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# Teen Dating Violence: Co-Occurrence with Bullying among African American Teens in South Florida

Rosemarie Hemmings  
*Walden University*

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# Walden University

College of Health Sciences

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Rosemarie Hemmings

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Walden University  
2016

Abstract

Teen Dating Violence: Co-Occurrence with Bullying among African American Teens in

South Florida

by

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MSW, New York University, 1988

BS, State University of New York at Stony Brook, 1987

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

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November 2016

## Abstract

Teen dating violence and bullying are major public health concerns but are preventable. Both dating violence and bullying occur within similar social context and the prevalence of teen dating violence was highest for African American teens as reported on the 2011 Youth Risk Behavior Survey (YRBS). Social learning theory provides a foundation for understanding and changing behavior related to dating violence victimization and bully victimization. The research questions focused on relationships between bully and teen dating violence victimization when controlling for race/ethnicity, gender, substance abuse, age, and age of first sexual intercourse. Additionally, the potential mediating variable of spending time with a parent was tested. This was a quantitative study using archival data from Palm Beach County YRBS of 2,376 public high school students in the spring of 2013. Descriptive statistics, ANOVA, Chi-square, multivariate regression analysis, Conditional PROCESS, and Games Howell Post Hoc tests were conducted. Results for this study showed a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of the co-occurrence of being a victim of teen dating violence and bullying. Additionally, spending time with a parent mediated the relationship between experiencing teen dating violence and bully victimization. This study has implications for positive social change through its potential change in the landscape of prevention programs that target teens, which may decrease victimization and improve the longevity of healthy social and intimate relationships.

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## Dedication

To my son Calik Jazz Hemmings, may you never embrace the limitations that others will use to deter you from your dreams. Study and work hard but never forget to take time for yourself, embrace love, and true friendships. Most importantly, never give up on yourself.

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## Chapter 1: Introduction to the Study

### **Introduction**

Teen dating violence and bullying are major public health issues (Center for Disease Control and Prevention, 2014a; Espelage, Basile, & Hamburger, 2012). The burden of teen dating violence and bullying is not only carried by the individual but the larger society. In a 2011 survey, 9.45% of students reported being victims of teen dating violence during the previous 12 months and 16.2% reported having been bullied electronically during the previous 12 months (Center for Disease Control and Protection, 2014a). Additionally, 20.1% of students reported being bullied while on school property during the previous 12 months (Center for Disease Control and Prevention, 2014a). Both teen dating violence and bullying are associated with negative outcomes which include psychological, physical, and behavioral disturbances (Center for Disease Control and Prevention, 2014a; Kowalski & Limber, 2013). Although teen dating violence and bullying among teens occurs within similar social sphere (Foshee V. A., et al., 2014), there is limited research on the co-occurrence of both forms of violence. Furthermore, African American teens have been reported as having higher prevalence rates of dating violence; whereby, they were more likely to report victimization than their White and Hispanic counterparts (Centers for Disease Control and Prevention, 2010). Despite these findings, there is limited research which examines aspects of teen dating violence and co-occurrence with other forms of violence such as bullying among African American teens. Research which examines the co-occurrence of teen dating violence and bullying among African American teens may help inform violence prevention programs which target this population. Changing the conditions that contribute to teen dating violence would be a

positive social change. It is possible that the results of this study might inform community organizations on the relationship among various forms of violence which could help in targeting teen programs in their communities to include the impact of neighborhood violence on teens as it relates to dating violence and bullying. On a family level, social change may occur based on results of this study as it relates to the role of spending time with a parent on occurrence of dating violence and bullying. Furthermore, on the individual level, social change may occur as it relates to informing teens through teen dating programs about bullying as a potential risk factor for potential dating violence victimization.

This chapter will include the background of the study that will summarize the research literature and gaps in knowledge as it relates to teen dating violence and bullying. Furthermore, the problem statement based on primary research occurring within the past 5 years is presented. Additionally, I will discuss the purpose of the study based on the study intent and research questions and hypotheses. Next, I will discuss the theoretical and conceptual framework of the study before addressing the nature of the study that includes a description of the variables, methodology, and definitions of terms. Furthermore, clarification of assumptions, which are critical to the meaningfulness of the study, are discussed as well as the scope and any limitations as it relates to internal and external validity, bias and boundaries of the study. I will end by discussing the significance of the study based on social change and how knowledge gained could benefit the field of public health as it relates to teen dating violence and bullying among African Americans. To end the chapter, a summary of the main points with a transition to Chapter 2 is presented.

## Background

Responding to the 2011 Youth Risk Behavior Survey, 9.4 %of high school students reported experiencing dating violence as defined as being hit, slapped, or physically hurt by someone they defined as their boyfriend or girlfriend during the previous 12 months (Center for Disease Control and Prevention, 2013). Researchers have reported that teens who are victims of dating violence are more likely to do poorly in school, abuse substances, and attempt suicide (Exner-Cortens, Eckenrode, & Rothman, 2013; Maas, Fleming, Herrenkohl, & Catalano, 2010). Several researchers reported that gender plays a role in teen dating violence where females are more likely to be victims and suffer longer lasting injury as a result of victimization (Alleyne, Coleman-Cowger, Crown, Gibbons, & Vines, 2011;Coker et al., 2014; Exner-Cortens, Eckenrode, & Rothman, 2013; Maas, et al., 2010)

There is limited focus in the literature as it relates to ethnicity/race and teen dating violence. Responding to the 2009 Youth Risk Behavior Survey (YRBS), African American teens reported the highest rate of teen dating violence victimization during the previous 12 months (Center for Disease Control and Prevention, 2010). Despite the YRBS results, researchers are conflicted as to the impact of race/ethnicity on teen dating violence. (Temple & Freeman, 2011; Tyler, Brownridge, & Melander, 2011). The conflict within the literature appears to exist due to limited studies that have focused on examining the relationship between race/ethnicity and teen dating violence. Studies consist of majority white populations and researchers who conduct analysis of their limited nonwhite samples as part of their overall results, find it difficult to draw definitive relationships between race/ethnicity and teen dating violence. Furthermore, few studies

target African American teens where majority of the studies targeted majority white populations.

Risk factors for teen dating violence as reported in the literature include low self esteem, low income, low academic achievement, aggressive or delinquent behavior, history of mental illness, history of alcohol abuse, drug abuse, impulsive or aggressive tendencies, laws that maintain unequal access to goods, services and opportunities, or societal norms that support violence and male dominance (Center for Disease Control and Prevention, 2012a). Protective factors include nurturing parenting skills, stable family relationships, connectedness between teens and their neighborhoods, after school and recreational programs, and communities that take responsibility as it relates to violence prevention (Center for Disease Control and Prevention, 2012a).

For the purposes of this study, bullying is defined as any repetitive unwanted aggressive behavior by another teen or group of teens who are not related or currently dating partners that involves observed or perceived imbalance of power (Center for Disease Control and Prevention, 2015). Furthermore, aggression related to bullying will include, physical, verbal, social/relational, and/or electronic (Center for Disease Control and Prevention, 2015). The literature on bullying among teens has focused on various forms of bullying such as face-to-face bullying, Cyberbullying, sexual bullying and school bullying. The majority of recent research in the area of bullying has centered around Cyberbullying due to the increased use of technology among youth (Slonje, Smith, & Frisen, 2013). Additionally, several researchers have examined co-occurrence of various forms of bullying (Kowalski & Limber, 2013; Wang, Iannotti, & Nansel, 2009). Co-occurrence of bullying and teen dating violence was limited in the literature ( Miller,

et al., 2013; Yahner, Dank, Zweig, & Lachman, 2014; Zweig, Dank, Yahner, & Lachman, 2013). When bullying and teen dating violence were studied, the focus was on examining if perpetration of bullying predicted teen dating violence as teens moved from early to late adolescence (Ellis & Wolfe, 2014; Foshee, et al., 2014).

Studies which focused primarily on African Americans as it related to bullying was limited. Despite finding few studies which targeted African Americans as it related to bullying, the authors who discussed race/ethnicity described an association between bullying and race/ethnicity as being prevalent (Bauman, Toomey, & Walker, 2013; Bradshaw, Waasdorp, Goldweber, & Johnson, 2013; Goldweber, Waasdorp, & Bradshaw, 2013; Kowalski & Limber, 2013; Williams & Peguero, 2013). When results were given along race/ethnicity lines, African American teens were at greater risk of bully victimization (Goldweber et al., 2013; Williams & Peguero, 2013) as well as perpetration of bullying (Wang et al., 2009).

Despite extensive research in teen dating violence and bullying, there is minimal research as it relates to co-occurrence of teen dating violence and other forms of violence and substantially less relating to co-occurrence of teen dating violence and bullying. Although some researchers have shown an association between bullying in early adolescence and experiencing or perpetrating dating violence in later adolescence, further research is needed as it relates to teen dating violence, bullying and race/ethnicity (Ellis & Wolfe, 2014; Foshee, et al., 2014; Miller, et al., 2013). Research which explores the relationship among teen dating violence victimization, bully victimization and race/ethnicity may help to inform current and future violence prevention programs which target African American youth. This study will help to add to the field of teen dating

violence especially as it relates to the African American teen population which reported a higher rate of teen dating violence victimization (Center for Disease Control and Prevention, 2010).

### **Problem Statement**

Teen dating violence and bullying are major public health issues. During a nationwide survey, 23% of females and 14% of males, who reported experiencing intimate partner violence, stated that their first occurrence was between the age of 11 and 17 (Center for Disease Control and Prevention, 2014a) . Both teen dating violence victimization and bully victimization contribute to negative psychological and physical outcomes (Foshee, et al., 2014). Negative impact of teen dating violence and bullying contribute to unacceptable societal and economical consequences (Center for Disease Control and Prevention, 2012a). African American teens reported higher rates of teen dating violence victimization (Centers for Disease Control and Prevention, 2010), and researcher have reported in several studies that race/ethnicity may be associated with bullying (Bradshaw et al., 2013;Goldweber et al., 2013; Wang et al., 2009). Currently, prevention programs which focus on teen dating violence and bullying occur in isolation of each other (Niolon, et al., 2015). Research suggest that there may be an association among teen dating violence and various forms of violence (Foshee, et al., 2014; Niolon, et al., 2015). There is a gap in the field of teen dating violence as it relates to co-occurrence with bullying which widens as it relates to African American teens (Goldweber et al., 2013).

### **Purpose of the study**

The purpose of this quantitative study using archival data from the 2013 YRBSS for Palm Beach County Florida was to examine the relationship between race/ethnicity, gender, age, substance use, and age of first sexual intercourse and bully and teen dating violence victimization. I also examined the effect of protective factor spending time with a parent as a potential mediating variable.

### **Research Questions and Hypotheses**

*Research Question 1:* What is the relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of (a) bullying, (b) teen dating violence, and (c) bullying and teen dating violence?

$H_{01a}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying.

$H_{a1a}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying.

$H_{01b}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence.

$H_{a1b}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence.

$H_{01c}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and teen dating violence.

*H<sub>a1c</sub>*: There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and teen dating violence.

*Research Question 2*: Does spending time with a parent mediate any relationships between experiencing bully victimization and experiencing teen dating violence when controlling for race, gender, substance abuse, age, and age of first sexual intercourse.

*H<sub>02</sub>*: Spending time with a parent does not mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for race, gender, substance abuse, age, and age of first sexual intercourse.

*H<sub>a2</sub>*: Spending time with a parent does mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for the influence of race, gender, substance abuse, age, and age of first sexual intercourse.

### **Theoretical and/or Conceptual Framework for the Study**

Research that focuses on social and cultural factors as it relates to human behavior frequently reference social learning theory (McCullough Chavis, 2012). Social learning theory is based on the premise that environment, personal factors and behaviors are constantly interacting and influencing each other (Bandura, 2001). Furthermore, the theory proposes that human behavior is a result of observational learning and vicarious reinforcement which is a foundation of social learning theory (Bandura, 2001). How behaviors, once acquired, are expressed and regulated by individual and external forces is another key component of social learning theory (Bandura, 1973). Teen dating violence and bullying occurs most often within the social circle in which teens abide. Therefore,

based on social learning theory, examining the relationship among various forms of violence which occurs among teens within the school setting such as bullying, offers an opportunity to change violent behavior which occurs within the teen social circle.

A lengthy description as it relates to social learning theory and how it relates to the focus of this study was presented in Chapter 2.

### **Nature of the study**

Identifying associations among various forms of violence such as teen dating violence and bullying is essential in meeting the needs of teens within violence prevention programs and those that might be struggling with these issues on their own. Currently, teen dating violence and bully prevention programs operate in isolation of each other (Espelage et al., 2012) and may not be meeting the needs of the teen population. In this study, I used a quantitative cross sectional survey design to examine the relationship between dependent variable teen dating violence victimization and the independent variable bully victimization while controlling for age, gender, race/ethnicity, substance abuse, and age of first sexual intercourse. I also tested spending time with parents for its effect.

Archival data collected in 2013 for the Palm Beach County Youth Risk Behavior Survey (YRBS) was used to examine the variables. The YRBS, used in Palm Beach, was developed by the Center for Disease Control and Prevention for describing the prevalence of health-risk behaviors among youth (Center for Disease Control and Prevention, 2014b). It also assesses trends in health-risk over time with a goal of providing public health professionals with the tools needed to evaluate and improve policies and programs that target youth (Center for Disease Control and Prevention, 2014c). The Palm Beach

County YRBS collected data in the spring of 2013 from 2,376 high school students using in-school questionnaires ( Center for Disease Control and Prevention, 2014b). The dataset for the Palm Beach County YRBS is available through the Center for Disease Control and Prevention. Once I have received approval from Walden University IRB, I requested the dataset from Palm Beach County Department of Health as this is required in order for Center for Disease Control and Prevention to release the data. To answer the research questions, I used archival data from 1,836 respondents. The YRBS is appropriate for my study as it was one of few self-reported data sets that targets high school students and includes questions specific to teen dating violence victimization, bully victimization, and variables which act as risk and protective factors (e.g., substance abuse, age of first sexual intercourse, and spending time with parent).

IBM Statistical Package for Social Sciences (SPSS) Amos version 21 was used to analyze the data collected for the 2013 Palm Beach YRBS. I conducted measures related to central tendency and dispersion using descriptive statistics. Logistic regression was used to analyze the impact of bully victimization, gender, and race/ethnicity on teen dating violence victimization. Mediating variables spending time with a parent was added with logistic regression analysis to examine the effects. Regression analysis was used to determine the direction and/or strength of being African American, female, and age of first sexual experience on teen dating violence victimization and bully victimization . Futher description of the methods for this study is included in Chapter 3.

## Definitions

The following are concise definition of the independent variable, dependent variables and covariates as it relates to understanding their meaning in this study. A more detailed analysis of coding and descriptions of the variables were included in Chapter 3.

*Bully victimization:* When one or more students who are not dating partners tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again (Center for Disease Control and Protection, 2014c). It includes electronic bullying (being bullied through e-mail, chat rooms, instant messaging, websites, or texting.) (Center for Disease Control and Protection, 2014c).

*Spending time with a parent:* Eating dinner with a parent.

*Substance use:* Includes use of alcohol and drugs (marijuana, cocaine, sniffed glue, breathed contents of aerosol spray cans or inhaled paints or sprays for the purposes of getting high, heroin, methamphetamines, ecstasy, steroid pills or shots, prescription drug use without a doctor's prescription, synthetic marijuana and injection of illegal drugs) (Center for Disease Control and Protection, 2014c). Alcohol was defined as beer, wine, wine coolers, and liquor which included rum, gin, vodka, or whiskey but excluded just taking a few sips of wine intended for religious purposes (Center for Disease Control and Protection, 2014c).

*Teen dating violence victimization:* Being physically hurt on purpose by someone they were dating or being forced to do sexual things by someone they were dating (Center for Disease Control and Protection, 2014a).

### **Assumptions**

Due to extensive research which stated that bullying begins in early adolescents/middle school (Ellis & Wolfe, 2014; Espelage et al., 2012; Foshee, et al., 2014; Olweus, 1994), I assumed that as teens move into later adolescents whereby the nature of their social relationships changed to mixed gender and romantic, bullying would have an impact on dating. As I was not present for the administration of the survey and did not have access to the participants or their parents, I made the assumption that appropriate consent procedures were followed. Additionally, I assumed that the participants took the survey voluntarily and confidentiality protocols were followed. Lastly, I assumed that school personnel and proctors who administered the Palm Beach YRBS did so without inserting bias and were appropriately trained as to not influence the responses of the participants.

### **Scope and Delimitations**

#### **Internal Validity**

In the current study, I considered bullying as it contributes to teen dating violence and more specifically victimization. I examined the relationship among risk factors of age, gender, race/ethnicity, substance use, and age of first sexual intercourse with teen dating violence victimization and bully victimization. Furthermore, I examined the effects of a protective factor; spending time with a parent as it relates to victimization. Specific aspects of the research problem that was addressed are whether there is an association among teen dating violence, bully victimization, and ethnicity/race. I chose the specific focus in order to fill current gaps in research as it relates to co-occurrence of teen dating violence, bullying, and race/ethnicity. Outcomes of this study may help to

inform violence prevention programs that target teens and more specifically, African American teens who reported the highest rate of teen dating violence victimization (Centers for Disease Control and Prevention, 2010).

### **External Validity**

Archival data, which was collected in 2013 for the Palm Beach County YRBS, is available for this study and the resulting dataset was used for this study. Participants for the YRBS were public high school students in grades 9 to 12 in the spring of 2013 (Center for Disease Control and Prevention, 2014b). All 23 high schools in the county of Palm Beach were eligible to participate and participated in the survey ( Center for Disease Control and Prevention, 2014b). Students who attended on the day of the survey were eligible to participate. Home schooled and private high school students were not included in the YRBS. The YRBS is not appropriate for non-English speaking students as the questionnaire is only available in English.

The following studies have been used in prior studies related to dating violence:

- Attachment theory: Lack of parental warmth contributes to aggressive behaviors in youth (Powell & Ladd, 2010).
- Male peer support theory: Patriarchal beliefs are at the core of intimate partner violence (Sellers, Cochran, & Branch, 2005).
- Intergenerational transmission theory: Witnessing or experiencing violence in childhood leads to violent behavior and victimization in later life including in intimate partner relationships ( Eriksson & Mazerolle, 2015;Sellers, Cochran, & Branch, 2005).

Social learning theory presents as an all-inclusive theory that incorporates the influence of individual, relationship, community, and societal factors related to violent behavior that is amenable to the cultural/ethnic/racial aspects of the selected population for this study.

### **Generalizability**

The Palm Beach County YRBS is based on generating responses from a representative sample of all public high school students in Palm Beach County. As such, results from this study cannot be generalized to all high school teens, as the current sample did not include home schooled and private high school students. However, the results of this study, which is limited to Palm Beach County, may be used to inform future studies that use the National YRBSS data examining co-occurrence of various forms of violence and implications along racial/ethnic lines.

### **Limitations**

There were limitations with this study as it relates to the reliance on self-report survey design. Issues related to recall bias on questions, which required respondents to recall incident that occurred in the past, may have occurred whereby there may be an underreporting or over reporting. However, reliance on self-reporting survey design has been used for studies of this nature on multiple occasions and has been an effective method of measurement (Creswell, 2009; Frankfort-Nachmias & Nachmias, 2008).

The Palm Beach County YRBS is a school-based design survey and may not represent teens that are not enrolled in school or any form of educational system. Participants who attend private schools, home schools, and those in the juvenile justice

system were not included in the YRBS. I reported results as it relates to this sample without generalization to the larger population in order to address this potential bias.

The potential for selection threats as all the respondents were from the same county which may predispose them to emit similar responses is possible. The sampling frame, which included all public high schools with a systematic equal probability sampling with a random start time to select the classes for participation in the survey, was used by the Center for Disease Control and Prevention and may decrease the impact of selection threats (Center for Disease Control and Protection, 2014c).

The construct of spending time with a parent was measured based on having dinner with a parent during the previous 7 days. Responses to this question may not adequately describe the nature of the parent-child dyad. In reporting of the results, number of times spent eating dinner with a parent may be more relevant in determining an association, thereby limiting construct issues. Additionally, the construct age of first intercourse does not provide information as to context in which sexual intercourse occurred but results from this study may help frame future studies which will explore this construct in more detail.

In constructing the substance use variable, an aggregate of 13 variables related to substance use was conducted. All except for one variable were specific as it related to frequency of the respondent's substance use. The inclusion of age of first alcohol use as a variable as part of the aggregate for substance use may have posed construct issues as it was not specific to frequency. However, prior studies have shown a positive trajectory of early substance use to frequency of use (Adams, Milich, Lynam, & Charnigo, 2013; Pilatti, Godoy, Brussino, & Pautassi, 2013).

### **Significance**

Currently most research and prevention programs targeting teen dating violence and bullying occurs in silos (Grych & Swan, 2012). There is research on various forms of violence which impact youths but few studies that explored the interconnectedness of these forms of violence (Grych & Swan, 2012; Hamby, Finkelhor, & Turner, 2012). Subsequently, evidence based practice prevention programs that are based on the results of research may not be the most effective in addressing the problem of violence amongst teen, especially as it relates to bullying and teen dating violence.

Bullying and dating violence amongst teens occur within the same social sphere (Ellis & Wolfe, 2014). Prior researchers suggested that bullying begins in early adolescence; whereas, dating violence occurs most often in later adolescence as the social context of relationships emerge into mixed gendered and romantic type relations. Dating violence and bullying have been shown to occur in the same individuals (Miller, et al., 2013). Despite these results, there exist a gap in the literature as it relates to co-occurrence of bullying and teen dating violence. Furthermore, there is limited research which examines race/ethnicity, specifically African Americans despite having the highest rate of reported dating violence victimization.

