-Rodgers, & Kapadia, 2008). Even in Western American culture there has been a shift away from children’s reliance on one primary caregiver onto several caregivers or even an extended family network. This is consistent with the decreasing rates of stay-at-home mothers, which means that children are often being cared for more by fathers or other adults, including non-relative adults, who may serve as an important attachment figure for the child (Brown et al., 2008; Vespa et al., 2013). While a comprehensive review of the limitations of attachment theory is out of the scope of this dissertation and can be found elsewhere (Brown et al., 2008), it is important to acknowledge these factors and take them into consideration when examining parent-child relationships, which is the focus of the present study. An overarching theme across attachment theories is that children need to form healthy relationships early on and have positive, supportive attachments over the course of their development in order to develop and sustain healthy relationships in adulthood.

Conceptual Framework

Previous research on DV has shown that experiences in the family of origin play an important role in affecting one’s risk for victimization or perpetration later in life. The two most popular theories often cited to account for these findings are social learning theory and attachment theory. While previous research has predominantly utilized a
social learning theory framework, the present study utilizes an attachment theory-based framework for focusing on parent-child relationship quality and the hypothesized relationship to DV experiences in emerging adulthood. In other words, the quality of adult-children’s relationships with their parent(s) may increase or decrease their experiences of violence within their dating relationships. This study proposes a structural equation model (SEM) for testing for the association between the perceived quality of mother-child and father-child relationships and DV victimization and perpetration outcomes. Furthermore, a recent study used a similar SEM for exploring the quality of parent-child relationships in predicting maladaptive outcomes among a sample of adolescents, including depression, anxiety, and substance abuse, but did not assess DV experiences (Raudino et al., 2013).

**Summary of Literature Review**

Adolescence and emerging adulthood are important developmental stages in which dating relationships are increasingly formed (Connolly et al., 2010). This period marks a particularly vulnerable time for experiencing DV, with approximately one in four adolescents reporting violence or abuse from a dating partner (CDC, 2012b; Noonan & Charles, 2009). Recently, violence prevention researchers have examined numerous risk factors for DV in an attempt to gain a better understanding of this phenomenon and more effectively develop prevention strategies (Banyard & Cross, 2008; CDC, 2012b; Vezina & Hebert, 2007). As of late, researchers have begun to investigate family-related factors associated with increased risk for experiencing DV, specifically parenting practices and behaviors (Lewis & Fremouw, 2001; Schwartz, 2006; Vezina & Hebert, 2007). Researchers posit that the relationships of children with their parents often provides the
foundation for forming relationships later on (Bowlby, 1978; Dunham et al., 2011).

However, few studies exist with regards to how the quality of the parent-child relationship may play a role in DV experiences. Of the few studies that have emerged on this topic, they are limited by diversity in scope, design and sample (Cleveland et al., 2003; Ryan et al., 2010; Simons et al., 2008; Yan et al., 2010). Specifically, these studies often assess parent-child relationship quality using a limited measurement of quality, assess only one parent’s, most commonly the mother’s, perceptions of the relationship, exclude fathers altogether, and focus on parenting behaviors or practices as opposed to relationship quality factors.

A recent review of the literature published between 1996 and 2006 on dating violence found that the majority of studies utilizing college samples were comprised of predominately White samples (Williams et al., 2008). Gathering information on DV from a college sample is preferable over examining other adolescent populations, such as high school students, for several reasons. First, these years are when DV is at greatest likelihood to occur and studies have reflected this in their prevalence rates (Silverman et al., 2011). For example, one study of 410 college students found a 47% prevalence rate for some forms of DV (Deal & Wampler, 1986). Also, most people have had some dating experience dating by the time they reach college, which makes them an appropriate sample to study (Carver et al., 2003). However, studies, particularly those using national samples, have typically included only physical and sexual forms of violence in their assessment of DV.

This study aims to build upon the existing research on DV by examining the relationship between perceived quality of parent-child relationships and DV victimization
and/or perpetration among an undergraduate sample of men and women. Researchers have highlighted the importance of family of origin characteristics, specifically parent-child relationships, in increasing one’s risk for DV and have called for more research in this area (Lewis & Fremouw, 2001; Schwartz, 2006; Vezina & Hebert, 2007). It has also been found that positive qualities of parent-child relationships, such as warmth and cohesion, may decrease one’s risk for experiencing DV, while negative qualities may increase one’s risk (Brook et al., 2012; Raudino et al., 2013; Rodgers & McGuire, 2012). Furthermore, previous research suggests attachment to only the mother as opposed to the father may influence the risk of DV experience. Therefore, this study aims to contribute to gaps in the existing literature by utilizing a large, diverse sample to examine the quality of relationships between emerging adults and their mothers and fathers from the adult-child’s perspective as well as the ways these relationships are associated with DV victimization and perpetration experiences. This study will allow participants to report on their relationships with parents or parent-figures, including non-biological individuals who serve in the role of a parent, and include individuals from a range of family structures as opposed to limiting the sample to participants coming from families consisting of two biological married parents. Therefore, the following research questions and hypotheses are offered:

1) **Are the perceived qualities of mother-child relationships associated with DV victimization and/or perpetration in an undergraduate sample of men and women?**

   H1. Perceived quality of mother-child relationships will be negatively associated with DV victimization.
H2. Perceived quality of mother-child relationships will be negatively associated with DV perpetration.

2) Are the perceived qualities of father-child relationships associated with DV victimization and/or perpetration in an undergraduate sample of men and women?

H3. Perceived quality of father-child relationships will be negatively associated with DV victimization.

H4. Perceived quality of father-child relationships will be negatively associated with DV perpetration.

3) Are the perceived qualities of both mother-child relationships and father-child relationships associated with dating DV victimization and/or perpetration in an undergraduate sample of men and women?

H5. Perceived quality of both mother-child relationships and father-child relationships will be negatively associated with DV victimization.

H6. Perceived quality of both mother-child relationships and father-child relationships will be negatively associated with DV perpetration.
CHAPTER THREE:

METHODS

This chapter provides an overview of the study’s methodology. First, I briefly describe the study participants based on inclusion criteria. Then, the measures and variables of interest are described with a report of measures’ psychometric properties. The study procedures are described in detail followed by data analysis.

Participants

Participants were 454 students recruited from three different undergraduate institutions in the United States. As per the inclusion criteria, study participants were fluent in English, between the ages of 18 and 25 years, enrolled in an undergraduate institution in the United States, had had at least one dating relationship in the past year, and were willing to answers questions about their dating relationships as well as their relationships with their parents. Participant characteristics are summarized in Table 1.

Measures

The following section outlines the measures used in this study. Each of the study measures can be found in Appendices A through E. A measure of internal consistency (Cronbach’s alphas) as a reliability coefficient for each measure used in this study as well as previous research are in Table 2.

Demographic questionnaire. Demographic information was collected using a short questionnaire (shown in Appendix A), asking university or college of attendance, year in school, age, gender identity, racial/ethnic identity, sexual orientation, country of origin, primary language, and military service. Additional questions regarding dating relationship status and history included current relationship status, number of dating
partners in the past year as well as total number of dating partners in their lifetime. Participants were asked to respond “Yes” or “No” to the following statements “I have had at least 1 dating partner in the past year AND I am willing to answer questions about this/these dating relationships” to be eligible for this study. Subsequently, they were asked to answer the question: “In the past year, how many dating/romantic relationships have you had?” Given the subjectivity of what people consider a dating partner, participants were allowed to decide for themselves if they identified individuals as past dating partners and were asked to report those numbers in this study. For family background, participants were asked about parents’ marital status, number of siblings, and the structure of their family living in the home while growing up. Participants were asked to identify their relationship to the individual who served in the role as their mother-figure and father-figure (i.e. biological mother, adoptive mother, step-mother, aunt, etc.). Specifically, they were provided with instructions stating: “Some of the questions ask about your mother or the person who has acted as your mother. If you have more than one person acting as your mother (e.g. a biological mother and a step-mother) answer the questions for the one you feel has most influenced you. Please refer to this same person when responding to questions about your mother through the survey.” Parallel instructions were provided for the questions about fathers. Also, family’s socio-economic status was assessed through questions regarding family’s annual income and parents’ education and occupations.

**Dating violence.** Participants were asked to report on their experiences of DV as a victim and/or a perpetrator. The most popular measure of DV, the Revised Conflict Tactics Scale (CTS2; Straus et al., 1996), was used to gather information about physical
and non-physical forms of aggression or violence. This measure is comprised of a total of 78 items, with parallel scales for victimization and perpetration, each containing 39 questions. Four of the five subscales (66 items) were employed in this study, including Psychological Aggression (16 items), Physical Assault (24 items), Injury (12 items) and Sexual Coercion (14 items). The fifth subscale of CTS2 entitled Negation (12 items) assesses behaviors or actions taken to settle a conflict through communication with the other partner as well as positive affect shared in the relationship. Examples of negotiation as per this measure would be explaining one’s side of an argument or respecting the other partner’s feelings. This subscale was excluded because it does not assess DV behaviors directly, which was the aim of this study (Straus et al., 1996).

To complete the CTS2, participants were asked to rate each statement of the included subscales by responding to the question: “How often did this happen in the past year?” Each statement could be answered by selecting a rating on an eight-point Likert scale as follows: “0 = Never,” “1 = Once in the past year,” “2 = Twice in the past year,” “3 = 3-5 times in the past year,” “4 = 6-10 times in the past year,” “5 = 11-20 times in the past year,” “6 = More than 20 times,” and “7 = Not in the past year, but it has happened before” which assesses for lifetime occurrence. The questions were asked in pairs, with parallel items for the respondent’s perpetration and victimization experiences. An example of the item pairs is as follows: “I insulted or swore at my partner” and “My partner insulted or swore at me.” The CTS2 can be scored in various ways depending on the need or aim for use, with the most common methods including calculating subscale scores for prevalence, chronicity, annual frequency, or severity scoring. The author of this instrument has cited a number of limitations for each scoring method when used in
research versus clinical settings (Straus, 2001; 2006). The prevalence method is the most frequently used and consists of creating a dichotomous version for each item where there is a score of 1 if there is a response of 1, 2, 3, 4, 5, or 6 is given. Items marked as 0 or 7 are scored as 0. The prevalence of each item is then computed. Researchers have the option to examine the prevalence of each item or calculate if any item has been endorsed on each subscale and report the prevalence for the subscale. One obvious limitation of this method is that we lose information regarding how many acts of violence were used, how often, or how severe. Further, the chronicity scoring allows participants to report how often each type of violence happened in the past year using the specified scale. Responses of 0 or 7 are coded as 0 and remaining values of each item are summed for the corresponding subscale. For annual frequency scoring, item responses of 1 through 6 are recoded or weighted to the midpoints of each response option. This method is not recommended in research because it often leads to extreme skewness. For example, a response of 5 is coded to 15, which is the assumed midpoint. Lastly, severity scoring recodes the data into two categories, minor and severe forms of violence (Straus, 2001; 2006).

For purposes of this study, the annual prevalence rates were used to provide descriptive information while continuous chronicity scores were used for the main analyses. Specifically, non-weighted chronicity scores were used in the main analyses to reflect as much information about the DV acts as possible while attempting to minimize the amount of skewness in the data caused by the process of recoding used in the annual frequency method. These chronicity scores were obtained by summing the values of each item for the respective subscales resulting in self-to-partner (perpetration) and partner-to-
self (victimization) DV scores. Thus, higher scores reflect more reports of DV acts along each respective subscale and lower scores reflect lower reports of DV acts.

This scale has been used with college samples and has strong evidence of validity and reliability in numerous studies and samples, including cross-cultural samples of men and women (e.g., Straus et al., 1996; Straus, 2004). In a sample of over 7,000 college students, the subscales were found to have acceptable reliability as follows: Psychological Aggression $\alpha = .74$, Physical Assault $\alpha = 0.88$, Injury $\alpha = 0.89$, Negotiation $\alpha = .88$, and Sexual Coercion $\alpha = .82$ (Straus et al., 1996; Straus, 2004). In the current study, Cronbach’s alpha for the subscales were: Psychological Aggression $\alpha = .89$, Physical Assault $\alpha = .89$, Injury $\alpha = .92$, and Sexual Coercion $\alpha = .81$. The combined scale for Physical Assault and Injury was also acceptable, $\alpha = .92$.

**Parent-child relationship quality.** The quality of participants’ relationships with both their mother (or mother-figure) and father (or father-figure), if applicable, were assessed using two measures.

**Parental Bonding Instrument.** The PBI (Parker et al., 1979) is a 25-item self-report measure of parenting attitudes and behaviors during the first 16 years of one’s life. It is the most widely used measure of emotional bonding between a parent and child (Gladstone & Parker, 2005). This scale was originally developed to examine associations of the parent-child relationships with psychopathology outcomes and maladjustment. Respondents are asked to rate on a 4-point Likert scale the degree to which statements reflect experiences while being cared for by their parents or primary caregivers, including “3 = Very like,” “2 = Moderately like,” “1 = Moderately unlike,” and “0 = Very unlike.” Participants are asked to complete parallel scales which contain the same 25 items for
their mother and father. There are two factors, Care and Over-protection, assessed by this measure; for this study only questions corresponding with the Care factor were asked. Previous studies have demonstrated the factors of Maternal Care and Paternal Care to have good reliability ($\alpha = .89$ and $\alpha = .91$, respectively) and validity (Gladstone & Parker, 2005; Parker, 1990; Raudino et al., 2013). Example items from the PBI Care subscale include “My mother was affectionate toward me” and “My father spoke to me in a warm and friendly voice.” Overall scores on the Care dimension were calculated by summing items pertaining to this subscale to indicate parent-child bond, with higher scores representing better care and closer bonding. This measure has been used with a sample of college men to explore parenting in relationship to DV (Barnes, Greenwood, & Sommer, 1991). No other known studies have used this measure as an indicator of parent-child relationship quality with regards to DV outcomes. In the current study, Cronbach’s alpha was .93 for the Mother scale and .95 for the Father scale.

**Inventory of Parent and Peer Attachment.** The IPPA (Armsden & Greenberg, 1987) was developed on a sample of college students as a measure of the perceived quality of one’s attachment relationships with their parents and peers. The authors of the IPPA largely based the measure on Bowlby’s attachment theory. This measure is a 25-item self-report measure of adolescents’ relationships with their mother and father. Items are rated on a 5-point Likert scale ranging from “1 = Almost never or never true,” “2 = Not very often true,” “3 = Sometimes true,” “4 = Often true,” “5 = Almost always or always true.” It yields three subscales including Trust (10 items), Communication (9 items) and Alienation (6 items). An example of an item from the IPPA is “My mother/father helps me to understand myself better.” For the current study, participants
completed parallel measures for their mother and father. Overall attachment scores are computed by summing all 25 items for the scale, with higher scores indicating higher levels of attachment. Subscale scores are calculated by taking the simple average of scores on the items pertaining to each subscale then multiplying by the number of items on the subscale. This measure has demonstrated good test-retest reliability and internal reliability in college samples (mother attachment $\alpha = .87$, father attachment $\alpha = .89$; (Armsden & Greenberg, 1987). Cronbach’s alpha for the subscales found in the current study were as follows: Mother attachment $\alpha = .80$ and father attachment $\alpha = .80$. The IPPA has been used in numerous studies as a predictor of adolescent outcomes such as depression, anxiety, and substance abuse (e.g. Raudino et al., 2013). Yet, studies that have previously utilized the IPPA to explore parental attachment as a risk factor for DV among emerging adults have been limited.

