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Witnessing Parental Domestic Violence and Young Girls' Dating Relationships

Brinda Kay McKinney
Walden University

Walden University

College of Health Sciences

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Brinda McKinney

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Review Committee
Dr. Peter Anderson, Committee Chairperson, Health Services Faculty
Dr. Kourtney Nieves, Committee Member, Health Services Faculty
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Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
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Abstract

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Brinda K. McKinney, RN, MSN, PhD

MSN, Walden University, 2007

BSN, Arkansas State University, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Domestic violence afflicts people regardless of ethnicity, socio-economically status, age, or gender. Too often, girls enter and remain in abusive relationships, despite the trauma and risks of doing so. Using Roy's theory of adaptation, this study explored the effect of witnessing inter-parental violence on girls' experiences of physical violence or sexual abuse in their dating relationships. Original data collection occurred at a Midwestern U.S. university via e-mail using questions adapted from the CDC's Youth Risk Behavior Survey Surveillance System. The study used 526 responses from female participants who self-disclosed if they had or had not witnessed inter-parental violence for categorical placement. Participants mirrored the population of the university with regard to age, race, and GPA. Using an ANOVA, the groups were compared on the independent variable of witnessing inter-parental violence and the dependent variable of experiencing physical or sexual dating violence. Results showed witnessing inter-parental violence did not predict whether or not a girl would experience physical or sexual violence in a dating relationship. Findings indicated adaptation on the part of the girls after witnessing inter-parental violence and beginning their own dating relationships. Additional research is needed to gain knowledge of this adaptation process and to explore what happened between the time of witnessing inter-parental violence and entering dating relationships that helped prevent them from experiencing dating violence. Knowledge of these participants' adaptation processes may provide insight for counselors and therapists on how to support children who witness inter-parental violence. This insight may help girls develop adaptation mechanisms to prevent experiencing violence in dating relationships.

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Dedication

This dissertation is dedicated to God for supplying health, strength, knowledge and wisdom, and to my loving and devoted husband, Carl. D. McKinney, without whose love, support, and prayers, this project could never have been completed.

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Chapter 1: Introduction to the Study

Introduction

For as far back as there are written records, people from various walks of life have both witnessed and experienced domestic violence (Foyster, 2005; Miller, 2012). Years of research provided significant information about the topic, yet for all that scholars know about domestic violence, there is much still unknown. Intimate partners who murdered their female significant other had almost always repeatedly abused them in the months or years prior to the murder (Centers for Disease Control and Prevention [CDC], 2011). In spite of this knowledge, these murders still take place. Young women often enter and choose to remain in abusive relationships, putting themselves at risk for murder by their offender (Reynolds & Shepherd, 2011). Much research has been done in an attempt to profile the victims and the perpetrators of this crime (Furlow 2010, p. 133; Zolotor, Denham, & Weil, 2009), yet almost no researcher has considered how specific factors such as exposure to parental domestic violence effects the dating relationships of young women, leaving a gap in the literature. In this particular study, I considered what, if any, impact witnessing domestic violence between parents or primary caretakers as a child had on teen girls' dating relationships. Understanding this impact may help high school and college counselors devise programs to combat any negative impact of witnessing domestic violence on girls' own dating relationships. Such programs may produce positive social change by curtailing the number of young women who are adversely affected by dating violence.

This chapter summarizes the research literature available on this topic and highlights the gap in literature that this study addressed. In addition, it includes the problem statement of this research, the purpose of the study, research question and hypotheses, theoretical framework for the study, and nature of the study including the definitions, assumptions, scope, delimitations, and limitations.

Background

World-wide domestic violence, physical aggression, and/or assault continue to be a societal problem (Della-Giustina, 2009; Granstrom, 2009; Reinke-Williams, 2009). Europe became seriously concerned about the rampant domestic violence in the 15th century (Miller, 2012). West Asia (including North Africa) and South Asia experienced and recorded significant interpersonal violence as early as the 11th century (Wilke, Hippler, & Zakar, 2011). Historically, the Middle East culture has embraced domestic violence as part of their spiritual and gender-specific rights (Elsaidi, 2011). In the 17th century, Swedishen husbands thought it was their biblical duty to uphold the male dominance in family and marriage and employed domestic violence as one of the means to accomplish that goal (Liliequist, 2011). Foyster (2005) reviewed numerous United States domestic violence court documents between 1738 and 1800 finding the commonality in these cases was it was all female victims.

Romulus, the founder of Rome, instituted a law in 753 B.C. for men to discipline their wife as needed (Utech, 1994; England, 2007). As early as the mid-sixteen hundreds, America's English colonists believed domestic violence undermined society and would intervene if the husband exceeded moderate chastisement of his wife (Pleck, 1987) or

beat their wife with a rod larger than his thumb (Wojtczak, 2009). As late as the early 18th century, public law allowed men to beat their wives into submission for essentially any reason (Miller, 2012). However, by the 1870's social reformers demanded change and laws were passed banning husbands from physically beating their wives (Siegel, 1996); albeit, he laws were not strictly enforced. It was not until the 1900s that the laws that exist today regarding domestic violence have come into being (Lenderman, 2013; Wang, 2013; Wong, 2013).

Klein's work (2009) in 21st century considered multiple factors of domestic violence, most notably that only 27 percent of women who were physically assaulted by an intimate partner actually reported their assault to law enforcement; suggesting that the problem is as much as four times greater than originally thought. Advocates for the reduction of domestic violence have successfully gotten penalties attached to domestic violence offenders (Lenderman, 2013; Wang, 2013; Wong, 2013); however, these penalties vary in severity from state to state (LaMance, 2013) and have not succeeded in stopping domestic violence (Rabin, 2011).

With their study revealing up to 70% of women experience domestic violence, Alhabib, Nur, and Jones (2010) claim domestic violence has reached epidemic proportions in the United States. The CDC (2011) asserted that more violence occurs than what is actually reported due to the perpetrators' frequent use of intimidation during their attacks (Furlow 2010; Zolotor, Denham, & Weil, 2009).

The CDC (2011) estimated that over 12 million Americans are victims of physical assault by an intimate partner each year. In addition, over 25% percent of women

experience domestic violence at some point during their lifetime (Center for American Progress, 2011). Although men are also victims of domestic violence, 85% of domestic violence victims are females (Domestic Violence Resource Center, 2013). Women are more than three times more likely than men to be victimized by a current or former intimate partner (American Bar Association, 2011).

Although, all women are at risks for domestic violence; females 16 to 24 years of age are at greatest risk for intimate partner abuse and domestic violence (Carpenter & Stacks, 2009; Futures without Violence, 2013; National Organization for Women, 2012). Moreover, pregnancy significantly increases the risks of domestic violence (Ameh, Shittu, & Abdul, 2009). More than three women a day are murdered by their husbands or boyfriends in the United States (Domestic Violence Resource Center, 2013) and the murdered women were nearly always repeatedly abused in the months or years prior to the murder (CDC, 2011) signifying removal from the relationship may have been lifesaving.

Witnessing violence between one's parents or caretakers has been identified as the strongest risk factor of transmitting violent behavior from one generation to the next (Family Violence Prevention Fund, 2009); however, witnessing violence between parents affects males and females differently (Straus, 2009). Boys who witness domestic violence are more likely to become perpetrators (Israel, & Stover, 2009) and girls who witness domestic violence are more likely to eventually become victims (Elwood, et al., 2011; Kerley, Xu, Sirisunyaluck, & Alley, 2010). Considering that these girls are likely to grow up to be victims, and girls who become repeated victims are at risk for murder, it is

important that there is study regarding how witnessing domestic violence between one's parents effects an adolescent girls dating patterns. The purpose of this quantitative study was to discover specifically how exposure to domestic violence between a female's parents or primary caretakers during childhood may influence their dating relationships later in life.

Witnessing domestic violence may influence young males to have negative mental health consequences, higher than usual mood disorders, and become perpetrators later in life (Bayarri, Ezpeleta, and Granero, 2011; Furlow, 2010; Peckins, Dockray, Eckenrode, Heaton, and Susman, 2012). Witnessing domestic violence may influence young females to have low self-esteem and be insecure (Froeschle, 2009), experience significant sleep dysfunction (Humphreys, Lowe, and Williams, 2009) and even become victims of domestic violence later in life (Selic, Pesjak, and Kersnik, 2011). However, there is a gap in the literature when it comes to specifically considering how exposure to domestic violence between a female's parents or primary caretakers during their childhood may influence the female's dating relationships during her early teen years. I intend to fill that gap with this study as it considered what, if any, affect witnessing domestic violence between one's parents or primary care givers have on the females experiencing physical violence or sexual abuse in a dating relationship.

Problem Statement

Females who witness domestic violence between their parent / primary caretakers often become domestic violence victims (Elwood, et al., 2011; Kerley, Xu, Sirisunyaluck, & Alley, 2010). Females 16 to 24 years of age are at greatest risk for intimate partner

abuse and domestic violence (Carpenter & Stacks, 2009; Futures without Violence, 2013; National Organization for Women, 2012). Intimate partners typically repeatedly abuse the female victim for months or years prior to them murdering them (CDC, 2011). Young females often choose to remain in abusive relationships putting themselves at risk for continued abuse and possibly murder by their offender (Reynolds & Shepherd, 2011). There is no research to determine specifically how witnessing domestic violence between ones parents or primary caretakers affects the young girls dating relationships, most specifically her experiencing physical violence or sexual abuse in a dating relationship. I intend to fill this gap

Purpose of the Study

The purpose of the quasi-experimental quantitative study was to explore how witnessing domestic violence between one's parents/ primary caretakers affects a young girl's' dating relationships. Specifically, this study considered the independent variable of previous exposure to domestic violence between the female's parents or primary caretakers and the dependent variable of the female personally experiencing physical violence or sexual abuse in a dating relationship.

Research Question and Hypotheses

The primary research question was the following: Does witnessing domestic violence between one's parents and/or primary caretakers affect young girls' dating relationships? This research tested the following hypotheses:

The null hypothesis (H_0a: μ1= u2) states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship.

The alternative hypotheses (H_1a: μ1≠μ2) states there is a difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship.

The null hypothesis (H_0b: μ1= u2) states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in a dating relationship.

The alternative hypotheses (H_1b: μ1≠μ2) states there is a difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in a dating relationship.

The null hypothesis (H_0c: μ1= u2) states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in more than one dating relationship.

The alternative hypotheses (H_1c: μ1≠μ2) states there is a difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in more than one dating relationship.

The null hypothesis (H_0d: μ1= u2) states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in more than one dating relationship.

The alternative hypotheses (H_1d: $\mu 1 \neq \mu 2$) states there is a difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in more than one dating relationship.

The covariates that the data set controls for are age, race, and grade point average (GPA). Participants are asked to list their current age. Data on race was collected by asking participants to choose from American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Hawaiian or other Pacific Islander, White, and Other. Additionally, participants were asked to provide their GPA.

The independent variable was previous exposure to domestic abuse between parents or primary caretakers. The dependent variable was the female experiencing physical violence or sexual abuse in a dating relationship. The dependent variable was ratio scored and a regression analysis was performed to analyze the data.

Theoretical Framework for the Study

Sister Callista Roy (2014) announced her theory of adaptation in 1971 claiming people's attitudes and beliefs are shaped by the process of them adapting to their surroundings. Her theory hinged on the assumption that humans are in a constant state of adaptation throughout their lives, and this theory had two paradigms (coping and adaptation), which Roy (2014) based on cognitive processing. This model specifically describes how the sequencing between in-put processes including perception, central processes such as memory, output processes such as behavior, and emotion work together to find an adaptation response for the individual (Roy, 2014). The input processes, output

processes (behavior), and emotions are in a constant state of adaptation. Inside this model, individuals are viewed as bio-psycho-social adaptive systems who manage environmental change through adaptation (van Wilgen et al., 2009). Roy's theory of adaptation has provided a framework for scientists to examine how humans adapt, and therefore react to and with their environment (Weiland, 2010). Roy's theory of adaptation has provided the framework for medical researchers to understand how humans adapt to their changing health status (Akyil & Ergüney, 2013; Ordin, Karayurt & Wellard, 2013). Roy's theory of adaptation has been repeatedly employed to help health care providers identify an appropriate approach to planning useful interventions for patients who are experiencing significant challenges and who are in need of therapeutic interventions (Gurgel, Rolim, Galvao, & Caetano, 2010). This current study examined how Roy's theory of adaptation may guide the research of a psychosocial problem as one considers how children adapt when exposed to domestic violence between their parents or primary caretakers.

This study explored what effect, if any, the input process of witnessing intimate partner violence between one's parents or primary caretakers had on female adolescents' output process experiencing physical violence or sexual abuse in a dating relationship. Roy's (2014) theory of adaptation may be used to inform how children adapt with the exposure to domestic violence between their parents or primary caretakers. Additionally, Roy's theory of adaptation may be used to inform how one considers what effects witnessing domestic violence between their parents or primary caretakers had on a female adolescents' experiencing physical violence or sexual abuse in a dating relationship.

Finally, since it was determined that witnessing domestic violence between their parents or primary caretakers does influence a female adolescents experiencing physical violence or sexual abuse in a dating relationship, Roy's theory of adaptation may provide the framework needed for health care providers to design appropriate interventions. A more detailed explanation of this theoretical framework is provided in Chapter 2.

Nature of the Study

This quantitative study employed the use of an Institutional Review Board (IRB) approved survey to test relationships between previous exposure to domestic violence between parents or primary caretakers and behaviors in one's own dating relationships. This study utilized previously collected data (Bonomi et al., 2012). With operational terms clearly defined, informed participants answered a categorical question regarding their experience with the independent variable (previous exposure to domestic violence between parents or primary caretakers). The answer to this question placed them in one of two categories: (a) those women who had previous exposure to domestic violence between parents or primary caretakers and (b) those who had not had previous exposure to domestic violence between parents or primary caretakers. Both groups were asked the same questions regarding their own dating relationships.

Both groups were asked, "Has any partner you've been involved with between ages 13 and 19 ever hit, slapped, or physically hurt you on purpose?" A *no* answer was coded 0 and a *yes* answer was coded 1. Participants who answered *yes* were asked the number of times they experienced this abuse and their age when it first happened and last

happened. The participants answered follow-up questions in an open field by putting in any whole numerical value.

Both groups were also asked “Has any partner you've been involved with between ages 13 and 19 ever pressured you to participate in sexual activities by threatening you with physical force (i.e. twisting your arm or holding you down)?” A *no* answer was coded 0 and a *yes* answer was coded 1. Participants who answered *yes* were asked the number of times they experienced the physical force and their age when it first and last happened. Again, participants answered the follow-up questions for this question in an open field by putting in any whole numerical value.

Definitions

The definition of the independent variable, domestic violence, was physical aggression or assault such as hitting, slapping, pinching, shoving, kicking, or otherwise physically hurting their spouse or partner (Bonomi et al., 2012). This variable was measured by the participants answering *no*, *yes*, or *don’t know/not sure* on a questionnaire with answers keyed as 0, 1, and 2 respectively.