Results of this current study may decrease the gap which currently exist related to co-occurrence of various forms of violence amongst teens, specifically dating violence victimization and bully victimization. Furthermore, results from this study may help to target limited resources which are designed to develop evidence based prevention programs. For decades most prevention programs have focused their efforts on single issue forms of violence (Grych & Swan, 2012). Although the field of co-occurrence of

various forms of violence is beginning to emerge, research on teen dating violence victimization, bully victimization along racial/ethnic lines is still lacking.

Potential contributions as it relates to positive social change as a result of this study could be a shift in how public health practitioners target resources to address the problems of teen dating violence and bullying. Although the results from this study may not be generalized to populations outside of the sample, researchers in the field of prevention of teen dating violence, youth violence, bullying, and intimate partner violence could build on this study to better impact how public health workers advocate for funding and frame public policy. Furthermore, prevention of teen dating violence may lead to decreases in rates of intimate partner violence as there has been an established link between victimization and perpetration of dating violence in youth and adult intimate partner violence (Grych & Swan, 2012). This research has the potential to transform how researchers approach studies involving not only teen dating violence but also adult intimate partner violence. Researchers may consider studying co-occurrence of bullying and adult intimate partner violence. Social change may occur as programs which aim to address teen dating violence might include in their programming an understanding regarding how bully victimization relates to teen dating violence victimization which would educate teens to monitor for identified risk factors and/or how to change behaviors. Additionally, social change may occur on the community level as community organizations examine how they promote violence prevention within their community. Communities have the power to influence teens by working to reduce various forms of violence through sanctioned appropriate behavior within communities (Bandura, 1973).

## Summary

Teen dating violence and bullying are major public health concerns. In a 2011 survey, 9.45% of students reported being victims of teen dating violence during the previous 12 months and 16.2% reported having been bullied electronically during the previous 12 months (Center for Disease Control and Prevention, 2014c). Teens who are victims of dating violence and bullying experience negative psychological and physical outcomes which impact them long into adulthood (Feldman Hertz, Donato, & Wright, 2013). Additionally, there are financial cost associated with medical care, criminal justice costs, and social services (Center for Disease Control and Prevention, 2012b). The purpose of this study was to examine the relationships between the dependent variable teen dating violence victimization and the independent variable bully victimization. Most research and prevention programs in the field of teen dating violence and bullying operate in silos (Grych & Swan, 2012). Although the field has begun to move towards examining co-occurrence of various forms of violence, a gap exist as it relates to co-occurrence of teen dating violence and bullying especially as it relates to race/ethnicity. By examining the co-occurrence of bully victimization and teen dating violence, this study may help to inform public health as it moves towards primary prevention of dating violence, bullying, youth violence and intimate partner violence. Social change may occur as programs change the lives of teens by preventing victimization.

This chapter provided the background of the study, problem statement, purpose of the study, research questions and hypotheses, theoretical framework, nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance. The next

chapter provides a concise synopsis of current literature based on research between 2009 and 2015, gaps in the field, and how the results inform my current study.

## Chapter 2: Literature Review

### **Introduction**

Teen dating violence and bullying are major public health concerns due to the impact on the psychological and physical health of teens (Center for Disease Control and Prevention, 2014a). Despite acknowledgement by a major public health organization such as Center for Disease Control and Prevention that bullying ( victimization and perpetration) and teen dating violence create an undue burden for teens, limited research exist as to the co-occurrence of both forms of violence which occurs within the same social sphere (Hamby et al.,2012;Yahner et al., 2014). Furthermore, understanding the impact of racial/ethnic differences as it relates to teen dating violence and bullying has been recommended in various studies as an area that still requires further exploration (Patton, Hong, Williams, & Allen-Meares, 2013; Seaton, Neblett Jr., Cole, & Prinstein, 2013). Teen dating violence is defined as the occurrence of physical, sexual emotional and/or psychological violence that occurs within teen dating relationships (Center for Disease Control, 2014a). Olweus (1994) who was one of the earlier researchers of the 1970s who defined the term bullying, defined it as persistent and repetitive acts of aggression over a period of time whereby, there is a power imbalance. Both dating violence and bullying occur within similar social context (Ellis & Wolfe, 2014; Foshee, et al., 2014). Furthermore, prevalence of teen dating violence was found to be highest for African-American teens (Center for Disease Control and Prevention, 2010). Gender has been associated with teen dating violence whereby females have been reported as being impacted more than males because of violence within their relationships (Exner-Cortens et., 2013). Additionally, as it relates to gender and bullying, boys have been found to be

bullies; whereas, girls were more likely to be victims of bullying (Wang et al., 2009).

Substance abuse has been associated with dating violence victimization (Exner-Cortens et al., 2013) and bullying whereby substance use has been linked to aggressive behavior and to both perpetration and victimization (Radliff, Wheaton, Robinson, & Morris, 2012).

Early substance use may impair social and dating relationship, leading to early stressors and victimization (Maas et al., 2010). Bullying often begins in early adolescence and has been found to predict physical dating violence later in life (Ellis & Wolfe, 2014; Foshee, et al., 2014;). Furthermore, bullying predicted teen dating violence victimization and perpetration (Ellis & Wolfe, 2014). Childhood sexual abuse has been associated with victimization and perpetration of intimate partner violence and bullying (Davis, et al., 2012). Positive relationship ( defined as limited levels of hostility and autonomy-promoting negotiations) with parents has been found to be a protective factor for bullying (victimization and perpetration) (Wang et al., 2009), and a predictor for healthy teen dating relationships (Miga, Gdula, & Allen, 2012). Depression has been associated with bully victimization (Feldman Hertz et al., 2013) and dating violence victimization (Center for Disease Control and Prevention, 2014). Researchers have found that teens help seeking behavior as it related to interpersonal problems centered around friends and family (Black, Weisz, Preble, & Sharma, 2015) . Teens who self-reported victimization of dating violence were more likely to be victims of other types of violence versus those with no history of dating violence (Hamby et al., 2012). African Americans have a history of discrimination (Patton et al., 2013) and disparities against them; therefore, examination of the literature as it relates to efforts to understand how teen dating violence

occurs among this group and any association that may help promote and or enhance dating violence programs was explored through this literature review.

### **Synopsis of current literature**

Teen dating violence and bullying are preventable. Behaviors that cause harm to others and self and can be prevented (Center for Disease Control and Prevention, 2012a). Bullying and violence that occurs within teen dating relationships affects not only the physical health but the less visible inside which relates to emotional health (Feldman Hertz et al., 2013) . The effects of teen dating violence and bullying may not always leave outward scars but the damage done can cause internal and emotional damage leaving unseen scars which last a lifetime (Feldman Hertz et al., 2013).

There are financial cost associated with medical care, criminal justice cost, and social services (Center for Disease Control and Prevention, 2012a). The impact of teen dating violence and bullying can reduce the potential of a future generation of leaders. Teens that experienced dating violence may choose unhealthy relationships into their adult life (Center for Disease Control and Prevention, 2014a). Research has shown that teens who are involved in teen dating violence are more likely to be involved in adult intimate partner violence (Exner-Cortens et al., 2013). The financial cost of adult intimate partner violence was \$8.3 billion in 2003 and there were 1,336 deaths in 2010 related to adult intimate partner violence (Center for Disease Control and Prevention, 2012a) which translates into an unsustainable cost and significant loss of lives if teen dating violence is not prevented. Furthermore, teen dating violence and bullying which impacts the African American population serves to further promote disparities that exist within communities of color. African Americans who live in low-income neighborhood may be at greater risk

of teen dating violence and bullying as higher levels of unemployment may contribute to higher rates of neighborhood violence (Patton et al., 2013). As such, research which offers knowledge into the co-occurrence of various forms of violence such as this study, may help to promote positive changes in violence prevention programs which target teens.

### **Preview of major sections**

As part of my research related to gaps in the field of teen dating violence, I conducted a literature review that was the focus of this chapter. The literature review included exploring research in the area of co-occurrence of teen dating violence with other forms of violence along ethnic/racial and gender context. In this chapter, I discuss research strategies, social learning theory as the theoretical foundation, and review literature that features a description of the variables teen dating violence victimization, bully victimization, gender, and race/ethnicity. Additionally, risk and protective factors are also discussed.

### **Literature search strategy**

Using the search dates of 2009-2015, a search for peer reviewed and full text articles was conducted in PROQUEST, ACADEMIC SEARCH, Thoreau, SAGE, and SocINDEX using the search terms *teen dating violence*, *bullying*, and *African American teen dating*. Individual searches for the term *bullying*, resulted in the most results (1,786), and followed by *teen dating violence* (524) and *African American teen dating violence* (17). Search terms combining *teen dating violence* and *bullying* returned five results; whereas a search of combined terms *African American* and *bullying* returned 87 results. When search terms included *African American*, *teen dating violence*, and *bullying*, there

were zero results. Much of the literature related to bullying returned articles covering workplace bullying while a narrowing of the search to include teens returned 159 results. A review of all the searches resulted in the selection of 37 articles as having relevance to my research including nine focused on co-occurrence of teen dating violence with other forms of violence. There were no dissertations that examined the co-occurrence of teen dating violence with other forms of violence.

### **Theoretical Foundation**

#### **Social learning theory**

How teens relate to each other and those around them, contributes to teen dating violence and bullying. Social learning theory premises that environment, personal factors, and behaviors are continually influencing each other (Bandura, 2001). Environment relates to aspects within the social and physical environment that can influence behavior (Bandura, 2001). Social environment relates to family and friends; physical environment relates to the larger community such as schools and neighborhoods (Bandura, 2001). Personal factors relates to cognitive, affective, and biological components of the individual (Bandura, 2001). Bandura (2001) argued that behavior is a result of observational learning and vicarious reinforcement. How teens operationalized their thoughts around violence in their dating relationships and bullying and how these thoughts influence their behavior is a result of their social experience. It is for this reason that social learning theory is the most applicable theory to examine the co-occurrence of bullying and teen dating violence as both are influenced by similar factors (environmental, social, and personal).

Social learning theory referenced aggressive behavior as producing both personal (psychological and physical) and destruction of property as well as social labeling (Bandura,1973). Aggression unlike other social behaviors does not require mutual acceptance in order for the effects of such aggression to be responsive (Bandura, 1973). Aggressive behavior such as teen dating violence and bullying that is perceived as punishing for the victim can be rewarding for the perpetrator. Bandura's (1973) assertion that aggressive actions produces outcomes other than producing injury, aligns with established far reaching impact of teen dating violence and bullying. Both teen dating relationships and nondating relationships occur in a social context in which aggressive actions can occur. Such aggressive actions can stem from the value placed on aggression as a form of instilling or maintaining power within the peer group (Bandura, 1973). It is the social labeling which determines the within peer group acceptance or rejection of aggressive behavior (Bandura, 1973). It is therefore conceivable that such acceptance or rejection within the peer group would create a fertile ground for both teen dating violence and bullying to occur within the same individuals.

Social learning theory focuses on how behavior, once acquired, is expressed and regulated by the individual and external forces (Bandura, 1973). Behaviors that are found to be successful or reinforced by peers such as within teen dating and nondating social circles are the behaviors perpetrated, while behaviors rejected by peers are discarded. This process is what Bandura (1973) referred to as differential reinforcement. The rewarding and punishment of an action, determines whether the action is continued (Bandura, 1973). Teen dating violence and bullying, if observed and perceived as rewarded actions, continue violent actions are fostered. The theory lends itself to the

possibility that victims of bullying may also be victims of teen dating violence as outside actors who observe the occurrence of one form of victimization (teen dating violence) may perpetrate other forms of violence (bullying) towards the same individual.

External sources of influence are not the only predictors of behavior (Bandura, 1973). The cognitive process one engages in as it relates to the behavior, serves to reinforce or reject the behavior (Bandura, 1973). The ability to recognize the reinforcement or rejection of one's behavior requires insight that is a cognitive process (Bandura, 1973). Understanding acceptable behaviors and consequences of teen dating violence and bullying requires an awareness that involves cognitive processes which regulates the decision on whether to act. Social learning theory would explain why victims of one form of violence such as bullying might process such actions in a way that makes them more susceptible to being a victim of teen dating violence.

#### **Social learning theory and changing behavior**

Theoretical concepts of social learning which apply to how teen bullying and dating violence occurs can be used to modify the behavior. Social learning theory can be applied to how teen bullying and dating violence occurs through observational learning and cognitive processes. Bullying and teen dating violence occurs under situational, cognitive, and reinforcement conditions similarly in the same way new behaviors can be learned through the alteration of situations, cognitive, and reinforcement conditions within the peer group (Bandura, 1973). Bandura (1973) asserted that group problems required a group solution whereby the social dynamics and reinforcement practices are altered.

Social learning theory proposes that through suitable role models and valued incentives, new behaviors that create better benefits than previously defiant behaviors can be normalized and sustained (Bandura, 1973). Influence of role models occurs when such role models are closely associated to those being influenced (Bandura, 1973).

Relationship with parents is one such influence on the lives of teens and the nature of the parent-child relationship whether positive or negative, may influence acceptance or rejection of violence. Influences that contribute to teen bullying and dating violence must first be altered in order to create change in the behavior.

Modeling influence, which relates to observational learning, can be used to both promote aggression as well as modify aggressive behavior (Bandura, 1973). Influence plays a crucial role in the learning of more effective ways of managing situations that lead to bullying and dating violence. Social learning theory proposes that defiant behavior is maintained and valued because of a lack of better alternatives (Bandura, 1973). Influencers can model alternatives such as better ways of handling interpersonal conflicts to change teen bullying and dating violence behavior.

In order for modeling of influence to be most effective, alternative behavior has to repetitively model by multiple people within the circle of influence (Bandura, 1973). Opportunities to practice the modeled behavior with positive rewards and arrangement of successful experiences because of behaving differently, fulfills reinforced modeling (Bandura, 1973). Demonstration, guided practice, and successful experiences produce sustained change in behavior. Observation by itself does little to change behavior long term; whereas, acquiring the resources to learn successful ways of behaving is the foundation of changing behavior based on social learning theory (Bandura, 1973). Teens

that are socially and verbally unskilled with limited means of handling discord are more likely to become engaged in bullying and dating violence, especially within a social context that views such behavior favorably (Bandura, 1973). Therefore, creating opportunities/influences whereby teens can learn, be rewarded, and successfully implement new behaviors can foster long-term changes within the teen social sphere. Social learning theory may help explain the positive influence of positive relationship with parents on teen dating violence and bully victimization.

### **Social ecological model**

The social ecological model, which is used by Center for Disease Control and Prevention, allows public health to understand what causes risk and what protects teens from various forms of violence (Center for Disease Control and Prevention, 2012a). Individual, relationship, community, and societal are four levels within the social ecological model (Center for Disease Control and Prevention, 2012a). The individual level relates to biological and personal factors such as age, gender, drugs, trust, and history of aggressive behavior or experiencing violence (Center for Disease Control and Prevention, 2012a). Relationship factors relate to family and peers or more specifically, interactions between two or more individuals (Center for Disease Control and Prevention, 2012a). The variable spending time with parents would fit into the relationship factors as this is a time whereby teens would interact with parents. The community level relates to school, work, and neighborhood (Center for Disease Control and Prevention, 2012a). The final level is societal which relates to economic, cultural norms, media, policy and laws, discrimination, health, education, and social policy that foster discrimination (Center for Disease Control and Prevention, 2012a). Of all the levels of social ecological model, the

societal factors affect all the other factors. Societal factors which create a level of acceptance, tolerance for violence, or creates and sustains gaps between segments of society such as discrimination, impacts individual, relationship, and community factors.

### **Social learning theory and social ecological model combined**

Social learning theory use of influence on creating and changing behaviors can be combined with the social ecological model whereby the individual, relationships, community, and societal factors function as influence on teens' behaviors as it relates to bullying and dating violence. The individual level is where personal aspects can create or change bullying and dating violence behavior. Individual experience of violence can become operationalized as an influence on bullying and dating violent behavior.

Relationship levels, which include family and peers, can influence whether or not teen dating violence and bullying is accepted or rejected. Community factors, as it relates to schools where teens spend most of their time, can act as an influence on promoting or condemning violence. Societal factors such as policies and cultural norms that hinder or promote violence acts as an influence on teen's behavior.

The power of influence and cognitive processes on behavior is paramount to the social learning theory as it relates to understanding how behavior is operationalized and altered (Bandura, 1973). When applied to the social ecological model, teen dating violence and bullying can be understood within the context of a multifaceted matrix where teens learn to accept or reject violence as a resource of how they relate to each other. It is this aspect of the theory that makes it conceivable that bullying and teen dating violence would co-occur within the same individual. Changing the resources available to teens through influencing the individual, relationship, community, and societal aspects of

the world in which teens resides, is a sustainable method to change the scope of teen dating violence and bullying. Bandura (1973) stated that aggressive behavior is often used due to a lack of resources that provide other appropriate ways of handling interpersonal conflict. Additionally, the influence of those close to the subject through modeling, practice, positive rewards, and successful implementation of new behavior is paramount to maintaining the new behavior (Bandura, 1973).

### **Social learning theory literature and teen dating violence**

A review of the literature as it related to social learning theory and teen dating violence resulted in few studies which focused on attitudes and exposure as it related to teen dating violence. Miga et al., (2012) conducted a study using social learning theory as the explanation for their findings that autonomy promoting behavior displayed within the inter-parental sphere influenced teens' autonomous approach to conflicts within peer and romantic relationships (p.443). Tyler, Brownridge, & Melander (2011) also applied social learning theory framework to hypothesize that child maltreatment and low levels of parental warmth would be directly associated with victimization and perpetration of teen dating violence. Each of these studies built their framework around the observational aspects of social learning theory.

Social learning theory has been stated as one of the most used theory in research focused on social and cultural factors as it relates to human behavior (McCullough Chavis, 2012) . This study which focuses on teen behavior within the social context of the African American teen population makes application of social learning theory appropriate. Observation learning as well as imitation and modeling as an explanation for how humans acquire, retain, and reject behaviors makes social learning theory applicable

to research in the area of human behavior (McCullough Chavis, 2012). Regarding the cultural aspects of behavior, culture plays a very important role in behavior and the social environment (McCullough Chavis, 2012). The social environment and cultural aspects of African American teens plays an important role in understanding behaviors, which is in line with social learning theory and social ecological model which incorporates internal and external sources of how behavior is acquired and maintained. In order to change behavior, an understanding of how behaviors are acquired and rejected is warranted. Although there are limited studies with specific application of social learning theory as it relates to teen dating violence, the quest to understand human behavior in order to alter it, allows researchers to use social learning theory as a framework in various aspects of unhealthy behaviors in teens. There were several studies that applied social learning theory to other aspects of changing behavior in teens. Social learning theory was applied most often in studies related to teen's dietary behaviors, physical activity, and substance abuse (Bukhari, 2011; Connor, 2011; Dewar, 2012; Lee, 2012; McCabe, 2015; Nguyen, 2011; Roy, 2011; Shadur, 2014; Smith, 2011).

### **Social learning theory literature and bullying**

Review of the literature on social learning theory and bullying resulted in several studies. Prati, (2012) conducted a study of 863 students where social cognitive theory an extension of social learning theory was used as a framework to analyze self-reported homophobic aggression. The author examined how attitudes towards gay males mediated the relationship between observation of peer homophobic aggression such as bullying among school mates (Prati, 2012). Social cognitive processes such as observations of peer aggression predicted self-reported homophobic aggression towards those who were

perceived as gay (Prati, 2012). Prati (2012) stated that the use of social cognitive theory was appropriate as it focused on how humans process and integrate information based on social experiences.

Shafer & Silverman, (2013) applied social learning theory as a framework to understand behaviors and cognition of school aged bullies and victims in order to design a music therapy intervention. Pronk, Goossens, Olthof, De Mey, & Willemen, (2013) conducted a study examining differences in the cognitions of outsiders and defenders in bullying victimization situations. Using the self-efficacy aspect of social learning theory, the researchers hypothesized that the belief that one has the tools to handle bullies, would determine whether they intervened on the victims behalf (Shafer & Silverman, 2013). Study results were reported as outsiders and defenders differed in their actions when witnessing victimization based on their beliefs about their abilities; whereby, outsiders intervened indirectly rather than directly and defenders intervened directly rather than indirectly (Pronk, Goossens, Olthof, De Mey, & Willemen, 2013). Additionally, both outsiders and defenders reported that they would intervene if the victim was a friend versus a peer (Pronk et al., 2013).

In a more general context as it related to overall violence among teens, Bradshaw, Rodgers, Ghandour, & Garbarino, (2009) examined the association between youth violence exposure and aggression where they hypothesized that the effects would be greatest for total exposure to violence because of cumulative risk. Social cognitive theory was applied based on the assumption that experiences shape thoughts and behavior; therefore, exposure to violence influenced the formation of beliefs about the appropriate application and effectiveness of violence as a way to handle threats (Bradshaw et al.,

2009). It is this conceptualization of social learning theory as it relates to how experiences shape thoughts that makes the theory appropriate for this study as the experience of being a victim of one form of violence ( bullying) may influence the potential of becoming a victim of other forms of violence ( teen dating violence).