**Procedures**

Institutional Review Board (IRB) approval was obtained from the University of Miami Human Subjects Research Office and the Office of Research Integrity at Florida Internal University. The majority of participants were recruited through one university’s online research participation system, known as Sona Systems, and received class credit in exchange for their participation. Such methods have been successfully used in previous dissertation research (Owenz, 2011). The remaining participants were recruited through emails and peer-to-peer referrals. Emails were sent to colleagues and directors of training at local universities encouraging them to distribute the link to the Internet survey to undergraduate students at their institution. Emails were not sent individually to prospective participants by this researcher. Recruitment took place during the Fall
semester of 2013. Participants completed the study between the months of September and October 2013. The study remained active online until the total number of participants needed to obtain the estimated sample size was surpassed and then it was closed.

The measures were compiled using Qualtrics Survey Research Suite, a cloud-based web survey tool provided to researchers at the University of Miami. The survey was made available online so that participants may access it at a time and place that was convenient for them. Each participant completed the study at one time point. The Internet survey provided participants with an electronic consent form that detailed the purpose, design, inclusion and exclusion criteria, potential risks and benefits, confidentiality, and compensation for the research study. They were made aware of the voluntary nature of the study and informed that they could withdraw at any time without penalty. Potential participants who electronically consented to participate in the study by indicating that they understood this information and were willing to participate were then directed to five screening questions, which asked “yes” or “no” questions to determine if they met criteria necessary for inclusion. Criteria for eligibility included being fluent in English, aged 18 to 25 years, enrollment in any undergraduate institution in the U.S., having had at least one romantic relationship in the past year, and willingness to answer questions about romantic relationships as well as their relationships with parents. Those who were eligible, as determined by responding “yes” to all of the screening questions, were then directed to the online survey for completion. Those who answered “no” to one or more questions were directed to a separate site that thanked for their time and informed of their ineligibility. Before and after completing the online survey,
participants were provided with a list of national and local dating violence and mental health resources. They were also provided with contact information for this researcher as well as the University of Miami Human Subjects Research Office should they have needed additional resources or have questions regarding the study. Although the study was anonymous by design, participants were asked to complete their name, student ID number, and email address so that students participating through their university’s online research participation system could be awarded 1 class credit for their time. Students recruited from the institutions not offering course credit were offered the opportunity to be entered for a drawing to win one $50 gift card for completing the online survey by providing their email addresses. Following closure of the study, one participant was selected at random and sent an online gift certificate via email.

**Data Analysis Plan**

Preliminary statistical analyses were performed using IBM SPSS Statistics 21 (IBM Corp., Armonk, NY, 2012). The primary hypotheses were tested using SEM, which was conducted using Mplus 7.1 (Muthén & Muthén, 2012).

**Structural equation modeling.** The underlying assumptions for SEM were investigated as recommended by Kline (2011). These included checking for outliers, examining missing data, and checking the reliability of measures, normality, multicollinearity, and homoscedasticity. To identify multivariate outliers, Mahalanobis distance was examined and cases with a probability less than or equal to .001 were identified as outliers. Fourteen statistically significant outliers were detected and they were evaluated individually. Six of the cases fell within three standard deviations of the means for the subscale scores of the CTS2 and were kept for analyses. Further, it is not
uncommon for a small percentage of research participants to endorse more severe experiences of DV (e.g. Wolitzky-Taylor et al., 2008) and thus the remaining eight cases were found to have more extreme scores on the physical assault and sexual coercion victimization and perpetration subscales of the CTS2, but were determined to be theoretically important and kept for analyses. Missing data was checked for patterns by examining each subject individually and calculating prevalence of missing data for each item of the subscales. The number of responses missing for any one item from all of the subscales ranged from 0 to 7 (out of 454; 0.0% to 1.5%) with an average of 2.44 (0.5%) missing responses per item. Thus, there was no apparent bias in missing data and it was determined to be Missing at Random (MAR) or due to participant error. Missing data was handled using the Full-Information Maximum Likelihood (FIML) method, which is the preferred method when missing pattern is considered to be MAR (Kline, 2011). FIML reduces bias, which may be introduced by deleting cases with missing data.

All of the scales were found to have good reliability as determined by calculating the Cronbach’s alpha as a measure of an internal consistency (see Table 2). Additionally, skewness and kurtosis values for each variable were calculated to check for normality. As per Kline (2011), values for skew must fall below 3.00 and for kurtosis must fall below 10.00 to be acceptable. Values on the PBI and IPPA subscales were determined to fall within standard tolerance levels for skewness and kurtosis. However, the values of skewness and kurtosis for the subscales of the CTS2 indicated the violation of the normality assumption; therefore, a square root transformation was used for analyses. This transformation was effective in reducing the skewness of the data to an acceptable level and has been used successfully in other studies when addressing issues of skewness for
versions of this measure (Gonzalez-Guarda, McCabe, Florom-Smith, Cianelli, & Peragallo, 2011). Further, the CTS2 has been found to have extreme skewness in community samples when used in research (Straus, 2006). Bivariate scatter plots between the relative variances of the observed variables were visually inspected to assess for homoscedasticity and distributions appeared acceptable. Pearson correlations for all study variables were conducted and are in Table 3.

Prior to testing the six hypothesized structural regression models, measurement models for the latent variables mother-child relationship quality and father-child relationship quality were tested for model fit. Specifically, subscales from the PBI and IPPA were used as indicators for the parent-child relationship quality latent variables. The measurement model for mother-child relationship quality specified the Maternal Care subscale score of the PBI and the subscale scores for Alienation, Communication, and Trust from the Mother version of the IPPA as indicators of the latent variable. Similarly, the Paternal Care, Alienation, Communication, and Trust subscale scores were used as indicators for the father-child relationship quality latent variable. Measurement models for the latent variables DV victimization and DV perpetration were also examined prior to running analyses. The outcome variables DV victimization and DV perpetration were latent variables specified by the four subscale chronicity scores of the CTS2. Specifically, the subscales included Psychological Aggression, Physical Assault, Injury, and Sexual Coercion. Due to low rates of endorsement on the Physical Assault and Injury subscales, these scales were combined and used together as an observed variable in the model. All measurement models were assessed for model fit and the loadings of the indicators on the latent variables were examined. Kline (2011) provides the guideline
that standardized coefficients should be .40 or higher to be considered a good indicator. All of the indicators were retained for their respective measurement models because the scores were above this cutoff criterion.

Next, the measurement models specified above which used subscale scores were incorporated into the hypothesized structural equation models and tested for model fit. Goodness of model fit for all structural models was assessed by the following indices and corresponding cutoff scores: The root mean square error of approximation value (RMSEA; good < .06), standardized root mean squared residual (SRMR; good < .08), and comparative fit index (CFI; good > .95). The values used as cutoff criterion for each of these fit indices were based on recommendations by Kline (2011) and Hu and Bentler (1999) for SEM. Chi-square tests of model fit were not evaluated because this statistic is sensitive to large sample sizes, as used in the present study, and will almost always be significant with samples this large (Kline, 2011). Therefore, other measures of model fit are preferred when analyzing large sample sizes and are reported. For evaluation of standardized path coefficients in the structural models, cutoff criterion for effect sizes were based on Kline’s (2011) suggestions, with .10 interpreted as small, .30 as medium, and .50 as large. Correlations were estimated between latent variables DV victimization and DV perpetration as well as between latent variables mother-child relationship quality and father-child relationship quality. Correlations for the residual variances of the indicators were also calculated and are described below. Lastly, two separate nested model comparisons were performed based on likelihood ratio tests of difference in the chi-squared values to compare both the first model (simpler model), which examined only mother-child relationship quality, and the second model, which examined only
father-child relationship quality model, with the third, most complex model, which included both of these latent variables. In other words, the model for the first hypothesis was nested within the model for the third hypothesis, as was the second model, and likelihood ratio tests of difference in the chi-squared values were used to assess whether the information provided by the results of the third model was significantly different.

**Covariates.** Before testing this study’s hypotheses, theoretically important control variables were identified and tested for mean differences on CTS2 subscales using $t$-tests. Control variables were identified for use in this study based on the previous literature. The control variables, otherwise known as covariates in SEM, identified for use were gender, country of birth, racial/ethnic identity, sexual orientation, and family structure. For gender, participants were dummy-coded with male serving as the reference group. Participants were dummy-coded for country of birth, also, and individuals who identified as being born outside of the USA (also referred to here as foreign-born) were the reference group. Dummy coding was used for racial/ethnic identity by creating two groups, Hispanics and all other non-Hispanic individuals, and Hispanics were the reference group. Racial/ethnic categories were divided into these two groups due to the low number of participants in the other racial/ethnic categories who participated in this study (for example, only 13 out of 454 people reported Asian or Asian-American as their racial/ethnic identity). Participants were also dummy coded based on sexual orientation for similar reasons and individuals who identified as heterosexual were the reference group. Lastly, participants were dummy coded based on family composition given the low number in the non-traditional family composition sub-categories. Traditional family composition was the reference group for analyses. Prior to conducting the main analyses,
the covariates were examined using independent $t$-tests to assess mean differences in the continuous DV outcome variables by these dummy-coded participant characteristics. This exploration was also used to determine which covariates would be included in the final structural models and are described in more detail below. For covariates that were included in the structural models, chi-square tests were conducted to further compare the past year prevalence rates of DV victimization and perpetration by the grouping variables. It is important to note that the chi-square tests utilized the dichotomous prevalence rates values while the mean comparisons utilized the continuous mean scores for the subscales.
CHAPTER FOUR:  
RESULTS  

Participant Characteristics  

The majority of participants identified as students from Florida International University ($N = 445$), with the remaining participants coming from the University of Miami in Florida ($n = 3$) and Caldwell College in New Jersey ($n = 6$). Table 1 provides a summary of the demographic characteristics of the study participants. Here I will describe the sample by summarizing demographic characteristics and highlighting majority trends, provide descriptive information for responses in the “other” categories on the demographic form, and acknowledge missing data were applicable.  

All of the participants were between ages 18 to 25 years as endorsed on the screening questions, with 18.7% reporting their age as 18 years, 11.7% as 19 years, 18.5% as 20 years, 18.9% as 21 years, 12.3% as 22 years, 9.3% as 23 years, 4.6% as 24 years, and 5.5% as 25 years (two people did not report their age). Regarding year in school, 19.8% identified as freshman, 11.2% as sophomores, 35.2% juniors, and 32.4% seniors. Three participants identified as “other” (e.g. 5th year senior and 1st official year in college but credit-wise sophomore) and three did not respond about their year in school. The majority of the sample identified as female (87.2%; $n = 396$), Hispanic or Latino/a (66.7%; $n = 303$), and born in the United States (70.7%; $n = 321$). The remaining sample was 11.9% male ($n = 54$; missing = 4), 29.1% not born in the United States ($n = 132$; missing = 1), and reported their racial/ethnic identity as 14.8% Black/African-American ($n = 67$), 2.9% Asian or Asian-American ($n = 13$), 0.2% Pacific Islander ($n = 1$), and 11.0% White non-Hispanic/Caucasian/European-American ($n = 50$).
Eighteen identified their racial or ethnic identity as “other” while two participants chose not to report their racial or ethnic identity. Of those who reported their racial/ethnic identity as “other,” 6 identified as White Hispanic, 3 as Black Hispanic, 2 as multiracial Black and White, 1 as West Indian, 1 as Brazilian, 1 as Haitian, and 3 as multiracial (one did not specify). Participants who reported that they were not born in the United States had lived in the U.S. a period of time ranging from 2 months to 23 years ($M = 12.64$ years, $SD = 5.52$ years). For those born outside of the USA, countries of origin most frequently reported included Cuba ($n = 49$), Venezuela ($n = 13$), Columbia ($n = 10$), and Peru ($n = 6$). Other countries ranged from all over the world, such as Angola, Honduras, Jamaica, and Iran. Almost three-quarters of the participants (73.3%; $n = 333$) identified English as their primary language, while 21.4% of the sample reported Spanish ($n = 97$) and 4.8% endorsed “other” as their primary languages (missing = 2). Examples of primary languages reported as “other” included Portuguese ($n = 4$), Russian ($n = 2$), French ($n = 1$), and Tagalog ($n = 1$). The majority of the sample identified their sexual orientation as straight/heterosexual (91.2%; $n = 414$). Of the remaining participants, sexual orientation was reported as follows: 4.4% bisexual ($n = 20$), 2.2% gay/lesbian ($n = 10$), 1.5% preferred no label ($n = 7$), and 0.7% identified as “other” ($n = 3$, e.g. “Heteroflexible” and “I am attracted to all beauty independent of their sex”).

Participants were asked several questions about their romantic and family relationships and these details are also provided in Table 1. In the past year, participants reported having between one and ten different dating partners ($M = 1.32$, $SD = .74$). Over the course of their lifetime, they reported between 1 and 65 different partners, with an average of 4.09 different partners ($SD = 4.41$). With regards to family of origin, 3.3%
of the sample reported growing up in a family structure described as “other” \((n = 15;\) missing = 2). Examples from those who chose “other” included “I had a mother who would pay a caregiver and only pick me up when it was convenient for her,” “mother-stepmother family,” and “divorced parents, 50%-50% custody.” Participants reported having between 0 and 9 siblings (including step/half-siblings) with an average of 1.92 siblings \((SD = 1.41;\) missing = 50).

For purposes of this study, participants were asked to respond to questions about their mother, or the person who served in the role of their mother while growing up, and their father, or the person who served in the role of their father while growing up. They were then asked to specify their relationship to the person in this role and consistently respond to questions about their parents by referencing these specific individuals. The majority of participants, 97.4%, responded to questions about their biological mothers \((n = 442)\) and 84.4% about their biological fathers \((n = 383)\). Only one participant selected “other” for their relationship with their mother-figure and stated “I do not speak to my biological mother. I do speak to my stepmother.” Ten participants endorsed father-figures in the “other” \((n = 10)\) and 15 did not have a father-figure to report on (1 participant was missing data identifying their father-figure relationship). Further, 4 participants reported on their mother’s boyfriend and 4 reported that they had a father for some of their life but that he died. Other examples include “my brother’s dad” and “I know my biological father; there is no relationship.”

**Preliminary Analyses**

**Descriptive statistics.** The magnitude and sign of correlation among variables were found as expected, with several exceptions for the Sexual Coercion and the
combined Physical Assault/Injury subscales. Sexual Coercion perpetration was not significantly related to the mother versions of the Maternal Care (PBI) and Communication (IPPA) subscales. Sexual Coercion victimization was also not significantly correlated with the Maternal Care scale. Interestingly, combined Physical Assault/Injury perpetration subscale was not significantly related to the father version of the Communication subscale. Victimization of Physical Assault/Injury was not significantly related to father versions of the Trust and Communication subscales from the IPPA. As shown in Table 3, the remaining correlations among the variables measured in this study were statistically significant.