Dates or a dating relationship for this data set was defined as a relationship with (a) a boyfriend or girlfriend, (b) someone a participant liked romantically and went to specific events with, such as school dances, or hung out with at the movies or the mall, and/or (c) someone a participant "hooked up with" or had a sexual relationship with, but whom a participant would not consider a boyfriend or girlfriend (Bonomi et al., 2012).

The definition used for witnessing domestic violence between one’s parents was having ever seen or heard one of a participant’s parents or guardians being hit, slapped,

punched, shoved, kicked, or otherwise physically hurt by their spouse or partner (Bonomi et al., 2012).

Finally, the definition of parents or guardians was not defined in the questionnaire used to collect this data set. According to Merriam-Webster's dictionary (2014), it is the person or persons who provided direct care. For this study, I used the terms *primary caretakers, parents,* and *guardians* interchangeably. A more detailed analysis of coding and so forth associated with these definitions is described in Chapter 3.

Assumptions

Assumptions are the elements taken for granted in the study. The epistemological assumption was met because I as the researcher was totally independent from what was being researched. The ontological assumption was that reality is objective, apart from me as the researcher of this study. The methodological assumption was met by using a deductive process based on a set of definitions to explain a behavior. In this quasi-experimental quantitative approach, I tested a theory by specifying narrow hypotheses and examining data using an instrument that measures attitudes and behaviors, and then analyzed the data (Creswell, 2008). This study used previously collected data. The data set was collected in 2012 under the direction of principle investigator Dr. A. Bonomi (2012). Dr. Bonomi gave written permission for use of the data set. Because the data collection tool did not provide a definition for parents/guardians, it was reasonable to assume that this terminology is self-explanatory and that all participants would interpret these terms similarly. The other specific assumptions of this study included (a) the questionnaire elicited the desired data, (b) the participants answered questions truthfully,

and (c) the data were significant. These assumptions were necessary to the study because I as the researcher sought to provide insight as to how witnessing domestic violence between parents or primary caretakers in childhood might affect the dating relationships for teen and young adult women.

Scope and Delimitations

Scope and delimitations significantly impact any study (Creswell, 2009). The scope is the parameters under which a study operates (Simon & Goes, 2013). This study's scope was the dating relationships of female adolescents with and without the prior experience of witnessing domestic violence between their parents or primary caretakers.

Delimitations help define the boundaries of the study through the researcher's specific efforts to address the limitations of the study. Delimitations for this study included the geographical area from which the participants were chosen. Participants were limited to students at one university. One internal validity issue was the maturation level of the participants, which was controlled for by surveying the age of participants. The participants were limited to 18 to 26 years of age. Attrition was negated by collecting data at only one point in time. Population validity was addressed by using a sample size well above the calculated G*Power of 132 participants. I discuss these issues in detail in Chapter 3.

Conceptual framework, or the linking of literature concepts to support the research question, can be borrowed from previous researchers to underscore the current research (Liehr & Smith, 2011). The conceptual framework most related to the area of study that was not investigated was the social learning theory. According to social

learning theory, people learn from those around them through observation, modeling, and imitating (Akers & Jensen, 2006; Allen & Jacques, 2014). Rather, Roy's (2014) theory of adaptation provided the framework for the study. According to Roy's theory of adaptation, people's attitudes and beliefs are shaped by their surroundings (Nayback, 2009; Serceku & Mete, 2010). Explicit assumptions of Roy's theory of adaptation are that a person is a bio-psycho-social being who is in constant interaction with a changing environment (Roy, 2012).This model allows one to determine how different stimuli affect one's ability to adapt to the change in their environment (Harkness & DeMarco, 2012, p. 216). Additional rationale for this theory choice, as well as specific examples, is explained in detail in Chapter 2.

Finally, the scope and delimitations of this study impact the study's generalizability. Although analysis of these data may imply a general cause, due to variables not controlled for there is a limit to the generalizability of the findings. The limits of generalizability are related to the extent one can generalize across populations and situations. The conclusions drawn from this population were limited to the participants only and do not generalize to any other population.

Limitations

Limitations, or matters that are outside the researcher's control, for this study were (a) the environment and manner in which the questionnaires were administered by the original data collectors, (b) the mood, willingness to participate, and understanding of the participants, (c) the participants' previous personal experiences with domestic violence and the associated emotions evoked by the questions, and (d) the frequency of

the independent variable—witnessing domestic violence between one's parents or primary caretakers.

In addition, survey instruments have limitations. The instrument used for the data collection for this data set was rigorously tested for validity and reliability as described in Chapter 3. The presence of these limitations may imply a general cause but directly affects the researcher's ability to generalize findings.

Significance

This study has the potential to make a significant contribution to the body of knowledge regarding domestic violence by informing the scientific community regarding children witnessing domestic violence between their parents or primacy caretakers and their subsequent dating experiences. There are potential implications for positive social change. Understanding this impact may help high school and college counselors devise programs to combat any negative impact of witnessing domestic violence on adolescents' own dating relationships. Such programs may produce positive social change by curtailing the number of young women who are adversely affected by dating violence.

Summary

In summary, this chapter revealed the research literature available on this topic and highlighted the gap in literature that this study addressed. In addition, it discussed the problem statement of this research, including the purpose of the study, research question and hypotheses, theoretical framework for the study, and nature of the study including the definitions, assumptions, scope, delimitations, and limitations. The following chapter provides an extensive literature review of this topic.

Chapter 2: Literature Review

Introduction

Intimate partners who murder their female significant others had almost always repeatedly abused them in the months or years prior to the murder (CDC, 2011). In spite of this knowledge, these murders still take place (Jordan, 2014; Smith, Fowler, & Niolon, 2014; Wortham, 2014). Due to being confused about their feelings and unsure about relationships, yet desiring to be in a relationship, young women often choose to enter and remain in abusive relationships, putting themselves at risk for continued abuse and/or murder by their offender (Reynolds & Shepherd, 2011). Much research has been done in an attempt to profile the victims and the perpetrators of these crimes (Davins-Pujols, Pérez-Testor, Salamero-Baró, & Castillo-Garayoa, 2012; Furlow 2010; Krienert & Walsh, 2011; Zolotor et al., 2009). Yet, to date no researcher has specifically considered how exposure to parental domestic violence during childhood affects female adolescents' willingness to remain in a dating relationship after violence has been introduced, leaving a gap in the literature. In this chapter, I provide an extensive review of the current literature on domestic violence as it applies to this study.

Remaining in an abusive intimate relationship is the most frequent common denominator of young women who are murdered by an intimate partner (Reynolds & Shepherd, 2011; Young & Furman, 2013). The purpose of this quantitative study was to discover specifically how exposure to domestic violence between a young woman's parents or primary caretakers during childhood may influence her experiencing physical violence or sexual abuse in a dating relationship. This study considered what, if any,

effect the independent variable of previous exposure to domestic violence between one's parents or primary caretakers had on the dependent variable of the young woman experiencing physical violence or sexual abuse in a dating relationship.

Synopsis of the Current Literature

Although domestic violence laws were introduced as early as 753 B.C. (Utech, 1994), these laws were not always helpful in protecting women (England, 2007). Even though numerous laws aimed at stopping domestic violence or protecting the victims of domestic violence were introduced in the late 1900s and early 2000s (Lenderman, 2013; Wang, 2013; Wong, 2013), these laws lacked consistency (LaMance, 2013) and, to date, have not been successful in stopping domestic violence (Rabin, 2011).

Currently, 1 in 4 women in the United States will experience domestic violence in their lifetime (Center for American Progress, 2011). For some women, domestic violence will be a routine occurrence (Symes, 2011). Every 2 minutes, there are five domestic violence assaults on women in the United States (CDC, 2011). Thus domestic violence against women has now reached epidemic proportions in the United States (Alhabib, Nur, & Jones, 2010).

Children reside in over one third of the homes in which domestic violence occurs regularly (Domestic Violence Resource Center, 2013). These children become young teens who are confused about what constitutes an appropriate intimate relationship (Reynolds & Shepherd, 2011). Researchers have estimated that as much as one third of adolescent girls in the United States become a victim of physical, emotional, or verbal abuse from an intimate or dating partner (Family Violence Prevention Fund, 2009).

The cost of domestic violence is significant, with some estimates as much as 6.5% of the United States' gross domestic product (Bhandari, Sprague, Dosanjh, Wu, & Schemitsch, 2010). Although these costs do include injuries, lost productivity, and associated mental and chronic health issues, the cost does not factor in the loss of life for the victim or the family (Cunningham, 2010; Fishman, Bonomi, Anderson, Reid, & Rivara, 2010).

Thus, the world is in need of change regarding domestic violence behaviors (Zalmanowitz, Babins-Wagner, Rodger, Corbett, & Leschied, 2013). This chapter includes my literature search strategy and the theoretical foundation on which this study was based, as well as what current researchers have said and not said about intimate partner violence and key variables under study.

Literature Search Strategy

In preparation for this research, I searched the following databases in the Walden University Library: Academic Search Complete, CINAHL Plus with Full Text, eBook Collection (EBSCOhost), MEDLINE with Full Text, PsycARTICLES, PsycINFO, SocINDEX with Full Text, and Google Scholar. I used the following key terms alone and in combination to access the literature: *domestic violence, children, witnessing, dating relationships, females, girls, costs, incidence, history, domestic law, homicide,* and *murder*. I accessed over 1,000 articles in a 2-year period and reviewed over 220 articles that were published between 2009 and 2015.

Theoretical Foundation

Sister Callista Roy (2014) announced her theory of adaptation in 1971. Her theory is based on the assumption that humans are in a constant state of adaptation throughout their lives. The adaptation process may speed up or slow down during times of more or fewer challenges, but it is nonetheless a continual process for humans. The model's two paradigms are coping and adaptation, which Roy based on cognitive processing. This model specifically describes how the sequencing between in-put processes including perception, central processes such as memory, output processes such as behavior, and emotion work together to find an adaptation response for the individual (Roy, 2014). The input processes, output processes (behavior), and emotions are in a constant state of adaptation. Inside this model individuals are viewed as bio-psycho-social adaptive systems who manage environmental change through adaptation (van Wilgen et al., 2009). Roy's theory of adaptation has provided a framework for scientists to examine how humans adapt, and therefore react to and with their environment (Weiland, 2010). Roy's theory of adaptation has provided the framework for medical researchers seeking to understand how humans adapt to their changing health status.

Since the formulation and announcement of her theory, scientists around the globe have employed Roy's (2014) model of adaptation to test how humans adapt to various situations and circumstances (Gurgel, Rolim, Galvao, & Caetano, 2010; Hsiao & Hsieh, 2009; Nayback, 2009; Oliveira, & de Fatima, 2010; Serceku & Mete, 2010). Gurgel et al. (2010) employed Roy's model of adaptation to identify which nursing diagnosis addressed the physiological aspects of a newborn with meningomyelocele who was

hospitalized in a Neonatal Intensive Care Unit (NICU). Using a case study and Roy's model of adaptation, the researchers were able to determine how to best identify nursing actions needed for the infant's personalized care needs. Their findings included the newborn's ability to produce positive and/or negative responses to stimuli, thus enabling caretakers to implement appropriate interventions (Gurgel et al., 2010).

Akyil and Ergüney (2013) used Roy's adaptation model to study patients with chronic obstructive pulmonary disease. In a quasi-experimental design of 65 patients, the researchers compared an intervention group and a control group to consider how appropriate patient education could help patients with chronic obstructive pulmonary disease adapt. With the introduction of appropriate patient education, these scientists found statistically significant increases in adaptation to the disease in the physiologic, self-concept, and role-function modes (Akyil & Ergüney, 2013). Thus, these researchers concluded that using Roy's adaptation model to educate patients with chronic obstructive pulmonary disease is beneficial in increasing the adaptation to the living with chronic obstructive pulmonary disease for these patients through increasing the patient's interpersonal support system. A limitation to this study was the fact that the sample size needed for an alpha of 0•05 and an 80% power level for this group was 84 (42 for the intervention group and 42 for the control group), but due to low registration for the study only 65 patients (32 for the intervention group and 33 for the control group) were recruited in 14 months. Additionally, is the authors noted that patients with chronic obstructive pulmonary disease often delay reporting their symptoms in an effort to protect their smoking habit (Akyil & Ergüney, 2013).

In a descriptive qualitative design study of liver transplant recipients, Ordin, Karayurt, and Wellard (2013) used Roy's adaptation model to identify themes in the physiological, self-concept, role function, and interdependence modes. For each of these areas, the scientists noted both effective and mal-adaptive behaviors of the patients indicating that additional education was needed to decrease the amount of mal-adaptive behaviors in these patients. In each of these areas the researchers found Roy's adaptation model to be an effective nursing model for determining nursing care for the liver transplant recipients (Ordin, Karayurt, & Wellard, 2013).

Li-Lin, Hsing-Fang, and Shi-Fang (2013) tested Roy's adaptation model in a qualitative study and consequently described the lived experience of a female laryngeal cancer patient. The patient was extremely distraught with her diagnosis of early stage cancer of the larynx and this was complicated by the fact that she was to remain totally non-verbal for 40 days awaiting post-operative healing. These researchers found Roy's adaptation model effective in explaining the lived experience of the patient through her physical, emotional, and spiritual adaptation process, as well as in formulating appropriate nursing interventions to assist the patient with effective coping techniques (Li-Lin, Hsing-Fang, & Shi-Fang, 2013).

In their work with cardiac patients, Oliveira and de Fajtima (2010) engaged Roy’s adaptation model to consider how cardiac patients adapted during their cardiac crises. In a descriptive study exploring the phenomenon of adjusting to life after a cardiac crisis, these scientists studied 233 post cardiac crises patients. These researchers determined that this model was beneficial to healthcare providers in helping them with an in-depth

understanding of cardiac patient's adaptation, as well as in the planning of appropriate nursing interventions to assist these patients in their adaptation process (Oliveira and de Fajtima, 2010).

These are examples of how Roy's theory of adaptation has provided a beneficial and appropriate framework for scientist to examine how humans adapt when faced with various crises and situations. This theory has helped researchers understand how and why humans react to their environment and what steps can be taken to help them adjust (Weiland, 2010).

Additionally, Roy's theory of adaptation has been employed to help health care providers identify an appropriate approach to planning useful interventions for patients who are experiencing significant health challenges in which therapeutic interventions were necessary (Kozar-Westman, Troutman-Jordan, and Nies, 2013). This current study examined how Roy's theory of adaptation could guide the research of a psychosocial problem as one considers how children adapt when exposed to domestic violence between their parents or primary caretakers.