### **Literature review related to key variables**

#### **Teen dating violence**

The Center for Disease Control and Prevention (2014a) reported that teens who experience violence within their relationship are more likely to view violence as an appropriate means of dealing with anger within relationships, use alcohol, come from communities or homes where they witnessed violence, have a peer group whereby violence is condoned, suicidal thoughts, increased sexual risk, suffer from depression or anxiety, and have a history of aggressive behavior. In exploring the literature on teen dating violence, most studies referenced risk factors as stated by the Center for Disease Control and Prevention as a rationale for understanding how these risk factors help inform prevention of teen dating violence. Furthermore, in a nationwide survey 23% of females and 14% of males, who reported ever experiencing intimate partner violence, stated that their first occurrence was between the age of 11 and 17 (Center for Disease Control and Prevention, p. 2014a) . Considering that first dating violence experiences appear to occur during the teen years (Center for Disease Control and Prevention, 2014a), and bullying occurs most often among youths, (Robers, Zhang, & Truman, 2011), this research could advance the field of intimate partner violence by testing possible association between teen dating violence and bullying.

**Definintion of teen dating violence**

Teen dating violence includes physical, psychosocial or sexual harm by a dating partner (Center for Disease Control and Prevention, 2014a). This type of violence occurs as a continuum which ranges from single episode to chronic severe battering (Center for Disease Control and Prevention, 2014a). Physical violence includes shoving, punching, slaping kicking, choking, use of a weapon, or restraining (Center for Disease Control and Prevention, 2014a). Sexual violence relates to unwanted touching, physically forcing a partner to have sex against their will whether completed or not (Center for Disease Control and Prevention, 2014a). Consent for sex was not obtained or freely given by the partner (Center for Disease Control and Prevention, 2014a).

**Risk and protective factors**

Risk and protective factors for teen dating violence falls into four categories. The four categories are individual, relationship, community and society (Center for Disease Control and Prevention, 2012a). Individual risk factors for teen dating violence are low self esteem, low income, low academic achievement, aggressive or delinquent behavior, history of mental illness, history of alcohol abuse, drug abuse, and impulsive or aggressive tendencies (Center for Disease Control and Prevention, 2012a). Relationship protective factors for teen dating violence are nurturing parenting skills and stable family relationships (Center for Disease Control and Prevention, 2012a). Postitive relationships with parents may act as a protective factor as it relates to involvement in violent relationships both intimate and social (Black et al., 2015; Maas et al., 2010) . Community protective factors for teen dating violence are connectedness between teens and their neighborhoods, after school and recreational programs, and communities that take

responsibility as it relates to violence prevention (Center for Disease Control and Prevention, 2012a). Societal risk factors are laws that maintain unequal access to goods, services and opportunities, or societal norms that support violence and male dominance (Center for Disease Control and Prevention, 2012a).

The goal of public health as it relates to teen dating violence is to reduce risk factors and increase protective factors. Protective factors which may prevent against violence have not been studied as much as risk factors (Center for Disease Control and Prevention, 2012a). Research on teen dating violence has focused on identifying risk factors in search of protective factors. Research on teen dating violence makes the assumption that if risk factors are identified, such identification will help to prevent violence. In actuality, as much as we know about risk factors, little is known about the causes of teen dating violence. Without an understanding of the cause(s) of teen dating violence, primary prevention is dismal. To fully understand what protects against teen dating violence, research needs to start at the beginning of life, before one has been exposed to individual, relationship, community, and societal risk factors which puts them at risk for dating violence. Researchers would need to conduct experimental studies with a true control group of teens who were not exposed to any risk factors and this is not practical. As a result, research in the area of teen dating violence continues to work backwards where analysis occurs after exposure .

#### **Application of risk and protective factors in the literature**

In conducting the literature review, several studies were guided by the risk factors as identified by the Center for Disease Control and Prevention. Maas et al., (2010) conducted a study using prospective and retrospective longitudinal methods to identify

childhood predictors of teen dating violence among 941 participants. The authors reported that bonding to parents and social skills protected females against teen dating violence in part by reducing alcohol use; whereas, childhood bonding to parents was indirectly related to teen dating violence victimization for males (Maas et al., 2010). Similar to Maas et al., (2010) study, Makin-Byrd & Bierman, (2013) study examined aspects of childhood which could predict dating violence in late adolescence. Makin-Byrd & Bierman (2013) conducted a 12 year longitudinal study involving 401 children from kindergarten to age 18). The focus of the study was to examine whether aggressive family dynamics predicted development of dating violence, both perpetration and victimization. The authors reported results as aggressive family dynamics during childhood and early adolescence having a positive influence on the development of both perpetration and victimization of dating violence in late adolescence (Makin-Byrd & Bierman, 2013). Another study which focused on childhood risk factors for teen dating violence was conducted by Tyler et al., (2011), where they studied the effects of poor parenting on victimization and perpetration of teen dating violence of approximately 900 males and females in grades 7 to 12. This longitudinal, study results were reported as more physical abuse and low parenting warmth being linked to victimization and perpetration of dating violence (Tyler et al., 2011) In a more broader context, McNaughton Reyes, Foshee, Bauer, & Ennett, (2012) conducted a study examining family, peer, and neighborhood violence as it related to alcohol use and teen dating violence. The authors reported that teens exposed to higher levels of family violence and friend dating violence had heavier alcohol use and dating violence (McNaughton Reyes et al., 2012). The study conducted by Maas et al., (2010) confirmed the link between

alcohol use and teen dating violence where they reported that early adolescence alcohol consumption increased risk of late adolescence teen dating violence. Although the timeframes for substance use may differ between the two studies, the link between alcohol use among teens and dating violence is evident. These results demonstrate the multifaceted aspects to teen dating violence which makes it difficult for a one size fits all approach to prevention. Despite the acknowledgement that teen dating violence is complex, risk factors which focus on how race/ethnicity protects or is a risk factor for teen dating violence is limited in the literature.

### **Gender and teen dating violence**

Gender dominates the literature as it is related to teen dating violence. Several researchers stated that females are more likely to be victims of dating violence and/or experience more adverse effects (Alleyne et al., 2011; Coker, et al., 2014; Exner-Cortens et al., 2013; Maas et al., 2010). Most of these findings regarding gender were supplementary finding in those studies and not the primary focus of the study. However, the study conducted by Tyler et al., (2011) focused on gender where the authors pointed out that females were more likely to report having perpetrated dating violence. Another study which reported gender differences between types of dating violence perpetration was conducted by Niolon, et al., (2015) where they stated finding that more girls than boys reported perpetrating verbal/emotional, threatening behaviors and physical abuse towards partners while boys were more likely to report perpetrating sexual abuse towards their partner. Additionally, Maas et al., (2010) reported their findings based primarily along gender lines where they stated that female's higher bonding to parents predicted lower risk of being a victim of dating violence.

Although the primary focus of the Coker, et al., (2014) study was not gender, results related to gender were reported by the authors who conducted a study using a school-based sample of 14,190 to examine dating violence victimization and perpetration rates among high school students . The authors reported that females had a higher rate of victimization and perpetration of dating violence than males (Coker, et al., 2014). Exner-Cortens et al., (2013) conducted a longitudinal study using the National Longitudinal Study of Adolescent Health of 5,681 participants where they explored associations between teen dating violence and adverse health outcomes. The authors reported that the results demonstrated that female victims reported adverse outcomes related to physical and psychological victimization; whereas, males reported adverse outcomes related to psychological victimization only (Exner-Cortens et al., 2013). Additionally, female victims had longer lasting adverse health outcomes than male victims (Exner-Cortens et al., 2013). In examining predisposing factors related to dating violence, one study reported that males from maltreated families had greater risk of threatening and physical abuse in dating relationships (Wolfe et al., 2009). Despite recognizing issues related to gender as it related to teen dating violence, what was absent from the literature were studies which focused on/or reported results related to differences in gender along racial lines. The Center for Disease Control and Prevention (2008, 2010) reported that based on a national survey, Black and Hispanic teens reported higher levels of dating violence than their white counterpart. Despite these results by the Center for Disease Control and Prevention, limited knowledge regarding gender and African Americans can be gained based on current research due to the lack of attention to African Americans as it relates to teen dating violence. Such limitations thwart prevention efforts by public health, as

programs may not address the needs of all populations. Although the current study results cannot be generalized to all African Americans, presenting results as it relates to gender and race will help fill existing gaps in the literature.

### **Power and teen dating violence**

Researchers appear to question whether or not power plays a role in teen dating relationships as it does in adult intimate partner violence. Questions regarding power issues within romantic relationships involving teens exist due to findings that female perpetrate violence at a similar rate as males (O'Leary, Smith Slep, Avery-Leaf, & Cascardi, 2008; Renner & Whitney, 2010). Giordano, Soto, Manning, & Longmore, (2010) reported in their study of 956 adolescence that mutual violence ( victimization and perpetration) was the most common forms of dating violence and power balance within theses relationships were negatively associated with reports of violence where respondents who reported less favorable power balance, had greater odds of violence with males perpetrators reporting having less favorable power balance. Further findings from the study showed no significant difference between relationships where violence occurred and did not occur as it related to intimacy ( levels of love, self disclosure, and perceived partner caring) (Giordano et al., 2010). These results signify that there is more to teen dating violence that warrants further exploration. A balanced relationship does not mean that the relationship is equal (Emerson, 1962). As long as the relationship involves needs, someone will always be in the position of dependency. Blau (1964) stated that each individual associate with others for what benefits it brings. There could be a benefit from having a need met within or by the relationship, or there could be a benefit from

being able to fulfill a need within the relationship. Both the giver and the receiver have something to gain by being involved with the relationship.

Aspects of the relationship do not always go as smooth as one may expect. Power-dependency theory pointed to what happens in relationships that are unbalanced or unequal. The person that is in the position of dependency has various options which can be utilized to either decrease the cost of obtaining the needed benefit and or employ alternatives in accessing the benefit. Both decreasing the cost and utilizing alternatives can reduce power and bring balance to the relationship. However, balance does not mean equal. There is still an element of power within the relationship despite the relationship being balanced.

Within teen relationships where the relationship is unbalanced, Emerson's (1962) perspective focuses on the complexity of the relationship which creates powers of one individual over another. For example, if the relationship between the two teens were intimate, the nature of intimacy between the two would create dynamics that may be different within a non-dating relationship situation. Therefore, when examining the power structure of teen relationships, power has to be defined not based on whether the teen with the power (perpetrator) is male or female but rather on the dynamics of the relationship that contribute to the power structure.

It is possible that teens' definition of intimacy impacts how they respond to questions about control within their relationship (Martin, Houston, Mmari, & Decker, 2012). Cultural norms within various ethnic groups may also play a role in perceptions of power within dating relationships. Norms of a culture will often dictate what acceptable use of power is; therefore, if the use of power conforms to cultural norms, the norms

would have to be challenged before the use of power can be addressed (Patton et al., 2013) One's cultural background helps to define what is considered to be appropriate (Cheek, 1976) . The issue of power is relevant for the purposes of this study due to the focus on teen dating violence and bullying; whereby, bullying is centered around power (Olweus & Limber, 2010).

### **Bullying**

The literature on bullying focused on sexual bullying, Cyberbullying, face-to-face bullying, and school bullying. Most studies focused on perpetration of bullying. There were some studies that examined co-occurrence of teen dating violence with other forms of violence (Miller, et al., 2013;Yahner et al., 2014; Zweig et al., 2013), where a majority focused on sexual violence/harassment and bullying (including cyberbullying).

Most of the literature referenced the definition of bullying developed by Olweus of Norway who conducted one of the first comprehensive studies on bullying in the 1970's. Olweus's definition references the issue of power imbalance as part of a repetitive aggressive behavior which is intended to cause harm to another (Olweus, 1994). Blau, (1964) attributed power to the individual where the focus was on how the individual attained power by imposing his or her will on the other individual . Blau's (1964) perspective focused on the actions of the individual that creates power imbalances rather than the imbalance of the relationship itself. This distinction is significant in examining the relevance of power within teen social context. Blau's (1964) perspective's, offers an opportunity to focus on the mechanism utilized by teens in order to get the other to conform to his or her desire, which created the power structure. In this case, it is the

action of each teen that leads to one having power over the other regardless of the nature of the relationship. Those who bully, usually have a strong need to portray dominance and power, while enjoying the control they erect over those whom they perceive as weak (Powell & Ladd, 2010).

Aggressive behavior that is defined as bullying could be direct or indirect. Direct bullying is face to face and includes picking on the other person and/or hitting or slapping; whereas, indirect bullying is social exclusion and spreading rumors (Foshee, et al., 2014). Boys have been found to perpetrate more direct bullying than girls; whereas, there was no significance found as it related to indirect bullying for either boys or girls (Foshee, et al., 2014). However, girls and boys are both victims and perpetrators of bullying (Siyahhan, Aricak, & Cayirdag-Acar, 2012). Olweus developed a survey which is now referred to as the Olweus Bullying Survey which included a sample of 25,000 to 50,000 (Fredland, 2008). It is the issue of power imbalance that made it appropriate to undertake this study for association between teen dating violence and bullying among African-American teens. In a broader context, intimate partner violence has been linked to power (Wagers, 2015; Whiting, Oka, & Fife, 2012). Although there are still questions as to whether or not power and control issues exist within teen dating relationships, bullying has a key component of power where there is an imbalance of power (Olweus & Limber, 2010). Similarly, African-Americans are an ethnic group known to be stigmatized and discriminated against (Patton et al., 2013) which may create a power imbalance within our society.

### **Bullying and teen dating violence in the literature**

Several studies focused on comparing various forms of bullying. Kowalski & Limber, (2013) conducted a study examining co-occurrence of traditional bullying and cyberbullying among a sample of 931 6<sup>th</sup> through 12<sup>th</sup> graders. Schneider et al, (2012) conducted a study using a national data to examine prevalence of school bullying, cyberbullying and psychological distress among 9<sup>th</sup> to 10<sup>th</sup> graders. Wang et al., (2011) conducted a study comparing cyber and traditional bullying as it related to depression among 6<sup>th</sup> to 10<sup>th</sup> graders. In an earlier study by the same authors, Wang et al., (2009) conducted a study where they examined school bullying and compared physical, verbal, relational and cyber bullying among 7,182 6<sup>th</sup> to 10<sup>th</sup> graders. All of these authors reported that there was overlap among the various forms of bullying being examined .

There were some studies that examined co-occurrence of teen dating violence with other forms of violence such as bullying (Miller, et al., 2013; Yahner et al., 2014; Zweig et al., 2013), where a majority focused on sexual violence/harassment and bullying( including cyberbullying). In a longitudinal study of 1,154 adolescents Foshee, et al., (2014) hypothesized that perpetration of bullying in sixth grade would predict onset of perpetration of physical dating violence by eight grade. Results were reported as boys reported significantly more direct bullying than girls, black students reported more direct bullying than whites, onset of physical dating violence was less likely for boys than girls and more likely for black adolescents, and perpetration of direct bullying in the sixth grade was associated with physical dating violence by eight grade (Foshee, et al., 2014). The authors discussed how changes within the social context of adolescents as they move into mixed gender and dating relationships, transitions bullying behavior in early

adolescents to violence towards their dating partner in later adolescence (Foshee, et al., 2014). Taking this perspective into consideration, it is feasible that the current study which examines the co-occurrence of dating violence and bullying among teens especially African American teens will help fill existing gaps in the literature as it relates to such association. A similar study by (Ellis & Wolfe, 2014) of 585 adolescents who completed self-report assessment related to bullying and dating violence perpetration and victimization, results were reported as bullying positively predicting dating violence perpetration and victimization(p.1) . Additionally, bullying of boys was significantly related to dating violence perpetration (Ellis & Wolfe, 2014) . Studies such as these and Miller, et al., (2013) who reported that dating violence and bullying co-occurred in the same adolescents warrants the need for further studies which specifically focus on co-occurrence of bullying and teen dating violence as such studies are limited . Viewing early aggression in the form of bullying which occurs in early adolescents as a prelude to later dating violence as the social context of adolescence relationships change, presents justification from a public health perspective to examine potential associations.

### **Cyberbullying**

Cyberbullying among teens has exploded in the literature and the media such that most of the recent research on bullying has centered around cyberbullying. As technology expands, cybertools such as texting, video messaging, social networking has changed the way teens communicate with each other. With these new tools, teens have used this method for bullying peers and dating partners(Alvarez, 2012). The literature on bullying has began to focus on the use of cybertools to control dating partners but is very limited. Due to the ability to reach a wide audience and remain anonymous; cyberbullying may be

more menacing than traditional bullying (Burton, Florell, & Wiggant, 2013). Furthermore, research on cyberbullying suggests that this form of bullying may impact depression and suicidal ideation more than traditional bullying (Bonanno & Hymel, 2013; Patchin & Hinduja, 2010).

In a longitudinal study of 1,154 adolescents conducted by Foshee, et al., (2014), the authors reported that direct bullying (perpetration) in sixth grade predicted onset of dating violence perpetration in eighth grade (p.439). Similar to Foshee, et al study, Ellis & Wolfe, (2014) reported that bullying predicted victimization and perpetration of dating violence in their study of 585 9<sup>th</sup> through 11<sup>th</sup> graders in a Canadian public high school (p.5). Both studies reported results by gender, but Foshee, et al., (2014) reported on results related to race whereby African Americans reported more direct bullying (perpetration) than whites and prediction of the onset of physical dating violence perpetration was more likely for African American teens. Zweig et al., (2013) conducted a study of 5,647 youth where they examined cyber dating abuse among teens and other forms of violence. The authors defined cyber dating abuse as use of technology to commit abusive acts within a dating relationship. Results were reported by the authors as over 25% of respondents reporting experiencing cyber dating abuse victimization with females reporting greater victimization of cyber bullying specifically sexual cyber dating abuse (Zweig et al., 2013). Similarly, Lucero, Weisz, & Smith-Daren, (2014) conducted a qualitative study of 23 10<sup>th</sup> graders in Michigan whereby they examined gender differences in technology use /abuse among teens. Study results were reported as texting and social networking being the most common type of socially interactive

technology used for abusive actions such as spying/ monitoring, sexting, and password access as a consequence of distrust and jealousy (Lucero et al., 2014).

Several studies focused on cyberbullying as it related to teens in general. Included in cyberbullying was the issue of cyberdating abuse. Additionally, Schneider et al., (2012) used data from a Massachusetts census of high school students where they examined prevalence of cyberbullying and school bullying victimization and association with psychological distress. Results were reported as a majority of those who reported being victims of cyberbullying were also victims of school bullying . Additionally, psychological distress was higher for those who reported both cyberbullying and school bullying (Schneider et al., 2012). Futhermore, the authors stated that there was little to no difference as it related to race/ethnicity (Schneider et al., 2012). Similar to Schneider et al., (2012), Wang et al., (2011) reported that depression was associated with cyber bullying and traditional bullying but victims of cyberbullying reported higher levels of depression than perpetrators. There was one study whereby the authors reported that African American teens were more involved in physical, verbal or cyber bullying and less likely to to be verbally or relationally victimized (Wang et al., 2009). Another study involving 10,254 middle school youth had results which the authors reported related to race where African American youths were more likely to report bully-victim and victim than groups not involved in bullying (Goldweber et al., 2013). It was difficult to find African American teens as a focus in studies on bullying whereby most of the studies included predominantly white samples. These results point to the gap in the literature whereby African American teens are absent. Futhermore, the negative effects of bullying on the health of teens contributes to the need for research to further understand the

complexities associated with African American teen dating violence for better targeted programs.

### **Sexual bullying**

Sexual bullying is built on the definition of bullying by adding sexual interest and usually begins in early adolescence (middle school). This type of bullying occurs when there is repetitive teasing, taunting, harassment, and threats with malicious intent where one party has a sexual interest (Fredland, 2008). The perpetrator may present as having a romantic interest in the victim but there is a lack of consideration for the victim and there exist a power imbalance (Fredland, 2008). As adolescences grow older, sexual bullying has the potential to escalate into other forms of violence including emotional, physical, teen dating violence and sexual assault (Fredland, 2008). In a longitudinal study on bullying perpetration and subsequent sexual violence perpetration conducted by Espelage et al., (2012) reported that bullying perpetration and homophobic teasing were significant predictors for sexual harassment in a sample of 820 middle school students (p. 60). Additionally, the authors hypothesized that as these adolescents move into opposite gender peer relationships, perpetration of sexual violence is likely but although their results suggest this might be true, this was not shown by their research as this required a longer study (Espelage et al., 2012) . In a longitudinal study of 1,734 adolescents conducted by Chiodo, Wolfe, Crooks, Hughes, & Jaffee, (2009), results were reported as sexual harrassment victimization in early adolescence being associated with higher risk of other forms of relationship type violence including physical dating violence 2.5 yrs later (p.246). The Center for Disease Control and Prevention, (2012b) stated that the connection between bullying and sexual violence cannot be over looked and research

which focuses on examining the association is needed as middle schoolers move from same sex peer relationships to opposite sex social context, bullying behavior could lead to sexual violence. The literature makes reference to the possibility that bullying of a sexual nature could lead to other forms of violence and the lack of appropriate research; therefore, this current study will expand the research on bullying by examining association with teen dating violence.

### **School bullying**

School bullying occurs within the educational setting (Serra-Negra, et al., 2015). Types of school bullying include verbal, physical, relational and indirect such as spreading rumors (Serra-Negra, et al., 2015). Schools are where teens spend most of their time and during that time, they are involved in social relations, which makes the school setting an ideal place for the occurrence of bullying (Serra-Negra, et al., 2015) .