Descriptive statistics for all variables, including means, frequencies, ranges, and standard deviations, are in Table 4. A series of an independent t-test were performed to examine mean differences in the continuous DV outcome variables by the different demographic variables, which were in turn used as covariates in the subsequent SEM. Results of the t-tests yielded significant mean differences on at least one CTS2 subscale for all identified covariates, including racial/ethnic identity, sexual orientation, gender, and country of birth. For racial/ethnic identity, significant mean differences were found between Hispanics (n = 303) and non-Hispanics (n = 149) on Psychological Aggression perpetration \((t (450) = -2.34, p = .02)\) and victimization \((t (450) = -2.19, p = .03)\) as well as combined Physical Assault/Injury perpetration \((t (450) = -2.10, p = .04)\). On all three subscales, participants who did not identify as Hispanic or Latino/a yielded higher mean scores on average. Individuals who identified their sexual orientation as other than heterosexual \((n = 40 \text{ vs. } n = 414, \text{ respectively})\) yielded significantly higher means on the Psychological Aggression perpetration \((t (452) = -2.06, p = .04)\) and victimization \((t
Females ($n = 396$) reported significantly higher means on Psychological Aggression perpetration ($t (448) = -2.27, p = .02$) while males ($n = 54$) showed higher means for Sexual Coercion Perpetration ($t (448) = 3.33, p < .01$).

Individuals born in the USA ($n = 321$) when compared to their foreign-born counterparts ($n = 132$) yielded significantly higher mean scores on Psychological Aggression perpetration ($t (451) = -4.47, p < .01$) and victimization ($t (451) = -5.05, p < .01$) as well as combined Physical Assault/Injury perpetration ($t (451) = -2.84, p < .01$) and victimization ($t (451) = -3.34, p < .01$) subscales. There were no significant mean differences on the CTS2 subscales found when comparing family composition groups (traditional family composition = 289 vs. other family compositions = 163) and, therefore, it was not included in the main analyses as a covariate. A series of exploratory regression analyses were performed to explore the relationship of each of the covariates and DV outcomes. Separate regression models predicting DV outcome by each covariate were performed to examine the potential relationship. After being performed separately, hierarchical linear regression models predicting DV outcome by the covariates were performed to see if significant findings remained or could be explained by another variable. The order of the covariates entered into hierarchical models was determined based on theoretical importance. Results of exploratory regression analyses found that racial/ethnic identity was no longer significantly related to the DV outcomes once country of birth was also entered as an independent variable and, thus, it was not retained for the main analyses. In sum, only gender, country of birth, and sexual orientation were retained as covariates in this study. In the main analyses of this study, these three covariates were included in the proposed structural models and tested for significance.
Rates of DV. Frequencies on each item of the CTS2 were generated to provide information about the prevalence of the different forms of DV victimization and perpetration reported by this sample as occurring over the past year. Frequencies by each CTS2 item are in provided in Table 5. The highest rates of DV reported were various forms of psychological aggression. With regards to victimization, 78.6% of the sample reported experiencing at least one type of psychological aggression and 81.5% reported perpetrating at least one type of psychological aggression against a dating partner in the past year. More people reported perpetrating at least one form of violence from the Physical Assault subscale (37.9%) than experiencing physical violence as a victim (32.2%). Roughly 9.0% of the sample reported an injury as a result of a conflict with a dating partner while 7.3% reported injuring their partner during a conflict. Lastly, 37.9% of the sample endorsed at least one item on the Sexual Coercion victimization subscale and 24.0% endorsed one or more items on the Sexual Coercion perpetration subscale. Prevalence rates of DV victimization and perpetration for the past 12 months are illustrated in Table 6.

Prevalence rates were examined more closely to explore the trends among the most common and least common forms of victimization and perpetration. The three psychologically aggressive acts most commonly perpetrated in the past year included insulting or swearing at one’s partner (prevalence 65.9%), shouting or yelling at them (61.5%), and stomping out a room during a conflict (47.4%). The psychological forms of DV most rarely reported included threatening to hit or throw something at one’s partner (12.1%) or destroying something that belonged to the partner (9.9%). These rates were comparable to the prevalence rates of psychological aggression victimization over the
past year. The most common forms of physical violence perpetrated against partners of participants in this study over the past year included pushing or shoving them (26.7%), grabbing them (21.4%), and slapping them (12.3%). More severe forms of violence, such as burning, choking, or injuring one’s partner were rarely reported. More severe forms of physical violence were also more rarely found for victimization prevalence rates. The most commonly reported acts of physical violence victimization included being grabbed by one’s partner (22.7%), being pushed or shoved (18.3%), or having something thrown at them by a partner that could hurt them (9.5%). The most common forms of sexual coercion reported included insisting on sex when they or their partner did not want to but not using physical force to have sex (25.8% victimization, 14.8% perpetration). Using threats of violence or committing forcible rape were reported rarely, with no more than 6 participants reporting perpetration of these violent acts this over the past year. Rates of reported victimization by a partner who used force or threats of force over the past year ranged from 0.9% to 2.6%.

Additionally, the DV victimization and perpetration variables were explored to compare the prevalence rates for each of the covariates employed in this study. First, past year prevalence rates were compared between participants who reported being born in the USA and those who reported being born in another country (aka foreign-born). Results of chi-square tests comparing the rates of endorsed DV between USA-born participants ($n = 321$) and foreign-born ($n = 132$) participants are in Table 7. Percentages were calculated by taking the number of people in that category who endorsed a DV experience with the corresponding subscale and dividing it by the number in the total number of people in that category. Country of birth was significantly associated with
Psychological Aggression and Physical Assault outcomes. Specifically, participants born in the USA (84.7% of those identified as USA-born) were significantly more likely to report experiencing some form of psychological aggression as a victim than participants who identified as foreign-born (64.4% of the total number of participants identified as foreign-born). They were also significantly more likely to report perpetrating psychological aggression as a USA-born participant (86.6%) than as a foreign-born participant (68.9%). There was a significant difference between participants who endorsed experiencing physical assault as a victim when they identified as USA-born (37.1%) as opposed to foreign-born (21.2%). With regards to perpetrating physical assault against a dating partner in the past year, USA-born participants (41.4%) had significantly higher rates of endorsement than those born outside the USA (28.8%). There were no significant differences between the two groups on the Injury or Sexual Coercion subscales for the past year prevalence rates.

Past year prevalence rates of DV victimization and perpetration were also explored using chi-square analyses for the gender covariate. Analyses compared females’ (n = 396) to males’ (n = 54) reported prevalence rates on the four CTS2 subscales. Interestingly, the only significant difference between female and male participants for past year prevalence rates of DV was found for the Sexual Coercion perpetration scale. Of the 450 participants who reported their gender in this study, 87 (22.0%) females and 20 (37.0%) males reported perpetrating at least once instance of Sexual Coercion in the past year. Thus, males had higher prevalence rates of reported Sexual Coercion perpetration in the past year than females. There were no significant differences between females and males for the remaining subscales on the CTS2 with
regards to past year prevalence rates. Values for the chi-square test are provided in Table 8. Lastly, chi-square tests were performed to compare DV rates for those who identified as heterosexual \((n = 414)\) with those who identified as any other sexual orientation \((n = 40)\). Results found significant differences between the two groups for both victimization and perpetration on the Psychological Aggression and Physical Assault subscales. Non-heterosexual participants reported significantly higher past year prevalence rates of Psychological Aggression victimization \((95.0\% \text{ vs. } 77.1\%)\) and perpetration \((95.0\% \text{ vs. } 80.2\%)\). Further, non-heterosexual participants also reported higher prevalence rates of Physical Assault victimization \((50.0\% \text{ vs. } 30.4\%)\) and perpetration \((52.5\% \text{ vs. } 36.5\%)\) than those who identified as heterosexual. No significant differences were found for the Injury or Sexual Coercion subscales when comparing groups by sexual orientation. Results from the chi-square test for sexual orientation groups are provided in Table 9.

**Primary Analysis**

**Measurement models.** The first measurement model specified the Maternal Care subscale score from the PBI and the Alienation, Communication, and Trust subscale scores from the Mother version of the IPPA as indicators of a mother-child relationship quality latent variable. The model had a good model fit to the data \((\text{RMSEA} = .00, 90\% \text{ CI} [.00, .09]; \text{SRMR} = .01; \text{CFI} = 1.00)\). All four indicators were found to significantly load on the latent variable when using an alpha level of .01. The standardized loadings on the mother-child relationship quality latent variable were as follows: Maternal Care \((\beta = .74)\), Alienation \((\beta = -.84)\), Communication \((\beta = .91)\), and Trust \((\beta = .94)\). The standardized loading absolute values suggest that they are good indicators of the mother-child relationship quality latent variable.
The second measurement model specified the Paternal Care subscale score from the PBI and the Alienation, Communication, and Trust subscale scores from the Father version of the IPPA as indicators of a father-child relationship quality latent variable. The model was found to have good fit to the data (RMSEA = .00, 90% CI [.00, .00]; SRMR = .00, CFI = 1.00). The four indicators had the following standardized loading values on the latent variable and were significant at the \( p < .01 \) level: Paternal Care (\( \beta = .83 \)), Alienation (\( \beta = -.84 \)), Communication (\( \beta = .89 \)), and Trust (\( \beta = .93 \)). The absolute values of loadings suggest that they are good indicators of the latent variable father-child relationship quality.

For the DV outcome variables, the first measurement model specified the Psychological Aggression victimization, Physical Assault/Injury combined victimization, and Sexual Coercion victimization subscale scores as indicators of the DV victimization latent variable. The model was just identified because it had only three indicators (RMSEA = .00, 90% CI [.00, .00]; SRMR = .00, CFI = 1.00). The three indicators had the following standardized loading values on the latent variable and were significant at the \( p < .01 \) level: Psychological Aggression victimization (\( \beta = .81 \)), Physical Assault and Injury victimization combined (\( \beta = .73 \)), and Sexual Coercion (\( \beta = .56 \)). A second measurement model specified the Psychological Aggression perpetration, Physical Assault and Injury perpetration combined, and Sexual Coercion perpetration subscale scores as indicators of the DV perpetration latent variable. This model was also just identified (RMSEA = .00, 90% CI [.00, .00]; SRMR = .00, CFI = 1.00). The three indicators had the following standardized loading values on the latent variable and were significant at the \( \alpha \) of .01: Psychological Aggression perpetration (\( \beta = .84 \)), Physical
Assault and Injury perpetration combined ($\beta = .73$), and Sexual Coercion perpetration ($\beta = .46$). Given that all absolute values of standardized loadings of the indicators for the DV latent variables were greater than .40, they were retained for the final SEM models. 

**Tests of hypothesized structural models.** The research questions (bolded) and the results of the study’s hypotheses (bolded and italicized) are provided below.

1) **Are the perceived qualities of mother-child relationships associated with DV victimization and/or perpetration in an undergraduate sample of men and women?**

A structural model where the two outcome latent variables DV victimization and DV perpetration were regressed on the latent variable mother-child relationship quality was examined to test the first research question. Gender, country of birth, and sexual orientation were included in the analyses as covariates by regressing them simultaneously on the two DV outcome variables. The model was found to have good fit to the data (RMSEA = .06, 90% CI [.05, .08]; SRMR = .05; CFI = .97). Results for the two specific hypotheses associated with this research question are provided below. Standardized path coefficients are shown in Figure 4.1.

**H1. Perceived quality of mother-child relationships will be negatively associated with DV victimization.**

Mother-child relationship quality was significantly and negatively related to DV victimization as predicted ($\beta = -.24$, $b = -.25$, $SE = .06$, $p < .01$). In other words, participants who reported higher-quality relationships with their mothers reported lower DV victimization experiences at the time to this study. There was a significant difference on DV victimization by country of birth ($\beta = .20$, $b = .54$, $SE = .12$, $p < .01$). That is,
individuals born in the USA had higher reports of DV victimization than those who identified as foreign-born. No gender difference was found on DV victimization ($\beta = .04; b = .13, SE = .17, p = .44$) nor was there a difference by sexual orientation on DV victimization ($\beta = .08; b = .31, SE = .19, p = .11$). In sum, after controlling for the effects of country of birth, gender, and sexual orientation, a one standard deviation increase in mother-child relationship quality score would result in a decrease by .24 of one standard deviation in the square root value of DV victimization. This model accounted for 11.8% of the variance in the endogenous variable DV victimization.

**H2. Perceived quality of mother-child relationships will be negatively associated with DV perpetration.**

Mother-child relationship quality was significantly and negatively related to DV perpetration as predicted ($\beta = -.22, b = -.23, SE = .06, p < .01$). In other words, participants who endorsed higher quality relationships with their mothers had lower DV perpetration experiences reported and vice versa. Participants born in the USA had higher DV perpetration than foreign-born participants given that there was a significant difference in the DV perpetration outcome variable by country of birth ($\beta = .20, b = .46, SE = .12, p < .01$). There was a significant difference found by gender ($\beta = .12; b = .39, SE = .17, p = .02$) but not by sexual orientation for DV perpetration ($\beta = .07; b = .27, SE = .19, p = .15$). In sum, a one standard deviation increase in mother-child relationship quality score would result in a decrease by .22 of one standard deviation in the square root value of DV perpetration after controlling for the effects of country of birth, gender, and sexual orientation. This model accounted for 10.6% of the variance in DV perpetration.
2) Are the perceived qualities of father-child relationships associated with DV victimization and/or perpetration in an undergraduate sample of men and women?

To test this second research question, a structural model was performed in which DV victimization and DV perpetration were regressed on the latent variable father-child relationship quality. The three covariates were also regressed on the endogenous variables DV victimization and DV perpetration simultaneously. The goodness of model fit indices demonstrated good model fit to the data (RMSEA = .06, 90% CI [.04, .07]; SRMR = .05; CFI = .98). The findings for the specific hypotheses associated with this research question are shown below. Standardized path coefficients are shown in Figure 4.2.

**H3. Perceived quality of father-child relationships will be negatively associated with DV victimization.**

As predicted, the quality of father-child relationships was significantly and negatively associated with DV victimization ($\beta = -.18, b = -.19, SE = .06, p < .01$). Thus, participants who reported higher quality relationships with their fathers had lower DV victimization at the time of this study. There was a significant difference on DV victimization by country of birth ($\beta = .23, b = .53, SE = .12, p < .01$) and sexual orientation ($\beta = .11; b = .39, SE = .19, p = .04$). No gender difference was found on the DV victimization variable in the father-child relationship quality model ($\beta = .03; b = .09, SE = .17, p = .60$). After controlling for the effects of country of birth, gender, and sexual orientation, a one standard deviation increase in father-child relationship quality score would result in a decrease by .18 of one standard deviation in the square root value of DV
victimization. This model accounted for 9.8% of the variance in the endogenous variable DV victimization.