Specifically, this study explored what effect, if any, the input process of witnessing intimate partner violence between one's parents or primary caretakers had on the teen female's output process of experiencing physical violence or sexual abuse in a dating relationship. Roy's theory of adaptation may inform on how children adapt with the exposure to domestic violence between their parents or primary caretakers. Additionally, Roy's theory of adaptation may inform as I considered what affects witnessing domestic violence between their parents or primary caretakers had on an

adolescent female experiencing physical violence or sexual abuse in a dating relationship. And finally, since it was determined that witnessing domestic violence between their parents or primary caretakers does not influence an adolescent female experiencing physical violence or sexual abuse in a dating relationship when isolated out as a single factor, Roy's theory of adaptation may provide the framework needed for healthcare providers to design appropriate interventions to assist these children through the adaptation process as they move from witnessing domestic violence between their parents or primary caregivers and engaging in their own dating relationships.

Literature Review Related to Key Variables and/or Concepts

During the literature review common threads were identified in key variables and concepts. Each of these is outlined in detail below.

The History of Violence

Domestic violence, physical aggression, and/or assault continue to be a societal problem (Della-Giustina, 2009; Granstrom, 2009; Reinke-Williams, 2009). Europe became concerned about the rampant domestic violence in the 15th century and actively worked to decrease domestic violence incidences. Fortunately, these efforts were rewarded by citizens witnessing Europe's largest ever decrease in domestic violence between the years of 1450 and 1750 (Miller, 2012).

West Asia (including North Africa) and South Asia shared a common heritage from the 11th to 17th century with significant interpersonal violence (Wilke, Hippler, & Zakar, 2011). This included political, religious, communal, youth, domestic and gendered violence.

Historically, the Middle East culture has embraced domestic violence as part of their spiritual and gender-specific rights (Elsaidi, 2011). Muslims have traditionally interpreted verse 4:34 of the Quran as giving husbands authority over their wives and believe that, as the head of the household, the males are entitled to total obedience from their wives. Therefore, any deviation from total submission to the male may result in significant physical punishment for the female (Elsaidi, 2011). However, recently experts in the Muslim faith and Quran have challenged this belief from both a religious and legal standpoint through an extensive analysis of the Prophet Muhammad's obvious dislike of violence towards women, the high value the Quran places on the institution of marriage, and the goals of some current Islamic laws (Elsaidi, 2011).

Likewise, in 17th century Sweden, husbands believed it was not only their right, but their biblical duty to uphold the male dominance in family and marriage (Liliequist, 2011). This absolute right was given very high social priority as brides were addressed as servants, or minors under their husband's guardianship, and took a vow at the wedding to yield to the legitimate power and authority of her husband and willingly "give over to the violence of her husband" (Liliequist, 2011, p. 2). This was validated by the religious leaders of the day who quoted 1 Peter 3:7 from the bible to confirm the woman as the weaker human, and thus was the one that was more vulnerable to personal whims that would undoubtedly necessitate the need for discipline from the stronger husband (Liliequist, 2011).

The United States has a significant history of domestic violence as well. Foyster (2005) considered numerous historical court documents that evidenced significant

domestic violence in the United States between 1738 and 1800. Foyster (2005) reviewed several well-known cases from this era and concluded that the common and frequent wife beatings were most often brought on by the husband's sexual jealousy, insecurity, financial/economic problems/concerns, or frustrations and was typically exacerbated by the use of alcohol. However, the only thing Foyster (2005) found common among the victims was that an overwhelmingly majority were of the female gender. I hope to extend Foyster's work by testing variables that may help determine why females would stay in a relationship that includes IPV.

The Birth of Domestic Violence Laws

Historically, not all laws regarding domestic violence were aimed at assisting the victims. The first known law dealing with domestic violence was instituted by Romulus, the founder of Rome, in 753 B.C. (Utech, 1994). This law commanded all married women to behave at all times in a manner that was acceptable to their husband, and instructed all married men to discipline their wives as needed to assure continuous compliance (England, 2007). There was no evidence of significant change in the arena of domestic violence for hundreds of years.

In mid-sixteen hundred America, the English colonists believed domestic violence undermined society and would intervene if the husband exceeded moderate chastisement of his wife (Pleck, 1987). However, judges of the day were known to be very lenient on the abusive husband and would typically only admonish him to keep the peace (Pleck, 1987). This admonishment could be seen by the husband as a reason to make certain the wife did not report any more abuse, thus it could actually increase the punishment for the

wife. Chastisement was considered moderate providing the object used to beat the wife was less than the diameter of the man's thumb and beatings were no more frequent than daily (Wojtczak, 2009).

Moving into the early 18th century, the laws of chastisement still allowed men to beat their wives into submission (Miller, 2012). These beating could take place for a number of reasons including if the woman displeased the man by insulting him, wishing dirt on him, or giving away property that was not rightfully hers to give (Wojtczak, 2009). In the mid-1800s, the English Common Law again declared it illegal for a man to beat his wife with a stick bigger than the diameter of his thumb (Carter, 2002). This law was actually considered to be aimed at protecting women from being excessively abused because it limited the size of the weapon that could be used to beat her. However, this law did not address the frequency or length of the beatings, nor did it outline the crimes that the wife might commit that were worthy of a beating.

In the 1870's social reformers brought significant attention to domestic violence through their demonstrations and lobbying of politicians and this resulted in laws being passed banning husbands from physically beating their wives (Siegel, 1996). However, it is noteworthy that during this era women who brought up abuse charges against their husband in the courts were severely looked down upon by society and therefore were under significant pressure to not report such happenings (Liliequist, 2011). It was not until the 1900s that the laws existing today regarding domestic violence have come into being (Lenderman, 2013; Wang, 2013; Wong, 2013).

The Current Problem

Although not a new problem, domestic violence has gained a great deal of consideration, publicity, and attention in 21st century (Klein, 2009). In his work to shed light on domestic violence, Klein (2009) looked at numerous domestic violence reports to determine (1) the frequency of nonfatal domestic violence, (2) the percentage of police calls that involve domestic violence, (3) the time of day when domestic violence most often, and (4) the prevalence of stalking, sexual assaults, fatalities, and multiple forms of abuse against the same victim in the context of domestic violence. One of the most noteworthy findings of Klein (2009) is the finding that indicated only 27% of women who were physically assaulted by an intimate partner actually reported their assault to law enforcement; suggesting that the problem is as much as four times greater than originally thought.

Advocates for the reduction of domestic violence have garnered support from politicians, law makers, and the public at large and have successfully gotten penalties attached to domestic violence offenders (Lenderman, 2013; Wang, 2013; Wong, 2013). Although these penalties vary in severity from state to state and jurisdiction to jurisdiction, it is a significant start in the right direction according to LaMance (2013). Unfortunately, due to the variations in the penalties and the secrecy of the offences, these laws have not stopped domestic violence completely (Rabin, 2011).

Currently, in the United States, the majority of interpersonal violence is domestic violence (Alhabib, Nur, & Jones, 2010). Alhabib, Nur, and Jones (2010) conducted a literature search of six different databases to identify 134 studies in English on the

prevalence of domestic violence against women. With findings of up to 70% in the southeastern portion of the United States, these authors concluded violence against women has reached epidemic proportions in the U.S. in many societies while noting that accurately measuring the prevalence of such violence is difficult given the sensitive nature of the research (Alhabib, Nur, & Jones, 2010).

The CDC (2011) also asserted that more violence occurs than what is actually reported. In their report on the National Crime Victimization Survey data, the CDC noted 467,000 domestic violence victims actually contacted law enforcement officials. However, due to the frequent use of intimidation by perpetrators during their attacks, victims are often afraid to disclose the abuse, so incidents most often go unreported (Furlow 2010; Zolotor, Denham, & Weil, 2009). For this reason most the majority of perpetrators are never confronted by law enforcement officers or tried in the courts.

Some domestic violence laws are written in a manner that is conditional, meaning the laws will not be enforced unless the victim is willing to press charges against the perpetrator. Other laws are written as unconditional domestic violence laws, meaning the law will be enforced regardless of the willingness of the victim to press charges against the perpetrator. When surveying 378 police officers regarding their preference for conditional or unconditional enforcement of domestic violence laws, Gracia, Garcia, and Lila, (2011) found that the law enforcement officers who preferred unconditional enforcement were more empathetic and considered the violence more serious than did their counterparts who favored conditional enforcement.

Bowles, Reyes, and Garoupa (2009) pointed out that the under-reporting of domestic violence by victims coupled with the under-recording of domestic violence incidence by law enforcement officers complicated the ability to accurately report the prevalence and impeded the ability to accurate track trends. In light of the fact that perpetrators of domestic violence often convince their victims that it is the victim's actions or behaviors that triggered the violence, these authors found that victims will often avoid contacting authorities because of associated shame or embarrassment related to 'poor judgment', or because the victims are convinced that one may actually 'incriminate themselves' in the details which could lead to personal counter-charges from the police or their attacker (Bowles, Reyes, & Garoupa, 2009, p. 368).

The Magnitude of Dating Violence

The CDC (2011) estimated that over 12 million Americans are victims of physical assault by an intimate partner each year. Over 25% percent of women experience domestic violence in their lifetime (Center for American Progress, 2011). Every two minutes, there are five domestic violence assaults on women in the United States (Rape, Abuse, Incest National Network, 2009). In 2008, the CDC published data collected from 2005 that showed women experience two million injuries from intimate partner violence each year.

Although men are also victims of domestic violence, 85% of domestic violence victims are females (Domestic Violence Resource Center, 2013). Women are more than three times more likely than men to be victimized by a current or former intimate partner (American Bar Association, 2011). One out of every four women in the United States

reported experiencing violence by a current or former spouse or boyfriend at some point in her life (Futures without Violence, 2013). Although statistics exist for the prevalence of interpersonal violence within the dating relations, there are no current statistics on how witnessing domestic violence between one's primary caretakers affects a young teen girls decisions regarding dating violence. Next, I considered age with relation to dating violence.

Age and Dating Violence

All women are at risks for domestic violence; however, females 16 to 24 years of age are at greatest risk for intimate partner abuse and domestic violence (Carpenter & Stacks, 2009; Futures without Violence, 2013). Pregnancy has been identified as a factor that significantly increases the risks for intimate partner violence (Ameh, Shittu, & Abdul, 2009). Women age 20 to 24 are at the greatest risk of experiencing nonfatal intimate partner violence (Futures without Violence, 2013). Young women age 20 to 24 also experience the highest rates of rape and sexual assault, followed by those 16 to 19 (National Organization for Women, 2012).

Carpenter and Stacks (2009) identified teen females as especially at risk for intimate partner abuse. These same findings were echoed by statistics compiled by Futures without Violence (2013) and the National Organization for Women (2012). This study considered what, if any, affect witnessing domestic violence between one's parents or primary care givers, had on the teen female experiencing physical violence or sexual abuse in a dating relationship.

Fifteen and one half million children in the United States live in families in which intimate partner violence occurred at least once in the past year, and seven million children live in families in which severe partner violence occurred (Hamby, Finkelhor, Turner, & Ormrod, 2011). Children under age 12 are residents of the 38% of households that are experiencing intimate partner violence incidents involving a female victim (Domestic Violence Resource Center, 2013). Although these statistics validate that a significant number of children are present in households where intimate partner violence occurs, no data exist on how often these young females enter into or stay in intimate relationships where intimate partner violence occurs.

Adolescents may not be aware of how often dating violence occurs (Ayers & Davies, 2011). Approximately one in three adolescent girls in the United States is a victim of physical, emotional or verbal abuse from a dating partner – a figure that exceeds victimization rates for other types of violence affecting youth (Family Violence Prevention Fund, 2009). Additionally, one in five tweens – ages 11 to 14 – say their friends are victims of dating violence and nearly half are in relationships with friends who are verbally abusive. Two in five of the youngest tweens, ages 11 and 12, report that their friends are victims of verbal abuse in relationships (Family Violence Prevention Fund, 2009).

In 2009, the CDC researchers determined 9.8% of high school students reported experiencing physical violence in a dating relationship (CDC, 2012). One in five females who experience physical violence from the hand of an intimate partner first experienced the physical violence (being hit, slapped, or physically hurt) between the ages of eleven

and seventeen years (CDC, 2012). Although these statistics validate physical violence in a dating relationship is a risk for a large number of teens, there are no statistics available that consider if these same teens witnessed domestic violence between their primary caretakers earlier in life.

In their qualitative research, Reynolds and Shepherd (2011) used an interpretative phenomenological analysis of semi-structured interviews to explore how three young females lived through the experience of intimate partner violence. These researchers found participants largely attributed their vulnerability to intimate partner violence to being confused about their feelings and relationships, as well as feeling disconnected and powerless in early adolescence (Reynolds and Shepherd, 2011).

Hamby, Finkelhor, Turner, and Ormrod (2011) documented that 15.5 million children in the United States live in families in which intimate partner violence occurs and the children have witnessed. The Domestic Violence Resource Center (2013) claims children live in 38% of the households where the female partner is subjected to domestic violence. One in three adolescent girls in the United States is a victim of physical, emotional or verbal abuse from a dating partner (Family Violence Prevention Fund, 2009); however, many female adolescents are not aware of how often dating violence occurs (Ayers & Davies, 2011), or what to do about it if it happens (Shepherd, 2011). However, in their research regarding children in the United States witnessing intimate partner violence in the household, Hamby Finkelhor, Turner, and Ormrod (2011) do not consider what effect this might have on the dating decisions of young females. This study considered what, if any, affect witnessing this domestic violence between their parents or

primary caretakers had on these females experiencing physical violence or sexual abuse in a dating relationship. After considering age and dating violence I turned my attention to race as it related to dating violence.

Race and Dating Violence

In addition to ageless boundaries, domestic violence occurs in all known racial and ethnic groups (Grossman Loyola & Loyola, 2007). Research findings reveal dating violence is problematic among nearly all races (Kaukinen, Gover, & Hartman, 2012; White, Yuan, Cook, & Abbey, 2013). Sabina, Cuevas, and Rodriguez (2014) surveyed over 1500 Latino adolescents and nearly 100 of them reported some type of physical or sexual dating violence. In their survey of 5,647 youth from ten northeastern United States schools, Zweig, Dank, Yahner, and Lachman (2013) found over 900 students who reported being a victim of dating abuse within the last 12 months. Among these youth were Caucasians, African Americans, Hispanics/Latinos, Asians and Native American. Rothman and Xuan (2014) noted similar dating violence victimization among males and females, but found Blacks and multiracial students to have an increased risk over their White, Asian, and Hispanic counterparts. In the Chinese societies of Taiwan, Hong Kong, and Shanghai, Shen, Chiu, and Gao (2012) used self-reporting measures to survey 976 adolescents and found a significant prevalence of dating violence including a 27.3% perpetration rate and a 39% victimization rate. Likewise studies reveal the traditional Chinese beliefs increase the risk for dating violence and coping mechanisms among Taiwan college students (Shen, 2014). In a review of literature and statistical data, White, Yuan, Cook, and Abbey (2013) noted that 46% of the combined Indian, and Alaskan

Natives, experienced inter-personal violence during their lifetime. Over one third of Latino women from Central and South America, Mexico, Cuba, Puerto Rica, and Spain report experiencing inter-personal violence (White, Yuan, Cook, & Abbey, 2013). In a review of literature on young Africans, Stepteau-Watson (2014) found common cultural beliefs that specifically place young African American males at risk for dating violence perpetration. In a comparison study involving Japanese, Chinese, and American students, Toan Thanh et al. (2013) found cultural beliefs played a role in tolerance toward violence against women. In their study of 484 Canadian youths, Friedlander, Connolly, Pepler, and Craig (2013) found violence media significantly influenced violence-tolerant attitudes and suggested that a violence-tolerant attitude may lead to dating violence. These studies show domestic violence in all know cultures. A review of this literature exposes finding of intimate partner violence across races. This study considered race as a covariate when measuring intimate partner violence. Next, academic performance and dating violence were considered.