In a cross-national study, data was collected through anonymous self-report questionnaires of 7,182 6<sup>th</sup> to 10<sup>th</sup> graders where on the question of bullying ( victim or perpetrator) at school in the previous 2 months, 20.8% reported physical, 53.6% verbal, 51.4% social and 13.6% electronic (Wang et al., 2009). Similar results were found in a study of 20,406 9<sup>th</sup> through 12<sup>th</sup> graders in MetroWest Massachusetts using a survey, 25.9% reported school bullying in during the previous 12 months (Schneider et al., 2012). Futhermore, school bullying has been linked to lower school performance and school attachment (Schneider et al., 2012). School bullying has drawn national attention due to recent cases of suicides related to school bullying. It is well documented in the literature that school related bullying negatively impacts the emotional health of victims (Williams & Peguero, 2013). The most public cases of school bullying did not involve

African American teens which may send the wrong message to policy makers as they allocate resources to programs to address bullying. African American children are more likely to be labeled as aggressive by their teachers and peers (Goldweber et al., 2013). This brings into question whether or not the school system is adequately equipped to meet the needs of African American children especially as they move through the educational system into high school. African American teens may have special needs not readily addressed by current school based anti-bullying programs and without research which primarily targets this population, perpetual marginalization will continue.

### **Ethnicity/race**

Dating violence and bullying among teens are major public health issues deserving of research to understand risk and protective measure with a goal of primary prevention. Currently there is limited research which examines the complexities of African Americans within communities where African Americans constitute a large portion of the population. Most studies although reporting results related to race, fail to target their samples within large African American populations. The social context whereby African American teens reside plays an important role in how they operationalized their dating and social relationships. African American teens are more likely than their white counterparts to live in communities where prevalence of violence is higher (Martin et al., 2012; Patton et al., 2013).

### **Teen dating violence and ethnicity/race**

Despite an overwhelming focus in the literature on risk factors for teen dating violence and negative impact of dating violence, few studies examined teen dating violence in the context of ethnicity/race as the targeted population (Black, et al., 2014;

Boothe M. A. et al., 2014; Bradshaw et al., 2013; Freeman & Temple, 2010; Henry & Zeytinoglu, 2012; Redhawk Love & Richards, 2013; Temple & Freeman, 2011).

Furthermore, there was a gap in the literature regarding teen dating violence with co-occurrence with bullying among African American teens as such studies to date did not exist.

A disparity within the literature existed whereby, unless a study targeted African American teens (Black, et al., 2014 ; Boothe et al., 2014; Redhawk Love & Richards, 2013), most studies were conducted using a majority white sample . Additionally, the majority of the studies albeit few, which targeted African American youth was conducted in low income urban areas (Niolon, et al., 2015) . Results from studies where the sample came from populations of low income urban areas, may not represent the full spectrum of African American teens but it is understandable why researchers in the field of dating violence would choose their sample from low income urban areas in order to capture large samples of African Americans and the link between low income urban communities and prevalence of violence.

When race/ethnicity was discussed in the literature, there were contradictions as to whether or not race/ethnicity was associated with teen dating violence. Temple & Freeman, (2011) reported that in their study of 1,565 ethnically diverse teens in southeast Texas, they did not see an association between dating violence and being African American, white or Hispanic (p.701) . Contrast to the Temple & Freeman study, the Youth Risk Behavior Surveillance ( YRBS) 2009 showed that African American teens had the highest rate of teen dating violence victimization (Center for Disease Control and Prevention, 2010). The study conducted by Tyler et al., (2011) aligned with the

YRBS data where the authors conducted a study consisting of 1,025 adolescence (49.8% white, 24% black, 11.5% Hispanic, and 14.7% other) and reported findings of black youth being more likely to be victims of dating violence than their white counterparts.

### **Bullying and ethnicity/race in the literature**

Although there were few studies where the sampling of African American youth were predominant, an association between bullying and race/ethnicity was prevalent throughout the literature. Kowalski & Limber, (2013) stated that their sample of 931 students from grades 6 to 12 was conducted in a school where the population was 95% white. Furthermore, race was not recorded on the self administered surveys (Kowalski & Limber, 2013) . Another study conducted by Bauman et al., (2013) using the 2009 Arizona Youth Risk Behavior Survey of 1,491 high school students included a sample of 4.4% African-Americans. There was one study which focused on race, urbanicity, and patterns of bullying where the authors reported that their sample was ethnically diverse while stating that 62.4% were Caucasian, 19.0% African American and 5.6% were Hispanic (Goldweber et al., 2013). This brings into question the definition of diversity in research.

Bradshaw et al., (2013) conducted a study of 16,302 adolescent where they examined various subtypes of bullying and association to health risk. The authors reported results as African American adolescents being more likely to being involved in a gang. Additionally, in a study involving 7,182 teens from grade six through ten, the authors reported that African American adolescence perpetrated verbal, physical, and cyber bullying and less victimization as it related to verbal and relational bullying (Wang et al., 2009). Furthermore, Goldweber et al., (2013) reported that their results from a self

report of 10,254 middle school youth revealed that African American youth were at greater risk of bully victimization (p.213) . Additionally, Boothe et al., (2014) conducted a study using the 2009 Youth Risk Behavior Survey where they examined difference in sexual behavior among various ethnic groups and reported that sexual behaviors were associated with race/ethnicity and dating violence. As it related to the impact of academic achievement, Williams & Peguero, (2013) reported that Blacks who were higher achievers reported higher bullying victimization in a study where African American's were oversampled in order to obtain adequate representation for analysis.

### **Conclusion**

This literature review demonstrated that there is a major gap in the literature as it relates to teen dating violence and co-occurrence with bullying among African American teens. The literature related to teen dating violence clearly established the negative impact of teen dating violence and bullying although this variable was examined separately in most studies. Programs geared towards addressing the problem of teen dating violence and bullying occur in isolation of each other which may not be meeting the needs of teens. In examining the relationship among teen dating violence, bullying, and race/ethnicity this study could help to better target program resources.

### Chapter 3: Research Method

The purpose of this quantitative study was to explore and test the relationship between experiencing bullying and experiencing dating violence. The data was drawn from the 2013 YRBS. African American teens were compared to teens that self-identified as White or Hispanic in the survey. The following chapter includes the research design and rationale (purpose, design, and rationale), methodology (definition of the population, sampling and sampling procedures, data access and collection, instrumentation and operationalization of constructs, and data analysis), and threats to validity (internal/external threats) and ethical considerations.

#### **Research Design and Rationale**

To explore and test the relationship between experiencing bullying and experiencing dating violence, I used a quantitative survey design. An analysis of the relationship between the dependent variable (teen dating violence victimization) and the independent variable (bully victimization) while controlling for race/ethnicity, age, substance abuse, and age of first sexual intercourse was conducted. Possible mediating variable (spending time with a parent) was evaluated. The quantitative cross-sectional research design used for this study relies on data previously collected from a self-administered school-based national survey. The secondary data was from the self-administered questionnaires of Palm Beach County public high school students in the spring of 2013 for use in the Center for Disease Control YRBS. Participants who were in attendance on the day of the survey completed the questionnaires during a class period. Their responses were entered on a computer scannable answer sheet and booklet (Center for Disease Control and Protection, 2014c).

Cross-sectional design is often used in research which employ surveys as the method for data collection (Frankfort-Nachmias & Nachmias, 2008). The research questions for this study focused on describing patterns of relationship between variables which is a common application of cross-sectional design (Frankfort-Nachmias & Nachmias, 2008) . Responses to survey questions regarding victimization of bullying and teen dating violence, does not allow for manipulation of the independent variables bullying, race/ethnicity, and gender. As a result, before and after comparisons will not be possible which prevents causality. Use of a cross-sectional design will allow for analysis which utilize statistical methods to compensate for the inability to show causality while demonstrating the relationship between the variables (Frankfort-Nachmias & Nachmias, 2008).

The YRBS included the relevant data to analyze the relationship between bully victimization and teen dating violence victimization. Using a cross-sectional design allowed analysis of survey responses from the most recent YRBS which is one of the few datasets that captured bully victimization and teen dating violence victimization within South Florida. The National Survey of Children’s Exposure to Violence [NatSCEV] is a large national representation sample of over 4,500 children ages 17 and younger which focuses on estimating various types of violence, crime and abuse including bullying, sexual victimization and domestic violence (U.S. Department of Justice: Office of Justice Programs, 2011). Despite being a data source for violence victimization related to bullying, the NatSCEV did not assess teen dating violence victimization and did not provide data for individual states or localities such as Palm Beach Florida (U.S. Department of Justice: Office of Justice Programs, 2011) . Another large national survey

which collected data on violence among teens but did not meet the needs of my study due to lack of data on teen dating violence and bully victimization was The National Longitudinal Study of Adolescent to Adult Health[NLSA]. The NLSA collects data on students in grade 7-12 at Wave I (1994-1995) with follow-ups at Wave II( 1996), III (2001 and 2002), and IV(2008 and 2009) (Harris, et al., 2009). Due to reliance on archival data which was readily available for public use, there was no time or resource constraints.

Cross-sectional design is the most applied design within the social sciences (Frankfort-Nachmias & Nachmias, 2008).The application of cross sectional design using national survey's has been documented in the literature as it related to dating violence and bullying . Bauman et al., (2013) used data from the 2009 Arizona YRBS to examine relationships among depression, suicidal behaviors and bully victimization and perpetration of bullying. Boothe, Rula, Lassiter, & Holland, (2015) conducted a study using data from the 2009 YRBS where they examined differences in sexual behaviors among various female ethnic groups who reported exposure to dating and sexual violence. Rice, et al., (2015) conducted a study of middle schoolers using data generated from the 2012 YRBS in Los Angeles; whereby, the researchers examined associations between gender,race and sexual identity and technology use and cyberbullying experiences and behaviors. In a study conducted by Hamby et al., (2012), a cross sectional design was used based on data from the NatSCEV to examine co-occurrence of physical teen dating violence with other forms of vicitimization. These previously published studies support the design and analysis of my dissertation study.Use of cross-sectional design for research allows examination of various public health concerns among

youths. Surveys which are designed to accommodate the daily school schedule ( class periods) such as the YRBS, allows for collection of large amounts of data from a large sample; whereby, analysis of various health-risk behaviors and subsequent associated factors can transpire, furthering the knowledge of the field (Center for Disease Control and Prevention, 2014a).

## **Methodology**

### **Population**

The population for this study was Palm Beach County public high school students in grades 9 to 12. The 2013 Palm Beach County YRBS targeted all public high school students in grades 9 to 12. All 23 high schools in Palm Beach County were eligible to participate in the survey and all 23 participated.

### **Sampling and Sampling Procedures**

The 2013 Palm Beach County YRBS included 2,376 students in the sample (Center for Disease Control and Prevention, 2014b). I reviewed a total of 1,849 completed questionnaires of which 1,836 were usable after postdata editing; whereby, questionnaires which failed quality controls (less than 20 remaining responses after editing or had the same answers for greater than/equal to 15 consecutive questions were considered unusable (Center for Disease Control and Protection, 2014b) . Twenty-three public high schools in Palm Beach County completed the survey in the spring of 2013 (Center for Disease Control and Protection, 2014b). There was a 77% response rate which was calculated as number of participating schools/ number of eligible sampled schools x number of usable questionnaires/number of eligible students sampled rounded to the nearest integer (Center for Disease Control and Protection, 2014b). A two stage

sampling design was used for the 2013 YRBS. An initial sample of all public high schools that had 9-12 grades was selected, followed by a probability sampling of classes with a random start in each selected school; whereby, each student within a required subject or all classes meeting during a particular period of day were invited as participants (Center for Disease Control and Protection, 2014b). Participants' questionnaires were weighted for representation of all Palm Beach county public high school students and to reduce bias as it compensated for differences in patterns of non response (Center for Disease Control and Protection, 2014b).

### **Power analysis**

To determine the power of the sample size, I selected a medium effect size at .15, statistical power level was set at .80, probability level was set at .05 and predictor was 3. Using prior Sample Size Calculator for Multiple Regression, the resulting sample size was 76. Based on these results, a sample of 2,376 used for the Palm Beach County 2013 YRBS was appropriate.

### **Archival Data**

This study was a secondary analysis of archival data collected from a sample of public high school students in Palm Beach County in Florida during the spring of 2013. Due to the use of archival data for this study, I did not have contact with the students who completed the original survey. All measures for this study were unobtrusive; whereby, the method of data collection did not include my direct contact with events, interactions, or behavior of the participants under investigation. The Center for Disease Control and Prevention provided funding for the collection of data within Palm Beach counties (Center for Disease Control and Protection, 2014b).

Upon approval by Walden IRB and assignment of an IRB number, a request for data was completed and submitted to the Center for Disease Control and Prevention and Palm Beach County Department of Health in order to gain access to the data .

### **Instrumentation and Operationalization of Constructs**

#### **Instrumentation**

The YRBS used in Palm Beach was developed by the Center for Disease Control and Prevention for the purposes of (a) describing the prevalence of health-risk behaviors among youth and (b) assessing trends in health-risk over time with a goal of providing public health professionals with the tools needed to evaluate and improve policies and programs which target youth (Center for Disease Control and Protection, 2014a) . The first YRBS survey was developed in 1991 and has been conducted biannually nationally in schools based in state, territorial, tribal, and large urban school districts (Center for Disease Control and Protection, 2014c) . In 1997 the Center for Disease Control and Prevention reviewed the questionnaire and made adjustment to the questions in order to meet the Healthy People 2010 health objectives (Center for Disease Control and Protection, 2014c). The current 2013 questionnaire includes minor changes based on feedback from experts within and outside of Center for Disease Control and Prevention (Center for Disease Control and Protection, 2014c). Suggested changes to questions were placed on a ballot accessible by YRBS coordinators at each site, whereby votes for or against additions, deletion, or changes occurred (Center for Disease Control and Protection, 2014c).

The national standard questionnaire is available to states, tribes, and counties. Sites are able to request to modify the national survey but there are parameters which

include keeping two-thirds of the questions unchanged, a limit of eight mutually exclusive options for responses, and no skip patterns, grid formats, or fill-in responses (Center for Disease Control and Protection, 2014c).

Additionally, questions related to height and weight must be retained as Question 6 and Question 7 and no more than 99 questions are allowed (Center for Disease Control and Protection, 2014c). The Center for Disease Control and Protection limits the number of questions due to concerns about student's ability to complete the survey within one class period (Center for Disease Control and Protection, 2014c). Sites wishing to modify the questionnaires are provided with a list of optional questions which were already tested for reliability and validity. Sites who wish to develop their own questions, are provided with assistance by the Center for Disease Control and Protection to assure reading level appropriateness and alignment with the YRBS.

The YRBS has been used by several researchers to study health-risk and behaviors of youths (Bauman et al., 2013; Boothe et al., 2015; Mueller, James, Abrutyn, & Levin, May 2015). Few surveys collect data on a large scale within the social sphere of teens the school setting; whereby, county level data is available that provides insight into the behaviors of teens. The intended goal of using of the YRBS in research is to allow public health professionals to inform policies and programs which target youth (Center for Disease Control and Prevention, 2014c). The results from this current study could help to inform public health professionals in their development of programs which focus on teen dating violence by demonstrating whether or not there is an association among dating violence and bullying, race/ethnicity and gender.

Permission to use the instrument was not necessary as the data which was generated from the instrument is available with permission from Palm Beach Secondary Curriculum Department.

In 1992 and 2000, the Center for Disease Control and Prevention conducted two test-retest reliability studies of the national YRBS questionnaires where no significant difference was found between the prevalence estimates each time the questionnaire were used in 1992 (Center for Disease Control and Protection, 2014c). Additionally, responses were found to be less consistent for those in the seventh grade verses those in 9-12 grades which demonstrated that the instrument was appropriate for the intended grades of 9-12 (Center for Disease Control and Protection, 2014c). In the 2000 reliability study, the questionnaires were administered 2 weeks apart on two occasions whereby significant differences related to prevalence was found for 10 questions, which resulted in a revision or deletion for future questionnaires due to concerns about reliability (Center for Disease Control and Protection, 2014c).

Validity of the instrument which requests self-reported behavior information has not been studied (Center for Disease Control and Protection, 2014c). The Center for Disease Control and Prevention conducted a review of the literature as it related to assessing cognitive and situational factors that could impact validity of self-reporting behavior and found that there was no threat to validity of self-reports despite being affected by cognitive and situational factors (Center for Disease Control and Protection, 2014c).

## **Operationalization**

### **Teen dating violence**

Two items on the 2013 Palm Beach YRBS were used to measure teen dating violence victimization. Teen dating violence victimization was defined as being physically hurt on purpose by someone they were dating or being forced to do sexual things by someone they were dating. For the purposes of this study, dependent variable (*teen dating violence victimization*) was operationalized using variable Q22 and Q23.

Q22. During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon.)

The measure was coded as follows: *0. I did not date or go out with anyone during the past 12 months; 0. 0 times; 1. 1 time; 2. 2 or 3 times; 4. 4 or 5 times; 6. 6 or more times*

Q23. During the past 12 months, how many times did someone you were dating or going out with force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)

The measure was coded as follows: *0. I did not date or go out with anyone during the past 12 months; 0. 0 times; 1. 1 time; 2. 2 or 3 times; 4. 4 or 5 times; 6. 6 or more times*

These two variables (Q22 and Q23) were aggregated together to create a teen dating violence victimization score (VioScoreAggregate).

### **Bully victimization**

The independent variable *bully victimization* was measured and defined as when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another

student repeatedly ( Center for Disease Control and Prevention, 2014) . Bully victimization variable was operationalized using variable Q24, Q25, Q88,and Q89

Q24. During the past 12 months, have you ever been bullied on school property?

The measure was coded as follows: *0. no; 1. yes*

Q25. During the past 12 months, have you ever been electronically bullied?

(Count being bullied through e-mail, chat rooms, instant messaging, websites, or texting.).

The measure was coded as follows: *0. no; 1. yes*

Q88. During the past 12 months, have you ever been the victim of teasing or name calling because of your weight, size, or physical appearance?

The measure was coded as follows: *0. no; 1. yes*

Q89. During the past 12 months, have you ever been the victim of teasing or name calling because someone thought you were gay, lesbian, or bisexual?

The measure was coded as follows: *0. no; 1. yes* Bully victimization score was 0-4 points based on counting the number of yes and no responses to questions 24, 25, 88, and 89.

### **Race/ethnicity**

Control variable *race/ethnicity* was measured based on response to questions on the 2013 Palm Beach YRBS. Respondents were asked to self-identify their race/ethnicity by selecting American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander or White. Race/ethnicity was operationalized using variables Q4 and Q5.

Q4. Are you Hispanic or Latino?

The measure was coded as follows: *0. Not Hispanic; 1. Hispanic*

Q5. What is your race? (Select one or more responses)

The measure was coded as follows: *0. Other; 1. White; 2. Black or African American.*

### **Gender**

Control variable *gender* was measured by reported sex. Gender was operationalized using variable Q2 on the 2013 Palm Beach YRBS.

Q2. What is your sex?

The measure was coded as follows: *1. female; 2. male*

### **Spending time with a parent**

The mediating variable *spending time with a parent* was measured by responses to eating dinner at home with a parent. Spending time with a parent was operationalized using variable Q97.

Q97. During the past 7 days, on how many days did you eat dinner at home with at least one of your parents or guardians?

The measure was coded as follows: *1. 0 days; 2. 1 day; 3. 2 days; 4. 3 days; 5. 4 days; 6. 5 days; 7. 6 days; 8. 7 days*

### **Age**

Participants' age was a control variable and operationalized by responses to the question of age on the 2013 Palm Beach county YRBS.

Q1. How old are you?

1. The measure was coded as follows: 1. 12 years old or younger; 2. 13 years old; 3. 14 years old; 4. 15 years old; 5. 16 years old; 6. 17 years old; 7. 18 years old or older

#### **Age at first sexual intercourse**

Control variable *age at first sexual intercourse* was operationalized by a positive response to the question of having had sexual intercourse.

Q60. How old were you when you had sexual intercourse for the first time?

The measure was coded as follows: 1. I have never had sexual intercourse; 2. 17 years old or older; 3. 16 years old; 4. 15 years old; 5. 14 years old; 6. 13 years old; 7. 12 years old; 8. 11 years old or younger

#### **Substance use**

The control variable *substance use* which included alcohol and drugs was measured using the 2013 Palm Beach YRBS. Alcohol was defined as beer, wine, wine coolers, and liquor which included rum, gin, vodka, or whiskey but excluded just taking a few sips of wine intended for religious purposes ( Center for Disease Control and Prevention, 2014b). Two variables was used to operationalize alcohol consumption whereby one determined history of alcohol consumption; whereas, the second variable was used to operationalize current consumption of alcohol.

Q41. During your life, on how many days have you had at least one drink of alcohol?

The measure was coded as follows: 1. 0 days; 2. 1 or 2 days; 3. 3 to 9 days; 4. 10 to 19 days; 5. 20 to 30 days; 6. 40 to 99 days; 7. 100 or more days

Q42. How old were you when you had your first drink of alcohol other than a few sips? *The measure was coded as follows: 1. Never drank alcohol; 2. 17 years or older; 3. 15 or 16 years old; 4. 13 or 14 years old; 5. 11 or 12 years old; 6. 9 or 10 years old; 7. 8 years or younger.*

Drug use was operationalized by using variables related to marijuana, cocaine, sniffed glue, breathed contents of aerosol spray cans or inhaled paints or sprays for the purposes of getting high, heroin, methamphetamines, ecstasy, steroid pills or shots, prescription drug use without a doctor's prescription, synthetic marijuana and injection of illegal drugs ( Center for Disease Control and Prevention, 2014b).

Q47. During your life, how many times have you used marijuana?

*The measure was coded as follows: 1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 or more;*

Q49. During the past 30 days, how many times did you use marijuana?

*The measure was coded as follows: 1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q50. During your life, how many times have you used any form on cocaine, including powder, crack, or freebase?

*The measure was coded as follows: 1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q51. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

*The measure was coded as follows: 1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q52. During your life, how many times have you used heroin (also called smack, junk, or China White)?