**H4. Perceived quality of father-child relationships will be negatively associated with DV perpetration.**

The latent variable father-child relationship quality was significantly and negatively associated with DV perpetration as hypothesized ($\beta = -.20$, $b = -0.21$, $SE = .06$, $p < .01$). Participants who reported higher relationship quality with their fathers had lower DV perpetration at the time of this study. There was a significant difference by country of birth on DV perpetration ($\beta = .20$, $b = 0.45$, $SE = .12$, $p < .01$). Thus, individuals born in the USA had more DV perpetration experiences than those born in another country. There was a significant gender difference found on DV perpetration ($\beta = .11$; $b = .34$, $SE = .16$, $p = .04$) but no significant difference by sexual orientation ($\beta = .09$; $b = .34$, $SE = .18$, $p = .06$). Given the positive association between gender and the endogenous variable DV perpetration, results showed that participants who identified as female had higher reports of DV perpetration. Furthermore, a one standard deviation increase in father-child relationship quality score would result in a decrease by .20 of one standard deviation in the square root value of DV perpetration after controlling for the effects of country of birth, gender, and sexual orientation. This model accounted for 9.6% of the variance in DV perpetration.

3) **Are the perceived qualities of both mother-child relationships and father-child relationships associated with DV victimization and/or perpetration in an undergraduate sample of men and women?**
To test the third and final research question, a structural model that simultaneously regressed DV victimization and DV perpetration on the latent variables mother-child relationship quality and father-child relationship quality was examined. The observed variables gender, sexual orientation, and born in USA were also entered into the model as covariates. The goodness of fit indices illustrated that the model was found to have good fit to the data (RMSEA = .06, 90% CI [.05, .07]; SRMR = .05; CFI = .97).

These findings are outlined within the corresponding hypotheses below. Standardized path coefficients are shown in Figure 4.3.

**H5. Perceived quality of both mother-child relationships and father-child relationships will be negatively associated with DV victimization.**

When entered into the model at the same time, mother-child relationship quality was significantly and negatively related to DV victimization ($\beta = -.19, b = .20, SE = .06, p < .01$), as was father-child relationship quality ($\beta = -.12, b = -.13, SE = .06, p = .04$). In other words, those participants who reported higher quality relationships with their mothers and fathers reported lower DV victimization at the time of this study. There was a significant difference on DV victimization by country of birth ($\beta = .23, b = .46, SE = .12, p < .01$). In other words, participants who identified as USA-born had higher DV victimization at the time of this study than their foreign-born counterparts. No gender difference was found on DV victimization in this model ($\beta = .04, b = .12, SE = .17, p = .48$) and no difference by sexual orientation was found ($\beta = .30, b = .12, SE = .17, p = .12$). It is important to note that the effect sizes for the significant paths are considered small for this model. Moreover, a one standard deviation increase in mother-child
relationship quality score would result in a decrease by .19 of one standard deviation in the square root value of DV victimization after accounting for the effects of father-child relationship quality, country of birth, gender, and sexual orientation. Likewise, a one standard deviation increase in father-child relationship quality score would result in a decrease by .12 of one standard deviation in the square root value of DV victimization after accounting for the effects of mother-child relationship quality, country of birth, gender, and sexual orientation. This model accounted for 12.5% of the variance in DV victimization.

**H6. Perceived quality of both mother-child relationships and father-child relationships will be negatively associated with DV perpetration.**

As predicted, the perceived quality of both mother-child relationships and father-child relationships were significantly and negatively associated with DV perpetration ($\beta = -.16, b = -.17, SE = .06, p < .01; \beta = -.14, b = -.15, SE = .06, p = .01$, respectively). Further, those who endorsed higher quality relationships with their mothers and fathers reported fewer DV perpetration experiences. The covariate country of birth yielded a significant difference on DV perpetration ($\beta = .23, b = .46, SE = .12, p < .01$). Participants born in the USA had higher reports of DV perpetration than those who were not. There was a significant gender difference found on DV perpetration ($\beta = .12, b = .38, SE = .16, p = .02$), meaning females reported more DV perpetration than their male counterparts. There was not, however, a significant difference by sexual orientation on DV perpetration in this model ($\beta = .07, b = .26, SE = .19, p = .17$). Overall, a one standard deviation increase in mother-child relationship quality score would result in a decrease by .16 of one standard deviation in the square root value of DV perpetration.
after controlling for the effects of father-child relationship quality, country of birth, gender, and sexual orientation. Also, a one standard deviation increase in father-child relationship quality would result in a decrease by .14 of one standard deviation in the square root value of DV perpetration after controlling for the effects of mother-child relationship quality, country of birth, gender, and sexual orientation. The absolute values of the standardized path coefficients indicate small effect sizes for the significant paths. This model accounted for 11.7% of the variance in DV perpetration.

**Comparison of nested models.** Likelihood ratio tests based on difference in chi-squared values were performed to compare the first two models with the third, and most complex model. Significant chi-square difference values for the comparison between models for hypotheses one and three provided evidence for the preference of the third model with all paths specified between both mother-child relationship quality and father-child relationship quality variables and DV victimization and perpetration outcomes over the first model ($\chi^2(1) = 1,627.01, p < .01$). Similarly, a second nested model comparison was examined between the models for hypothesis two and hypothesis three. The significant results of the chi-square difference test yielded support for retaining the more complex model from hypothesis three over hypothesis two ($\chi^2(1) = 1,619.17, p < .01$).

**Correlations between variables.** In the third structural model, the mother-child relationship quality variable was moderately related to the father-child relationship quality variable ($\beta = .36, b = .35, SE = .05, p < .01$). For the exogenous variables, residual variances of the observed variables were also significantly correlated. For example, the residual variances from the variables Mother Care and Father Care from the PBI were significantly and moderately correlated ($\beta = .47, b = 13.21, SE = 1.72, p < .01$).
The residual variances from the Communication subscales of the mother and father versions from the IPPA were significantly and moderately correlated ($\beta = .34$, $b = 6.17$, $SE = 1.30$, $p < .01$). The values for the IIPA’s Alienation residual variances were highly correlated ($\beta = .53$, $b = 5.44$, $SE = .70$, $p < .01$). However, the residual variances for the mother and father versions of the Trust subscale were not significantly correlated and the correlation would be considered small ($\beta = .16$, $b = 1.50$, $SE = .90$, $p = .09$).

In all three structural models, the latent variables DV victimization and perpetration were found to be highly correlated (Model 3 values: $\beta = .93$, $b = .93$, $SE = .01$, $p < .01$). This suggests that these variables measured similar constructs. With regards to these endogenous variables, residual variance for Psychological Aggression victimization was significantly and highly correlated with residual variance for Psychological Aggression perpetration ($\beta = .78$, $b = .47$, $SE = .14$, $p < .01$). Victimization of Physical Aggression/Injury combined was significantly and highly correlated with Perpetration ($\beta = .73$, $b = .67$, $SE = .09$, $p < .01$). Lastly, residual variance of Sexual Coercion victimization was significantly and highly related to residual variance of Sexual Coercion perpetration ($\beta = .58$, $b = .06$, $SE = .12$, $p < .01$). Values of residual variances for all observed variables are provided in Figures 4.1 and 4.2.
CHAPTER 5:
DISCUSSION

Main Findings

The purpose of this study was to further the literature on DV among emerging adults by utilizing a large, diverse sample of undergraduate men and women. Specifically, this study aimed to explore the associations between perceived quality of mother-child and father-child relationships and DV victimization and perpetration experiences among a sample of emerging adults. The results of this study provide evidence that the perceived quality of mother-child relationships and father-child relationships, as reported on by adult-children, were significantly and negatively associated with experiences of DV victimization and perpetration after controlling for the effects of gender, sexual orientation, and country of birth. Further, individuals who endorsed parental relationships as higher quality as measured by domains of parental trust, communication, alienation, and care, reported fewer experiences of DV victimization and perpetration. On the other hand, participants who endorsed lower quality relationships with their mothers and fathers had higher victimization and perpetration experiences. However, effect sizes for the paths between the parent-child relationship quality variables and the DV outcome variables would be considered small by standard SEM practices. Although analyses revealed significant relationships between the exogenous and endogenous variables, the magnitude of effects suggests that the relationship may not be that strong. The three structural models analyzed in this study also accounted for a small amount of variance in DV victimization (9.8% to 12.5%) and
DV perpetration (9.6% to 11.7%), suggesting that there may be other variables not accounted for in this study that may significantly contribute to DV experiences.

Furthermore, the first structural model of mother-child relationship quality accounted for slightly more variance in DV outcomes than the second model which examined father-child relationship quality. The third model, which included both mother- and father-child relationship quality accounted for the most variance (12.5% in DV victimization and 11.7% in DV perpetration), which is still small. Results of likelihood ratio tests were conducted to compare the models for the first two hypotheses with the third hypothesis found that the third and most complex model is statistically different from the first two models and would be preferred. In other words, this study found that a structural model which analyzes mother-child relationship quality and father-child relationship quality at the same time is preferred over models analyzing the parent-child relationship quality variables separately when exploring their relationships with the DV outcome variables. Also, DV victimization and DV perpetration were highly correlated with a standardized coefficient value of .93. This suggests they were measuring similar constructs and were not very different from one another. This may be due to trends towards higher rates of common couple violence in comparison to intimate partner terrorism. Common couple violence has been found to occur at similar rates across genders and includes less severe forms of violence used mutually by both partners in the couple in response to conflict (Hamel, 2009).

One of the reasons that the reports of mother-child relationship quality were analyzed separately from the reports of father-child relationship quality was to be able to include more participants should they only have had one parent figure to report on, which
would have excluded them from the final research question. Only one participant identified as not having a mother or mother-figure and fifteen participants did not have a father or father-figure to report on. These low numbers may be due to the fact that participants were allowed to report on non-biological parental figures. Assessed both together and separately, relationships with mothers and fathers were significantly and negatively related to DV victimization and perpetration outcomes. Again, an analysis of both parent-child relationship quality variables was preferred over analyzing them separately. Thus, the perceived quality of one’s relationship with their mother and father, or the individuals who serve in those parenting roles, are significantly related to experiences of DV such that lower quality relationships are associated with higher rates of DV victimization and perpetration. These results are consistent with longitudinal findings by Raudino and colleagues (2013) which found better parent-child relationship quality, as operationalized similarly to the present study, during adolescence to be significantly associated with better mental health outcomes in adulthood.

**Findings for Covariates**

Theoretically important variables thought to be potential risk or protective factors for DV were identified through the literature review and assessment of correlation between variables to be included in data analysis as covariates. These included gender, racial/ethnic identity, country of birth (USA-born vs. foreign-born), and sexual orientation, which have consistently been identified as having significant relationships with DV, albeit that research findings on their relationships has been mixed. Each covariate was explored two ways, first by using t-tests to examine mean differences on the continuous values for the DV outcome variables and second by using chi-square tests
to compare the dichotomous values of past year prevalence rates. Results of mean differences comparison tests found that non-Hispanics had higher mean scores for Psychological Aggression perpetration and victimization as well as Physical Assault perpetration. Similarly, individuals born in the USA had significantly higher mean scores for Psychological Aggression perpetration and victimization as well as Physical Assault perpetration and victimization subscales. Similar trends were found for past year prevalence rates which found statistically higher rates of Psychological Aggression perpetration and victimization and Physical Assault perpetration and victimization for individuals born in the USA in comparison to those who were foreign-born. There were no significant differences between the groups on past year prevalence rates of sexual violence or injury as measured by the CTS2. When examined together using regression analyses, racial/ethnic identity was no longer significantly related to the DV outcome variables after entering the country of birth covariate. This suggests that the relationship between racial/ethnic identity and DV outcomes may have been better explained by whether or not individuals were born in the USA and so the covariate of racial/ethnic identity was excluded from the final structural analyses. One reason for this finding may be that the majority of the sample identified as a racial/ethnic minority, with the sample being predominantly Hispanic or Latino/a, and the majority of the sample came from a large university in south Florida where there is a high number of Hispanic-identified immigrants in the population. While the sample in this study was diverse with regards to having a large majority of racial/ethnic minorities as opposed to Caucasians or White individuals, which is typical of research in this field, there was homogeneity with regards to subgroups. The majority of study participants identified Hispanic or Latino/a as their
racial or ethnic identity, about two-thirds of the sample, and less than 11% identified as White non-Hispanic. Previous studies on DV among Hispanics have shown mixed findings regarding immigration status and acculturation level as risk or protective factors for DV among adolescents and emerging adults. For example, some studies have found immigrant status and lower levels of acculturation to be associated with lower levels of DV victimization (Ramos et al., 2011; Silverman et al., 2006; Smokowski et al., 2009). Other studies have identified immigration status as a risk factor for DV in studies of adults (Cummings et al., 2012). Although this study did not utilize a measure of acculturation level for those born outside the USA, findings from this study are consistent with previous research showing that being born outside of the USA may be associated with fewer experiences of DV. One explanation for immigration status serving as a protective factor against DV is that individuals, specifically Hispanic-identified individuals, who are less acculturated to the USA may have stronger ties to their families and stronger cultural values of close family relationships, which are protective against DV (Ramos et al., 2011). Future studies which include an assessment of acculturation are needed to provide a better understanding of these findings.

This study makes an important contribution to the literature on DV given that the majority of samples examining DV during emerging adulthood use predominantly non-Hispanic White individuals (Lohman, Neppl, Senia, & Schofield, 2013; Williams et al., 2008). Racial or ethnic identity was not added to the final structural models as a covariate because this variable was not significantly related to the outcomes after including country of birth, yet future research is needed to better understand these relationships among other subgroups. Again, these findings could have been in part due
to the fact that the majority of the sample identified as an ethnic or racial minority (almost 89%). However, these findings are similar to research findings that has not found significant differences in DV prevalence based on racial or ethnic identity alone (e.g. Temple & Freeman, 2010). However, they differ from larger national studies that consistently find higher rates of DV among racial or ethnic minorities, including Hispanics (CDC, 2012a). One possible explanation for this difference is that the Hispanic-identified individuals in this study were recruited from an area of the U.S. where Hispanics and Latinos comprise the majority population. Thus, there may be unique experiences or contextual factors associated with geographic region that account for these differences. Also, factors related to majority versus minority status may play a role in the likelihood of experiencing DV that have not been accounted for by previous studies.

When entered into the main structural analyses, gender was significantly related to the DV perpetration latent variable in all three models but was not significantly related to victimization. Specifically, female gender was significantly related to DV perpetration whereas male gender was not. For the gender variable, mean scores as well as prevalence rates of DV victimization and perpetration were compared between males and females to gain a better understanding of the reason for these findings. Females had higher mean scores for perpetration of psychological violence whereas males reported higher mean scores for perpetration of sexual violence. Interestingly, the only statistically significant difference when examining past year prevalence rates was for sexual coercion, with more males reporting perpetration in the past year than females. Although males reported perpetrating more sexual coercion, it was interesting that females did not report
significantly higher rates of sexual victimization, which would have been consistent with findings from large-scale national studies which have found higher rates of sexual victimization among females (CDC, 2012b). These analyses were important to show that although female gender was positively and significantly associated with the DV perpetration variable in the main analyses, the one form of violence that they had higher mean scores for was Psychological Aggression. Findings from this study are consistent with newer research that has found females to be just as likely or more likely to perpetrate DV against their dating partners in comparison to males (Banyard & Cross, 2008; Jouriles et al., 2012; Swahn et al., 2008). However, it is almost important to note that this study was predominantly female and Hispanic-identified, which may have contributed to these findings.