GPA and Dating Violence

Not all research findings agree on the relationship between intimate partner violence and academic problems (Cleveland, Herrera, & Stuewig, 2003: Schnurr & Lohman, 2008). When Cleveland, Herrera, and Stuewig (2003) conducted their study of 603 opposite sex relationships, they found that only one of their six variables, GPA, was a “significant predictor of the occurrence of male-to-female abuse” (p. 325). Schnurr and Lohman (2008) studied 765 adolescents and found academic difficulties increases the risk for inter-generational transference of violence tendencies, and is positively linked to

adolescents' perpetration of violence in romantic relationships over time, especially in the Hispanic population. Inversely, in their study of 394 subjects, Lohman, Neppl, Senia, and Schofield (2013) employed self-reported GPAs as a covariate and found academic difficulties positively predicted violence in subjects who were age 19-23 years. In an attempt to assess dating violence among Israeli adolescents, Sherer (2009) studied 1357 students using five dating violence measures and found academic achievements as one of the highest corresponding factors for dating violence among Jewish students. A review of this literature exposes finding of intimate partner violence across various levels of academic achievement. This study considered academic achievement levels as a covariate when measuring intimate partner violence.

When Violence Turns Deadly

On average, more than three women a day are murdered by their husbands or boyfriends in the United States (Domestic Violence Resource Center, 2013). Intimate partners who murder their female significant other almost always repeatedly abuse them in the months or years prior to the murder (CDC, 2011). The CDC reported there was 1,200 confirmed intimate partner violence related homicides for 2005 (Zolotor, Denham, & Weil, 2009). In 2007, 14% of all homicides in the U.S. (nearly 2350 murders) were murders by intimate partners killing an estimated 1,640 women and 700 men (Catalano, Rand, Smith, & Snyder, 2009). In 2009 the Federal Bureau of Investigation reported 1,818 women in the U.S. were killed by men (Violence Policy Center, 2011). Also according to the Federal Bureau of Investigation (FBI), almost one-third of female homicide victims reported in police records are actually murdered by an intimate partner

at a later date (FBI, 2011). Although these statistics reveal the frequency of homicides by an intimate partner, and that those killed are repeatedly abused prior to their murder, it does not consider and what might influence a female to remain in such a relationship. When considering that intimate partners almost always repeatedly abuse their victim before murdering them (CDC, 2011) and that these domestic homicides are on the rise (Catalano, Rand, Smith, & Snyder, 2009; Violence Policy Center, 2011; Zolotor, Denham, & Weil, 2009) one wonders how to rescue females form this detrimental cycle. Does witnessing domestic violence between one's primary caretakers affects a young teen girl's decisions regarding her dating relationships later in life? This study considered if witnessing this domestic violence between their parents or primary caretakers impacts the female experiencing physical violence or sexual abuse in a dating relationship.

The Costs Associated With Violence

Researchers have explored how domestic violence results in millions of child and adult emergency department visits annually (Furlow, 2010; Sampsel, Szobota, Joyce, Graham, & Pickett, 2009; Snider, Webster, O'Sullivan, & Campbell, 2009; Sormanti & Smith, 2010). With the average cost of an emergency department visit being approximately $1,233.00, Washington Post Reporter Sarah Kliff (2013) points out that at the $1,233.00 price tag is nearly 40% higher than the average monthly rent in the United States.

The high costs for domestic violence are generated from visits to the emergency department, doctor office appointments, medications, hospitalizations, diagnostic tests and work ups, missed work, missed school, decreased productivity, depression, alcohol

and drug abuse, and much more (Bhandari et al., 2010; Cunningham, 2010; Fishman et al., 2010). The cost of domestic violence is reported to be overwhelming (Ward, McCartney, Brown, Grant, Butchart, Taylor, & Pinnock, 2009). With estimates at 6.5% of the GDP or $1,100 per person in the United States, the price tag the nation pays for domestic violence is staggering (Bhandari et al., 2010; Harris, Novalis-Marine, Amend, & Surprenant, 2009; Ward et al., 2009). Additionally, researchers find women who have experienced domestic violence are 80% more likely to have a stroke, 70% more likely to have heart disease, 60% more likely to have asthma, and 70% more likely to drink heavily than women who have not experienced intimate partner violence (Futures without Violence, 2013). While these authors specifically point out the enormous cost paid for domestic violence, no attempt is made to consider ways to reduce these expenses.

This study considered what, if any, affect witnessing this domestic violence between their parents or primary caretakers had on these females experiencing physical violence or sexual abuse in a dating relationship. Although the aim of this study was not necessarily to decrease the expenses associated with domestic violence, the results of this study may inform researchers on the females dating relationships enabling them to consider interventions to decrease the exposure to domestic violence, thereby decreasing the national cost of domestic violence.

Children Who Witness the Violence

Witnessing violence between one's parents or caretakers has been identified as the strongest risk factor of transmitting violent behavior from one generation to the next (Family Violence Prevention Fund, 2009). However, witnessing violence between

parents affects males and females differently (Straus, 2009). Boys who witness domestic violence are more likely to become perpetrators and abuse their own partners and children as adults (Israel, & Stover, 2009). Researchers also studied females who witness domestic violence and concluded females who witness domestic violence as a child are more likely to become victims (Elwood, et al., 2011; Kerley, Xu, Sirisunyaluck, & Alley, 2010). Considering researchers have found that young females who witness domestic violence between their parents or primary caretakers are more likely to become domestic violence victims (Elwood et al., 2011), and that females are not typically murdered until after remaining in an abusive relationship for some time with the abuse growing worse (van Wormer, 2009), research was needed to specifically determine if females who witness domestic violence between their parents or primary caretakers are more likely to experience physical violence or sexual abuse in a dating relationship. To date no researcher has specifically considered how exposure to parental domestic violence during childhood affects the young female experiencing physical violence or sexual abuse in a dating relationship. This study informed about this gap in the literature.

Specifically, this study considered the independent variable of previous exposure to domestic violence between parents or primary caretakers and the dependent variable of the female experiencing physical violence or sexual abuse in a dating relationship. A quasi-experimental, quantitative design approach was used to consider what, if any, relationship exists between the exposure to parental domestic violence and young female experiencing physical violence or sexual abuse in a dating relationship.

Summary and Conclusions

In summary, domestic violence issues have plagued the United States for centuries (Carter, 2002; England, 2007; Pleck, 1987; Siegel, 1996). Currently, the majority of interpersonal violence is domestic violence (Alhabib, Nur, & Jones, 2010; Meuleners, Lee, Hendrie, & Fraser, 2010). Females are much more likely to be a victim than are males (American Bar Association, 2011; Domestic Violence Resource Center, 2013). Although all women are at risks for domestic violence; females 16 to 24 years of age are at greatest risk for intimate partner abuse and domestic violence (Carpenter & Stacks, 2009; Futures without Violence, 2013). One third of the adolescent girls in the United States are a victim of physical, emotional or verbal abuse from a dating partner (Family Violence Prevention Fund, 2009). Over 15.5 million children in the U.S. witnessed partner violence at least once in the past year (Hamby, Finkelhor, Turner, & Ormrod, 2011). On average, more than three women a day are murdered by their husbands or boyfriends in the United States (Domestic Violence Resource Center, 2013). The Federal Bureau of Investigation (2011) reports almost one-third of female homicide victims reported in police records are murdered by an intimate partner. Domestic violence results in millions of child and adult emergency department visits annually (Furlow, 2010; Price, 2010; Sampsel et al., 2009; Snider, Webster, O'Sullivan, & Campbell, 2009). The estimate costs are 6.5% of the GDP or $1,100 per person in the United States (Bhandari et al., 2010; Harris et al., 2009; Ward et al., 2009). Witnessing violence between one’s parents or caretakers has been identified as the strongest risk factor of transmitting violent behavior from one generation to the next (Family Violence

Prevention Fund, 2009). Of children exposed to domestic violence between their parents, researchers concluded that boys are more like to become future perpetrators (Israel, & Stover, 2009) while females are more likely to become future victims (Elwood, et al., 2011; Kerley, Xu, Sirisunyaluck, & Alley, 2010). Additionally, researchers found homicides by an intimate partner do not typically take place until the victim has remained in an abusive relationship for some time with the abuse growing worse (van Wormer, 2009).

In light of these findings, research was needed to specifically determine if females who witness domestic violence between their parents or primary caretakers are more or less likely to experience physical violence or sexual abuse in a dating relationship compared to their counterparts who did not witnessed domestic violence between their parents or primary caretakers as a child. This study considered what, if any, relationship exists between the independent variable of exposure to parental domestic violence and the dependent variable of the young female experiencing physical violence or sexual abuse in a dating relationship. The study employed a quasi-experimental, quantitative approach to consider how females who have witnessed domestic violence between their parents or primary care givers compare with those who have not witnessed domestic violence between their parents or primary care givers in their experiencing physical violence or sexual abuse in a dating relationship. With this literature review in mind, the next chapter focuses on the research design and rationale and the methodology including sampling and sampling procedures, as well as participant recruitment and data collection.

Chapter 3: Research Method

Introduction

Intimate partners who murder their female significant others had almost always repeatedly abused them in the months or years prior to the murder (CDC, 2011). In spite of this knowledge, these murders still take place. Young women often choose to enter and remain in abusive relationships, putting themselves at risk for murder by their offenders (Reynolds & Shepherd, 2011). Much research has been done in an attempt to profile the victims and the perpetrators of this crime (Furlow 2010, Zolotor et al., 2009), yet almost no researcher has considered how specific factors such as exposure to parental domestic violence effects the dating relationships of young women, leaving a gap in the literature. The purpose of this quantitative study was to discover specifically how exposure to domestic violence between a female adolescent's parents or primary caretakers during childhood may influence her dating relationships later in life. This chapter outlines the research design and rationale, the methodology, including population, sampling and sampling procedures, recruitment, participation, and instrumentation, as well as procedures used to acquire a set of previously collected data.

Research Design and Rationale

In quantitative research, surveys and experiments are often the design of choice (Creswell, 2009). For this study, a quasi-experimental design was used. The quasi-experimental design was chosen because the participants self-selected themselves into one of the two groups based on the criteria of previous exposure to physical violence between their parents or primary caretakers, which was the independent variable. Also in

keeping with the quasi-experimental design, the treatment (exposure to physical violence between their parents or primary caretakers) was not controlled in a lab. Because exposing children to this purposefully would be unethical, this quasi-experimental design focused on gathering data from those who were exposed to domestic violence between their parents during their childhood. Once participants self-selected into the treatment group, or control group, I then compared differences between the exposed group and the unexposed group. Comparison of the dependent variable (experiencing physical or sexual violence within a dating relationship indicated by answering *yes* or *no*) was then made between the groups.

The treatment or independent variable was the participants' exposure to domestic violence between their parents or primary caretakers earlier in life. It was certainly not ethical to apply such treatment, but I knew from personal testimonies and research that such treatment has indiscriminately been applied to many young girls. By allowing the participants to answer a question regarding their previous exposure to domestic violence between their parents or primary caretakers, it allowed for two groups—one that received the treatment and another that did not. I could then compare those two groups as to how questions were answer about dating experiences including if participants currently did, or ever did, experience physical or sexual violence in a dating or intimate relationship. Pearson's chi square test allowed me to determine if there was a relationship between the two categories (Field, 2009). The independent variable was previous exposure to domestic violence between parents or primary caretakers. The dependent variable was the female participant experiencing physical violence or sexual abuse in a dating relationship.

The dependent variable was ratio scored and a regression analysis was performed to analyze the data.

Additional rationale for choosing a quasi-experimental design for this research was time and resources constraints. Conducting a survey can be less time consuming than other data collection methods (Creswell, 2009). Conducting an Internet survey can be less time consuming and a more economical approach than other types of surveys (Evans & Rooney, 2008). This approach allows a researcher options regarding the format of the survey and may utilize social media and electronic instruments to help reach participants, collect the data, and analyze the data more quickly than some of the other designs. This was the approach chosen by the original data collectors (Bonomi et al., 2012).

Methodology

Population

The target population for this research study was women, 18 years of age or older, who were willing to complete a survey about their childhood and teen years regarding witnessing domestic violence and their dating relationships. By limiting the age of participants to 18 years of age or older, participants were able to give their own informed consent to participate in the study. Although it is well documented that men and boys are also significantly affected by witnessing domestic violence between their primary caretakers (Idemudia & Makhubela, 2011; Straus, 2009; Sirikantraporn, 2013; Yi et al., 2013), and do experience dating violence (Buller, Devries, Howard, & Bacchus, 2014), this study focused on young women who witnessed domestic violence between their

primary caretakers and their subsequent dating relationships. The study utilized portions of previously collected data involving the same subject matter.

Sampling and Sampling Procedures

The quality and reliability of a study is directly impacted by the sampling strategy. Therefore, to strengthen the study's quality and reliability researchers should apply appropriate, scientifically accepted sampling strategies.

To determine the appropriate sampling strategy for a study, I first considered the population or specific cases that may meet the specifications of the study. Frankfort-Nachmias and Nachmias (2008) suggested defining the population with regard to "content, extent, and time" (p. 164). For this quantitative research study, the population was women 18 years of age and older (content) who lived in the United States (extent) during their childhood and teen dating years (timeframe). The exact size of the total population was unknown as it was determined by those willing to participate. Because it was not practical to study the entire population, a sample was used.

One type of sampling appropriate for this quantitative research project was a nonprobability sample. Nonprobability samples are employed when the researcher cannot ensure each member of the population has an equal chance of being selected (Polit & Beck, 2004). The nonprobability sampling type used for this study was convenience sampling because I included the sampling units that are conveniently available (Frankfort-Nachmias & Nachmias, 2008).

The nonprobability samples not used in this study were purposive and quota samples. I did not use purposive sampling because it employs a researcher's subjective

judgment as it attempts to select study participants that seem to represent the population (Frankfort-Nachmias & Nachmias, 2008). Quota sampling was not used because it requires the researcher to select a sample that mirrors the population. Because the entire population was unknown, this type of sampling was not feasible.