The measure was coded as follows: *1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q53. During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?

The measure was coded as follows: *1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q54. During your life, how many times have you used ecstasy (also called MDMA)?

The measure was coded as follows: *1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q55. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?

The measure was coded as follows: *1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q56. During your life, how many times have you taken a prescription drug (such as OxyContin, Percocet, Vicodin, and codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?

The measure was coded as follows: *1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times; 5. 20 to 39 times; 6. 40 more times*

Q91. During your life, how many times have you used synthetic marijuana (also called K2 or Spice)?

The measure was coded as follows: *1. 0 times; 2. 1 or 2 times; 3. 3 to 9 times; 4. 10 to 19 times*

Q57. During your life, how many times have you used a needle to inject any illegal drug into your body?

The measure was coded as follows:

*1. 0 times; 2. 1 time; 3. 2 or more times 3. 2 or more times*

To create a substance abuse total score, the 13 separate variables (# Q41, Q42, Q47, Q49, Q50, Q51, Q52, Q53, Q54, Q55, Q56, Q57, and Q91) was aggregated to create the DrugUse variable. DrugUse variable which was coded as follows: *0. 0-5 Negligible use; 1. 6-13; 2. 14-22; 3. 23-30; 4. 31-39; 5. 40-50; 6. 51-60; 7. 61-79*

### **Data Analysis Plan**

Quantitative data was obtained from the 2013 Palm Beach YRBSS. Raw data related to the selected variables as answered on the questionnaire was obtained and entered into IBM SPSS version 21 for analysis. Utilization of secondary data for this study eliminates the need for me to clean and screen the data. According to the Center for Disease Control and Prevention, original data was cleaned and edited for inconsistencies and questionnaires which failed quality control standards ( less than 20 remaining responses after editing or had the same answer to 15 or more consecutive questions) were excluded from analysis (Center for Disease Control and Protection, 2014c).

### **Research questions and analysis**

*Research question 1:* What is the relationship between race, gender, substance abuse, age, , and age of first sexual intercourse and the likelihood of being a victim of (a) bullying, (b) teen dating violence, and (c) bullying and teen dating violence?

$H_{01a}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying.

$H_{a1a}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying.

$H_{01b}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence.

$H_{a1b}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence.

$H_{01c}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and teen dating violence.

$H_{a1c}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and teen dating violence.

One way ANOVA, Crosstabulation, Games-Howell a post-hoc test, and multivariate regression analysis were used to analyze research question 1.

*Research question 2:* Does spending time with a parent mediate any relationships between experiencing bully victimization and experiencing teen dating violence when controlling for race, gender, substance abuse, age, , and age of first sexual intercourse.

*H2<sub>o</sub>*: Spending time with a parent does not mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for race, gender, substance abuse, age, , and age of first sexual intercourse .

*H2<sub>a</sub>*: Spending time with a parent does mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for the influence of race, gender, substance abuse, age, , and age of first sexual intercourse.

To analyze *Research Question 2*, mediating variables spending time with a parent a simple mediation analysis was performed using a macro installed within SPSS, written by Andrew F. Hayes, called Conditional PROCESS (Hayes, 2012).

### ***Multivariable data analyses***

In order to measure the relationship between the dependent variable teen dating violence victimization and independent variables, bully victimization, gender and race/ethnicity, multivariable data analysis was conducted. Multiple regressions was used to assess the relationship between teen dating victimization and bully victimization, gender and race/ethnicity, while controlling for the effects of age, , substance use, and age of first sexual intercourse. Examination of the coefficient of determination ( $R^2$ ) was used to determine the combine effect of the independent variable (Frankfort-Nachmias & Nachmias, 2008) . Analysis of variance (ANOVA) was used to analyze the independent and confounding variables which were nominal variables (gender, race, and bully victimization). Application of ANOVA will allow for examination of difference in variations among the independent and cofounding variables.

### ***Statistical tests***

Descriptive statistics was used to describe the data set. Measures of central tendency (mean, median, and mode) were used to calculate univariate distribution and describe the average response for each variable. Measures of variability were expressed using standard deviation to describe the spread of ratio variables. Frequency distribution was completed to list the categories of each variable and to calculate the number of observations for nominal or categorical variables. Statistical significance was established at alpha level of  $p = .05$ .

### ***Measuring association***

Pearson's  $r$  was used to measure the association between ratio variables. Application of Pearson's  $r$  as it relates to the strength of association between variables is best to determine the power around the linear regression line (Frankfort-Nachmias & Nachmias, 2008).

Confounding variables age and , and age of first sexual intercourse was included in the study as prior studies results have shown that bullying including sexual harassment/violence tended to begin in early adolescence around middle school (Espelage et al., 2012) and transition into dating violence as peer groups become heterosexual (Miller, et al., 2013) . Age of first sexual intercourse was included to account for the influence of statutory rape or sexual misconduct victimization prior to high school as childhood sexual victimization has been associated with intimate partner violence (Davis, et al., 2012; Hamby et al., 2012). Additionally, substance abuse was included as control variable as prior researchers have reported positive association between substance abuse and dating violence (Exner-Cortens et al.,2013; Maas et al., 2010).

Mediating variables spending time with parent was included based on the social learning theory foundation of this study whereby teen's behaviors are influenced by others. Researchers have reported that teens who are engaged in positive relationships with parents acts as a protective factor for bully victimization (Benhorin & McMahon, 2008) and teen dating violence victimization (Garrido & Taussig, 2013; Maas et al., 2010; Miga et al., 2012) .

### **Threats to Validity**

#### **External**

Threats to the external validity of this study as it relates to interaction of selection and setting include inability to generalize the results outside of the sample as the current sample focused on high school students within Palm Beach County. The sample will not include teens who attended private schools or who were home schooled. Reporting of results as it relates to this sample without generalization to the larger population will address this bias.

#### **Internal**

There is a potential for selection threat as participants are all from the same county which may predispose them to emit certain outcomes (Creswell, 2009) . A sampling frame which included all public high schools with a systematic equal probability sampling with a random start time to select the classes for participation in the survey ( Center for Disease Control and Prevention, 2014c) allowed for equal opportunities for selection. Additionally, students who were absent on the date of the survey were allowed to participate at a later date which provided greater representation of

all high school students and also increased response rates (Center for Disease Control and Protection, 2014c).

### **Threats to construct**

The construct related to spending time with a parent poses a threat due to a inclusion of timeframe of past seven days for time spent with a parent which may threaten statistical conclusion as previous seven days may not reflect the true nature of the parent-child dyad. Eating dinner with a parent has been used in previous study as it related to social connectedness with family and the protective and resiliency benefits as it relates to teen dating violence (Foshee V. A., et al., 2012). Additionally, the construct related to age at first sexual intercourse may not accurately describe the variable as it does not allow for determination as to type of encounter. However, prior research establishes justification for using this construct as a control variable (Davis, et al., 2012; Hamby et al., 2012).

### **Ethical Procedures**

This dissertation study was conducted in an ethical manner. I submitted an application to the Walden University IRB for approval to conduct research and I did not collect any data until Walden University IRB approval is received. The IRB approval number for this study was 01-11-16-0156590. The 2013 YRBS for South Florida Public High Schools was the secondary dataset used for this study. Prior to completing the YRBS, parental consent was obtained by each high school prior to the administration of the survey. Students who were in attendance on the day of the survey completed the survey. The YRBS were designed with built in protection for the privacy of the participants. Participation was voluntary and anonymous whereby participants completed

self-administered questionnaires on a computer-scannable booklet which were placed in an envelope and sealed by the participants prior to submission to the data collector (Center for Disease Control and Protection, 2014c). During the administration of the survey, participants' desks were rearranged to provide privacy during completion (Center for Disease Control and Protection, 2014c). Personal identifiable information (name, address, date of birth, etc) was not collected during data collection.

For the purposes of this study, data sets were obtained by me from the Center for Disease Control and Prevention and subsequently stored on a portable flashdrive purchased solely for the purpose of this research prior to being exported into IBM SPSS for statistical analysis. Information on the computer was secured with a password which is only known by this author. Once the study is completed both the flash drive and information on the computer was destroyed once no longer needed. The data was not shared with any other party. Additionally, hard copies of the data were stored in a locked file cabinet whereby this researcher was the only person who will have access. Hard copies of data were securely shredded once they are no longer needed. Prior to requesting data, permission was obtained from Walden University's IRB. The IRB approval number for this study was 01-11-16-0156590. There were no conflicts of interest related to this research.

### **Summary**

This study was a quantitative research design to analyze archival data collected by the YRBS in the spring of 2013. The purposes of this study is to explore co-occurrence of teen dating violence victimization with bully victimization within ethnic/racial context while controlling for gender, age, substance abuse, and age of first sexual intercourse.

Mediating variables (spending time with a parent) was added based on prior research on protective factors and social learning theory. Descriptive statistics was provided. Multiple regressions analysis was used to analyze the relationships among teen dating violence victimization, bully victimization, and race/ethnicity while controlling for gender, age, substance abuse and age of first sexual intercourse. Mediating variables was added to the PROCESS model for association.

## Chapter 4: Results

### Introduction

The purpose of this quantitative study was to explore and test the relationship between experiencing bullying and experiencing teen dating violence victimization. The data was drawn from the 2013 Youth Risk Behavior Survey [YRBS]. Research questions were as follows:

*Research Question 1:* What is the relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of (a) bullying, (b) teen dating violence, and (c) bullying and teen dating violence?

$H_{01a}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying

$H_{a1a}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying

$H_{01b}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence

$H_{a1b}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence

$H_{01c}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and teen dating violence

$H_{a1c}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and teen dating violence

*Research Question 2:* Does spending time with a parent mediate any relationships between experiencing bully victimization and experiencing teen dating violence when controlling for race, gender, substance abuse, age, and age of first sexual intercourse?

$H_02$ : Spending time with a parent does not mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for race, gender, substance abuse, age, and age of first sexual intercourse.

$H_a2$ : Spending time with a parent does mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for the influence of race, gender, substance abuse, age, and age of first sexual intercourse.

The remainder of the chapter includes data collection, results and summary.

### **Data Collection**

This study consisted of secondary analysis of archival data collected from a sample of public high school students in Palm Beach County in Florida during the spring of 2013. Due to the use of archival data for this study, I did not have contact with the students who completed the original survey. All measures for this study were unobtrusive; whereby, the method of data collection did not include my direct contact with events, interactions, or behavior of the participants under investigation. Twenty-three public high schools during the spring of 2013 invited students to complete the survey in Palm Beach County (Center for Disease Control and Protection, 2014b) . There was a 77% response rate which was calculated as number of participating schools/ number of eligible sampled schools  $\times$  number of usable questionnaires/number of eligible students sampled rounded to the nearest integer (Center for Disease Control and Protection, 2014b). There were 1,836 respondents in the sample.

Baseline demographic characteristic percentages of the sample were as follows:

Gender demographics of sample is shown in Table 1.

*Table 1*

*Gender demographics of sample*

<b>Genders Represented in Sample</b>	<b>Female</b>	<b>Male</b>
Gender	46.1%	53.9%

Age demographics of the sample is shown in Table 2.

*Table 2*

*Ages Represented in Sample*

	<b>14 yrs</b>	<b>15 yrs</b>	<b>16 yrs</b>	<b>17 yrs</b>	<b>18 yrs and older</b>
<b>Percent of each age group</b>	7.21%	25.41%	32.95%	23.38%	11.05%

Race/ethnicity demographics of the sample is shown in Table 3

*Table 3*

*Race/Ethnicity Represented in Sample*

	<b>Black Non-Hispanic</b>	<b>Hispanic/Latino</b>	<b>White Non-Hispanic</b>	<b>Other Race Non-Hispanic</b>
<b>Race/Ethnicity</b>	24.38%	30.75%	35.87%	9.0%

As a comparative to the percentages shown in the tables, the larger Palm Beach population reported the following race/ethnicity data according to the United States Census Bureau (2016).

- Black-Non-Hispanic 17.3% (2010) and 18.8% (2014),
- White-Non-Hispanic 60.1% (2010) and 57.3% (2014),
- Hispanic/Latino 19.0% (2010) and 20.7% (2014)

Baseline demographics of Age at first sexual intercourse within the sample is shown in Table 4.

*Table 4*

*Age at First Sexual Intercourse in Sample*

Never had sex	17 yrs or older	16 yrs	15 yrs	14 yrs	13 yrs	12 yrs	11 yrs or younger
56.2%	3.3%	7.8%	10.5%	9.6%	5.4%	3.4%	3.8%

Baseline demographics of respondents who reported dating violence victimization within the sample is shown in Table 5.

*Table 5*

*Percentage of Respondents Who Reported Dating Violence Victimization in Sample*

Times violated	Percent	Frequency
No date violence	86.7%	1522
1 time	4.2%	73
2 times	3.2%	56
3 times	1.0%	17
4 times	1.2%	22
5 times	0.3%	5
6 times	1.2%	22
7 times	0.2%	4
8 times	0.7%	13
9 times	0.0%	0
10 times	0.3%	5
11 times	0.0%	0
12 times or more	1.0%	17

Baseline demographics of respondents who reported being a victim of bullying within the sample is shown in Table 6.

Table 6

*Percentage of Respondents Who Reported Being a Victim of Bullying*

<b>% of times bullied</b>	<b>Percent</b>	<b>Frequency</b>
Lowest No incident= 0	63.1%	1157
Low = 1	18.4%	337
Medium-Low = 2	10.6%	194
Medium-High = 3	5.8%	106
High = 4	2.1%	39

**Results**

*Research Question 1:* What is the relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of (a) bullying, (b) teen dating violence, and (c) bullying and teen dating violence?

**Hypotheses H1a.**

*H<sub>0</sub>1a:* There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying

*H<sub>a</sub>1a:* There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying

One way ANOVA was conducted to see the relationship between each control variables separately and the dependent variable bully victimization.

Descriptive for bully victimization by age is shown in the Table 7.

Table 7

*Descriptive for Bully Victimization by Age*

	<b>N</b>	<b>Percent</b>	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>
Age 14	131	7.2%	.63	0	4
Age 15	461	25.4%	.73	0	4
Age 16	598	33.0%	.66	0	4
Age 17	425	23.4%	.62	0	4
Age 18	200	11.0%	.45	0	4

*Note:* Total of 1,815 students were between ages 14 and 18, inclusively, who reported

Crosstabs for bully victimization by age is shown in the Table 8.

Table 8

*Crosstabs for Bully Victimization by Age*

		3 = 14 yrs old	4 = 15 yrs old	5 = 16 yrs old	6 = 17 yrs old	7 = 18 yrs old	Total
<b>BullyScore</b> <b>Aggregate-24,25,88,89</b>	0 = Lowest No Incident Reported	84 4.6%	265 14.6%	381 21.0%	275 15.2%	149 8.2%	1154 63.6%
	1 = Low Bully Score	23 1.3%	100 5.5%	102 5.6%	79 4.4%	26 1.4%	330 18.2%
	2 = Medium-Low Bully Score	16 0.9%	59 3.3%	68 3.7%	34 1.9%	15 0.8%	192 10.6%
	3 = Medium-High Bully Score	5 0.3%	30 1.7%	32 1.8%	30 1.7%	6 0.3%	103 5.7%
	4 = High Bully Score	3 0.1%	7 0.4%	15 0.8%	7 0.4%	4 0.2%	36 1.9%
	Total	131 7.2%	461 25.4%	598 33.0%	425 23.4%	200 11.0%	1815 100%

There were less than 15 participants in the age group of 13 and younger.

Therefore, I focused on participants greater than 13 for the analysis. The youngest and oldest groups experienced the lowest levels of bullying. The Levene test for equality of variances was found to be violated for the present analysis,  $F(4, 1810) = 3.366, p = .009$ . Due to this violated assumption, Games-Howell, a post hoc test that does not assume homogeneity of variance, was run.

Bully victimization based on ages greater than 13 Games Howell Post hoc results are shown in Table 9.

Table 9

*Games Howell Post hoc Test for Bully Victimization based on Ages greater than 13*

Age of respondent	Comparison age groups	Mean difference	Significance
Age 14	15	-.103	.836
	16	-.033	.997
	17	.002	1.000
	18	.176	.480
Age 15	14	.103	.836
	16	.070	.805
	17	.105	.531
	18 *	.279 *	.005 *
Age 16	14	.033	.997
	15	-.070	.805
	17	.035	.982
	18	.209	.053
Age 17	14	-.002	1.000
	15	-.105	.531
	16	-.035	.982
	18	.174	.200

Table 9 shows only two groups that differed significantly,  $p = .005$ , which are students ages 15 and age 18. Because the mean difference between them was positive, we know that 15 year olds had a larger mean value bully victimization score than the 18 year olds did. With respect to the control variable, age, the null hypothesis is rejected and this test indicates a statistical significance that there is a relationship between age and bully victimization.

Descriptive for bully victimization by gender is shown in the Table 10.

Table 10

*Descriptive for Bully Victimization based on Gender*

Gender	N	Percent	Mean	Minimum	Maximum
Female	935	51.4%	.74	0	4
Male	884	48.6%	.56	0	4

*Note:* A total of 1,819 students, of either gender, reported

Crosstabs for bully victimization by gender is shown in the Table 11.

Table 11

*Crosstabs for Bully Victimization by Gender*

		1 = Female	2 = Male	Total
<b>BullyScoreAggregate-24,25,88,89</b>	0 = Lowest No Incident Reported	567 31.2%	583 32.1%	1150 63.3%
	1= Low Bully Score	166 9.1%	168 9.2%	334 18.3%
	2 = Medium-Low Bully Score	105 5.8%	88 4.8%	193 10.6%
	3 = Medium-High Bully Score	71 3.9%	32 1.8%	103 5.7%
	4 = High Bully Score	26 1.4%	13 0.7%	39 2.1%
Total		935 51.4%	884 48.6%	1819 100%

The second control variable, gender, when analyzed for the effects on bully victimization using a one way ANOVA . The Levene test for equality of variances was found to be violated,  $F(1, 1817) = 35.176, p = .000$ . Due to this violated assumption, a chi-square test was conducted. All cells had counts larger than 5 making this chi-square test credible. The results were  $\chi^2(4) = 19.418, p = .001$  which shows significance for gender and bully victimization with females having a greater mean value of .74 as compared to the mean bully score of males of .56 ( see Table 10).

Descriptive for bully victimization by race is shown in the Table 12

Table 12

*Descriptive for Bully Victimization based on Race*

Race	N	Percent	Mean	Minimum	Maximum
0 – Other	409	22.3%	.69	0	4

(table continued)

Race	N	Percent	Mean	Minimum	Maximum
1 – White	942	51.4%	.71	0	4
2 – Black	482	26.3%	.52	0	4

Note: A total of 1,833 students, choosing a race of black, white or other

Crosstabs for bully victimization by race is shown in the Table 13.

Table 13

Crosstabs for Bully Victimization based on Race

		0 - Other	1 - White	2 - Black	Total
<b>BullyScoreAggregate-24,25,88,89</b>	0 = Lowest No Incident Reported	254 13.8%	577 31.5%	326 17.8%	1157 63.1%
	1 = Low Bully Score	76 4.1%	175 9.6%	86 4.7%	337 18.4%
	2 = Medium-Low Bully Score	45 2.5%	99 5.4%	50 2.7%	194 10.6%
	3 = Medium-High Bully Score	20 1.1%	72 3.9%	14 0.8%	106 5.8%
	4 = High Bully Score	14 0.8%	19 1.0%	6 0.3%	39 2.1%
Total		409 22.3%	942 51.4%	482 26.3%	1833 100%

Descriptive for bully victimization by ethnicity is shown in Table 14

Table 14

Descriptive for Bully Victimization based on Ethnicity

Ethnicity	N	Percent	Mean	Minimum	Maximum
0 – Not Hispanic	1246	69.3%	.67	0	4
1 – Hispanic	553	30.7%	.60	0	4

Note: A total of 1,799 students, of choosing Hispanic or Not Hispanic

Crosstabs for bully victimization by ethnicity is shown in Table 15.

Table 15

*Crosstabs for Bully Victimization based on Ethnicity*

		0 - Not Hispanic	1 -Hispanic	Total
<b>BullyScoreAggregate-24,25,88,89</b>	0 = Lowest No Incident Reported	777 43.2%	364 20.2%	1141 63.4%
	1 = Low Bully Score	228 12.7%	98 5.4%	326 18.1%
	2 = Medium-Low Bully Score	139 7.7%	51 2.8%	190 10.6%
	3 = Medium-High Bully Score	77 4.3%	27 1.5%	104 5.8%
	4 = High Bully Score	25 1.4%	13 0.7%	38 2.1%
Total		1246 69.3%	553 30.7%	1799 100%

The YRBS survey separated race from ethnicity therefore for the purposes of this study, race included participations that self-identified as Black, White with all others (American Indian, Alaska Native, Asian, Native Hawaiian or Other Pacific Islander) placed in the other category . Ethnicity included Hispanic or not and was analyzed separately from race. The third control variable, race, when analyzed for the effects on bully victimization violated the Levene test for equality of variances,  $F(2,1830) = 12.054$ ,  $p = .000$ . As a result of the assumption being violated, a Post Hoc test which did not rely on homogeneity of variance was run (see Table 16).