With regards to sexual orientation, individuals who identified as a sexual orientation other than heterosexual had higher mean scores on Psychological Aggression perpetration and victimization subscales. Yet, past year prevalence rates showed significant differences between heterosexuals and non-heterosexuals for the Psychological Aggression and Physical Assault subscales for both victimization and perpetration, with higher prevalence rates among non-heterosexuals. When entered into the structural models, sexual orientation was only significantly related to DV victimization in the father-child relationship quality model for hypothesis two. These findings may speak to the influence of a child’s sexual orientation on their relationship with their father, which in turn could influence their risk for experiencing DV. Given the small number of individuals who identified as a sexual orientation other than
heterosexual \( n = 40 \), future research on the role of sexual orientation in DV is warranted.

As previously discussed, there has been shifting trends in family structures in American over recent decades. Because of these changes, family of origin was analyzed as a covariate in this study to compare individuals coming from traditional two-parent homes with individuals coming from homes considered historically non-traditional. Examples of non-traditional homes would include single-parent homes or being raised by a non-parent figure, such as a grandmother. When comparing these two groups, no mean differences were found for DV perpetration or victimization outcomes. There were also no differences between the groups for past year prevalence rates of DV as per the four CTS2 subscales. As such, this variable was not retained as a covariate in the structural models used to test the study hypotheses. Given that this variable was not of primary interest in this study, additional exploration was not performed and future studies should further examine the nuances of family composition as related to DV outcomes.

**Summary of prevalence rates.** Data on the past year rates of DV victimization and perpetration were collected as a part of this study. Most prevalent rates of victimization were found to be psychological aggression, sexual coercion, and physical assault, respectively, with injury rates being more rarely reported by the sample. Perpetration rates were highest on subscales assessing psychological aggression, physical assault, and sexual coercion, respectively, with the lowest rates of perpetration reported on the subscale assessing injuries resulting from a partner conflict. These findings are consistent with other studies that find much higher rates of psychological or emotional abuse than physical and sexual violence (Jouriles et al., 2009; Williams et al., 2008;
These results are important because previous research has found forms of psychological abuse to have greater negative and longer lasting consequences than other forms of abuse (Coker et al., 2008; Eshelman & Levendosky, 2012, William et al., 2012).

Interestingly, there were higher rates of perpetration than rates of victimization reported on the subscales of the CTS2 that assessed psychological aggression and physical assault. By examining the individual items corresponding to these subscales, we can get a better understanding of the nature of DV among this sample of emerging adults. As in previous studies, rates of sexual violence or coercion were reported much less often than psychological aggression or physical violence. Again, these rates were reported based on the past 12 months only and do not account for lifetime prevalence of sexual coercion, which has been reported at much higher rates among college samples (CDC, 2012a). These findings are consistent with the 2005 National Survey of Adolescents which found much lower prevalence rates of more severe forms of physical and sexual violence, 1.6%, among a sample of adolescents (Wolitzky-Taylor et al., 2008).

Given that this study was predominantly female-identified, it is important to consider these findings in the context of previous research that shows that females are more likely to report using violence, specifically physical violence and psychological aggression, in dating relationships than their male counterparts (Banyard & Cross, 2008; Hokoda et al., 2012; Jouriles et al., 2012; Swahn et al., 2008). Also, females have been shown to report committing acts of physical violence in studies of DV even if they were perpetrated in self-defense (Hamby & Turner, 2012). Additionally, it may speak to differences in gender norms regarding use of violence in dating relationships. However, generally in DV research there is a problem with underreporting of victimization
experiences, which may have also influenced these findings. Studies on DV and IPV also show trends towards mutually used violence in relationships, or common couple violence, as opposed asymmetrical use violence between partners (Hamel, 2009).

**Significance of Current Study**

This study was unique for several reasons. This was the first known study to assess parent-child relationship quality by utilizing ratings of the adult-child’s perceptions, as opposed to the parent’s, and by using subscales from both the IPPA and PBI together to more comprehensively assess different qualities of the relationship. Domains of trust, communication, alienation, and care were found to be good measures of parent-child relationship quality as suggested by the goodness of fit to the data. Further, participants responded to a total of 37 items of relationship quality for their mothers and 37 items for their fathers separately. Previous studies have been limited with regards to the assessment of relationship quality and have historically excluded fathers from the research. Prior studies of parent-child relationship quality have typically only focused on mothers as the primary caregivers (Brown & Rinelli, 2010; Reidler & Swenson, 2012). Recently, researchers have called for greater inclusion of fathers for parent-child focused interventions of families affected by IPV (Stover & Morgos, 2013). The present study provides support for the incorporation of fathers and their relationship with their children in DV research and practice.

This study also allowed for participants without two biological parents, as in a mother and a father, to participate by separately analyzing data on these two different parenting roles. Both relationships were found to be significantly associated rates of DV experiences by participants in this study and nested model comparison provided evidence
for a comprehensive model which included both mothers and fathers. Additionally, this study included individuals without biological mothers or fathers who may have had someone serving in those parental roles participate in the study by allowing them to designate their relationship to the person who served in that role and respond to questions about parents accordingly. This is important given the changing structures of families in America at present and the decreasing amount of two biological parent family households (Vespa et al., 2013). The findings showed that roughly 63% of the sample reported growing up in a family structure described as a two biological or adoptive parent household, although rates of adoptive parents were very low. Similarly, recent data from the U.S. Census reported that only 63% of family groups with children under the age of 18 are married couples. Results related to family structure were consistent with newer Census data such that a large number of participants reported growing up in single-parent families and blended-families (Vespa et al., 2013). However, the majority of participants did report on their relationship with their biological mothers (97.4%) or fathers (84.4%). Future studies should examine the relationship between various mother-figures and father-figures with regards to DV outcomes. Also, further analysis of the effects of family structure on DV experiences is warranted in future research given the research supporting the negative consequences associated with such transitions in family structure (Brown, 2006; Brown & Rinelli, 2010).

In addition, this study was important in that it utilized a comprehensive measure of DV as opposed to focusing on only physical forms of violence, which has been done in past studies and is often used to report DV prevalence rates among our nation’s youth (CDC, 2012b). Given the consequences associated with various forms of DV, it is
important that studies continue to assess DV in a comprehensive manner. Yet, research also needs to continue exploring the differences among various types of violence, such as risk and protective factors that may be found for physical versus non-physical forms of violence. Research also needs to continue to try to understand how shifts in societal and cultural norms influence rates of DV. For example, we might see such high rates of psychological forms of violence reported among young adults because of the increased use of technology (i.e. cell phones), which could make it much more convenient to perpetrate psychological forms of violence without direct contact, such as by texting someone to call them names or threaten them. Future research should consider such factors when developing studies and interpreting study findings.

**Summary**

Dating violence among emerging adults has been identified as a serious public health problem given the high-risk nature of this phase of development and the disproportionate rates of DV prevalence compared to individuals across other developmental phases (CDC, 2012a; Collins, 2003; Vagi et al., 2013). Violence within dating relationships has been identified as a serious problem because of the long-lasting negative consequences associated with victimization and the increased likelihood of revictimization over time (Banyard & Cross, 2008; Hamby et al., 2012). Research on risk and protective factors for DV has been an increasing area in the literature over the past few decades and consistently identifies family-level factors, specifically witnessing or experiencing violence as a child in the family of origin, as key risk factors for DV experiences. However, studies on parent-child relationship quality as a risk or protective factor have been limited. The current study sought to advance the literature on the role of
parent-child relationships in DV experiences by including a more comprehensive assessment of relationship quality, utilizing the perspective of the adult-child as opposed to the parent for rating relationship quality, and including participants from diverse backgrounds, including diverse family structures. The study found support for high quality parent-child relationships as a protective factor against DV after controlling for the effects of gender, sexual orientation, and whether or not individuals were born in the USA.

This study is the first known study to explore the relationship of perceived quality of mother-child relationships and father-child relationships and outcomes of DV victimization and perpetration. It is also the first known study to operationalize the construct of parent-child relationships using the combination of subscales specified above. Moreover, this study utilized an attachment theory framework, one of the more commonly used theories of interpersonal violence, to better understand the association between parent-child relationships and DV experiences among emerging adults. The findings of this study can provide important information on the relationship-level characteristics that play an influential role in the dating experiences of adolescents and emerging adults. In sum, this study found that higher quality relationships reported between a sample of emerging adults and their mothers and/or fathers were associated with fewer experiences of DV victimization and perpetration after controlling for the effects of gender, sexual orientation, and country of birth. However, there may be factors not accounted for by this study that are also associated with DV experiences, such as acculturation or spirituality. Individuals born in the USA, in comparison to those born in another country, were more likely to report experiencing psychological aggression and
physical forms of violence both as a perpetrator and a victim. Females were more likely to report perpetrating psychologically aggressive acts whereas males had higher mean scores for sexual coercion perpetration. Non-heterosexual individuals reported more psychological aggression and physical assault with regards to past year prevalence rates.

**Limitations and Recommendations for Future Studies**

The current study has a number of limitations that are important to acknowledge as well as discuss the potential effects on the current findings. First, a limitation of this study is the cross-sectional design which assesses parent-child relationship quality and DV experiences simultaneously and, thus, does not provide information regarding a temporal or causal relationship between the predictors and outcomes. Also, the data collected for this study were self-reported and subject to reporting and recall biases. Surveys were collected over the Internet as opposed to face-to-face contact to increase the feeling of anonymity for participants and reduce reporting biases. However, online studies also run the risk of participant data entry error and participant fatigue, which can lead to inaccurate data. This particular online study utilized one university’s online data collection system that offered students one course credit in exchange for completion of the measures which may have influenced the sample. Also, the majority of the sample came from this institution which contributed to homogeneity among participants (i.e. predominantly Hispanic, female, and heterosexual). Because this research study gathered retrospective data, such as past year DV prevalence rates, participants may have difficulty remembering exact details about their dating experiences and therefore misreport unintentionally. Future studies should employ different research designs, such as longitudinal assessment, that would help minimize these concerns.
The issue of DV is a complex issue, with many nuances among different types of violence. One limitation of this study is that it collected data on a wide range of DV experiences, such as psychological, physical, and sexual forms of perpetration and victimization. All forms of violence were analyzed together in the structural models, although additional exploration using t-tests and chi-square tests were conducted to provide greater information about the various types of violence reported and the differences between subgroups in this sample. Also, subscales from the CTS2 were analyzed continuously for the structural equation modeling analyses. Future studies should explore other methods of scoring, such as by exploring levels of severity or duration of violence, to better understand the phenomenon of DV. The differences and correlations between different forms of violence should also be explored to better understand the newer trends and changes seen over recent decades.

Furthermore, given that DV is such a sensitive issue, some students may not have disclosed victimization or perpetration experiences. On the other hand, some participants in the study may be sensitized to DV and report more as a result. Additionally, the measures in this study were employed in a diverse sample and may vary in quality of measuring the constructs of interest according to subgroups. Data was analyzed by subgroup differences using three covariates: Gender, sexual orientation, and country of birth. Further, a number of variables collected in this study were not included in the primary analyses and may have had significant effects on the outcomes of DV, such as socio-economic status. Overall, mother-child relationship quality and father-child relationship quality combined had small effects on the DV perpetration and victimization variables and explained only 11.7% and 12.5% of the variance in them, respectively.
This suggests that there are other factors not assessed or examined in this study that could be related to DV experiences. Future studies on DV among emerging adults and the association with parent-child relationships should include other variables known in the literature to relate to DV outcomes to better explain the nature of these relationships.

This study utilized attachment theory as a basis for focusing on parent-child relationship quality. Family- and parent-level factors have long been found to play a role in the DV experiences of young adults. However, concepts related to one of the most heavily researched theories within the field of DV, social learning theory, were not assessed in this study. Future studies should assess participants’ past experiences of witnessing and experiencing violence in the family of origin to control for these effects when examining the parent-child relationship quality to better understand what contributes to these findings. For example, it is possible that individuals who endorsed poorer quality relationships with their mothers or fathers had experienced some type of abuse or trauma by them in childhood, which would contribute to their negative perceptions of the relationship and, thus, influence the study findings. The fact that experiences of violence in the family of origin during childhood, such as witnessing IPV between the parents or parent’s use of corporal punishment, were not included in the present study is a major limitation and should be included in future studies.

The findings of this study may not be generalizable to other populations in the U.S. due to the sample demographics. The study predominantly self-identified as Hispanic or Latino/a, straight/heterosexual, and female. Future studies that include individuals of more diverse identities, such as sexual orientation, gender identity, and ethnic or racial identity, are needed as well as exploration of the intersection of these
identity characteristics on DV experiences. Additionally, future studies that focus on ethnic minority samples, such as Hispanics/Latinos, should include culturally-specific measures that may better explain the relationship between racial/ethnic identity and DV experiences. For example, future studies could include measures of acculturation, spirituality, or family values in addition to DV experiences. Furthermore, reports of DV used in this study were based on the past year and does not include lifetime rates of victimization or perpetration experiences. Thus, it may not provide an accurate assessment of parent-child relationships for those who experience DV. This study only included individuals who reported having had at least one dating relationship in the past year, which excludes participants who may have been single for the past year but still experienced forms of interpersonal violence, such as a sexual assault. It also excludes individuals who may have been in unhealthy or abusive relationships in the past but not in the last 12 months. Future research studies, including longitudinal studies, should include more comprehensive assessments of DV as well as risk and protective factors for DV over the period of adolescence and emerging adulthood to better understand the factors that may influence these types of dating experiences. Research should continue to explore the effects of DV on development as well as on future relationship patterns.

**Implications for Research and Practice**

The findings of this study have important implications for research and clinical practice in the area of DV in addition to the suggestions for future research discussed above. Multidisciplinary research that includes researchers across a variety of educational backgrounds, including family studies, psychology, social work, and public health, should continue to assess the problem of DV to shed more light on this problem.
given the high prevalence rates found here. Future studies should include more comprehensive assessments of DV risk and protective factors while also continuing to explore variables of parent-child relationship quality. Additionally, research should continue to assess variables related to cultural background, such as country of origin and racial/ethnic identity, in relationship to DV and tailor programs to meet the needs of subgroups that may face unique risk factors for experiencing DV.