Probability sample designs were also appropriate for this study. When using probability sample designs, the researcher can specify the likelihood of each participant's inclusion in the sample. Random sampling was not chosen because I did not take every n^{th} female and include them in the study. The probability sample design that was used was random samples because the study involved an existing random samples data set collected by Bonomi et al. (2012).

Participant Eligibility Criteria

The eligibility criteria for this study was (a) female, (b) current age of 18 years or older, and (c) willingness to participate in the study after being informed of the study details including the need for the study, the study's purpose, steps, and procedures. Persons who did not meet all three criteria were excluded from the study. Data collection was conducted at the Ohio State University using university e-mail. Because this particular study involved only women, I considered the responses from the 556 female participants in Bonomi et al.'s (2012) study. Participants were specifically asked about witnessing domestic violence between their parents. Those who answered *no* or *yes* to the questions about witnessing domestic violence between their parents were included in this study. Those who answered *not sure* were excluded.

Sampling Size

The first consideration for the sample size was to determine the minimal number of participants that should be used to achieve a desires level of power (Field, 2009). G*Power 3.1.3 software was used to compute the sample size. A two tailed approach was used because the r value may be positive or negative. The G*Power tests was ran to achieve 80% power, alpha = 0.05 and an effect size of 0.2. After selecting F-test from the test family and ANOVA: repeated measures, between factors, A priori: compute requires sample size given alpha, power, and effect size power analysis was chosen. The input parameters were an effect size of 0.2, an alpha error probability of 0.02, a power of 0.80, and the number of groups was two. Table 1 provides the input and output data for an effect size of 0.25.

Table 1

Protocol of Power Analysis Output

Noncentrality parameter λ	13.2000000
Critical F	3.939890
Numerator df	1.000000
Denominator df	130
Total Sample Size	132
Actual Power	0.8036475

The total sample size computes to 132. G*Power also provides a distribution graph as illustrated in Figure 1.

Figure 1. Central and noncentral distributions.

Procedures for Recruitment, Participation, and Data Collection

Data for this study were taken from research previously conducted by Bonomi et al. (2012). Because this research data collection was conducted at Ohio State University located in the United States using university e-mail, the potential population for this research was students who were enrolled at the university at the time of the research (32,716). Those invited to participate in the study were given written explanation of the study including the reason for the study, the type of study, and what the findings would be used for (Bonomi et al., 2012). The data collection process used for participant recruitment was a computer-generated random sampling of 730 students who received the survey and two follow-up requests via their university e-mail account. Because this particular study involved only women, I considered the responses from the 556 female participants in Bonomi et al.'s study. This study specifically included the female participants who answered *no* or *yes* to witnessing domestic violence between their parents.

Once participants completed the survey, their contribution to the study was complete. No debriefing or follow-up procedures were implicated or conducted (Bonomi et al., 2012).

Instrumentation and Operationalization of Constructs

Data collection for this study relied on The Teen Domestic Violence survey developed and tested by Bonomi et al. (2012). The questions on the Teen Domestic Violence survey were adapted from the CDC's (2009) Youth Risk Behavior Survey Surveillance System and include a sequence of questions in the categories of eating behaviors, alcohol consumption, cigarette smoking, sexual intercourse, emotions, behaviors of any intimate partners, and parental behaviors. This tool was employed in research conducted by Bonomi in 2012 and 2013 (Bonomi et al., 2012).

This data collection tool was divided into three parts: dating violence questions, romantic attachment questions, and bullying questions. According to Dr. A. Bonomi (personal communication, April 19, 2014), each part of the data collection tool can stand alone. For this study, the dating violence section, which contains eight main questions and their related sequence questions, was used. These questions are relevant to this study because the questions are designed to explore dating violence during the teen years. Additionally, this study used data from Question 44 regarding the participants witnessing or not witnessing domestic violence between their parents or guardians during childhood as a grouping question. This allowed one to see if there were any difference between those who did witness domestic violence between their parents or primary caretakers during childhood and those who did not.

Previous Reliability and Validity Values Relevant to the Data Collection Tool

The survey includes eight, four-part series questions covering psychological, physical, and sexual abuse that contain 168 variables (Bonomi et al., 2012). The research group used Proc univariate analysis in SAS and found the eight new abuse variables indicated significant skewness and kurtosis, so the variables were transformed by taking their square root, a technique useful with count data (Schumacker & Lomax, 2004). Despite transformation, the Proc univariate procedure again indicated significant skewness and kurtosis violating the assumption of normality, so an asymptotic covariance matrix was generated for use in the CFA analysis (Bonomi et al., 2012). This analysis also indicated a skewness and kurtosis values above the accepted levels for CFA using ML estimation. Therefore, a goodness of fit analysis was conducted. This analysis yielded a likelihood ratio test comparison of 6.557 (significantly improved) for the second to initial model and a 3.913 (significantly improved) for the final to initial model with a critical value of 3.84 (Bonomi et al., 2012).

Populations on Which the Instrument was Previously Used

After approval of the procedures by Ohio State University IRB (Bonomi et al., 2012), the Registers' Office randomly selected students to participate in the cross-sectional, self-administered, on-line survey over a 1-week period. The response rate was 46.7% and reflected the general student population. Due to missing data, 39 were omitted from the study leaving 730 original subjects in the data set (Bonomi et al., 2012). Of the original 730 responses, 76.4% (or 556) were female. This study utilized this previously collect data set and considered only the responses of female participants.

Operationalization

Operations definitions used in the study include the following:

Domestic violence: Physical aggression or assault such as hitting, slapping, pinching, shoving, kicking or otherwise physically hurting their spouse or partner (Bonomi et al., 2012).

Primary caretakers: According to Merriam-Webster's dictionary (2014), primary caretakers, also known as parents or guardians, are the person or persons who provided direct care. For this study, the terms *primary caretakers, parents,* and *guardians* were used interchangeably.

Witness: According to Merriam-Webster's dictionary (2014), this is one who can give a firsthand account of something seen or heard.

The variables for this study included (a) witnessing a parent or guardian slapping, pinching, shoving, kicking, or otherwise physically hurting their spouse or partner, (b) experiencing a partner hitting, slapping, or physically hurting the participant on purpose, and (c) experiencing a partner pressuring the participant to have sexual activities by threatening with physical force such as twisting the participant's arm or holding her down. Participants could respond to the question about witnessing a parent or guardian slapping, pinching, shoving, kicking, or otherwise physically hurting their spouse or partner with *no*, *yes*, or *don't know/not sure*, which were keyed on a nominal scale as 0, 1, and 2 respectively. Those answering *no* (0) and *yes* (1) were included in the study. Those who answered *don't know/not sure* were excluded from the study. For the variable of experiencing a partner hitting, slapping, or physically hurting the participant on

purpose, the answer options were *no* and *yes* and were keyed on a nominal scale as 0 and 1, respectively. For those answering *yes*, additional questions ensued regarding the number of times the participant experienced it. The options were *once, twice, 3-5 times, 6-10 times, 11-20 times, 20-50 times, more than 50 times,* or *don't remember*. These were represented on scale as 1, 2, 3, 4, 5, 6, 7, and 8 respectively. The final variable of experiencing a partner pressuring the participant to have sexual activities by threatening with physical force such as twisting her arm or holding her down was answered with *no* or *yes* and was keyed on a nominal scale as 0 and 1, respectively.

The covariates controlled for in the data set were age, race, and GPA. Age options were coded as 18, 19, 20, 21, 22, 23, 24, 25, or 26 to correspond with the participant's chronological age. Data on race were collected by asking a series of questions and coding *no* as 0 and *yes* as 1 for the following races: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Hawaiian or other Pacific Islander, White, and Other. Those who answered *yes* to Other were asked to specify. GPA was coded numerically as follows: 1 = a GPA of 3.7-4.0, 2 = a GPA of 3.3-3.6, 3 = a GPA of 3.0-3.2, 4 = a GPA of 2.7-2.9, 5 = a GPA of 2.3-2.6, 6 = a GPA of 2.0-2.2, 7 = a GPA of 1.7-1.9, and 8 = a GPA of 1.6 or lower.

Data Analysis Plan

For this quasi-experimental study the data analysis included descriptive statistics and statistical regressions. The descriptive statistics provided a summary that included median, mode, and standard deviation. A binomial logistic regression analysis was done that yielded the omnibus chi-square test, Wald chi-square test, odds ratio, and the Cox

and Snell *R*-square. The omnibus chi-square test indicated if the independent variables or predictor (witnessing physical violence between parents or primary caretakers) actually predicted the dependent or outcome variable (experiencing physical violence or sexual abuse in a dating relationship). If significant, it indicated a good model fit (Laureate Education, Inc., 2009i).

The mean was reported for each group, as well as the results of the binomial logistic regression analysis. Consideration was given to the omnibus chi-square test as it indicated if the independent variable actually predicted the dependent variable. Comparison was made between the two groups using a regression analysis. This information will be shared with area high school and junior college counselors. Opportunities will be sought for presentation and publication on this information.

Threats to Validity

In any quantitative study, the validity of the study must be considered to assure the study is legitimate and creditable (Creswell, 2009). One threat to internal validity was the maturation level of the participants. To control for this, the survey asked how old the participant was as a demographic question. The ages ranged from 18 to 26 with a mean average of 20.13 and a median of 20. Because the questionnaire was gathering data from the past, it relied on the memory of participants, which may not always be totally accurate. To address the threat to internal validity for the data collection instrument, authors Bonomi et al. (2012) performed appropriate tests on the instrument and recalibrated as needed prior to the original data collection in 2012. The threat of attrition was negated by the study taking data and measurement at only one point in time. With

quantitative research, there is a threat of validity regarding the instrument used to collect data. Bonomi et al. (2012) completed a sequence of tests to assure the reliability and validity values relevant to the data collection tool, which were explained in detail under that section. To address the possibility of population validity, a sample size well above the calculated G*Power of 132 participants needed for this study was used. Additionally, care was taken in the original data collection to generate the sample randomly in an effort be mirror the whole population.

Ethical Procedures

Above all, research must be ethical (Resnik, 2011). The Nuremberg code of 1949 was adopted to assure the rights of all people were protected from research abuse (Carey, 2010). This research study was approved by the Walden University IRB, hereafter referred to as Walden's IRB. Members of Walden's IRB received and reviewed a general description of the proposed research, a list of community research stakeholders and partners, the potential risks and benefits, proof of data integrity and confidentiality, and potential conflicts of interest, the data collection tool, and a description of the research participants who gave informed consent. Because this study used data collected from a previous study that was IRB approved at the time of the data collection, it was well documented that the data collection for the study was ethical. The Walden University IRB issued an approval number of 01-02-15-0040393 for this study. No attempt was made to collect new data for this particular study.

The study data set was provided directly from Dr. A. Bonomi, the primary investigator of the original study and data collection process (Bonomi, et al., 2012). Prior

to sharing the data set, it was stripped of all individual identifiers. Data were received and stored on a secure drive and were protected with no-override passwords and firewalls. Once the data were analyzed for this study and the project completed, the data set was permanently deleted as the original and complete data set is maintained by Dr. Bonomi.

Summary

In summary, this quasi-experimental quantitative study considered data collected in a previous study regarding the witnessing of domestic violence between ones parents or primary caretakers, and their subsequent dating relationships during their teen years. The random sample of data was collected using the Teen Domestic Violence survey which was adapted from the CDC's Youth Risk Behavior Survey Surveillance System by Bonomi et al. (2012). The study considered responses from all females completing the survey (556) and who answered the question about witnessing domestic violence between their parents or guardians definitively (yes or no). The results included a data analysis containing descriptive statistics, statistical regressions, and a binomial logistic regression analysis to determine the omnibus chi-square test, Wald chi-square test, odds ratio, and the Cox & Snell R-square. These results are detailed in Chapter 4.

This chapter outlined the research design and rationale, the methodology, including population, sampling and sampling procedures, recruitment, participation, and instrumentation, as well as procedures used to acquire a set of previously collected data. Chapter 4 recaps the data collection process and discusses the results of the data analysis.

Chapter 4: Results

Introduction

The purpose of the quasi-experimental quantitative study was to explore how witnessing domestic violence between one's parents and/or primary caretakers affects a young girl's dating relationships. Specifically, this study considered the independent variable of previous exposure to domestic violence between the female adolescent's parents or primary caregivers and the dependent variable of the participant personally experiencing physical violence or sexual abuse in a dating relationship. The primary research question being studied was as follows: Does witnessing domestic violence between one's parents/primary caretakers affects a young girls' dating relationships? The research tested the following hypotheses:

The null hypothesis (H_0a: μ1= u2) states there is no difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship.

The alternative hypotheses (H_1a: μ1≠μ2) states there is a difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship.

The null hypothesis (H_0b: μ1= u2) states there is no difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in a dating relationship.

The alternative hypotheses (H_1b: μ1≠μ2) states there is a difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in a dating relationship.

The null hypothesis (H_0c: μ1= u2) states there is no difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in more than 1 dating relationship.

The alternative hypotheses (H_1c: μ1≠μ2) states there is a difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in more than 1 dating relationship.

The null hypothesis (H_0d: μ1= u2) states there is no difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in more than 1 dating relationship.

The alternative hypotheses (H_1d: μ1≠μ2) states there is a difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in more than 1 dating relationship.

This chapter will discuss the data collection including discrepancies noted, baseline descriptive and demographic characteristics of the sample, and how representative it was, as well as the treatment, adverse events, and results of the statistical analysis.

Data Collection

Data for this study were taken from research previously conducted (Bonomi et al., 2012). The research data collection was conducted at Ohio State University located in the United States using university e-mail (Bonomi et al., 2012). The potential population for this research was students who were enrolled at the university at the time of the research (32,716). Those invited to participate in the study were given written explanation of the study including the reason for the study, the type of study, and what the findings would be used for. The data collection process used for participant recruitment was a computer-generated random sampling of the students who received the survey and two follow-up requests via their university e-mail account (Bonomi et al., 2012). The data set was collected in 2011-2012. There were 729 students who completed the survey.

Discrepancies in Data Collection

The present study includes only female participants, so of the 729 participants in the original data collection, this study considered the responses from the 556 young women who participated in the study (Bonomi et al., 2012). The original plan was to include all 556 female participants. However, this study also required that participants answer a categorical question of whether or not they witnessed domestic violence between their parents or primary caregivers prior to age 18. Of the 556 female participants in the original data collection, 526 of them answered *yes* or *no* to the categorical question of whether or not domestic violence was witnessed between their parents or primary caregivers prior to age 18. Therefore, this study considered only those 526 participants.

Baseline Descriptive and Demographic Characteristics of Sample

Baseline descriptive characteristics are provided for the participants. All participants were students at Ohio State University at the time of the data collection. Race of participants was self-reported as American Indian or Alaska Native (0.6%), Asian (5.7%), Black or African American (7.2%), Hispanic or Latino (2.3%), Hawaiian or other Pacific Islander (0.4%), White (85.6%) and Other (0.8%), which was comprised of Jewish, Somalian, Middle Eastern/Palestinian, an South African. The age range of participants was 18 to 26 years with a mean age of 20.14 years. Participants reported GPAs in categories ranging from lower than 1.6 to 4.0 with a median range of 3.3-3.6 and a mean range 3.0 to 3.6.