Bully victimization based on race Games Howell Post Hoc results are in Table 16

Table 16

*Games Howell Post Hoc test for Bully Victimization based on Race*

Race	Comparison of races	Mean	Mean difference	Significance
0 - Other	1 - White	.71	-.016	.963
	2 - Black	.52	.167 *	.033 *
1 - White	0 - Other	.69	.016	.963
	2 - Black	.52	.183 *	.002 *
2 - Black	0 - Other	.69	-.167 *	.033 *
	1 - White	.71	-.183	.002 *

The Games-Howell Post Hoc was conducted to compare all the different race groups on the bully victimization score. Between Blacks and other, there was a small significance  $p = .033$  shown for this test, whereas, between white and Blacks  $p = .002$  showing stronger significance, and finally between white and other,  $p = .963$  showing no statistical significance. Whites had a higher mean value for bully victimization score; whereas, Blacks had the lowest mean score of the three categories tested. Therefore this test indicates statistical significance for whites being more likely to be a victim of bullying within this sample.

An analysis was conducted using ethnicity (Hispanic or not). The Levene statistic was given as  $F(1, 1797) = 2.167$ ,  $p = .141$ . Thus, the homogeneity of variance holds for this variable indicating a reliable result for the ANOVA. The ANOVA result was  $F(1, 1797) = 1.785$ ,  $p = .182$ . So, for this sample, ethnicity (Hispanic or not) did not indicate statistical significance with respect to a relationship with bully victimization.

Descriptive for bully victimization based on age of first sexual intercourse results are in Table 17.

Table 17

*Descriptive for Bully Victimization based on Age of First Sexual Intercourse*

Age of 1 <sup>st</sup> sexual intercourse	N	Percent	Mean	Minimum	Maximum
Never had sex	898	56.2%	.60	0	4
Age 17 and older	52	3.3%	.37	0	4
Age 16	125	7.8%	.67	0	4
Age 15	168	10.5%	.73	0	4
Age 14	153	9.6%	.72	0	4
Age 13	85	5.3%	.71	0	4
Age 12	56	3.5%	.57	0	3
Age 11 or younger	60	3.8%	1.00	0	4

Note: A total of 1,597 students, reported a bullying score within varying ages of first sexual intercourse

Crosstabs for bully victimization based on age of first sexual intercourse is shown in Table 18.

Table 18

*Crosstabs for Bully Victimization based on Age of First Sexual Intercourse*

		Never had sex	17 Yrs and older	3 = 16 yrs old	4 = 15 yrs old	5 = 14 yrs old	6 = 13 yrs old	7 = 12 yrs old	8 = 11 yrs or younger	Total
<b>BullyScore</b> <b>Aggregate - 24,25,88,89</b>	0=Lowest No Incident Reported	583 36.5%	40 2.5%	81 5.1%	98 6.1%	96 6.0%	52 3.3%	37 2.3%	29 1.8%	1016 63.6%
	1=Low Bully Score	164 10.3%	8 0.5%	21 1.3%	33 2.1%	23 1.4%	18 1.1%	10 0.6%	14 0.9%	291 18.2%
	2 = Medium- Low Bully Score	94 5.9%	1 0.1%	11 0.7%	23 1.4%	20 1.3%	6 0.4%	5 0.3%	7 0.4%	167 10.5%
	3 = Medium- High Bully Score	43 2.7%	3 0.2%	7 0.4%	12 0.8%	9 0.6%	6 0.4%	4 0.3%	8 0.5%	92 5.8%
	4 = High Bully Score	14 0.9%	0 0.0%	5 0.3%	2 0.1%	5 0.3%	3 0.2%	0 0.0%	2 0.1%	31 1.9%
	Total	898 56.2%	52 3.3%	125 7.8%	168 10.5%	153 9.6%	85 5.3%	56 3.5%	60 3.8%	1597 100%

This variable, age of first sexual intercourse, gives respondents' age of their first sexual intercourse. The Levene test for equality of variances was found to be violated for the present analysis;  $F(7, 1589) = 3.330, p = .002$ . As a result of this violated assumption, Games-Howell, a post-hoc test that does not assume homogeneity of variance, was run (see Table 19).

Bully victimization based on age of first sexual intercourse Games Howell Post Hoc results are in Table 19.

*Table 19*

*Games Howell Post Hoc test for Bully Victimization based on Age of First Sexual Intercourse*

Age of 1 <sup>st</sup> sexual intercourse	Compariative age group	Mean difference	Significance
Never had sex	17 and older	.233	.471
	16	-.074	.997
	15	-.134	.766
	14	-.121	.907
	13	-.340	.421
	12	-.206	.918
	11 years or younger	-.402	.203
17 and older	Never had sex	-.233	.471
	16	-.307	.437
	15	-.367	.131
	14	-.354	.206
	13	-.340	.421
	12	-.206	.918
16 years old	11 years or younger	-.635 *	.026 *
	Never had sex	.074	.997
	17 and older	.307	.437
	15	-.060	1.000
	14	-.047	1.000
	13	-.034	1.000
	12	.101	.998
15 years old	11 years or younger	-.328	.637
	Never had sex	.134	.766
	17 and older	.367	.131
	16	.060	1.000
	14	.013	1.000
	13	.026	1.000
	12	.161	.958
14 years old	11 years or younger	-.268	.788
	Never had sex	.121	.907

(table continued)

Age of 1 <sup>st</sup> sexual intercourse	Compariative age group	Mean difference	Significance
	17 and older	.354	.206
	16	.047	1.000
	15	-.013	1.000
	13	.013	1.000
	12	.148	.979
	11 years or younger	-.281	.770
13 years old	Never had sex	.108	.988
	17 and older	.340	.421
	16	.034	1.000
	15	-.026	1.000
	14	-.013	1.000
	12	.134	.994
	11 years or younger	-.294	.807
12 years old	Never had sex	-.027	1.000
	17 and older	.206	.918
	16	-.101	.998
	15	-.161	.958
	14	-.148	.979
	13	-.134	.994
	11 years or younger	-.429	.391

Table 19 shows that those who had sex at age 11 or younger and those who had sex at age 17 years or older had a statistically significance difference in their mean scores for bullying. As a result of the mean difference between them being negative, we know that those who had sex at age 11 or younger had a larger mean value bully victimization score than the ones who had sex at 17 years or older . With respect to the control variable, age of first sexual intercourse, the null hypothesis is rejected and this test indicates a statistical significance that there is a relationship between age at first intercourse and bully victimization.

Descriptive for bully victimization based on substance use is shown in Table 20

*Table 20*

*Descriptive for Bully Victimization based on Substance Use*

Frequency of substance use*	N	Percents	Mean	Minimum	Maximum
0 – 5	9	0.5%	.00	0	0
6 -13	766	41.9%	.49	0	4
14 - 22	655	35.9%	.69	0	4
23 - 30	251	13.7%	.86	0	4
31 - 39	107	5.9%	.93	0	4
40 -50	22	1.2%	1.18	0	4
51 – 60	11	0.6%	1.82	0	4

(table continued)

Frequency of substance use*	N	Percents	Mean	Minimum	Maximum
61 - 79	6	0.3%	1.83	0	4

\*aggregate # of times used various forms of substances (drugs and/or alcohol)

Note: 1827 students reported a bullied score within varying levels of substance use

Crosstabs for bully victimization based on substance use is shown in Table 21.

Table 21

Crosstabs for Bully Victimization based on Substance Use

		Substance Use Groups								Total
		0 = 0-5 Negligible Use	1 = 6-13	2 = 14-22	3 = 23-30	4 = 31-39	5 = 40-50	6 = 51-60	7 = 61-79	
<b>BullyScore</b> <b>Aggregate - 24,25,88,89</b>	0=Lowest No Incident Reported	9 0.5%	540 29.6%	399 21.8%	132 7.2%	56 3.1%	11 0.6%	3 0.2%	2 0.1%	1152 63.1%
	1=Low Bully Score	0 0.0%	120 6.6%	126 6.9%	60 3.3%	23 1.2%	3 0.2%	3 0.2%	1 0.0%	336 18.4%
	2 = Medium-Low Bully Score	0 0.0%	72 3.9%	77 4.2%	30 1.7%	13 0.7%	2 0.1%	0 0.0%	0 0.0%	194 10.6%
	3 = Medium-High Bully Score	0 0.0%	6 .4%	1 .3%	0 .0%					06 .8%
	4 = High Bully Score	0 0.0%	8 0.4%	12 0.7%	9 0.5%	6 0.3%	1 0.0%	2 0.1%	1 0.1%	39 2.1%
	<b>Total</b>	9 0.5%	766 41.9%	655 35.9%	251 13.7%	107 5.9%	22 1.2%	11 0.6%	6 0.3%	1827 100%

Substance use is a variable that groups frequency of substance use ( drugs and/or alcohol) during the life of the respondent. Though the frequency is low on both ends of the scale (negligible use to high frequency usage), the mean bully victimization scores are

quite remarkable whereby, the greater the reported number of times respondents used substances (drugs and/or alcohol), the higher the mean bully victimization score.

The Levene test for equality of variances was found to be violated for the present analysis;  $F(7, 1819) = 14.043$ ,  $p = .000$  when running an ANOVA. As a result of this violated assumption, Games-Howell, a post-hoc test that does not assume homogeneity of variance, was run (see Table 22).

Bully victimization based on substance use Games Howell Post Hoc results are in Table 22.

*Table 22*

*Games Howell Post Hoc test for bully victimization based on substance use*

Frequency of substance use	Comparative frequency group	Mean difference	Significance
0 = negligible use	1 = 6 - 13 times	-.488 *	.000 *
	2 = 14 - 22 times	-.689 *	.000 *
	3 = 23 - 30 times	-.861 *	.071 *
	4 = 31 - 39 times	-.935 *	.000 *
	5 = 40 - 50 times	-1.182 *	.014 *
	6 = 51 - 60 times	-1.818 *	.049 *
	7 = 61 - 79 times	-1.833	.323
1 = 6 - 13 times	0 = negligible use	.488 *	.000 *
	2 = 14 - 22 times	-.200 *	.002 *
	3 = 23 - 30 times	-.372 *	.000 *
	4 = 31 - 39 times	-.446 *	.009 *
	5 = 40 - 50 times	-.694	.334
	6 = 51 - 60 times	-1.330	.211
	7 = 61 - 79 times	-1.345	.593
2 = 14 - 22 times	0 = negligible use	.689 *	.000 *
	1 = 6 - 13 times	.200 *	.002 *
	3 = 23 - 30 times	-.172	.412
	4 = 31 - 39 times	-.246	.505
	5 = 40 - 50 times	-.493	.725
	6 = 51 - 60 times	-1.130	.361
	7 = 61 - 79 times	-1.145	.728
3 = 23 - 30 times	0 = negligible use	.861 *	.000 *
	1 = 6 - 13 times	.372 *	.000 *
	2 = 14 - 22 times	.172	.412
	4 = 31 - 39 times	-.074	.999
	5 = 40 - 50 times	-.321	.962
	6 = 51 - 60 times	-.958	.543
	7 = 61 - 79 times	-.973	.838
4 = 31 - 39 times	0 = negligible use	.935 *	.000 *
	1 = 6 - 13 times	.446 *	.009 *
	2 = 14 - 22 times	.246	.505
	3 = 23 - 30 times	.074	.138
	5 = 40 - 50 times	-.247	.993

(table continued)

Frequency of substance use	Comparative frequency group	Mean difference	Significance
	6 = 51 - 60 times	-.884	.645
	7 = 61 - 79 times	-.899	.883
5 = 40 - 50 times	0 = negligible use	1.182 *	.014 *
	1 = 6 - 13 times	.694	.334
	2 = 14 - 22 times	.493	.725
	3 = 23 - 30 times	.321	.962
	4 = 31 - 39 times	.247	.993
	6 = 51 - 60 times	-.636	.944
	7 = 61 - 79 times	-.015	1.000
6 = 51 - 60 times	0 = negligible use	1.818 *	.049 *
	1 = 6 - 13 times	1.330	.211
	2 = 14 - 22 times	1.130	.361
	3 = 23 - 30 times	.958	.543
	4 = 31 - 39 times	.884	.645
	5 = 40 - 50 times	.636	.944
	7 = 61 - 79 times	-.015	1.000

Table 22 shows that there is statistically significant difference in the mean bully victimization scores with respect to negligible use and all higher frequencies of use – except for the highest usage, which has very few respondents (6) who reported such a high frequency of substance use. Statistical significance for group 7 (61-79 frequency of substance use) cannot be validated with this test, yet the raw mean scores are indicative of it. In general, the pattern persists that the lower frequency of substance uses, the lower the bully victimization score; this is shown throughout Table 22 with asterisks marking each statistically significant difference. Thus, with respect to substance use, there is statistical significance showing that there is a relationship between substance use and reported bully victimization.

#### ***Regression analysis H1a***

There was a slight positive correlation between substance use and age at first sexual intercourse whereby the correlation of  $R = -.303$  (indicating that the younger one has sex, the more substance use is noted in the data) which can affect the way the regression is run. Also, there is a correlation of  $R = -.364$  between Race and Hispanics which is also a possible warning for this study in that many of the Hispanics indicated a

Race of White or other. These correlations may affect the statistical outcome of the regression. Additionally, the model summary showed  $R^2 = .057$ . This indicates that 5.7% of the variance in the bully victimization score can be accounted for by this model with the given covariates.

Regression analysis for H1a dependent variable bully victimization score is shown in Table 23.

*Table 23*

*Regression H1a – Dependent Variable is Bully Victimization Score*

Variables	B coefficient	Beta	t-test	Significance	VIF test for collinearity
constant	1.087		7.307	.000	
Hispanic	-.132	.058	-2.280	.023	1.180
Race	-.102	-.068	-2.554	.011	1.185
Substance Use	.181	.180	6.900	.000	1.126
Age	-.065	-.071	-2.853	.004	1.015
Age at 1 <sup>st</sup> sex	.016	.034	1.264	.206	1.163
Gender	-.244	-.122	-4.888	.000	1.027

The regression is not showing statistical significance for age of first sexual intercourse as seen in the one way ANOVA. As noted, this result is probably due to a slight positive correlation to substance use. Also note that for ethnicity (Hispanic or not), in this regression it shows statistical significance, yet not in the one way ANOVA. In the future, a clearer delineation of race and ethnicity will help to reduce the overlap of data, and thus differing outcomes of statistical significance for ethnicity.

The analysis indicates that the strongest relationship was found between substance use and bully victimization such that the more often respondents reported using substances, the more bullying victimization they also reported. Gender was also found to

be a particularly strong indicator of bully victimization such that girls were more likely to report bully victimization than boys. In conclusion, for Hypothesis H1a, there is statistical evidence showing a relationship between gender, substance use, age, race and age at first sexual intercourse and the likelihood of being a victim of bullying. The null is rejected because there are control variables that showed statistical significance indicating a relationship with bully victimization . Being female in this sample resulted in a higher bully victimization score which indicates a positive relationship. The greater the substance use score the higher the bully victimization score which indicates a positive relationship. There was a negative relationship between age and bully victimization for ages 15 and 18 with participants who were 15 having a higher bully victimization score than participants who were 18. There was a negative relationship between age of first sexual intercourse whereby, those who had sexual intercourse at 11 years or younger had a higher bully victimization score than those age 17 and older.

**Hypothesis H1b.**

*H<sub>0</sub>1b*: There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence.

*H<sub>a</sub>1b*: There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of teen dating violence.

Descriptive for teen dating violence victimization based on age in shown in Table 24.

Table 24

*Descriptive for Teen dating violence Victimization based on Age*

Age	N	Percent	Mean	Minimum	Maximum
Age 14	128	7.4%	.33	0	6
Age 15	447	25.7%	.46	0	12
Age 16	577	33.1%	.47	0	12
Age 17	403	23.1%	.50	0	12
Age 18	186	10.7%	.58	0	12

Note: 1741 students reported teen dating violence within age group 14-18

Crosstabs for teen dating violence victimization based on age is shown in Table 25.

Table 25

*Crosstabs for Teen dating violence Victimization based on Age*

		Q1AdjGreaterThan13					Total
		3 = 14 yrs old	4 = 15 yrs old	5 = 16 yrs old	6 = 17 yrs old	7 = 18 yrs old	
<b>ViolenceScoreAggregate Q22 and Q23</b>	0 - did not date or had no date violence	115 6.6%	393 22.6%	501 28.8%	352 20.2%	153 8.8%	1514 87.0%
	1 - hurt or forced to have sex once	4 0.2%	16 0.9%	22 1.2%	17 1.0%	12 0.7%	71 4.0%
	2 - 2 or 3 times hurt and/or forced to have sex	2 0.1%	10 0.6%	19 1.1%	13 0.7%	11 0.6%	55 3.1%
	3 - 3 or 4 times hurt and/or forced to have sex	0 0.0%	4 0.2%	10 0.6%	2 0.1%	1 0.1%	17 1.0%
	4 - 4 or 5 times hurt and/or forced to have sex	4 0.3%	5 0.3%	5 0.3%	5 0.3%	3 0.1%	22 1.3%
	5 - 5 or 6 times hurt and/or forced to have sex	0 0.0%	2 0.1%	3 0.2%	0 0.0%	0 0.0%	5 0.3%
	6 - 6 or more times hurt and/or forced to have sex	3 0.2%	7 0.4%	6 0.3%	3 0.2%	1 0.0%	20 1.1%
	7 - 7 or more times hurt and/or forced to have sex	0 0.0%	1 0.1%	2 0.1%	1 0.1%	0 0.0%	4 0.3%
	8 - 8 or more times hurt and/or forced to have sex	0 0.0%	6 0.3%	2 0.1%	2 0.1%	2 0.1%	12 0.7%
	10 - 10 or more times hurt and/or forced to have sex	0 0.0%	2 0.1%	1 0.1%	2 0.1%	0 0.0%	5 0.3%

(table continued)

		3 = 14 yrs old	4 = 15 yrs old	5 = 16 yrs old	6 = 17 yrs old	7 = 18 yrs old	Total
	12 – 12 or more times hurt and/or forced to have sex	0 0.0%	1 0.1%	6 0.3%	6 0.3%	3 0.2%	16 0.9%
Total		128 7.4%	447 25.7%	577 33.1%	403 23.1%	186 10.7%	1741 100%

The Levene test for equality of variances was found to be satisfied for the present analysis,  $F(4, 1736) = 1.245$ ,  $p = .290$ , which indicates that the variances are equal.

Therefore, the ANOVA should have reliable results given that the assumption of homogeneity of variances is satisfied. Accordingly, the one way ANOVA for age as the control variable and teen dating violence as the dependent variable, resulted in  $F(4,1736) = .430$ ,  $p = .787$ . Therefore, for this test there is not statistical evidence that shows a relationship between age and teen dating violence.

Descriptive for dating violence victimization based on gender is shown in Table 26.

*Table 26*

*Descriptive for Teen dating violence Victimization based on Gender*

Gender	N	Percent	Mean	Minimum	Maximum
Female	898	51.5%	.53	0	12
Male	844	48.5%	.45	0	12

*Note:* 1742 students reported teen dating violence victimization within two gender categories

Crosstabs for dating violence victimization based on gender is shown in Table 27.

*Table 27*

*Crosstabs for Teen dating violence Victimization based on Gender*

		1 = Female	2 = Male	Total
ViolenceScore Aggregate Q22 and Q23	0 - did not date or had no date violence	760 43.6%	752 43.2%	1512 86.8%
	1 - hurt or forced to have sex once	43 2.5%	29 1.6%	72 4.1%

(table continued)

	1 = Female	2 = Male	Total
2 – 2 or 3 times hurt and/or forced to have sex	40 2.3%	16 0.9%	56 3.2%
3 – 3 or 4 times hurt and/or forced to have sex	8 0.5%	8 0.4%	16 0.9%
4 – 4 to 5 times hurt and/or forced to have sex	13 0.7%	8 0.5%	21 1.2%
5 – 5 to 6 times hurt and/or forced to have sex	2 0.1%	3 0.2%	5 0.3%
6 – 6 or more times hurt and/or forced to have sex	13 0.7%	8 0.5%	21 1.2%
7 – 7 or more times hurt and/or forced to have sex	3 0.2%	1 0.1%	4 0.3%
8 – 8 or more times hurt and/or forced to have sex	6 0.3%	7 0.4%	13 0.7%
10 – 10 or more times hurt and/or forced to have sex	2 0.1%	3 0.2%	5 0.3%
12 – 12 or more times hurt and/or forced to have sex	8 0.5%	9 0.5%	17 1.0%
Total	898 51.5%	844 48.5%	1742 100%

The second control variable, gender, when analyzed for the effects on teen dating violence victimization using a one way ANOVA . The Levene test for equality of variances was found to be satisfied,  $F(1, 1740) = 1.391, p = .238$ . Therefore, the ANOVA should have reliable results given that the assumption of homogeneity of variances is satisfied. Accordingly, the one way ANOVA for gender as the control variable, and teen dating violence as the dependent variable, resulted in  $F(1,1740) = .799, p = .371$ . Therefore, for this test there is not statistical evidence that shows a relationship between gender and teen dating violence. However, females had a higher frequency of dating violence victimization.

Descriptive for teen dating violence victimization based on race is shown in Table

28.

*Table 28*

*Descriptive for Teen dating violence Victimization based on Race*

Race	N	Percent	Mean	Minimum	Maximum
0 – Other	397	22.6%	.73	0	12
1 – White	909	51.8%	.39	0	12
2 – Black	450	25.6%	.49	0	12

Crosstabs for teen dating violence victimization based on race is shown in Table

29.