The present study strongly supports the development of DV prevention and intervention programs that incorporate family-level interventions, such as by working to improve relationships and communication between parents and their children. Results from recent studies that assessed prevention programs inclusive of family-based interventions have found empirical support for the involvement of parents and caregivers in DV prevention efforts. One example of this is Families for Safe Dates, which aims to engage caregivers in the prevention of DV among adolescents (Foshee, McNaughton Reyes, Ennett, Cance, Bauman, & Bowling, 2012). Another program developed by the CDC called Dating Matters™ highlights the important role of parents in the prevention of DV among adolescents and have launched programs like Parent’s Matter! to draw attention to the need for parents to take an active role in the development of dating relationships for their children (Tharp, 2012). Parents and caregivers have significant influences on their children over the course of their development and should be included in programs surrounding DV. These programs should make an effort to include both parents and/or primary caregivers whenever possible. Future prevention efforts should also take into consideration acculturation level and other identity variables of the
individuals they work with to better tailor prevention programs to address the unique risk and protective factors of different subgroups in America.

These findings also have important implications for psychologists and clinicians in practice. Clinicians should conduct initial assessments of DV experiences and histories of interpersonal violence, like violence in the family of origin. Comprehensive screenings for various forms of DV, particularly when working with emerging adults, would be important given the high prevalence rates of victimization and perpetration found in this study. For example, mental health providers in university counseling center settings should develop DV prevention programs and offer clinical services for survivors of DV. Clinicians should also gain information on family relationship history when working with survivors of DV to better understand relational dynamics and patterns that may have been formed earlier on in life. For clinicians who work with parents and their children concurrently, psychoeducation about long-term effects of parent-child relationships should be provided. They should also use interventions aimed at strengthening the quality of the relationship between parents and their children. Additionally, educators should work to make the prevention of psychological aggression a priority given the disproportionate rates at which it is experienced in comparison to other forms of DV.
REFERENCES


**FIGURES**

*Figure 4.1. Structural Equation Model for Research Question 1.*
Fitted structural equation model of the associations between latent variables mother-child relationship quality, DV victimization, and DV perpetration with born in the USA as a covariate. CFI = .97, RMSEA = .06, SRMR = .05. *p < .05, **p < .01.
PBI = Parental Bonding Inventory; IPPA = Inventory of Parent and Peer Attachment; Alien = Alienation subscale of the IPPA; Comm. = Communication subscale of the IPPA; Trust = Trust subscale of the IPPA; Psych. Aggress. = Psychological Aggression subscale of the CTS2; Sexual Orient. = Sexual Orientation covariate.

*Note:* Standardized coefficients are shown.
Figure 4.2. Structural Equation Model for Research Question 2.
Fitted structural equation model of the associations between latent variables father-child relationship quality, DV victimization, and DV perpetration with born in the USA as a covariate. CFI = .98, RMSEA = .06, SRMR = .05. * p < .05, **p < .01.
PBI = Parental Bonding Inventory; IPPA = Inventory of Parent and Peer Attachment; Alien = Alienation subscale of the IPPA; Comm. = Communication subscale of the IPPA; Trust = Trust subscale of the IPPA; Psych. Aggress. = Psychological Aggression subscale of the CTS2; Sexual Orient. = Sexual Orientation covariate.
Note: Standardized coefficients are shown.
Figure 4.3. Structural Equation Model for Research Question 3.
Fitted structural equation model of the associations between latent variables mother-child relationship quality, father-child relationship quality, DV victimization, and DV perpetration with born in the USA as a covariate. CFI = .97, RMSEA = .06, SRMR = .05. * p < .05, **p < .01.
Mat. Care = Maternal Care subscale of the PBI; Pat. Care = Paternal Care subscale of the PBI; PBI = Parental Bonding Inventory; IPPA = Inventory of Parent and Peer Attachment; Alien = Alienation subscale of the IPPA; Comm. = Communication subscale of the IPPA; Trust = Trust subscale of the IPPA; Psych. Aggress. = Psychological Aggression subscale of the CTS2; Sexual Orient. = Sexual Orientation covariate.
Note: Standardized coefficients are shown.
### Table 1
**Demographic Characteristics of Participants (N = 454)**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year in School</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>90</td>
<td>19.8%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>51</td>
<td>11.2%</td>
</tr>
<tr>
<td>Junior</td>
<td>160</td>
<td>35.2%</td>
</tr>
<tr>
<td>Senior</td>
<td>147</td>
<td>32.4%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>85</td>
<td>18.7%</td>
</tr>
<tr>
<td>19</td>
<td>53</td>
<td>11.7%</td>
</tr>
<tr>
<td>20</td>
<td>84</td>
<td>18.5%</td>
</tr>
<tr>
<td>21</td>
<td>86</td>
<td>18.9%</td>
</tr>
<tr>
<td>22</td>
<td>56</td>
<td>12.3%</td>
</tr>
<tr>
<td>23</td>
<td>42</td>
<td>9.3%</td>
</tr>
<tr>
<td>24</td>
<td>21</td>
<td>4.6%</td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>396</td>
<td>87.2%</td>
</tr>
<tr>
<td>Male</td>
<td>54</td>
<td>11.8%</td>
</tr>
<tr>
<td><strong>Racial or Ethnic Identity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian or Asian American</td>
<td>13</td>
<td>2.9%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>67</td>
<td>14.8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>303</td>
<td>66.7%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>White, Caucasian, not Hispanic</td>
<td>50</td>
<td>11.0%</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Born in USA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>321</td>
<td>70.7%</td>
</tr>
<tr>
<td>No</td>
<td>132</td>
<td>29.1%</td>
</tr>
<tr>
<td><strong>Primary Language</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>333</td>
<td>73.3%</td>
</tr>
<tr>
<td>Spanish</td>
<td>97</td>
<td>21.4%</td>
</tr>
<tr>
<td>Other</td>
<td>22</td>
<td>4.8%</td>
</tr>
<tr>
<td><strong>Sexual Orientation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual or straight</td>
<td>414</td>
<td>91.2%</td>
</tr>
<tr>
<td>Homosexual or gay/lesbian</td>
<td>10</td>
<td>2.2%</td>
</tr>
<tr>
<td>Bisexual</td>
<td>20</td>
<td>4.4%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td>I prefer not to label myself</td>
<td>7</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
Table 1 continued

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Veteran</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>No</td>
<td>445</td>
<td>98.0%</td>
</tr>
<tr>
<td>Current Relationship Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single, not dating nor ever married</td>
<td>143</td>
<td>31.5%</td>
</tr>
<tr>
<td>In a dating or romantic relationship</td>
<td>297</td>
<td>65.4%</td>
</tr>
<tr>
<td>Married</td>
<td>12</td>
<td>2.6%</td>
</tr>
<tr>
<td>Separated</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Parent’s Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married or living together</td>
<td>32</td>
<td>7.0%</td>
</tr>
<tr>
<td>Living together, but not married</td>
<td>4</td>
<td>0.9%</td>
</tr>
<tr>
<td>Married</td>
<td>231</td>
<td>50.9%</td>
</tr>
<tr>
<td>Separated</td>
<td>37</td>
<td>8.1%</td>
</tr>
<tr>
<td>Divorced</td>
<td>134</td>
<td>29.5%</td>
</tr>
<tr>
<td>Widowed</td>
<td>16</td>
<td>3.5%</td>
</tr>
<tr>
<td>Family Structure for Family of Origin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two biological (or adoptive) parent</td>
<td>289</td>
<td>63.7%</td>
</tr>
<tr>
<td>Single-mother family</td>
<td>94</td>
<td>20.7%</td>
</tr>
<tr>
<td>Single-father family</td>
<td>2</td>
<td>0.4%</td>
</tr>
<tr>
<td>Mother-stepfather family</td>
<td>42</td>
<td>9.3%</td>
</tr>
<tr>
<td>Father-stepmother family</td>
<td>5</td>
<td>1.1%</td>
</tr>
<tr>
<td>Grandparent as primary caregiver family</td>
<td>5</td>
<td>1.1%</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>3.3%</td>
</tr>
<tr>
<td>Relationship to Mother-figure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological mother</td>
<td>442</td>
<td>97.4%</td>
</tr>
<tr>
<td>Adoptive mother</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td>Step-mother</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Aunt</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td>Grandmother</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>I have no mother-figure</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Relationship to Father-figure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological father</td>
<td>383</td>
<td>84.4%</td>
</tr>
<tr>
<td>Adoptive father</td>
<td>6</td>
<td>1.3%</td>
</tr>
<tr>
<td>Step-father</td>
<td>31</td>
<td>6.8%</td>
</tr>
<tr>
<td>Uncle</td>
<td>6</td>
<td>1.3%</td>
</tr>
<tr>
<td>Grandfather</td>
<td>2</td>
<td>0.4%</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>2.2%</td>
</tr>
<tr>
<td>I have no father-figure</td>
<td>15</td>
<td>3.3%</td>
</tr>
</tbody>
</table>
Table 1 continued

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Income of Family of Origin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $10,000</td>
<td>21</td>
<td>4.6%</td>
</tr>
<tr>
<td>$10,000 to $25,000</td>
<td>63</td>
<td>13.9%</td>
</tr>
<tr>
<td>$25,000 to $50,000</td>
<td>100</td>
<td>22.0%</td>
</tr>
<tr>
<td>$50,000 to $75,000</td>
<td>73</td>
<td>16.1%</td>
</tr>
<tr>
<td>$75,000 to $100,000</td>
<td>52</td>
<td>11.5%</td>
</tr>
<tr>
<td>$100,000 &amp; Up</td>
<td>58</td>
<td>12.8%</td>
</tr>
<tr>
<td>I do not know</td>
<td>86</td>
<td>18.9%</td>
</tr>
<tr>
<td>Mother-figure’s Educational Background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>31</td>
<td>6.8%</td>
</tr>
<tr>
<td>High school graduate or equivalent</td>
<td>109</td>
<td>24.0%</td>
</tr>
<tr>
<td>Some college</td>
<td>143</td>
<td>31.5%</td>
</tr>
<tr>
<td>College graduate (4-year degree)</td>
<td>93</td>
<td>20.5%</td>
</tr>
<tr>
<td>Graduate degree or higher</td>
<td>75</td>
<td>16.5%</td>
</tr>
<tr>
<td>Not applicable/no response</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td>Father-figure’s Educational Background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>42</td>
<td>9.3%</td>
</tr>
<tr>
<td>High school graduate or equivalent</td>
<td>124</td>
<td>27.3%</td>
</tr>
<tr>
<td>Some college</td>
<td>112</td>
<td>24.7%</td>
</tr>
<tr>
<td>College graduate (4-year degree)</td>
<td>91</td>
<td>20.0%</td>
</tr>
<tr>
<td>Graduate degree or higher</td>
<td>73</td>
<td>16.1%</td>
</tr>
<tr>
<td>Not applicable/no response</td>
<td>12</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Note: Percent of total N provided, not Valid Percent. Some items had missing data.
Table 2
*Cronbach’s Alpha Coefficient of Internal Consistency for Study Measures*

<table>
<thead>
<tr>
<th>Variable</th>
<th># of Items</th>
<th>Previous Study Cronbach’s α</th>
<th>Current Study Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS2 – Psychological Aggression</td>
<td>16</td>
<td>.74</td>
<td>.89</td>
</tr>
<tr>
<td>CTS2 – Physical Assault</td>
<td>24</td>
<td>.88</td>
<td>.89</td>
</tr>
<tr>
<td>CTS2 – Injury</td>
<td>12</td>
<td>.89</td>
<td>.92</td>
</tr>
<tr>
<td>Combined - Physical Assault &amp; Injury</td>
<td>36</td>
<td>--</td>
<td>.92</td>
</tr>
<tr>
<td>CTS2 – Sexual Coercion</td>
<td>14</td>
<td>.82</td>
<td>.81</td>
</tr>
<tr>
<td>IPPA – Mother Attachment</td>
<td>25</td>
<td>.87</td>
<td>.80</td>
</tr>
<tr>
<td>IPPA – Father Attachment</td>
<td>25</td>
<td>.89</td>
<td>.80</td>
</tr>
<tr>
<td>PBI – Maternal Care</td>
<td>12</td>
<td>.89</td>
<td>.93</td>
</tr>
<tr>
<td>PBI – Paternal Care</td>
<td>12</td>
<td>.91</td>
<td>.95</td>
</tr>
</tbody>
</table>
## Pearson Correlations for All Study Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PBI Mother Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. PBI Father Care</td>
<td>.29**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mother Trust</td>
<td>.70**</td>
<td>.21**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Father Trust</td>
<td>.20**</td>
<td>.78**</td>
<td>.34**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Mother Communication</td>
<td>.67**</td>
<td>.25**</td>
<td>.86**</td>
<td>.37**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Father Communication</td>
<td>.18**</td>
<td>.74**</td>
<td>.29**</td>
<td>.83**</td>
<td>.40**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Mother Alienation</td>
<td>-.60**</td>
<td>-.25**</td>
<td>-.78**</td>
<td>-.33**</td>
<td>-.76**</td>
<td>-.33**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Father Alienation</td>
<td>-.17**</td>
<td>-.70**</td>
<td>-.27**</td>
<td>-.80**</td>
<td>-.32**</td>
<td>-.76**</td>
<td>.43**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Psych. Agg. Perpetration</td>
<td>-.12**</td>
<td>-.16**</td>
<td>-.17**</td>
<td>-.16**</td>
<td>-.14**</td>
<td>-.19**</td>
<td>.22**</td>
<td>.25**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Psych. Agg. Victimization</td>
<td>-.10*</td>
<td>-.13**</td>
<td>-.17**</td>
<td>-.13*</td>
<td>-.16**</td>
<td>-.22**</td>
<td>.20**</td>
<td>.89**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Sex Coer. Perpetration</td>
<td>-.07</td>
<td>-.10*</td>
<td>-.13**</td>
<td>-.11*</td>
<td>-.05</td>
<td>-.13**</td>
<td>.15**</td>
<td>.13**</td>
<td>.38**</td>
<td>.32**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Sex Coer. Victimization</td>
<td>-.09</td>
<td>-.16**</td>
<td>0.16**</td>
<td>-.18**</td>
<td>-.09*</td>
<td>-.23**</td>
<td>.21**</td>
<td>.26**</td>
<td>.49**</td>
<td>.46**</td>
<td>.67**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Physical/Injury Perpetration</td>
<td>-.15**</td>
<td>-.10*</td>
<td>-.19**</td>
<td>-.11*</td>
<td>-.14**</td>
<td>-.08</td>
<td>.19**</td>
<td>.16**</td>
<td>.61**</td>
<td>.57**</td>
<td>.34**</td>
<td>.40**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Physical/Injury Victimization</td>
<td>-.20**</td>
<td>-.11*</td>
<td>-.26**</td>
<td>-.09</td>
<td>-.21**</td>
<td>-.09</td>
<td>.21**</td>
<td>.13**</td>
<td>.55**</td>
<td>.60**</td>
<td>.32**</td>
<td>.41**</td>
<td>.83**</td>
<td></td>
</tr>
</tbody>
</table>
Table 4
Mean, Standard Deviation, and Range for Study Variables (N = 454)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS2 – Psychological Aggression - Perpetration</td>
<td>2.36</td>
<td>1.56</td>
<td>0 – 6.16</td>
</tr>
<tr>
<td>CTS2 – Psychological Aggression - Victimization</td>
<td>2.19</td>
<td>1.54</td>
<td>0 – 6.40</td>
</tr>
<tr>
<td>CTS2 – Physical Assault &amp; Injury - Perpetration</td>
<td>0.88</td>
<td>1.35</td>
<td>0 – 8.77</td>
</tr>
<tr>
<td>CTS2 – Physical Assault &amp; Injury - Victimization</td>
<td>0.75</td>
<td>1.31</td>
<td>0 – 8.37</td>
</tr>
<tr>
<td>CTS2 – Sexual Coercion - Perpetration</td>
<td>0.53</td>
<td>1.05</td>
<td>0 – 6.08</td>
</tr>
<tr>
<td>CTS2 – Sexual Coercion - Victimization</td>
<td>0.81</td>
<td>1.18</td>
<td>0 – 5.57</td>
</tr>
<tr>
<td>IPPA – Mother Trust</td>
<td>41.99</td>
<td>8.18</td>
<td>13 – 50</td>
</tr>
<tr>
<td>IPPA – Mother Communication</td>
<td>35.29</td>
<td>9.02</td>
<td>9 – 45</td>
</tr>
<tr>
<td>IPPA – Mother Alienation</td>
<td>12.98</td>
<td>5.63</td>
<td>6 – 30</td>
</tr>
<tr>
<td>IPPA – Father Trust</td>
<td>39.15</td>
<td>9.79</td>
<td>10 – 50</td>
</tr>
<tr>
<td>IPPA – Father Communication</td>
<td>29.25</td>
<td>10.45</td>
<td>9 – 45</td>
</tr>
<tr>
<td>IPPA – Father Alienation</td>
<td>14.45</td>
<td>6.23</td>
<td>6 – 30</td>
</tr>
<tr>
<td>PBI – Maternal Care</td>
<td>29.06</td>
<td>7.77</td>
<td>3 – 36</td>
</tr>
<tr>
<td>PBI – Paternal Care</td>
<td>25.30</td>
<td>9.62</td>
<td>0 – 36</td>
</tr>
</tbody>
</table>
Table 5  
*Frequencies by Item: Revised Conflict Tactics Scale (N = 454)*