Sample Representation

The sample used for this study was representative of the population. The probability sample design used for the original data set was random samples (Bonomi et al., 2012). The sample attained closely mirrored the population of Ohio State University that was being studied because it has similar characteristics to the population, such as the age, race, and GPA of the female student body at Ohio State University. To address the possibility of population validity, G*Power 3.1.3 software was used to compute the sample size with input parameters of 0.2 effect size, 0.02 alpha error probability, a power of 0.80, and two groups. The needed sample size computes to 132. The sample size of 527 was well above the calculated G*Power of 132 participants. A basic univariate analysis of race, age, GPA, justifies the inclusion of these covariates. See Table 2 for the analysis of race.

Table 2

Analysis of Race

	Frequency	Percent	Valid Percent	Cumulative Percent
American Indian or Alaska Native	3	0.6	0.6	0.6
Asian	30	5.7	5.7	6.3
Black or African American	38	7.2	7.2	13.5
Hispanic or Latino	12	2.3	2.3	15.8
Hawaiian or other Pacific Islander	2	0.4	0.4	16.2
White	451	85.7	85.7	101.9
Other	4	0.8	0.8	102.7
Total	540	100.0	100.0	102.7

An in-depth explanation of the analysis of race appears under the “Results” section of this chapter. For the analysis of age, see Table 3.

Table 3

Analysis of Age

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
18	49	9.3	9.4	9.7
19	131	24.9	25.0	34.4
20	155	29.5	29.6	64.1
21	129	24.5	24.7	88.7
22	33	6.3	6.3	95.0
23	16	3.0	3.1	98.1
24	1	.2	.2	98.3
25	1	.2	.2	98.5
26	8	1.5	1.5	100.0
Total	523	99.4	100.0	
Missing	3	.6		
TOTAL	526	100.0		

An in-depth explanation of the analysis of age appears under the “Results” section of this chapter. For the analysis of GPA, see Table 4.

Table 4	Frequency	Percent	Valid Percent	Cumulative Percent

Analysis of GPA

Valid				
1 : 3.7-4.0	113	21.5	23.6	23.6
2: 3.3-3.6	172	32.7	36.0	59.6
3: 3.0-3.2	104	19.8	21.8	81.4
4: 2.7-2.9	54	10.3	11.3	92.7
5: 2.3-2.6	24	4.6	5.0	97.7
6: 2.0-2.2	6	1.1	1.3	99.0
7: 1.7-1.9	4	0.8	0.8	99.8
8: 1.6 or lower	1	0.2	0.2	100.0
Total	478	90.9	100.0	
Missing	48	9.1		
TOTAL	526	100.0		

An in-depth explanation of the analysis of GPA appears under the “Results” section of this chapter.

Results

Descriptive Statistics

First is the in-depth analysis for race. The sample for this study was 526 females strong of various races. Reported races included Asian (30), Black or African American (38), Hispanic or Latino (12), Hawaiian or other Pacific Islander (2), White (450) and other (4) which was comprised of Jewish, Somalian, Middle Eastern/Palestinian, and South African. It is noteworthy that of the 526 participants, 6 did not answer the race questions, 16 responded with 2 races and 3 responded with 3 races bringing the total

responses to 540 or 102.7% of the whole. See Table 2 above for a visual summary of participant race.

Next, is the in-depth analysis for age. Ages of the participants vary. The range of ages was ages 18-26 and was divided as follows: 49 18-year-olds (9.3%); 131 19-year-olds (24.9%); 155 20-year-olds (29.6%);129 21-year-olds (24.5%); 33 22-year-olds (6.3%); 16 23-year-olds (3%); 1 24-year-old (.2%); 1 25-year-old (.2%); and 8 26-year-olds (1.5%). The mean age of the group was 20.14 with a standard deviation of 1.418. The median age and mode are 20 for 524. Three participants did not divulge their age. See Table 3 above for a visual summary of age.

The GPAs of participants also varied. GPA was reported in ranges in the initial data collection rather than specific numerical values. Of the 526 participants, 113 (21.4%) had a GPA of 3.7-4.0; 172 (32.7%) had a GPA of 3.3-3.6; 104 (19.7%) had a GPA of 3.0-3.2; 54 (10.2%) had a GPA of 2.7-2.9; 24 (4.6%) had a GPA of 2.3-2.6; 6 (1.1%) had a GPA of 2.0-2.2; 4 (.8%) had a GPA of 1.7-1.9; and 1 (.2%) had a GPA of 1.6 or lower. Of the participants, 48 (9.1%) did not answer this question. The median GPA category was 2 or a GPA of 3.3-3.6. The mean for the GPA categories was 2.46, or approximately middle ways between category two (GPA of 3.3-3.6) and category three (GPA of 3.0-3.2). The standard deviation was 1.277. Of the 527 participants, 479 reported their GPA and 48 did not report their GPA. See Table 4 above for a visual summary of grade-point-average.

Statistical Assumptions

There are several assumptions in this study. The epistemological assumption was met because the researcher was totally independent from what is being researched. The ontological assumption was that reality is objective, apart from the researcher of this study. The methodological assumption was met by using a deductive process based on a set of definitions to explain a behavior. In this quasi-experimental quantitative approach the researcher was testing a theory by specifying narrow hypotheses and examining previously collected data using an instrument that measures attitudes and behaviors, and then analyzing the data (Creswell, 2008). Other specific assumptions of this study include (1) the questionnaire elicited the desired data, (2) the participants answered questions truthfully, and (3) the data will be significant.

This study used a binomial logistic regression analysis. Other underlying principle assumptions for the binomial logistic regression are as follows:

1. The dependent variables are dichotomous. For this study the dependent variables of experiencing physical violence in dating relationship and experiencing sexual violence in dating relationships are both dichotomous.

2. The independent variable was measured on a nominal scale. For this student the independent variable of witnessing domestic violence between one's parents or primacy caregivers is measured on a nominal scale by answering 'yes' or 'no'.

3. There is independence of observation in the dependent variables. For this study the dependent variables of experiencing physical violence in dating relationship and

experiencing sexual violence in dating relationships have mutually exclusive and exhaustive categories.

4. A linear relationship between the continuous independent variables exists. The Pearson Correlation was used to test whether there was a statistically significant linear relationship between the independent variables of experiencing physical violence in dating relationship and experiencing sexual violence in dating relationships, and to determine the strength and direction of the association. See Table 5.

Table 5

Correlations

		Q32.1: Dependent Variable - Hit, slap, physically harm	Q36.1: Dependent Variable - Pressured into sex by threat/ physical force
Q32.1: Dependent Variable - Hit, slap, physically harm	Pearson Correlation	1	.316**
	Sig. (2-tailed)		.000
	N	502	500
Q36.1: Dependent Variable - Pressured into sex by threat/physical force	Pearson Correlation	.316**	1
	Sig. (2-tailed)	.000	
	N	500	501

**. Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation coefficient for the independent variables of experiencing physical violence in dating relationship and experiencing sexual violence in dating

relationships was .316, which was significant ($p < .001$ for a two-tailed test) based on a sample of 500 cases.

5. Homoscedasticity was also an assumption. The homoscedasticity assumption was that the dependent variable exhibits similar amounts of variance across the range of values for an independent variable. In this study, logistic regression is used to predict the categorical variable, such as experiencing physical or sexual violence in dating relationships, from a set of predictor variables such as age, race, or GPA. With a categorical dependent variable, such as experiencing physical violence in dating relationship and experiencing sexual violence in dating relationships, a discriminant function analysis was employed. To assure homoscedasticity (that the dependent variable exhibits similar amounts of variance across the range of values for an independent variable), a scatter plot with a fit line was used to compare the categorical dependent variable of experiencing sexual violence in dating relationship to race, GPA, and age. The first test for homoscedasticity for this study was a scatter plot was used to compare the categorical dependent variable of experiencing physical violence in dating relationship to race. A fit line was used to indicate homoscedasticity. See Figure 2.

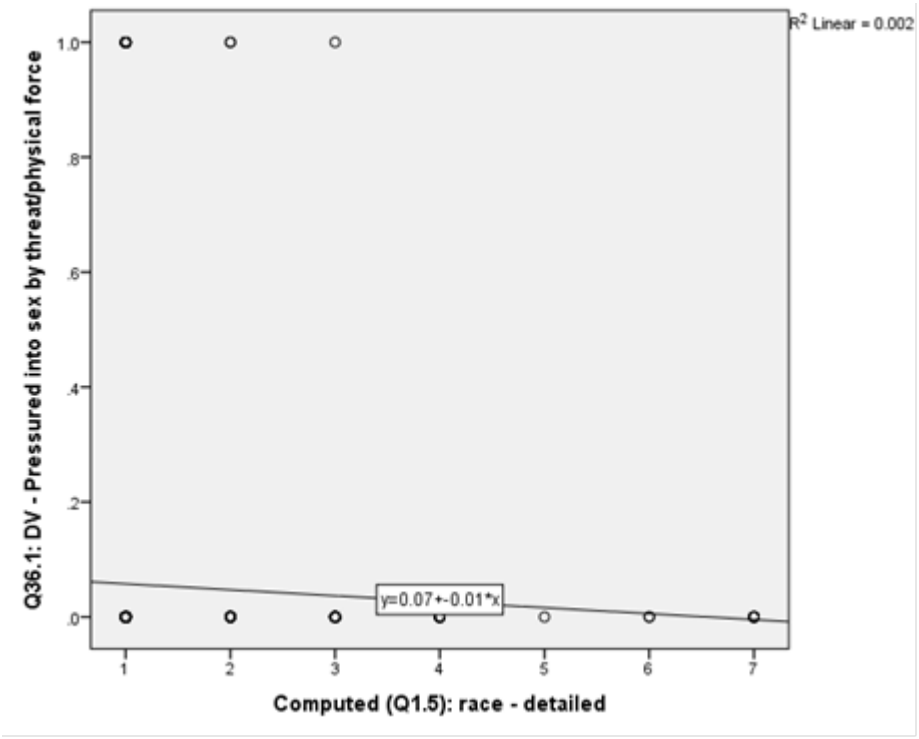

Figure 2. Experiencing sexual violence in dating relationships and race.

The flat fit line for experiencing sexual violence in dating relationship with regard to the single variable of race indicated homoscedasticity. However, the coefficient of determination or R2 which explains the proportion of the variance (fluctuation) of one variable (race) that is predictable from the other variable (experiencing sexual violence in dating relationship) was only 0.002 which means that only 0.2% of the total variation in experiencing sexual violence in dating relationship (y axis) can be explained by the linear relationship between the variable of race (x axis) and experiencing sexual violence in dating relationship. This leaves 99.8% of experiencing sexual violence in dating relationship unexplained.

Likewise, to test for homoscedasticity for this study, a scatter plot was used to compare the categorical dependent variable of experiencing sexual violence in dating relationship to GPA. A fit line was used to indicate homoscedasticity. See Figure 3.

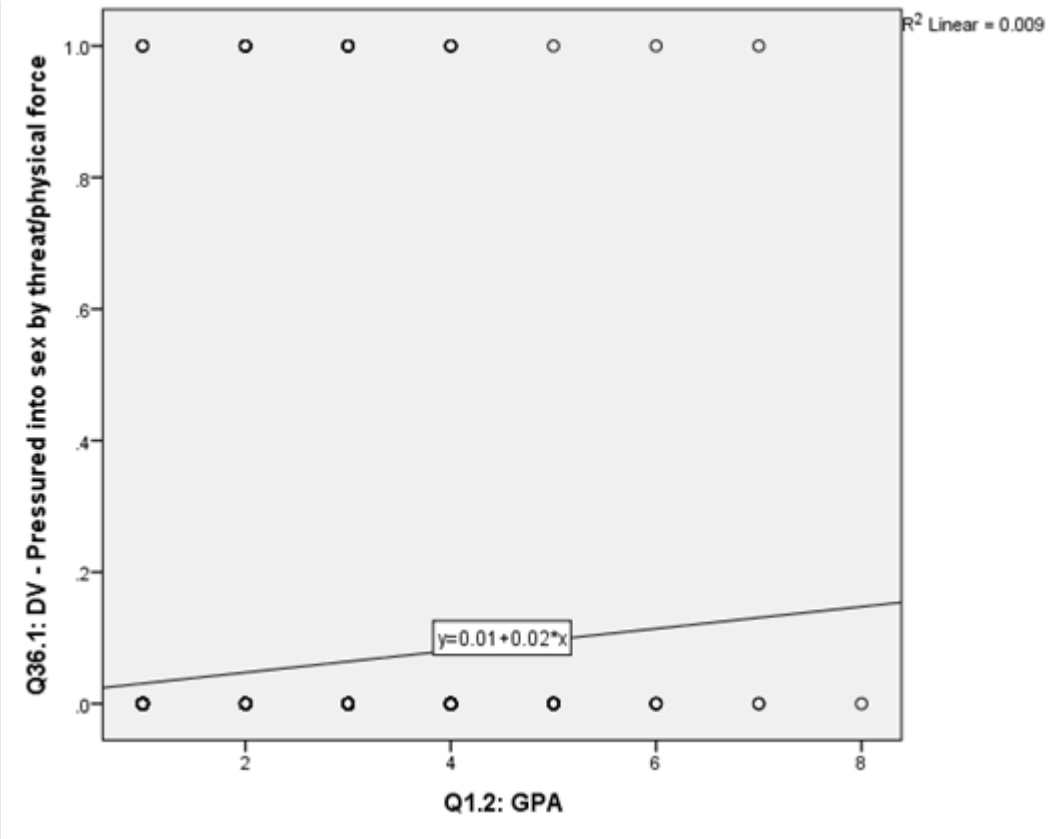

Figure 3. Experiencing sexual violence in dating relationships and GPA.

The flat fit line for experiencing sexual violence in dating relationship with regard to the single variable of GPA indicated homoscedasticity. However, the coefficient of determination or R2 which explains the proportion of the variance (fluctuation) of one variable (GPA) that is predictable from the other variable (experiencing sexual violence in dating relationship) was only 0.009 which means that only 0.9% of the total variation in experiencing sexual violence in dating relationship (y axis) can be explained by the

linear relationship between the variable of GPA (x axis) and experiencing sexual violence in dating relationship. This leaves 99.1% of experiencing sexual violence in dating relationship unexplained.

And finally, to test for homoscedasticity for this study, a scatter plot was used to compare the categorical dependent variable of experiencing sexual violence in dating relationship to age. A fit line was used to indicate homoscedasticity. See Figure 4.