*Table 29*

*Crosstabs for Teen dating violence Victimization based on Race*

			0 - Other	1 - White	2 - Black	Total
<b>ViolenceScoreAggregate Q22 and Q23</b>	0 - did not date or had no date violence	Count	335	806	381	1522
		% of Total	19.1%	45.9%	21.7%	86.7%
	1 - hurt or forced to have sex	Count	17	34	22	73
		% of Total	1.0%	1.9%	1.3%	4.2%
	2 - 2 or 3 times hurt and/or forced to have sex	Count	6	29	21	56
		% of Total	0.3%	1.7%	1.2%	3.2%
	3 - 3 or 4 times hurt and/or forced to have sex	Count	6	5	6	17
		% of Total	0.3%	0.3%	0.3%	1.0%
	4 - 4 or 5 times hurt or forced to have sex	Count	7	8	7	22
		% of Total	0.4%	0.5%	0.4%	1.3%
	5 - 5 to 6 times hurt and/or forced to have sex	Count	3	2	0	5
		% of Total	0.2%	0.1%	0.0%	0.3%
	6 - 6 or more times hurt and/or forced to have sex	Count	8	9	5	22
		% of Total	0.5%	0.5%	0.3%	1.3%

(table continued)

		0 - Other	1 - White	2 - Black	Total
7 – 7 or more times hurt and/or forced to have sex	Count	0	3	1	4
	% of Total	0.0%	0.2%	0.1%	0.2%
8 - 8 or more times hurt and/or forced to have sex	Count	6	5	2	13
	% of Total	0.3%	0.3%	0.1%	0.7%
10 – 10 or more times hurt and/ or forced to have sex	Count	2	1	2	5
	% of Total	0.1%	0.1%	0.1%	0.3%
12 – 12 or more times hurt and/or forced to have sex	Count	7	7	3	17
	% of Total	0.4%	0.4%	0.2%	1.0%
Total	Count	397	909	450	1756
	% of Total	22.6%	51.8%	25.6%	100.0%

Descriptive for teen dating violence victimization based on ethnicity is shown in Table 30.

*Table 30*

*Descriptive for Teen dating violence Victimization based on Ethnicity*

Ethnicity	N	Percent	Mean	Minimum	Maximum
0 – Not Hispanic	1188	68.9%	.50	0	12
1 – Hispanic	536	31.1%	.45	0	12

Crosstabs for teen dating violence victimization based on ethnicity is shown in Table 31.

*Table 31*

*Crosstabs for Teen dating violence Victimization based on Ethnicity*

			0 - Not Hispanic	1 - Hispanic	Total
<b>ViolenceScoreAggregate Q22 and Q23</b>	0 - did not date or had no date violence	Count	1028	472	1500
		% of Total	59.6%	27.4%	87.0%
	1 - hurt or forced to have sex once	Count	50	21	71
		% of Total	2.9%	1.2%	4.1%

(table continued)

		0 - Not Hispanic	1 - Hispanic	Total
2 - 2 or 3 times hurt and/or forced to have sex	Count	42	11	53
	% of Total	2.4%	0.6%	3.1%
3 - 3 or 4 times hurt and/ or forced to have sex	Count	8	9	17
	% of Total	0.5%	0.5%	1.0%
4 - 4 or 5 times hurt and/or forced to have sex	Count	15	6	21
	% of Total	0.9%	0.3%	1.2%
5 - 5 or 6 times hurt and/or forced to have sex	Count	3	1	4
	% of Total	0.2%	0.1%	0.2%
6 - 6 or more times hurt and/or forced to have sex	Count	15	5	20
	% of Total	0.9%	0.3%	1.2%
7 - 7 or more times hurt and/or forced to have sex	Count	4	0	4
	% of Total	0.2%	0.0%	0.2%
8 - 8 or more times hurt and/or forced to have sex	Count	9	3	12
	% of Total	0.5%	0.2%	0.7%
10 - 10 or more times hurt and/or forced to have sex	Count	0	5	5
	% of Total	0.0%	0.3%	0.3%
12 -12 or more times hurt or forced to have sex	Count	14	3	17
	% of Total	0.8%	0.2%	1.0%
Total	Count	1188	536	1724
	% of Total	68.9%	31.1%	100.0%

The third control variable, race, when analyzed for the effects on teen dating violence victimization the Levene test for equality of variances was found to be violated,  $F(2,1753) = 17.912$ ,  $p = .000$ . Because the assumption was violated, a Post Hoc test not relying on homogeneity of variance was run.

Teen dating violence victimization based on race Games Howell Post Hoc results are shown in Table 32.

Table 32

*Games Howell Post Hoc test for Teen dating violence Victimization based on Race*

Race	Comparaitive races	Mean difference	Significance
0 – Other	1 – White	.377 *	.004*
	2 – Black	.244	.122
1 – White	0 – Other	-.377 *	.004 *
	2 – Black	-.093	.565
2 – Black	0 – Other	-.244	.122
	1 – White	.093	.565

Note: Comparing the mean value of one group to another group

Again, the Games-Howell Post Hoc was conducted to compare all the different race groups compared to the teen dating violence victimization score (see Table 32). Between white and other, there was statistical significance with  $p = .004$  shown for this test. Whites had the lower mean value for teen violence victimization score; whereas, other had the highest mean score of the three categories tested. Therefore this test indicates statistical significance for race, and in particular whether a subject was white or other, and being a victim of teen dating violence within this sample.

An analysis was conducted using ethnicity (Hispanic or not). The Levene statistic was given as  $F(1, 1722) = .935$ ,  $p = .334$ . Thus, the homogeneity of variance holds for this variable indicating a reliable result for the ANOVA. The ANOVA result was  $F(1, 1722) = .332$ ,  $p = .565$ . So, for this sample, ethnicity (Hispanic or not) did not indicate statistical significance with respect to a relationship with teen dating violence victimization.

Descriptive for teen dating violence victimization based on age of first sexual intercourse is shown in Table 33.

Table 33

*Descriptive for Teen dating violence Victimization based on Age of First Sexual Intercourse*

Age of 1 <sup>st</sup> sexual intercourse	N	Percent	Mean	Minimum	Maximum
Never had sex	866	56.3%	.19	0	12
Age 17 and older	49	3.2%	.53	0	12
Age 16	119	7.7%	.69	0	12
Age 15	165	10.7%	.44	0	7
Age 14	150	9.8%	.67	0	10
Age 13	82	5.3%	.72	0	8
Age 12	51	3.3%	.37	0	12
Age 11 or younger	57	3.7%	2.16	0	12

Crosstabs for teen dating violence victimization based on age of first sexual intercourse are shown in Table 34.

Table 34

*Crosstabs for Teen dating violence Victimization based on Age of First Sexual Intercourse*

			Never had sex	17 Yrs and older	3 = 16 yrs old	4 = 15 yrs old	5 = 14 yrs old	6 = 13 yrs old	7 = 12 yrs old	8 = 11 yrs or younger	Total
<b>ViolenceScore</b>	0 - did not	Count	813	42	100	136	119	64	45	39	1358
<b>Aggregate Q22 and Q23</b>	date or had no date violence	% of Total	52.8%	2.7%	6.5%	8.8%	7.7%	4.2%	2.9%	2.5%	88.2%
	1 - hurt or forced to have sex once	Count % of Total	19 1.2%	2 0.1%	4 0.3%	12 0.8%	11 0.7%	4 0.3%	4 0.3%	2 0.1%	58 3.8%
	2 – 2 or 3 times hurt and/or forced to have sex	Count % of Total	16 1.0%	3 0.2%	5 0.3%	8 0.5%	7 0.5%	7 0.5%	0 0.0%	2 0.1%	48 3.1%
	3 - 3 or 4 times hurt and/ or forced to have sex	Count % of Total	2 0.1%	0 0%	2 0.1%	2 0.1%	1 0.1%	1 0.1%	0 0.0%	2 0.1%	10 0.6%

(table continued)

		Never had sex	17 Yrs and older	3 = 16 yrs old	4 = 15 yrs old	5 = 14 yrs old	6 = 13 yrs old	7 = 12 yrs old	8 = 11 yrs or younger	Total
4 – 4 or 5 times hurt and/or forced to have sex	Count % of Total	4 0.3%	0 0.0%	3 0.2%	3 0.2%	3 0.2%	1 0.1%	0 0.0%	2 0.1%	16 1.0%
5 – 5 or 6 times hurt and/or forced to have sex	Count % of Total	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 0.1%	0 0.0%	1 0.1%	0 0.0%	3 0.2%
6 – 6 or more times hurt and/or forced to have sex	Count % of Total	6 0.4%	1 0.1%	1 0.1%	2 0.1%	3 0.2%	3 0.2%	0 0.0%	1 0.1%	17 1.1%
7 – 7 or more times hurt and/or forced to have sex	Count % of Total	0 0.0%	0 0.0%	0 0.0%	2 0.1%	1 0.1%	0 0.0%	0 0.0%	1 0.1%	4 0.3%
8 – 8 or more times hurt and/or forced to have sex	Count % of Total	3 0.2%	0 0.0%	1 0.1%	0 0.0%	1 0.1%	1 0.1%	0 0.0%	1 0.1%	6 0.6%
10 – 10 or more times hurt and/or forced to have sex	Count % of Total	1 0.1%	0 0.0%	0 0.0%	0 0.0%	1 0.1%	0 0.0%	1 0.1%	1 0.1%	4 0.3%
12 – 12 or more times hurt and/or forced to have sex	Count % of Total	2 0.1%	1 0.1%	3 0.2%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	6 0.4%	12 0.8%
<b>Total</b>	Count % of Total	866 56.3%	49 3.2%	119 7.7%	165 10.7%	150 9.7%	82 5.3%	51 3.3%	57 3.7%	1539 100.0%

This variable, age of first sexual intercourse, gives respondents' age of their first sexual intercourse. The Levene test for equality of variances was found to be violated for the present analysis;  $F(7, 1531) = 42.520, p = .000$ . Because of this violated assumption, Games-Howell, a post-hoc test that does not assume homogeneity of variance, was run (see Table 35).

Teen dating violence victimization based on age of first sexual intercourse Games-Howell Post Hoc results are shown in Table 35.

*Table 35*

*Games Howell Post Hoc test for Teen dating violence Victimization based on Age of First Sexual Intercourse*

Age of 1 <sup>st</sup> sexual intercourse	Comparative ages	Mean difference	Significance
Never had sex	17 and older	-.338	.925
	16	-.496	.234
	15	-.244	.254
	14	-.480 *	.030 *
	13	-.527	.147
	12	-.180	.992
	11 years or younger	-1.965 *	.012 *
17 and older	Never had sex	.338	1.000
	16	-.158	1.000
	15	.094	1.000
	14	-.143	1.000
	13	-.189	1.000
	12	.158	1.000
	11 years or younger	-1.627 *	.000 *
16 years old	Never had sex	.496 *	.030
	17 and older	.158	1.000
	15	.253	1.000
	14	.016	1.000
	13	-.030	1.000
	12	.317	1.000
	11 years or younger	-1.469 *	.000*
15 years old	Never had sex	.244	1.000
	17 and older	-.094	1.000
	16	-.253	1.000
	14	-.237	1.000
	13	-.283	1.000
	12	.064	1.000
	11 years or younger	-1.722 *	.000 *
14 years old	Never had sex	.480 *	.013 *
	17 and older	.143	1.000
	16	-.016	1.000
	15	.237	1.000
	13	-.046	1.000
	12	.301	.944
	11 years or younger	-1.485	.145
13 years old	Never had sex	.527	.147
	17 and older	-.317	.963

(table continued)

Age of 1 <sup>st</sup> sexual intercourse	Comparative ages	Mean difference	Significance
	16	.030	1.000
	15	.283	.894
	14	.046	1.000
	12	.347	.934
	11 years or younger	-1.485	.145
12 years old	Never had sex	.180	.992
	17 and older	-.158	1.000
	16	-.317	.963
	15	-.064	1.000
	14	-.301	.944
	13	-.347	.934
	11 years or younger	-1.785	.053

Table 35 shows that for several categories, there are some changes with respect to the teen dating violence score. In particular, those who had sex at age 11 or younger compared to those who had sex at age 15 years or older there was statistical significance in their mean score differences for teen dating violence for this test. With respect to the control variable, age of first sexual intercourse, the null hypothesis is rejected and this test indicates a statistical significance that there is a relationship between age of first intercourse and teen dating violence victimization. There is a negative relationship between age of first sexual intercourse and teen dating violence victimization; whereby, the earlier the age of first sexual intercourse, the higher the teen dating violence victimization score.

Descriptive for teen dating violence victimization based on substance use results is shown in Table 36.

*Table 36*

*Descriptive for Teen dating violence Victimization based on Substance Use*

Substance use frequency*	N	Percent	Mean	Minimum	Maximum
0 - 5	9	0.5%	0	0	0
6 -13	738	42.2%	.26	0	12
14 - 22	628	35.9%	.36	0	12
23 - 30	240	13.7%	.63	0	12
31 - 39	100	5.7%	1.76	0	12
40 -50	19	1.1%	2.00	0	12
51 - 60	11	0.6%	3.36	0	12
61 - 79	5	0.3%	8.80	0	12

\*aggregate # of times used various forms of substances (drugs and alcohol)

Crosstabs for teen dating violence victimization based on substance use is shown in Table 37.

Table 37

*Crosstabs for Teen dating violence Victimization based on Substance Use*

		Substance Use Groups									Total
		0 = 0-5 Negligible Use	1 = 6- 13	2 = 14-22	3 = 23-30	4 = 31- 39	5 = 40- 50	6 = 51- 60	7 = 61- 79		
<b>ViolenceScore Aggregate Q22 and Q23</b>	0 - did not date or had no date violence	Count	9	670	558	198	63	11	7	1	1517
		% of									
		Total	0.5%	38.3%	31.9%	11.3%	3.6%	0.6%	0.4%	0.1%	86.7%
	1 - hurt or forced to have sex once	Count	0	25	20	10	13	3	1	0	72
		% of									
		Total	0.0%	1.4%	1.1%	0.6%	0.7%	0.2%	0.1%	0.0%	4.1%
	2 – 2 or 3 times hurt and/or forced to have sex	Count	0	17	22	11	5				6
		% of									
		Total	0.0%	1.0%	1.3%	0.6%	0.3%	0.1%	0.0%	0.0%	3.2%
	3 – 3 or 4 times hurt and/or forced to have sex	Count	0	5	6	4	1	1	0	0	17
		% of									
		Total	0.0%	0.3%	0.3%	0.2%	0.1%	0.1%	0.0%	0.0%	1.0%
	4 – 4 or 5 times hurt and/or forced to have sex	Count	0	10	8	2	2	0	0	0	22
		% of									
Total		0.0%	0.6%	0.5%	0.1%	0.1%	0.0%	0.0%	0.0%	1.3%	
5 – 5 or 6 times hurt and/or forced to have sex	Count	0	1	0	4	0	0	0	0	5	
	% of										
	Total	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	
6 - 6 or more times hurt and/or forced to have sex	Count	0	6	8	5	3	0	0	0	22	
	% of							0.0%			
	Total	0.0%	0.3%	0.5%	0.3%	0.2%	0.0%		0.0%	1.3%	

(table continued)

			Substance Use Groups							Total	
			0 = 0-5 Negligible Use	1 = 6- 13	2 = 14-22	3 = 23-30	4 = 31- 39	5 = 40- 50	6 = 51- 60		7 = 61- 79
	7 - 7 or more times hurt and/or forced to have sex	Count	0	0	0	2	2	0	0	0	4
		% of Total	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
	8 - 8 or more times hurt and/or forced to have sex	Count	0	2	1	3	5	1	0	1	13
		% of Total	0.0%	0.1%	0.1%	0.2%	0.3%	0.1%	0.0%	0.1%	0.7%
	10 -10 or more time hurt and/or forced to have sex	Count	0	1	2	0	1	1	0	0	5
		% of Total	0.0%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.3%
	12 – 12 or more times hurt and/or forced to have sex	Count	0	1	3	1	5	1	3	3	17
		% of Total	0.0%	0.1%	0.2%	0.1%	0.3%	0.1%	0.2%	0.2%	1.0%
	Total	Count	9	738	628	240	100	19	11	5	1750
		% of Total	0.5%	42.2%	35.9%	13.7%	5.7%	1.1%	0.6%	0.3%	100.0%

For the teen dating violence score, the frequency is low on both ends of the scale (negligible use and high frequency usage); however, the mean teen dating violence scores are quite remarkable; whereby, the greater the reported number of times respondents used substances ( drugs and/or alcohol), the higher the mean teen dating violence score.(see Table 37).

The Levene test for equality of variances was found to be violated for the present analysis;  $F(7,1742) = 56.988$ ,  $p = .000$  when running a One Way ANOVA. Due to this violated assumption, Games-Howell, a post-hoc test that does not assume homogeneity of variance, was run.

Teen dating violence victimization based on substance use Games Howell Post Hoc is shown in Table 38.

Table 38

*Games Howell Post Hoc test for Teen dating violence Victimization based on Substance Use*

Substance use frequency	Comparative frequency	Mean difference	Significance
0 = negligible use	1 = 6 - 13 times	-.262 *	.000 *
	2 = 14 - 22 times	-.360 *	.000 *
	3 = 23 - 30 times	-.633 *	.000 *
	4 = 31 - 39 times	-1.760 *	.000 *
	5 = 40 - 50 times	-2.000	.322
	6 = 51 - 60 times	-3.364	.520
	7 = 61 - 79 times	-8.800	.137
1 = 6 - 13 times	0 = negligible use	.262 *	.000*
	2 = 14 - 22 times	-.098	.834
	3 = 23 - 30 times	-.372 *	.045*
	4 = 31 - 39 times	-1.498 *	.001*
	5 = 40 - 50 times	-1.738	.485
	6 = 51 - 60 times	-3.364	.520
	7 = 61 - 79 times	-8.440	.154
2 = 14 - 22 times	0 = negligible use	.360 *	.000 *
	1 = 6 - 13 times	.098	.834
	3 = 23 - 30 times	-.273	.374
	4 = 31 - 39 times	-1.400 *	.002 *
	5 = 40 - 50 times	-1.640	.554
	6 = 51 - 60 times	-3.004	.638
	7 = 61 - 79 times	-8.440	.154
3 = 23 - 30 times	0 = negligible use	.633 *	.000 *
	1 = 6 - 13 times	.372 *	.045 *
	2 = 14 - 22 times	.273	.374
	4 = 31 - 39 times	-1.127 *	.038 *
	5 = 40 - 50 times	-1.367	.750
	6 = 51 - 60 times	-2.730	.728
	7 = 61 - 79 times	-8.167	.169
4 = 31 - 39 times	0 = negligible use	1.760 *	.000 *
	1 = 6 - 13 times	1.498 *	.001 *
	2 = 14 - 22 times	1.400 *	.002 *
	3 = 23 - 30 times	1.127 *	.038 *
	5 = 40 - 50 times	-.240	1.000
	6 = 51 - 60 times	-1.604	.975
	7 = 61 - 79 times	-7.040	.250
5 = 40 - 50 times	0 = negligible use	2.000	.322
	1 = 6 - 13 times	1.738	.485
	2 = 14 - 22 times	1.640	.554
	3 = 23 - 30 times	1.367	.750
	4 = 31 - 39 times	.240	1.000
	6 = 51 - 60 times	-1.364	.995
	7 = 61 - 79 times	-6.800	.283

(table continued)

Substance use frequency	Comparative frequency	Mean difference	Significance
6 = 51 - 60 times	0 = negligible use	3.364	.520
	1 = 6 - 13 times	3.102	.605
	2 = 14 - 22 times	3.004	.638
	3 = 23 - 30 times	2.730	.728
	4 = 31 - 39 times	1.604	.975
	5 = 40 - 50 times	1.364	.995
	7 = 61 - 79 times	-5.436	.587

Table 38 shows that there is statistically significant difference in the mean teen dating violence scores with respect to negligible use and higher frequency of use up through group 4 (frequency from 31 – 39). In general, the pattern persists that the lower the frequency of substance use, the lower the teen dating violence score, which is shown throughout the table with asterisks marking each statistically significant difference. Thus, with respect to substance use, there is statistical significance shown that there is a relationship between substance use and the teen violence score for this sample. There is a positive relationship between substance use and teen dating violence victimization score; whereby the lower the frequency of substance use, the lower the teen dating violence score.

H1b Regression for dependent variable teen dating violence score shown in Table 39.

*Table 39*

*Regression H1b – Dependent Variable is Teen Dating Violence Score*

Variable	B- Coefficient	Beta	t-test	Significance
constant	.203		.851	.395
Hispanic	-.053	-.016	-.581	.561
Race	-.044	-.019	-.691	.490
Substance Use	.037	.199	7.549	.000
Age	-.033	-.023	-.909	.363
Age at 1 <sup>st</sup> sex	.107	.144	5.381	.000
Gender	-.321	-.102	-4.058	.000

A regression test was conducted within SPSS, which gave an ANOVA result of  $F(6,1505) = 21.992$ ,  $p = .000$  for the overall model. Additionally, the model summary

showed  $R^2 = .081$ . This indicates that 8.1% of the variance in the teen dating violence victimization score can be accounted for by this model with the given covariates.

In conclusion, for Hypothesis H1b, there is statistical evidence showing a relationship between substance use (the greater the frequency of substance use, the greater the teen dating violence victimization score), and age of first sexual intercourse (the younger the age of first sexual intercourse, the greater the teen dating violence victimization score) and the likelihood of being a victim of teen dating violence. The null is rejected because there are control variables that showed statistical significance indicating a relationship with teen dating violence victimization.

### **H1c.**

$H_{01c}$ : There is no relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and teen dating violence

$H_{a1c}$ : There is a relationship between race, gender, substance abuse, age, and age of first sexual intercourse and the likelihood of being a victim of bullying and of teen dating violence.

H1c multivariate regression shown in Table 40.