<table>
<thead>
<tr>
<th></th>
<th>Once</th>
<th>Twice</th>
<th>3-5</th>
<th>6-10</th>
<th>11-20</th>
<th>More than 20 times</th>
<th>Not in the past year, but it did happen before</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
<td>% (n)</td>
</tr>
<tr>
<td>1. I showed my partner I cared even though we disagreed.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>2. <em>My partner</em> showed care for me even though we disagreed.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>3. I explained my side of a disagreement to my partner.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>4. <em>My partner</em> explained his or her side of a disagreement to me.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5. I insulted or swore at my partner.</td>
<td>9.0% (41)</td>
<td>10.6% (48)</td>
<td>16.5% (75)</td>
<td>9.7% (44)</td>
<td>7.0% (32)</td>
<td>13.0% (59)</td>
<td>5.1% (23)</td>
<td>28.9% (131)</td>
</tr>
<tr>
<td>6. <em>My partner</em> insulted or swore at me.</td>
<td>9.7% (44)</td>
<td>11.0% (50)</td>
<td>15.6% (71)</td>
<td>10.1% (46)</td>
<td>6.8% (31)</td>
<td>9.7% (44)</td>
<td>6.2% (28)</td>
<td>30.2% (137)</td>
</tr>
<tr>
<td>7. I threw something at my partner that could hurt.</td>
<td>2.6% (12)</td>
<td>3.7% (17)</td>
<td>2.4% (11)</td>
<td>0.7% (3)</td>
<td>0.9% (4)</td>
<td>0.4% (2)</td>
<td>2.2% (10)</td>
<td>86.6% (393)</td>
</tr>
<tr>
<td>8. <em>My partner</em> threw something at me that could hurt.</td>
<td>4.4% (20)</td>
<td>2.2% (10)</td>
<td>0.9% (4)</td>
<td>1.1% (5)</td>
<td>0.4% (2)</td>
<td>0.4% (2)</td>
<td>2.4% (11)</td>
<td>87.9% (399)</td>
</tr>
<tr>
<td>9. I twisted my partner’s arm or hair.</td>
<td>2.2% (10)</td>
<td>1.3% (6)</td>
<td>1.5% (7)</td>
<td>1.1% (5)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>1.3% (6)</td>
<td>92.1% (418)</td>
</tr>
<tr>
<td>10. <em>My partner</em> twisted my arm or hair.</td>
<td>3.1% (14)</td>
<td>3.1% (14)</td>
<td>1.5% (7)</td>
<td>0.7% (3)</td>
<td>0.7% (3)</td>
<td>0.0% (0)</td>
<td>1.1% (5)</td>
<td>89.0% (404)</td>
</tr>
<tr>
<td>11. I had a sprain, bruise, or small cut because of a fight with my partner.</td>
<td>3.5% (16)</td>
<td>2.4% (11)</td>
<td>0.9% (4)</td>
<td>0.4% (2)</td>
<td>0.0% (0)</td>
<td>0.4% (2)</td>
<td>2.0% (9)</td>
<td>90.1% (409)</td>
</tr>
<tr>
<td>12. <em>My partner</em> had a sprain, bruise, or small cut because of a fight with me.</td>
<td>3.1% (14)</td>
<td>2.0% (9)</td>
<td>0.9% (4)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.4% (2)</td>
<td>1.1% (5)</td>
<td>91.6% (416)</td>
</tr>
<tr>
<td>13. I showed respect for my partner’s</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
14. **My partner showed respect for my feelings about an issue.**

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th>--</th>
<th>--</th>
<th>--</th>
<th>--</th>
<th>--</th>
<th>--</th>
<th>--</th>
<th>--</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. I made my partner have sex without a condom.</td>
<td>2.4% (11)</td>
<td>1.1% (5)</td>
<td>2.4% (11)</td>
<td>1.1% (5)</td>
<td>0.2% (1)</td>
<td>7.0% (32)</td>
<td>1.1% (5)</td>
<td>83.7% (380)</td>
</tr>
<tr>
<td>16. <strong>My partner made me have sex without a condom.</strong></td>
<td>2.9% (13)</td>
<td>2.9% (13)</td>
<td>3.1% (14)</td>
<td>1.5% (7)</td>
<td>0.9% (4)</td>
<td>6.4% (29)</td>
<td>1.3% (6)</td>
<td>80.4% (365)</td>
</tr>
<tr>
<td>17. I pushed or shoved my partner.</td>
<td>8.1% (37)</td>
<td>6.8% (31)</td>
<td>7.3% (33)</td>
<td>2.4% (11)</td>
<td>0.2% (1)</td>
<td>1.8% (8)</td>
<td>4.2% (19)</td>
<td>67.8% (308)</td>
</tr>
<tr>
<td>18. <strong>My partner pushed or shoved me.</strong></td>
<td>5.1% (23)</td>
<td>5.1% (23)</td>
<td>4.6% (21)</td>
<td>2.4% (11)</td>
<td>0.2% (1)</td>
<td>0.9% (4)</td>
<td>3.5% (16)</td>
<td>77.5% (352)</td>
</tr>
<tr>
<td>19. I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex.</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.4% (2)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.4% (2)</td>
<td>97.8% (444)</td>
</tr>
<tr>
<td>20. <strong>My partner used force to make me have oral or anal sex.</strong></td>
<td>0.9% (4)</td>
<td>0.7% (3)</td>
<td>0.4% (2)</td>
<td>0.2% (1)</td>
<td>0.4% (2)</td>
<td>0.0% (0)</td>
<td>0.9% (4)</td>
<td>95.8% (435)</td>
</tr>
<tr>
<td>21. I used a knife or gun on my partner.</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>98.7% (448)</td>
</tr>
<tr>
<td>22. <strong>My partner used a knife or gun on me.</strong></td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.4% (2)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>98.5% (447)</td>
</tr>
<tr>
<td>23. I passed out from being hit on the head by my partner in a fight.</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.4% (2)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>98.9% (449)</td>
</tr>
<tr>
<td>24. <strong>My partner passed out from being hit on the head in a fight with me.</strong></td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>98.2% (446)</td>
</tr>
<tr>
<td>25. I called my partner fat or ugly.</td>
<td>4.2% (19)</td>
<td>2.6% (12)</td>
<td>4.4% (20)</td>
<td>1.5% (7)</td>
<td>2.2% (10)</td>
<td>1.8% (8)</td>
<td>2.9% (13)</td>
<td>79.7% (362)</td>
</tr>
<tr>
<td>26. <strong>My partner called me fat or ugly.</strong></td>
<td>5.1% (23)</td>
<td>2.4% (11)</td>
<td>3.3% (15)</td>
<td>1.3% (6)</td>
<td>0.7% (3)</td>
<td>1.3% (6)</td>
<td>3.7% (17)</td>
<td>81.1% (368)</td>
</tr>
<tr>
<td>27. I punched or hit my partner with something that could hurt.</td>
<td>3.7% (17)</td>
<td>1.5% (7)</td>
<td>0.9% (4)</td>
<td>0.7% (3)</td>
<td>0.4% (2)</td>
<td>0.2% (1)</td>
<td>2.2% (10)</td>
<td>88.8% (403)</td>
</tr>
<tr>
<td>28. <strong>My partner punched or hit me with something that could hurt.</strong></td>
<td>1.5% (7)</td>
<td>1.1% (5)</td>
<td>0.4% (2)</td>
<td>1.1% (5)</td>
<td>0.7% (3)</td>
<td>0.2% (1)</td>
<td>1.5% (7)</td>
<td>92.1% (418)</td>
</tr>
<tr>
<td>29. I destroyed</td>
<td>6.4%</td>
<td>1.3%</td>
<td>1.5%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>2.9%</td>
<td>86.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>30. My partner destroyed something that belonged to me.</td>
<td>3.1% (14)</td>
<td>3.1% (14)</td>
<td>0.9% (4)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>3.3% (15)</td>
<td>88.1% (400)</td>
</tr>
<tr>
<td>31. I went to a doctor because of a fight with my partner.</td>
<td>0.7% (3)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.4% (2)</td>
<td>97.1% (441)</td>
</tr>
<tr>
<td>32. My partner went to a doctor because of a fight with me.</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.4% (2)</td>
<td>0.2% (1)</td>
<td>98.2% (446)</td>
</tr>
<tr>
<td>33. I choked my partner.</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.7% (3)</td>
<td>96.9% (440)</td>
</tr>
<tr>
<td>34. My partner choked me.</td>
<td>3.1% (14)</td>
<td>0.0% (0)</td>
<td>0.7% (3)</td>
<td>0.4% (2)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>1.1% (5)</td>
<td>94.3% (428)</td>
</tr>
<tr>
<td>35. I shouted or yelled at my partner.</td>
<td>8.6% (39)</td>
<td>8.6% (39)</td>
<td>14.5% (66)</td>
<td>10.4% (47)</td>
<td>7.5% (34)</td>
<td>11.9% (54)</td>
<td>4.4% (20)</td>
<td>32.8% (149)</td>
</tr>
<tr>
<td>36. My partner shouted or yelled at me.</td>
<td>8.8% (40)</td>
<td>10.4% (47)</td>
<td>13.2% (60)</td>
<td>8.6% (39)</td>
<td>7.7% (35)</td>
<td>10.8% (49)</td>
<td>4.4% (20)</td>
<td>35.9% (163)</td>
</tr>
<tr>
<td>37. I slammed my partner against a wall.</td>
<td>2.0% (9)</td>
<td>0.7% (3)</td>
<td>0.4% (2)</td>
<td>0.2% (1)</td>
<td>0.4% (2)</td>
<td>0.2% (1)</td>
<td>0.7% (3)</td>
<td>95.4% (433)</td>
</tr>
<tr>
<td>38. My partner slammed me against a wall.</td>
<td>1.8% (8)</td>
<td>2.0% (9)</td>
<td>0.7% (3)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>1.3% (6)</td>
<td>93.4% (424)</td>
</tr>
<tr>
<td>39. I said I was sure we could work out a problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. My partner was sure we could work it out.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. I needed to see a doctor because of a fight with my partner, but I didn’t.</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.4% (2)</td>
<td>0.2% (1)</td>
<td>98.9% (449)</td>
</tr>
<tr>
<td>42. My partner needed to see a doctor because of a fight with me, but didn’t.</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>99.3% (454)</td>
</tr>
<tr>
<td>43. I beat up my partner.</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>0.2% (1)</td>
<td>98.7% (448)</td>
</tr>
<tr>
<td>44. My partner beat me up.</td>
<td>0.4% (2)</td>
<td>0.0% (0)</td>
<td>0.0% (0)</td>
<td>0.4% (2)</td>
<td>0.0% (0)</td>
<td>0.2% (1)</td>
<td>0.7% (3)</td>
<td>97.8% (444)</td>
</tr>
<tr>
<td>45. I grabbed my partner.</td>
<td>6.6% (30)</td>
<td>3.3% (15)</td>
<td>6.6% (30)</td>
<td>2.0% (9)</td>
<td>1.1% (5)</td>
<td>1.8% (8)</td>
<td>2.6% (12)</td>
<td>76% (345)</td>
</tr>
<tr>
<td>46. My partner grabbed me</td>
<td>7.9% (36)</td>
<td>4.6% (21)</td>
<td>6.4% (29)</td>
<td>1.1% (5)</td>
<td>1.1% (5)</td>
<td>1.5% (7)</td>
<td>3.7% (17)</td>
<td>73.3% (333)</td>
</tr>
<tr>
<td>Question</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>97.8%</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>47. I used force (like hitting, holding down, or using a weapon) to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>make my partner have sex.</td>
<td>(0)</td>
<td>(2)</td>
<td>(0)</td>
<td>(2)</td>
<td>(1)</td>
<td>(0)</td>
<td>(2)</td>
<td>(444)</td>
</tr>
<tr>
<td>48. <em>My partner</em> used force to make me have sex</td>
<td>0.2%</td>
<td>0.7%</td>
<td>0.4%</td>
<td>0.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>96.9%</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(3)</td>
<td>(2)</td>
<td>(3)</td>
<td>(3)</td>
<td>(2)</td>
<td>(2)</td>
<td>(440)</td>
</tr>
<tr>
<td>49. I stomped out of the room or house or yard during a disagreement.</td>
<td>14.5%</td>
<td>8.6%</td>
<td>11.5%</td>
<td>5.3%</td>
<td>3.5%</td>
<td>4.0%</td>
<td>5.5%</td>
<td>47.1%</td>
</tr>
<tr>
<td>50. <em>My partner</em> stomped out of the room or house or yard during a</td>
<td>10.8%</td>
<td>9.9%</td>
<td>9.9%</td>
<td>6.4%</td>
<td>2.4%</td>
<td>2.4%</td>
<td>5.7%</td>
<td>52.4%</td>
</tr>
<tr>
<td>disagreement.</td>
<td>(49)</td>
<td>(45)</td>
<td>(45)</td>
<td>(29)</td>
<td>(11)</td>
<td>(11)</td>
<td>(26)</td>
<td>(238)</td>
</tr>
<tr>
<td>51. I insisted on sex</td>
<td>2.6%</td>
<td>4.6%</td>
<td>4.4%</td>
<td>1.3%</td>
<td>0.4%</td>
<td>1.3%</td>
<td>2.4%</td>
<td>82.6%</td>
</tr>
<tr>
<td>when my partner did not want to (but I did not use physical force).</td>
<td>(12)</td>
<td>(21)</td>
<td>(20)</td>
<td>(6)</td>
<td>(2)</td>
<td>(6)</td>
<td>(11)</td>
<td>(375)</td>
</tr>
<tr>
<td>52. <em>My partner</em> insisted on sex when I didn’t want to (but did not</td>
<td>4.6%</td>
<td>7.7%</td>
<td>7.9%</td>
<td>3.5%</td>
<td>0.9%</td>
<td>1.1%</td>
<td>2.9%</td>
<td>70.9%</td>
</tr>
<tr>
<td>53. I slapped my partner.</td>
<td>6.4%</td>
<td>3.5%</td>
<td>1.3%</td>
<td>0.7%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>85.2%</td>
</tr>
<tr>
<td></td>
<td>(29)</td>
<td>(16)</td>
<td>(6)</td>
<td>(3)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(387)</td>
</tr>
<tr>
<td>54. <em>My partner</em> slapped me.</td>
<td>3.1%</td>
<td>1.3%</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.4%</td>
<td>0.0%</td>
<td>2.0%</td>
<td>92.5%</td>
</tr>
<tr>
<td></td>
<td>(14)</td>
<td>(6)</td>
<td>(1)</td>
<td>(1)</td>
<td>(2)</td>
<td>(0)</td>
<td>(9)</td>
<td>(420)</td>
</tr>
<tr>
<td>55. I had a broken bone from a fight with my partner.</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>99.6%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(0)</td>
<td>(0)</td>
<td>(2)</td>
<td>(0)</td>
<td>(0)</td>
<td>(2)</td>
<td>(452)</td>
</tr>
<tr>
<td>56. <em>My partner</em> had a broken bone from a fight with me.</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>98.9%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(0)</td>
<td>(1)</td>
<td>(0)</td>
<td>(1)</td>
<td>(0)</td>
<td>(2)</td>
<td>(449)</td>
</tr>
<tr>
<td>57. I used threats to make my partner have oral or anal sex.</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>98.5%</td>
</tr>
<tr>
<td></td>
<td>(0)</td>
<td>(0)</td>
<td>(2)</td>
<td>(1)</td>
<td>(0)</td>
<td>(0)</td>
<td>(1)</td>
<td>(452)</td>
</tr>
<tr>
<td>58. <em>My partner</em> used threats to make me have oral or anal sex.</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.4%</td>
<td>98.2%</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(1)</td>
<td>(0)</td>
<td>(1)</td>
<td>(0)</td>
<td>(1)</td>
<td>(2)</td>
<td>(446)</td>
</tr>
<tr>
<td>59. I suggested a compromise to a disagreement.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>60. <em>My partner</em> suggested a compromise to a disagreement.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Activity</td>
<td>Percentage</td>
<td>Count</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>I burned or scalded my partner on purpose.</td>
<td>0.0%</td>
<td>(0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td><em>My partner</em> burned or scalded me on purpose.</td>
<td>0.0%</td>
<td>(0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>I insisted my partner have oral or anal sex (but did not use physical force).</td>
<td>1.1%</td>
<td>(5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td><em>My partner</em> insisted I have oral or anal sex (but did not use physical force).</td>
<td>4.4%</td>
<td>(20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>I accused my partner of being a lousy lover.</td>
<td>5.7%</td>
<td>(26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td><em>My partner</em> accused me of being a lousy lover.</td>
<td>4.0%</td>
<td>(18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>I did something to spite my partner.</td>
<td>10.1%</td>
<td>(46)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td><em>My partner</em> did something to spite me.</td>
<td>9.0%</td>
<td>(41)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>I threatened to hit or throw something at my partner.</td>
<td>2.6%</td>
<td>(12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td><em>My partner</em> threatened to hit or throw something at me.</td>
<td>1.5%</td>
<td>(7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>I felt physical pain that still hurt the next day because of a fight with my partner.</td>
<td>1.8%</td>
<td>(8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72.</td>
<td><em>My partner</em> still felt physical pain the next day because of a fight we had.</td>
<td>1.8%</td>
<td>(8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73.</td>
<td>I kicked my partner.</td>
<td>1.5%</td>
<td>(7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74.</td>
<td><em>My partner</em> kicked me.</td>
<td>0.4%</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75.</td>
<td>I used threats to make my partner have sex.</td>
<td>0.2%</td>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76.</td>
<td><em>My partner</em> used threats to make me.</td>
<td>0.4%</td>
<td>(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
have sex.