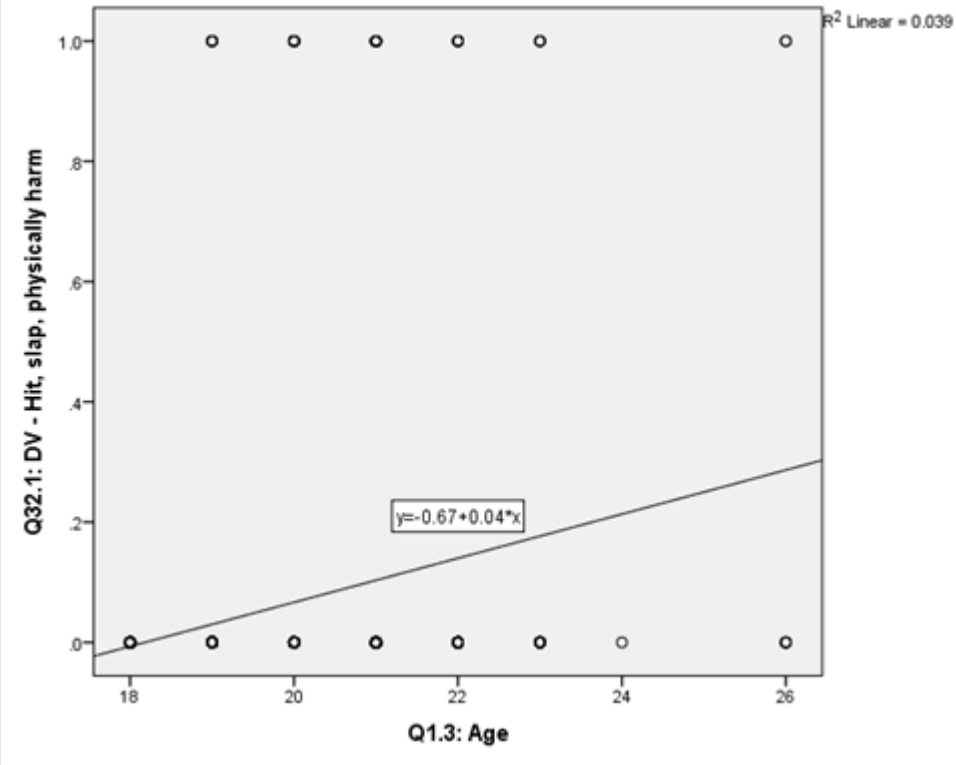

Figure 4. Experiencing sexual violence in dating relationships and age.

And lastly, the flat fit line for experiencing physical violence in dating relationship with regard to the single variable of age indicated homoscedasticity. However, the coefficient of determination or R2 which explains the proportion of the variance (fluctuation) of one variable (age) that is predictable from the other variable

(experiencing sexual violence in dating relationship) was only 0.039 which means that only 3.9% of the total variation in experiencing sexual violence in dating relationship (y axis) can be explained by the linear relationship between the variable of age (x axis) and experiencing sexual violence in dating relationship. This leaves 96.1% of experiencing sexual violence in dating relationship unexplained.

6. There was an assumption of normality. The assumption of normality compared the shape of your sample distribution to the shape of a normal curve. This assumption assumes, if your sample is normal shaped, the population from which it came is normally distributed. To test for normality of the error distribution a histogram with a cure overlay was employed for the variable of age. See Figure 5.

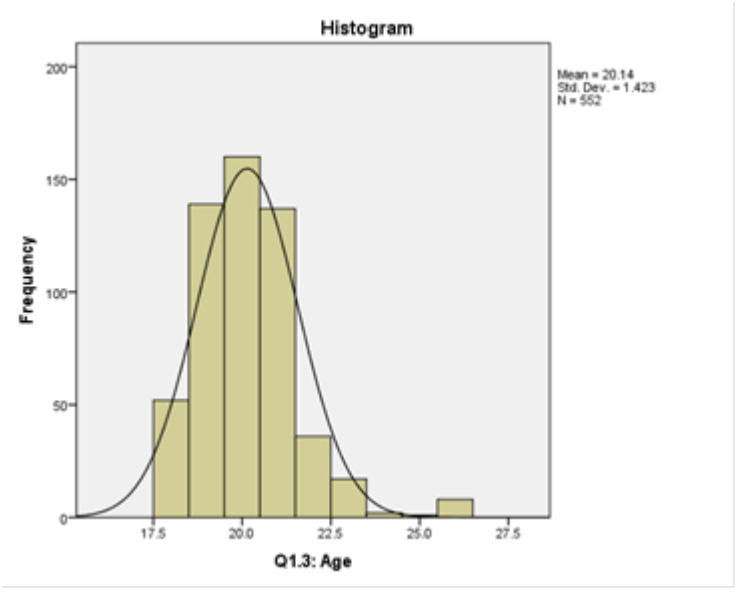

Figure 5. Histogram with normal curve overlay.

The sample distribution of the participant ages is in the shape of a normal curve indicating normality.

7. There was an assumption of homogeneity of variance. The Leven's test was used to test this assumption. See Table 6.

Table 6

Test of Homogeneity of Variance[a]

		Levene Statistic	df1	df2	Sig.
Q36.1: Dependent Variable - Pressured into sex by threat/physical force	Based on Mean	3.681	1	476	.056
	Based on Median	.977	1	476	.324
	Based on Median and with adjusted df	.977	1	461.731	.324
	Based on trimmed mean	3.681	1	476	.056
Q32.1: Dependent Variable - Hit, slap, physically harm	Based on Mean	.534	2	492	.587
	Based on Median	.137	2	492	.872
	Based on Median and with adjusted df	.137	2	488.794	.872
	Based on trimmed mean	.534	2	492	.587

a. Q36.1: Dependent Variable - Pressured into sex by threat/physical force is constant when Q44.1: Witnessed domestic violence between parents = 2: not sure. It has been omitted.

To evaluate the homogeneity of variance, the Levene's statistic based on the mean was considered. The Levene's test is non-significant (0.56) for the dependent variable of pressured into sex by threat/physical force during a dating relationship because the significance column are more than 0.05 indicating that the variance are not significantly different. Due to this similarity, homogeneity of variance assumption is considered reasonable. Likewise, the Levene's test was non-significant (0.587) for the dependent variable of being hit, slapped, or experiencing physically harm in a dating relationship because the significance column are more than 0.05 indicating that the variance are not significantly different. Due to this similarity, homogeneity of variance assumption is considered reasonable in this instance also.

Thus, the assumptions have all been met. The focus will now shift to the analysis.

Statistical Analysis

The statistical analysis for this study was a binomial logistic regression analysis. This yielded the omnibus chi-square test, chi-square test, odds ratio, and the Cox & Snell R-square which was used to evaluate the hypothesis.

The first phase of the statistical analysis considered the following hypothesis: The null hypothesis (H_0a: μ1= u2) states there is no difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship. The alternative hypotheses (H_1a: μ1≠μ2) states there is a difference in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship. To consider, what if any, difference

there was in the proportion of females who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship and those who did not previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship, a binomial logistic regression was done using SPSS.

To begin the statistical analysis for this study a binomial logistic regression analysis was done which yielded the omnibus chi-square test, chi-square test, odds ratio, and the Cox & Snell R-square. To consider the dependent variable of experiencing physical violence (hit, slap or physically harm) after the dependent variable (witnessing domestic violence between parents or primary caregivers) the Omnibus Tests of Model Coefficients was considered. See Table 7.

Table 7

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig
Step 1	Step	.269	2	.874
	Block	.269	2	.874
	Model	.269	2	.874

The significance level (*p*-value) was .874. For this calculation, a p value (significance level) of < 0.05 was used. Since .874 is more than the significance level of < 0.05 the null hypothesis that states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship is not rejected. Because this is not

significant it indicated that the variable of witnessed domestic violence between one's parents or primary caregivers is not a good predictor of that person experiencing physical violence in their own dating relationships.

Next consider the model summary. See Table 8.

Table 8

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	252.933[a]	.001	.001

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

The very large number (252.933) in the -2 log likelihood indicated this is not a good fit. According to the Cox & Snell R2 the part of the independent variable (witnessed domestic violence between one's parents or primary caregivers) that is explained by the dependent variable (experiencing physical violence in their own dating relationships) is extremely low. The Nagelkerke R2 is the pseudo R2. Next consider the variables in the equation. See Table 9:

Table 9

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for Exp(B)	
Step 1[a]	witness			.282	2	.869		Lower	Upper
	Witness (1)	.170	1.048	.026	1	.871	1.185	.152	9.244
	Witness (2)	.445	1.156	.148	1	.700	1.561	.162	15.052

Constant	-2.773	1.031	7.235	1	.007	.063

a. Variable(s) entered on step 1: witness.

The Cox Regression, or odds ratio, indicated on the table above as Exp(B), is 1.185 for those who did not witness domestic violence between their parents or primary caregivers, and 1.561 for those who did witness domestic violence between their parents or primary caregivers. These numbers are positive indicating a positive correlation between those who witness domestic violence between their parents or primary caregivers and experience domestic violence in their own dating relationship, as well as positive correlation between those who witness domestic violence between their parents or primary caregivers and do not experience domestic violence in their own dating relationship. However, there is little difference between the two groups. This is an analysis of how the independent variable of witnessing domestic violence between one's parents or primary caregivers affects the dependent variable of experiencing domestic violence in one's own relationship. This validated the null hypothesis (H_0a: μ1= u2) that states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in a dating relationship.

In the next phase of analysis the following hypotheses were considered: The null hypothesis (H_0b: μ1= u2) states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in a dating relationship. The alternative hypotheses (H_1b: μ1≠μ2) states there is a difference in the proportion of girls who previously witnessed

physical violence between their parents or primary care givers and who experience sexual abuse in a dating relationship. To consider, what if any, difference there was in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual violence in a dating relationship and those who did not previously witnessed physical violence between their parents or primary care givers and who experience sexual violence in a dating relationship, a binomial logistic regression was done using SPSS. To begin this analysis phase consider the Omnibus Tests of Model Coefficients. See Table 10:

Table 10

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig
Step 1	Step	2.800	2	.247
	Block	2.800	2	.247
	Model	2.800	2	.247

The significance level (p value) was .247. For this calculation, a p value (significance level) of < 0.05 was used. Since .247 is more than the significance level of < 0.05 the null hypothesis that states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual violence in a dating relationship is not rejected. Because this is not significant it indicated that the variable of witnessed domestic violence between one's parents or primary caregivers is not a good predictor of that person experiencing sexual violence in their own dating relationships.

Now consider the model summary. See Table 11.

Table 11

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	206.883[a]	.006	.016

a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

The very large number (206.883) in the -2 log likelihood indicated this is not a good fit. According to the Cox & Snell R2 the part of the independent variable (witnessed domestic violence between one's parents or primary caregivers) that is explained by the dependent variable (experiencing sexual violence in their own dating relationships) is extremely low. The Nagelkerke R2 is the pseudo R2. Now consider the variables in the equation. See Table 12.

Table 12

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for Exp(B)	
Step 1[a]	witness			.965	2	.617		Lower	Upper
	Witness (1)	18.320	9748.194	.000	1	.999	9040339 7.188	.000	
	Witness (2)	18.876	9748.194	.000	1	.998	1576067 70.920	.000	
	Constant	-21.203	9748.194	.000	1	.998	.000		

a. Variable(s) entered on step 1: witness.

The Cox Regression, or odds ratio, indicated on the table above as Exp(B), is 90403397.188 for those who did not witness domestic violence between their parents or primary caregivers, and 157606770.920 for those who did witness domestic violence between their parents or primary caregivers. These numbers are positive which indicated a positive correlation between those who witness domestic violence between their parents or primary caregivers and experience sexual violence in their own dating relationship, as well as positive correlation between those who witness domestic violence between their parents or primary caregivers and do not experience sexual violence in their own dating relationship. However, again, there is little difference between the two groups. This is an analysis of how the independent variable of witnessing domestic violence between one's parents or primary caregivers affects the dependent variable of experiencing sexual violence in one's own relationship. Thus validating the null hypothesis (H_0b: μ1= u2) that states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in a dating relationship.

The third phase of the statistical analysis considered the following hypothesis: The null hypothesis (H_0c: μ1= u2) states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in more than 1 dating relationship. The alternative hypotheses (H_1c: μ1≠μ2) states there is a difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience physical violence in more than 1 dating relationship.

This data set was problematic at this point because there were missing values in the remaining two variables that were being testing, specifically, in the data of those who experience physical or sexual violence in more than 1 dating relationship. In general, when considering missing data, it is important to know if the data is missing at random, missing on common factors, missing with bias, and/or missing on specific indicators according to Osborne (2008). Missing data are a potential source of bias, and how the missing data are treated in the statistical analysis can have an important impact on the findings (Díaz-Ordaz, Kenward, Cohen, Coleman, & Eldridge, 2014). For this analysis the first consideration was the amount of data that was missing. In considering the portion of the data set that asked about the number of relationships that included an experience of physical violence in the dating relationship, 44% of the participants did not answer this question. Due to the very low participation in this portion of the data collection, this research questions could not be answered.

The fourth and final phase of the statistical analysis considered the following hypothesis: The null hypothesis (H_0d: μ1= u2) states there is no difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in more than 1 dating relationship. The alternative hypotheses (H_1d: μ1≠μ2) states there is a difference in the proportion of girls who previously witnessed physical violence between their parents or primary care givers and who experience sexual abuse in more than 1 dating relationship.

To begin this analysis phase consideration was given to the data to determine if there were ample data to answer this research questions. A close look at the data reveals

that this section too had significant missing data. Only 59% of those answering yes to experiencing sexual violence during a dating relationship went on the answered the subsequent question about the frequency of sexual violence in their dating relationships. Therefore, due to the very low participation in this portion of the data collection, this research questions could not be answered.

Summary

This chapter discussed the data collection including discrepancies noted, baseline descriptive and demographic characteristics of the sample, and how representative it is, as well as the treatment, adverse events, and results of the statistical analysis. There were no significant relationships found between the independent variable of witnessing physical violence between parents or primary care givers and experiencing physical violence in a dating relationship. Likewise, there were no significant relationships found between the independent variable of witnessing physical violence between parents or primary care givers and experiencing sexual abuse in a dating relationship. Chapter 5 will review the study purpose, nature and key findings, before providing the interpretation of the findings, along with the limitations, recommendations, implications, and conclusion of the study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The most ancient written records indicated that domestic violence has been both witnessed and experienced by people from various walks of life (Foyster, 2005; Miller, 2012). Domestic violence laws introduced as early as 753 B.C. (Utech, 1994) were not always helpful in protecting women (England, 2007). Currently, 1 in 4 women in the United States will experience domestic violence in their lifetime (Center for American Progress, 2011). For some women, domestic violence will be a routine occurrence (Symes, 2011). Every 2 minutes, there are five domestic violence assaults on women in the United States (CDC, 2011). Thus, domestic violence against women has now reached epidemic proportions in the United States (Alhabib et al., 2010). The purpose of this quantitative study was to explore how witnessing domestic violence between one's parents/primary caretakers affected a young girl's dating relationships. Specifically, this study considered the independent variable of previous exposure to domestic violence between the female adolescent's parents or primary caretakers and the dependent variable of her personally experiencing physical violence or sexual abuse in a dating relationship. The primary research question being studied was as follows: Does witnessing domestic violence between one's parents/primary caretakers affects a young girls' dating relationships? The nature of this quasi-experimental quantitative study was to use previously collected data from a study that employed an IRB approved survey (Bonomi et al., 2012) to test relationships between previous exposure to domestic violence between parents or primary caretakers and behaviors in one's own dating relationships.