| 77. I agreed to try a solution to a disagreement my partner suggested. | -- | -- | -- | -- | -- | -- | -- | -- |
| 78. *My partner* agreed to a solution I suggested. | -- | -- | -- | -- | -- | -- | -- | -- |

*Note:* Percent of total *N* provided, not Valid Percent. Some items had missing data. Items with missing values correspond to the Negotiation subscale, which was not collected for this study.
Table 6
Past Year Prevalence Rates of DV Perpetration and Victimization by CTS2 Subscales (N = 454)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Endorsed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% (n)</td>
<td></td>
</tr>
<tr>
<td>Psychological Aggression – Victimization</td>
<td>78.6% (357)</td>
<td>21.4% (97)</td>
</tr>
<tr>
<td>Psychological Aggression – Perpetration</td>
<td>81.5% (370)</td>
<td>18.5% (84)</td>
</tr>
<tr>
<td>Physical Assault – Victimization</td>
<td>32.2% (146)</td>
<td>67.8% (308)</td>
</tr>
<tr>
<td>Physical Assault – Perpetration</td>
<td>37.9% (172)</td>
<td>62.1% (282)</td>
</tr>
<tr>
<td>Injury – Victimization</td>
<td>9.0% (41)</td>
<td>91.0% (413)</td>
</tr>
<tr>
<td>Injury – Perpetration</td>
<td>7.3% (33)</td>
<td>92.7% (421)</td>
</tr>
<tr>
<td>Sexual Coercion – Victimization</td>
<td>37.9% (172)</td>
<td>62.1% (282)</td>
</tr>
<tr>
<td>Sexual Coercion – Perpetration</td>
<td>24.0% (109)</td>
<td>76.0% (345)</td>
</tr>
</tbody>
</table>
### Table 7
**Comparison of Past Year Prevalence Rates of Endorsed DV Victimization and Perpetration by Country of Birth (N = 454)**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>USA Born % (n = 321)</th>
<th>Foreign Born % (n = 132)</th>
<th>$\chi^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Aggression –Victimization</td>
<td>84.7% (272)</td>
<td>64.4% (85)</td>
<td>23.17</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Psychological Aggression –Perpetration$^1$</td>
<td>86.6% (278)</td>
<td>68.9% (91)</td>
<td>19.32</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Physical Assault – Victimization</td>
<td>37.1% (119)</td>
<td>20.5% (27)</td>
<td>11.83</td>
<td>.001</td>
</tr>
<tr>
<td>Physical Assault – Perpetration$^1$</td>
<td>41.4% (133)</td>
<td>28.8% (38)</td>
<td>6.37</td>
<td>.012</td>
</tr>
<tr>
<td>Injury – Victimization</td>
<td>10.0% (32)</td>
<td>6.8% (9)</td>
<td>1.128</td>
<td>.288</td>
</tr>
<tr>
<td>Injury – Perpetration</td>
<td>8.1% (26)</td>
<td>5.3% (7)</td>
<td>1.083</td>
<td>.298</td>
</tr>
<tr>
<td>Sexual Coercion – Victimization</td>
<td>38.6% (124)</td>
<td>36.4% (48)</td>
<td>.204</td>
<td>.652</td>
</tr>
<tr>
<td>Sexual Coercion – Perpetration</td>
<td>22.1% (71)</td>
<td>28.8% (38)</td>
<td>2.277</td>
<td>.131</td>
</tr>
</tbody>
</table>

$^1$Note: Values may differ in comparison to values in Table 6 because one participant had missing data on country of birth variable.
Table 8  
*Comparison of Past Year Prevalence Rates of Endorsed DV Victimization and Perpetration by Gender (N = 450)*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Female % (n = 396)</th>
<th>Male % (n = 54)</th>
<th>$\chi^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Aggression – Victimization</td>
<td>313 (79.0%)</td>
<td>40 (74.1%)</td>
<td>.693</td>
<td>.405</td>
</tr>
<tr>
<td>Psychological Aggression – Perpetration</td>
<td>325 (82.1%)</td>
<td>41 (75.9%)</td>
<td>1.182</td>
<td>.277</td>
</tr>
<tr>
<td>Physical Assault – Victimization</td>
<td>123 (31.1%)</td>
<td>21 (38.9%)</td>
<td>1.338</td>
<td>.247</td>
</tr>
<tr>
<td>Physical Assault – Perpetration</td>
<td>152 (38.6%)</td>
<td>17 (31.5%)</td>
<td>1.035</td>
<td>.309</td>
</tr>
<tr>
<td>Injury – Victimization</td>
<td>34 (8.6%)</td>
<td>6 (11.1%)</td>
<td>.374</td>
<td>.541</td>
</tr>
<tr>
<td>Injury – Perpetration</td>
<td>28 (7.1%)</td>
<td>4 (7.4%)</td>
<td>.008</td>
<td>.928</td>
</tr>
<tr>
<td>Sexual Coercion – Victimization</td>
<td>154 (38.9%)</td>
<td>16 (29.6%)</td>
<td>1.733</td>
<td>.188</td>
</tr>
<tr>
<td>Sexual Coercion – Perpetration</td>
<td>87 (22.0%)</td>
<td>20 (37.0%)</td>
<td>5.952</td>
<td>.015</td>
</tr>
</tbody>
</table>

Note: Values differ from total endorsed in Table 6 because four participants had missing data for the gender variable.
Table 9
Comparison of Past Year Prevalence Rates of Endorsed DV Victimization and Perpetration by Sexual Orientation (N = 454)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Heterosexual % (n = 414)</th>
<th>All Other Sexual Orientations % (n = 40)</th>
<th>$\chi^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Aggression – Victimization</td>
<td>319 (77.1%)</td>
<td>38 (95.0%)</td>
<td>6.993</td>
<td>.008</td>
</tr>
<tr>
<td>Psychological Aggression – Perpetration</td>
<td>332 (80.2%)</td>
<td>38 (95.0%)</td>
<td>5.303</td>
<td>.021</td>
</tr>
<tr>
<td>Physical Assault – Victimization</td>
<td>126 (30.4%)</td>
<td>20 (50.0%)</td>
<td>6.400</td>
<td>.011</td>
</tr>
<tr>
<td>Physical Assault – Perpetration</td>
<td>151 (36.5%)</td>
<td>21 (52.5%)</td>
<td>3.981</td>
<td>.046</td>
</tr>
<tr>
<td>Injury – Victimization</td>
<td>36 (8.7%)</td>
<td>5 (12.5%)</td>
<td>.643</td>
<td>.423</td>
</tr>
<tr>
<td>Injury – Perpetration</td>
<td>29 (7.0%)</td>
<td>4 (10.0%)</td>
<td>.485</td>
<td>.486</td>
</tr>
<tr>
<td>Sexual Coercion – Victimization</td>
<td>155 (37.4%)</td>
<td>17 (42.5%)</td>
<td>.397</td>
<td>.529</td>
</tr>
<tr>
<td>Sexual Coercion – Perpetration</td>
<td>97 (23.4%)</td>
<td>12 (30.0%)</td>
<td>.863</td>
<td>.353</td>
</tr>
</tbody>
</table>
APPENDIX

Appendix A. Demographic Questionnaire

1. What college or university do you attend?

2. What is your year in school?
   • Freshman
   • Sophomore
   • Junior
   • Senior
   • Other (please specify): 

3. What is your age (in years)?
   18  22
   19  23
   20  24
   21  25

4. How do you identify your gender?
   • Male
   • Female
   • Transgender

5. Which best describes your racial or ethnic identity?
   • Black or African American (including Caribbean, Haitian, African)
   • Asian or Asian American
   • Hispanic or Latino
   • Native American or Alaska Native
   • Pacific Islander
   • White, Caucasian, Anglo European American, not Hispanic
   • Other (please specify): 

6. Were you born in the United States?
   • Yes
   • No
      a. If no, how many years have you lived in the US? 
      b. What is your country of origin? 

7. What is your primary language?
   • English
• Spanish
• Other (please specify): ____________

8. Are you a veteran?
• Yes
• No

9. Which best describes your sexual orientation?
• Heterosexual or straight
• Bisexual
• Homosexual or gay/lesbian
• Other (please specify): ________________
• I prefer not to label myself

10. What is your current relationship status?
• Single (never married) and not in a dating/romantic relationship
• Single (never married), but in a dating/romantic relationship
• Married
• Separated
• Divorced
• Widowed

11. In your lifetime, how many dating/romantic relationships have you had?
_______ (total # of different dating partners)

12. What is your parent’s (biological or adoptive) marital status?
• Never married or living together
• Living together, but not married
• Married
• Separated
• Divorced
• Widowed

13. What family structure best describes the family you grew up in?
• Two biological (or adoptive) parent family
• Single-mother family
• Single-father family
• Mother-stepfather family
• Father-stepmother family
• Grandparent as primary caregiver family
• Other. Please describe ______________

14. How many siblings do you have in total? ____________
15. What is the annual income of your family?
   - Less than $10,000
   - $10,000 to $25,000
   - $25,000 to $50,000
   - $50,000 to $75,000
   - $75,000 to $100,000
   - $100,000 & up
   - I don’t know

This questionnaire will ask about your relationships with your parents.
Some of the questions ask about your mother or the person who has acted as your mother. If you have more than one person acting as your mother (e.g. a biological mother and a step-mother) answer the questions for the one you feel has most influenced you. Please refer to this same person when responding to questions about your mother through the survey.

16. What is your relationship to the person who serves as your “mother”? She is my:
   - Biological mother
   - Adoptive mother
   - Step-mother
   - Aunt
   - Grandmother
   - Other (please specify): ____________________________
   - I have no mother-figure

17. What is your mother’s educational background?
   - Less than high school
   - High school graduate or equivalent
   - Some college
   - College graduate (4-year degree)
   - Graduate degree or higher (e.g. professional or medical degree)

Some of the questions ask about your father or the person who has acted as your father. If you have more than one person acting as your father (e.g. a biological father and a step-father) answer the questions for the one you feel has most influenced you. Please refer to this same person when responding to questions about your father through the survey.

18. What is your relationship to the person who serves as your “father”? He is my:
   - Biological father
   - Adoptive father
   - Step-father
   - Uncle
   - Grandfather
   - Other (please specify): ____________________________
• I have no father-figure

19. What is your father’s educational background?
• Less than high school
• High school graduate or equivalent
• Some college
• College graduate (4-year degree)
• Graduate degree or higher (professional or medical degree)