This study was conducted to gain an understanding of the impact of exposure to domestic violence between the young woman's parents or primary caretakers on her dating relationships. It was believed that this understanding could help high school and college counselors devise programs to combat any negative impact of witnessing domestic violence on the young woman's dating relationships.

There were two key findings to this study. The first key findings of this study was that exposure to domestic violence between the girl's parents or primary caretakers was not a good indicator of the girl's experiencing physical abuse in a dating relationship. The second key findings of this study was that exposure to domestic violence between the girl's parents or primary caretakers was not a good indicator of the girl's experiencing sexual abuse in a dating relationship.

This chapter will provide an in-depth interpretation of the findings and discuss the study limitations as well as provide some recommendations and implications.

Interpretation of the Findings

Previously published literature indicated that only 27% of women who were physically assaulted by an intimate partner actually reported their assault to law enforcement (Klein, 2009) meaning 3 of 4 abused partners will not file a report against their partner. Children reside in over one third of the homes in which domestic violence occurs regularly (Domestic Violence Resource Center, 2013). Researchers found that children who witnessed the abuse of their mother by an intimate partner suffered negative effects on behavioral functioning (Blair, McFarlane, Nava, Gilroy, & Maddoux, 2015). Boys who witnessed domestic violence were more likely to become perpetrators and

abuse their own partners and children as adults (Israel & Stover, 2009). Researchers also studied women who witnessed domestic violence and concluded women who witnessed domestic violence as children were more likely to become victims later in life (Elwood, et al., 2011; Kerley et al., 2010). However, the research did not address what effect witnessing domestic violence between one's parents or primary caretakers might specifically have on the young girl's dating relationships. Research did indicate that these children became young teens who were confused about what constituted an appropriate intimate relationship (Reynolds & Shepherd, 2011). Researchers have estimated that as many as one third of adolescent girls in the United States become a victim of physical, emotional, or verbal abuse from an intimate or dating partner (Family Violence Prevention Fund, 2009). This estimation may be accurate regarding the incidence of physical, emotional, or verbal abuse from an intimate or dating partner. Researchers have also found children who witness interparental violence are at a higher risk to develop psychosocial, behavioral, or psychological problems than are their peers who do not witness interparental violence (Febres, et al., 2014; Sirikantraporn, 2013). Children who witnessed recent severe intimate partner violence between their parents or primary caretakers are at a higher risk of justifying their own aggressive behaviors (Jouriles, Vu, McDonald, & Rosenfield, 2014). Futhermore, Bogeanu (2014) found that the behaviors children witness and learn in childhood could determine whether or not their dating relationships develop according to social norms. However, the current study challenges the conclusion that becoming a victim of physical, emotional, or verbal abuse from an intimate or dating partner is a primary result of the girls witnessing domestic violence

between her parents or primary caretakers. No other study has isolated out the standalone effect of the independent variable of witnessing domestic violence between parents or primary caretakers. Additionally, the missing data in the current study prevented the ability to answer how witnessing domestic violence between parents or primary caretakers affects experiencing physical or sexual violence across dating relationship. Thus, the strengths and limitation of the aforementioned studies leave an unresolved issue that calls for future research to provide a resolution.

Interpretation with Theoretical Foundation

Within the expectations of Roy's (2014) theory of adaptation, people's attitudes and beliefs are shaped by the process of them adapting to their surroundings. Roy's theory hinged on the assumption that humans are in a constant state of adaptation throughout their lives, and it had two paradigms (coping and adaptation), which Roy based on cognitive processing. This model has been shown to specifically describe how the sequencing between in-put processes including perception, central processes such as memory, output processes such as behavior, and emotion work together to find an adaptation response for the individual (Roy, 2014). The input processes (stimuli), output processes (behavior), and emotions are in a constant state of adaptation. Inside this model, individuals are viewed as bio-psycho-social adaptive systems who manage environmental change through adaptation (van Wilgen et al., 2009). Roy's theory of adaptation has provided a framework for scientists to examine how humans adapt, and therefore react to and with their environment (Weiland, 2010). Findings for this study indicated that female children who experienced the input process of witnessing domestic

violence between their parents or primary caretakers did not witness physical or sexual interpersonal violence in their own dating relationships. Thus between the time of exposure to domestic violence between their parents or primary caretakers and them growing up to experience their own dating relationships, something happened to prevent them from experiencing this type of violence in their own lives. Some type of adaptation took place to enable these children to grow up and enter their own dating relationships without experiencing what their parents or primary caretakers experienced. According to Roy, humans will cope when that is an option but when circumstances are no longer considered acceptable, adaptation will take place, with the individual making needed changes based on cognitive processing (Roy, 2014). The findings in this study indicated there has been some degree of adaptation.

Limitations of the Study

There were several limitations in this study. The first limitation for this study was the geographical area from which the participants were chosen. Participants were limited to students at one university, namely Ohio State University. Other limitations that were outside of my control for this study were (a) the environment and manner in which the questionnaires were administered by the original data collectors, (b) the mood, willingness to participate, and understanding of the participants, (c) the participants' previous personal experiences with domestic violence and the associated emotions evoked by the questions, and (d) the frequency of the independent variable—witnessing domestic violence between ones' parents or primary caretakers. Next, a significant limitation of this study was the missing data. According to Salazar, Crosby, and

DiClemente (2015), survey respondents may experience the well-known phenomenon of respondent fatigue when completing especially long surveys. This may result in resorting to behaviors such as answering items with *don't know*, choosing the same column of answers for all questions, or simply stopping answering the questionnaire altogether (Salazar et al., 2015). This study used an existing data set. The data collection tool for that data set was erected in Survey Monkey and was 45 pages in length (Bonomi et al., 2012). The categorical questions for this survey (Did the participant ever see or hear one of your parents or guardians being hit, slapped?) was on page 44.

Respondents, who answered yes to experiencing physical or sexual violence in dating relationship, were asked how many relationships contained a physical or sexual violence experience. It is noteworthy that 44% of those responding had experienced physical violence in a dating relationship did not answer the following questions regarding the number of relationships that included physical violence. Likewise, of those who reported experiencing sexual violence in a dating relationship, 41% did not answer the subsequent questions regarding the number relationships that included sexual violence. Typically, to control for respondent fatigue, researchers are mindful of the length of survey participants are requested to complete (Salazar et al., 2015). Since this survey used previously collected data, this limitation was not well controlled for making it a significant limitation for this study.

The scope and delimitations of this study impacts the study's generalizability. Although analysis of this type of data may imply a general cause, due to variables not controlled there is a limit to the generalizability of the findings. The limits of

generalizability are related to the extent one can generalize across populations and situations. The conclusions drawn from this population will be limited to the participants only and will not generalize to any other population. Thus one cannot generalize that witnessing domestic violence between one's parents or primary caretakers has no impact on any population's dating relationships.

This study has limitations to validity as well. Validity, or the extent to which the questions are actually measuring what the researcher intended to measure, was specifically addressed by Bonomi et al. (2012) in the original data collection through a series of appropriate tests on the instrument, which were recalibrated as needed prior to the original data collection. An internal limitation is the maturation level of the participants. Although this was controlled for by surveying the age of participants and limiting participants to 18 to 26 years of age, it is arguable that not all people in this age range and in the university setting are mature. The threat of attrition was negated by the study taking data and measurement at only one point in time. With quantitative research there is a threat of validity regarding the instrument used to collect data. Bonomi et al. (2012) completed a sequence of tests to assure the reliability and validity values relevant to the data collection tool which are explained in detail under that section. Additionally, care was taken to generate the sample randomly in an effort be mirror the whole population. To address the possibility of population validity for this present study, G*Power was employed and found that a sample size of 132 participants was needed to test the current hypothesis. The previous data set's sample size of 556 was well above the needed 132 participants for the hypotheses that compared witnessing domestic violence

between one's parents or primary caretakers and experiencing physical or sexual violence in a dating relationship. However, due to the missing data in the questions involving the number of relationships, there was inadequate data (less than 132) to answer the questions regarding how witnessing domestic violence between one's parents or primary caretakers might affect the female in experiencing physical or sexual violence across dating relationships.

To control for reliability limitations, the original data collection tool was scrutinized. The Teen Domestic Violence survey was developed and tested by Bonomi et al. (2012). The questions on the Teen Domestic Violence survey were adapted from the CDC's Youth Risk Behavior Survey Surveillance System. The research group used Proc univariate analysis in SAS and found the eight new abuse variables indicated significant skewness and kurtosis so the variables were transformed by taking their square root, a technique useful with count data (Schumacker & Lomax, 2004). Despite transformation, the Proc univariate procedure again indicated significant skewness and kurtosis violating the assumption of normality so an asymptotic covariance matrix was generated for use in the CFA analysis. This analysis also indicated a skewness and kurtosis values above the accepted levels for CFA using ML estimation. Therefore a Goodness of Fit analysis was conducted. This analysis yielded a likelihood ratio test comparison of 6.557 (significantly improved) for the second to initial model and a 3.913 (significantly improved) for the final to initial model with a critical value of 3.84. Thus this tool is considered a good fit for reliability.

Recommendations

Further research is needed to consider the impact of witnessing domestic violence between one's parents/primary caretakers. Empirical data provides evidence that the impact of witnessing domestic violence between one's parents/ primary caretakers is significant on many fronts, including, but not limited to, becoming a perpetrator or victim (Furlow 2010, Zolotor, Denham, & Weil, 2009). At least one in four women in the United States will experience domestic violence in their lifetime (Center for American Progress, 2011) and may experience it routinely (Symes, 2011). Children resides in over one third of the homes in which domestic violence occurs regularly (Domestic Violence Resource Center, 2013). These children become young teens who are confused about what constitutes an appropriate intimate relationship (Reynolds & Shepherd, 2011). Researchers have estimated that as much as one third of adolescent girls in the United States become a victim of physical, emotional or verbal abuse from an intimate or dating partner (Family Violence Prevention Fund, 2009). However, research specifically related to witnessing domestic violence between one's parents/primary caretakers and the teen's dating relationships is seriously lacking. Although the survey tool used for the original data collection was reliable and valid, it did not address respondent fatigue. The lack of participation in the questions regarding the experience of physical and/or sexual violence across relationships causes one to question the existing data for these questions. A survey tool that addresses respondent fatigue is needed to gather data within the boundaries of this type of study. Additionally, it is noteworthy that the age of the participant population may have impacted the data. Young people who are ages 18 to 20 years of age may have

had only limited dating experience. Additionally, those in this age group may have limited capabilities of identifying abuse in a relationship. Future studies should consider collecting data from a slightly older population that would likely have a longer dating history to consider and who might be better situated to identify abuse inside an interpersonal dating relationship.

Positive social change is needed in the area of domestic violence. In this study witnessing domestic violence between one's parents or primary caretakers was not an indicator of experiencing physical or sexual violence in dating relationships for girls. It thereby illuminates the fact that significant adaptation has occurred between the time of the independent variable of witnessing domestic violence between one's parents or primary caretakers and the dependent variable of dating relationships. Both qualitative and quantitative studies are needed to gain knowledge of this adaptation process. Specifically, exploration is needed to determine what happened between the time of exposure to domestic violence between their parents or primary caretakers and them growing up to experience their own dating relationships that helped prevent them from experiencing this type of violence in their own lives. With a proper understanding of this adaptation, educational materials could be designed to support victims of domestic violence, as well as the counselors and professionals who are trying to assist these victims, and thereby improve the lives of individuals, their families, and their communities.

Implications

Empirical evidence indicates that witnessing domestic violence between one's parents or primary caretakers has had substantial negative effects on children (Bayarri et al., 2011; Selic et al., 2011). Many of these negative effects have been identified and steps have been taken to counteract these negative effects (Elwood, et al., 2011; Peckins et al., 2012). However isolating out witnessing domestic violence between one's parents or primary caretakers did now show an impact of experiencing physical or sexual violence on that girl's own dating relationships. There is knowledge to be gained by this finding. Girls who witnessed domestic violence between their parents or primary caretakers and who did not experience physical or sexual violence in their own dating relationships may have valuable information to share with high school and college counselors and therapists on understanding this experience. Additionally, it may provide insight on how to best support children who are witnessing domestic violence between their parents or primary caretakers through the process of coping and adapting while growing into adulthood.

Conclusion

Domestic violence has been both witnessed and experienced by people from various walks of life (Miller, 2012). For many girls, domestic violence occurs routinely (Symes, 2011). The cost of domestic violence in the United States is estimated at 6.5% of the United States' gross domestic product (Bhandari et al., 2010) which does not factor in the loss of life for the victims who are murdered in domestic violence episodes (Cunningham, 2010; Fishman et al., 2010). It has been learned that children who witness

the abuse of their mother by an intimate partner suffer negative effects in behavioral functioning (Blair et al., 2015). Unfortunately, children witness this tragedy and become young teens who are confused about what constitutes an appropriate intimate relationship (Reynolds & Shepherd, 2011). Empirical data suggest this has negatively impacted the family and the child's ability to perform their best in academic and social settings (Carrell & Hoekstra, 2012). More research is needed to determine what, if any, impact witnessing domestic violence between ones parents/primary caretakers as a child has on teen girls' dating relationships across multiple dating relationships. Likewise, additional research is needed to consider what valuable information girls who witnessed domestic violence between their parents or primary caretakers and who did not experience physical or sexual violence in their own dating relationships may have to share with high school and college counselors, therapists, and children who are currently witnessing domestic violence between their parents or primary caretakers on understanding this experience. Such programs may produce positive social change by curtailing the number of young girls who are adversely affected by dating violence.

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Appendix: Permission to Use Existing Data Set

Written Permission for Use of Existing Data Set

From: Bonomi, Amy
Sent: Wednesday, June 11, 2014 10:55 AM
To: Brinda McKinney
Cc: Amy Bonomi; Nemeth, Julianna; Lisa Parker
Subject: Bonomi data set, de-identified

Dear Brinda,

Attached is the de-identified dataset you requested. The data are in STATA format, so if you are using another program, such as SPSS, you will need to convert the file to be compatible with that program.

Please keep me abreast of your progress. Your dissertation and any presentation and/or publication should include an acknowledgment of the use of our data and reference to me as the study's principal investigator. I can help you with the acknowledgment statement when it comes time to doing so.

Best wishes to you,

Amy

Amy Bonomi
Professor and Chair
Human Development and Family Studies