*Table 40*

### *Multivariate Regression H1c*

Variable	Effect (Pillai's Trace)	Effect Value	F	Sig.
Intercept		.035	27.030	.000
Race Black White Other		.004	3.147	.043
Gender (Q2)		.021	16.444	.000
Age		.006	4.671	.010
Substance Use		.052	41.440	.000
How old at first sex? (Q60)		.020	15.194	.000

(table continued)

Variable	Effect (Pillai's Trace)	Effect Value	F	Sig.
Hispanic		.004	3.184	.042

The multivariate analysis for H1c indicates, and is in agreement with the previous tests, that the strongest predictor of teen dating violence victimization and bully victimization is substance use. This is indicated by the effect size = .052, which is greater than all of the other covariates shown in Table 40. Also, in this test, all covariates have p values less than 0.05 indicating statistical significance of having a relationship with the dependent variables. Therefore, the null hypothesis is rejected as this test indicates a relationship between race (Blacks had the least likelihood of experiencing teen dating violence and bullying victimization), ethnicity (Hispanic or not) (non-Hispanics had greatest likelihood of experiencing teen dating violence and bullying victimization), substance use (there was a positive relationship; the greater the frequency of substance use, the greater the likelihood of experiencing teen dating violence and bullying victimization), age (there was a negative relationship, the younger the age, the greater the likelihood of experiencing teen dating violence and bullying victimization), age of first sexual intercourse (there was a negative relationship, the younger age of first sexual intercourse the greater the likelihood of experiencing teen dating violence and bullying victimization).

***Research question 2: Does spending time with a parent mediate any relationships between experiencing bully victimization and experiencing teen dating violence when controlling for race, gender, substance abuse, age, and age of first sexual intercourse?***

*H<sub>0</sub>2*: Spending time with a parent does not mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for race, gender, substance abuse, age, and age of first sexual intercourse.

*H<sub>a</sub>2*: Spending time with a parent does mediate the relationships between experiencing bully victimization and experiencing teen dating violence after accounting for the influence of race, gender, substance abuse, age, and age of first sexual intercourse.

To investigate research *Question 2* with predictor variables (including ethnicity, age, gender, age of first sexual intercourse, race and substance use), a simple mediation analysis was performed using a macro installed within SPSS, written by Andrew F. Hayes, called Conditional PROCESS (Hayes, 2012). The first outcome variable for analysis was bully victimization. The first predictor variable for the analysis was Hispanic or not. The mediator variable for the analysis was spending time with a parent. The indirect effect of Hispanic or not predictor on bully victimization was found to be not statistically significant Effect = -.0109, 95% C.I. (-.20611, -.20027). The second predictor variable for the analysis was age. Again, the mediator variable for the analysis was spending time with a parent. The indirect effect of age on bully victimization was found to be statistically significant Effect = -.0089, 95% C.I. (.0032, .0166). The third predictor variable for the analysis was gender; the mediator variable for the analysis was spending time with a parent. The indirect effect of gender predictor on bully victimization was not statistically significant Effect = -.0022, 95% C.I. (-.0127, -.0065). The fourth predictor variable for the analysis was age of first sexual intercourse; the mediator variable for the analysis was spending time with a parent. The indirect effect of age at first sexual intercourse predictor on bully victimization was found to be statistically significant Effect

= .0034, 95% C.I. (.0008, .0077). The fifth predictor variable for the analysis was race; the mediator variable for the analysis was spending time with a parent. The indirect effect of race predictor on bully victimization was found to be statistically significant Effect = .0161, 95% C.I. (.0070, .0293). The sixth predictor variable for the analysis was substance use; the mediator variable for the analysis was spending time with a parent. The indirect effect of substance use predictor on bully victimization was found to be statistically significant Effect = .0095, 95% C.I. (.0017, .0200).

Continuing with the analysis of research *Question 2*, further simple mediation analysis was performed using the function, Conditional PROCESS, whereby the outcome variable for analysis was teen dating violence victimization. The first predictor variable for the analysis was Hispanic or not; the mediator variable for the analysis was spending time with a parent. The indirect effect of Hispanic or not on teen dating violence was not statistically significant Effect = -.0385, 95% C.I. (-.0736, -.0091). The second predictor variable for the analysis was age; the mediator variable for the analysis was spending time with a parent. The regression shows that age had no impact on teen dating violence  $p=.5753$ ; therefore, spending time with a parent could not be considered a mediator with respect to age. The third predictor variable for the analysis was gender; the mediator variable for the analysis was spending time with a parent. Gender did not have a statistical significant effect on spending time with a parent  $p=.5373$ . Gender had no effect on spending time with a parent therefore spending time with parent could not be a mediating variable between teen dating violence and gender. The fourth predictor variable for the analysis was age of first sexual intercourse; the mediator variable for the analysis was spending time with a parent. The indirect effect of age of first sexual

intercourse on teen dating violence was found to be statistically significant Effect = .0076, 95% C.I. (.0031, .0159). The fifth predictor variable for the analysis was race; the mediator variable for the analysis was spending time with a parent. The indirect effect of race on teen dating violence was found to be statistically significant Effect = .0454, 95% C.I. (.0248, .0758). The sixth predictor variable for the analysis was substance use; the mediator variable for the analysis was spending time with a parent. The indirect effect of substance use on teen dating violence was found to be statistically significant Effect = .0309, 95% C.I. (.0152, .0503).

In conclusion, the null hypothesis is rejected as spending time with a parent does mediate the relationship between experiencing bully victimization and experiencing teen dating violence as each of these dependent variables was tested separately with each control variable and the concluding results are summarized to support this. The results showed that spending time with a parent mediated both bully victimization and experiencing teen dating violence victimization for the control variables, race, age of first sexual intercourse, and substance use. Although spending time with a parent mediated bully victimization when controlling for age, it did not mediate for teen dating violence victimization when controlling for age. Hence, there was statistical significance indicated for the mediation of spending time with a parent as proposed in the research hypothesis.

### **Summary**

The current study was a quantitative study using archival data from the 2013 YRBSS for Palm Beach County Florida used to examine the relationship between race/ethnicity, gender, age, substance use, and age of first sexual intercourse and bully and teen dating violence victimization. Descriptive statistics were used to report

demographics. One way ANOVA, Chi-square, univariate and multivariate regression analysis, and Conditional PROCESS (for determining possible mediation) were conducted as it related to the two research questions and associated hypotheses. Additionally, Games Howell Post Hoc test were attained and reported in narrative and tabular formats. The results of the statistical analysis of *Research Question 1* were that the null hypothesis,  $H_01a$ , was rejected and this test indicated a statistical significance that there was a negative relationship between age and bully victimization (respondents who were 15 had a higher bully victimization score than participants who were 18). There is statistical evidence showing a relationship between gender (females had a higher frequency of bully victimization), a positive relationship in terms of frequency of substance use (respondents with higher frequency of substance use reported higher bully victimization), and a negative relationship with age of first sexual intercourse and the likelihood of being a victim of bullying (those who had sexual intercourse at 11 years or younger had a higher bully victimization score than those age 17 and older).

Furthermore, the null hypothesis,  $H_01b$ , was rejected because there are predictor variables that showed statistical significance indicating a relationship with teen dating violence victimization. There was no statistical evidence of a relationship between age and being a victim of teen dating violence (frequency of teen dating violence victimization was not affected by age of respondents). Also, there is no statistical evidence showing a relationship between gender (although females had a higher frequency of teen dating violence), a positive relationship in terms of frequency of substance use was indicated with teen dating violence (respondents who reported higher frequency of substance use (drugs and/or alcohol) also reported greater teen dating

violence victimization), and a negative relationship with age at first sexual intercourse and the frequency of teen dating violence was shown (respondents who had their first sexual intercourse at a younger age also reported greater frequency of teen dating violence victimization) . Additionally, the null hypothesis,  $H_01c$ , was rejected. This was indicated with a negative relationship between race and ethnicity (Hispanic or not) – lower scores for Hispanics (Blacks had the least likelihood of experiencing teen dating violence and bully victimization; whereas, non-Hispanics had greatest likelihood of experiencing teen dating violence and bully victimization); a positive relationship with substance use – the higher the frequency of reported substance use, the higher the teen dating violence and bully victimization scores; a negative relationship with age – the younger the age, the more likely to be a victim of teen dating violence and bullying; a negative relationship with age of first sexual intercourse – the younger one had sexual intercourse, the more likely they were to be a victim of bullying and teen dating violence. The results of the statistical analysis of *Research Question 2* were that the null hypothesis  $H_02$  is rejected for this test, and spending time with a parent was shown as a mediating factor for bully victimization and was also shown as a mediating factor for teen dating violence. The results showed that spending time with a parent mediated both bully victimization and experiencing teen dating violence victimization for the control variable, race, age of first sexual intercourse, and substance use. Although spending time with a parent mediated bully victimization when controlling for age, it did not mediate for teen dating violence victimization when controlling for age. Hence, there was statistical significance indicated for the mediation of spending time with a parent as proposed in the research hypothesis.

Chapter 5 will focus on interpretation of the findings, limitations of the current study, and recommendations for future research. Additionally, I will discuss the social change impact of the results of this study and final conclusions.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

Teen dating violence and bullying are major public health concerns. Both teen dating violence victimization and bully victimization contribute to negative psychological and physical outcomes (Foshee et al., 2014). The purpose of this quantitative study using archival data from the 2013 YRBS for Palm Beach County, Florida was to examine the relationship between race/ethnicity, gender, age, substance use, and age of first sexual intercourse and bully and teen dating violence victimization. I also examined the effect of the protective factor spending time with a parent as a potential mediating variable.

Considering that first dating violence experiences appear to occur during the teen years (Center for Disease Control and Prevention, 2014a), and bullying occurs most often among youths (Robers et al., 2011), this research advances the field of intimate partner violence by testing possible association between teen dating violence and bullying. Currently most research and prevention programs targeting teen dating violence and bullying occurs in silos (Grych & Swan, 2012). As a result, prevention programs may not be meeting the needs of teens engaged in teen dating violence and bully victimization. Identifying associations among various forms of violence such as teen dating violence and bullying is essential in meeting the needs of teens within violence prevention programs and those that might be struggling with these issues on an individual level.

**Key findings**

Findings from this study included females having a higher frequency of bully victimization, respondents with higher frequency of substance use reported higher bully victimization and those who had sexual intercourse at 11 years or younger had a higher bully victimization score than those who had first sexual intercourse at ages 17 and older. Frequency of teen dating violence victimization was not affected by age of respondents. Additionally, females had a higher frequency of teen dating violence. Respondents who reported higher frequency of substance use (drugs and/or alcohol) also reported greater teen dating violence victimization. Furthermore, respondents who had their first sexual intercourse at age 11 or younger also reported greater frequency of teen dating violence victimization. Blacks had the least likelihood of experiencing teen dating violence and bully victimization; whereas, non-Hispanic Whites had greatest likelihood of experiencing teen dating violence and bully victimization. The higher the frequency of reported substance use, the higher the teen dating violence and bully victimization scores; the younger the age, the more likely to be a victim of teen dating violence and bullying; the younger one had sexual intercourse, the more likely they were to be a victim of bullying and teen dating violence. Spending time with a parent mediated both bully victimization and experiencing teen dating violence victimization when controlling for race, age of first sexual intercourse, and substance use. Although spending time with a parent mediated bully victimization when controlling for age, it did not mediate for teen dating violence victimization when controlling for age.

### **Interpretation of the Findings**

The findings confirm existing literature as it relates to findings that there is a relationship among substance use, gender, relationship with parent(s), teen dating violence and bullying. Several studies have linked substance use to teen dating violence. McNaughton Reyes et al., (2012) reported that teens exposed to higher levels of family violence and friend dating violence had heavier alcohol use and dating violence. Maas et al., (2010) confirmed the link between alcohol use and teen dating violence where they reported that early adolescence alcohol consumption increased risk of late adolescence teen dating violence. Furthermore, alcohol and drug use are listed as risk factors for teen dating violence (Center for Disease Control and Prevention, 2012a) . As it relates to gender and teen dating violence, several researchers stated that females are more likely to be victims of dating violence and/or experience more adverse effects (Alleyne et al., 2011;Coker et al., 2014;Exner-Cortens et al., 2013;Maas et al., 2010) . As it relates to relationship with parent(s) Maas et al., (2010) reported that bonding to parents and social skills protected females against teen dating violence in part by reducing alcohol use; whereas, childhood bonding to parents was indirectly related to teen dating violence victimization for males. Another study conducted by Black et al., ( 2015) also showed positive relationships with parents acting as a protective factor as it related to involvement in violent relationships both intimate and social. Nurturing parenting skills and stable family relationships were identified by Center for Disease Control and Prevention (2012a) as relationship protective factors for teen dating violence. The findings from my study, which extend knowledge in the discipline, include my results related to race/ethnicity. Prior studies consisted of majority white populations and

researchers who conducted analysis of their limited nonwhite samples as part of their overall results, found it difficult to draw definitive relationships between race/ethnicity and teen dating violence Kowalski & Limber, (2013). Furthermore, few studies targeted African American teens where majority of the studies targeted majority white populations. This current study had a relatively equal representation of race/ethnic groups ( 24.38% black, non-Hispanic, 30.75% Hispanic, 35.87% white, non-Hispanic, and 9.0% other). Few studies examined teen dating violence in the context of ethnicity/race as the targeted population (Black, et al., 2014;Boothe et al., 2014;Bradshaw et al., 2013;Freeman & Temple, 2010;Henry & Zeytinoglu, 2012;Redhawk Love & Richards, 2013; Temple & Freeman, 2011) . Although there were few studies where the sampling of African American youth were predominant, an association between bullying and race/ethnicity was prevalent throughout the literature (Boothe et al., 2014;Goldweber et al., 2013;Wang et al., 2009;Williams & Peguero, 2013).

Furthermore, there was a gap in the literature regarding teen dating violence with co-occurrence with bullying among African American teens as such studies to date did not exist. Temple & Freeman, (2011) reported that in their study of 1,565 ethnically diverse teens in southeast Texas, they did not see an association between dating violence and being African American, white or Hispanic (p.701) . In contrast to the Temple & Freeman study, the National Youth Risk Behavior Surveillance ( YRBS) 2009 showed that African American teens had the highest rate of teen dating violence victimization (Center for Disease Control and Prevention, 2010). The study conducted by Tyler, Brownridge, & Melander, (2011) aligned with the National YRBS data where the authors conducted a study consisting of 1,025 adolescence(49.8% white,24% black, 11.5%

Hispanic, and 14.7% other) and reported findings of black youth being more likely to be victims of dating violence than their white counterparts . However, the results of my study which used data from the 2013 Palm Beach County Florida YRBS disconfirm these results, whereby; Blacks had the least likelihood of experiencing teen dating violence and bully victimization; whereas, non-Hispanic Whites had greatest likelihood of experiencing teen dating violence and bully victimization.

The findings related to age and age of first sexual intercourse extend knowledge in the discipline as there was a gap in the literature related to the potential relationship between age of first sexual intercourse and teen dating violence and bully victimization. Throughout the literature, early aggression in the form of bullying which occurs in early adolescents as a prelude to later dating violence as the social context of adolescence relationships change is discussed in limited context (Foshee, et al., 2014;Ellis & Wolfe, 2014;Miller, et al., 2013). Additionally, there is mention of sexual abuse victimization as a child being associated with victimization and perpetration of intimate partner violence and bullying (Davis, et al., 2012). The findings from this study, whereby the younger the age, the more likely someone is to be a victim of teen dating violence and bullying and the younger one had sexual intercourse, the more likely they were to be a victim of bullying and teen dating violence extends knowledge more specifically as it relates to age and early sexual experiences acting in concert with experiencing teen dating violence and bullying. The context of early sexual experiences should be further explored in order to better understand the role early sexual experience has on teen dating violence and bully victimization.

Social learning theory premises that environment, personal factors, and behaviors are continually influencing each other (Bandura, 2001). Environment relates to aspects within the social and physical environment that can influence behavior (Bandura, 2001). Social environment relates to family and friends; whereas, physical environment relates to the larger community such as schools and neighborhoods (Bandura, 2001). Personal factors relates to cognitive, affective, and biological components of the individual. (Bandura, 2001) Findings from this study as it relates to the social learning theory framework are highlighted where spending time with a parent (environment) was shown to act as a mediating variable for experiencing teen dating violence (behavior) and bullying (behavior) in addition to the association among substance use (behavior) , age of first sexual intercourse (personal), gender (personal) and victimization. Bandura, (2001) argued that behavior is a result of observational learning and vicarious reinforcement. How teens operationalized their thoughts around violence in their dating relationships and bullying is a result of their social experience and how these thoughts influence their behavior. Additionally, the findings in this study related to teen dating violence and bully victimization occurring within the same individuals align with social learning theory, whereby; the cognitive process one engages in as it relates to behavior, serves to reinforce or reject the behavior (Bandura, 1973). Understanding acceptable behaviors and consequences of teen dating violence and bullying requires an awareness that involves cognitive processes which regulates the decision on whether to act. Victims of one form of violence such as bullying may process such actions in a way which makes them more susceptible to being a victim of teen dating violence.

### **Limitations of the Study**

Limitations of this study included generalization whereby the results of this study cannot be generalized to all population but only applied to the population from which the sample was drawn- high school students in Palm Beach County Florida. Despite the generalization limitation, the findings of the study align with other studies and can be used to further research to prevent teen dating violence victimization, bully victimization and inform violence prevention programs. As is typical of self report questionnaires, issues related to recall bias may have occurred whereby there may be an underreporting or over reporting. However, reliance on self-report survey design has been used for studies of this nature on multiple occasions and has been an effective method of measurement in Public Health and other social sciences (Creswell, 2009; Frankfort-Nachmias & Nachmias, 2008) . Additionally, analysis of the study was hampered by the low number of participants who were 13 and younger (n=15), therefore the results related to bully victimization does not reflect those who are younger than 13 within the Palm Beach County High School system. However, this population may be captured in other research which focuses on middle school where you are more likely to find respondents younger than 13.

The highest substance usage had very few respondents (6) . Statistical significance for group 7 (61-79 frequency of substance use) could not be validated by statistical test. However, the raw mean scores was indicative of a relationship between bully victimization and substance use (see Table 20) and the pattern persisted that the lower the frequency of substance uses, the lower the bully victimization score; this is shown throughout Table 20 . An additional limitation relates to the construct for age of

first sexual intercourse which does not inform of the context to this sexual encounter. However, the findings of the study whereby, those who had sex at age 11 or younger were more likely to report being a victim of bullying and the younger the age of first sexual intercourse, the more likely they were to report being a victim of teen dating violence warrants further research. The construct of spending time with a parent was measured based on having dinner with a parent during the previous seven days .

Although responses to this question may not adequately describe the nature of the parent-child dyad . To limit construct issues and give more relevance, analysis was conducted using the number of days spent eating dinner with a parent within the past 7 days, ranging from 0 to 7 days. Additionally, due to the inclusion of age of first alcohol use variable which might create construct issues, as part of the aggregate for substance use, and to ensure an ordinal response to match levels of intensity related to substance use, a re-ordering of the numerical representations of the responses was required. To further confirm the use of the new response order, I conducted an analysis comparing age of first alcohol use (Q42) to the frequency of use (Q41). There was an association (positive correlation,  $r = 0.372$ , chi-square  $p = 0.000$ ); indicating that the younger a respondent began using alcohol, the higher the frequency of alcohol use. These results are in line with other studies which have shown positive trajectory of early substance use and frequency (Adams et al., 2013; Pilatti, Godoy, Brussino, & Pautassi, 2013).

### **Recommendations**

One of the challenges of conducting a study which relies on archival data is the inability to design the questions on the survey. As a result, I would recommend that further research expand on this study by examining the relationship between age of first

sexual intercourse and teen dating violence and bully victimization which includes a question about the context (including relationship to perpetrator) in which the first sexual encounter occurred. Understanding the context in which ones first sexual encounter occurred will provide greater relevance for targeting specific childhood intervention programs and childhood protective factors. Additionally, further research is needed to determine the relationship between substance use ( drugs/alcohol) and teen dating violence and bullying. The results of this study indicated that there is a relationship between substance use (drugs/alcohol) and teen dating violence and bully victimization whereby the higher the reported substance use, the higher the teen dating violence and bully victimization score. A question that may be answered in further research is whether or not using drugs/alcohol put teens in situations where they get bullied/and or abused by others or do they do drugs/alcohol as a result of being bullied/and or abused by others . Early substance use may impair social and dating relationship and judgement, leading to early stressors and victimization (Maas et al., 2010).

Although this study adds to the body of knowledge related to teen dating violence and bullying, there is still a need to focus research in this field as it relates to race/ethnicity. The results of this study showed that Blacks were least likely to report victimization and non-Hispanic Whites were most likely to report victimization. Along with prior research which have reported results along racial/ethnic line, this research shows that there is a relationship between race/ethnicity and teen dating violence and bully victimization, never the less, there is limited research which focus on examining this relationship in a way where results might help inform prevention programs. African American teens are more likely than their white counterparts to live in communities

where prevalence of violence is higher (Martin, Houston, Mmari, & Decker, 2012; Patton et al., 2013). Exposure to violence has been shown to be a risk factor for perpetration and victimization of violence (McNaughton Reyes et al., 2012), therefore; research which occurs in communities of color is still needed.

At the inception of this study, there was limited research which examined co-occurrence of various forms of violence. The results of this study adds to the body of knowledge related to co-occurrence of various forms of violence specifically, co-occurrence of experiencing teen dating violence and bully victimization. As a result, research which expands on this study to include other methods such as mixed or qualitative designs might allow for development of evidence based practice within prevention programs targeting the co-occurrence population.

### **Implications**

#### **Positive social change**

Potential impact of this study as it relates to social change is change in the landscape of prevention programs which target teens. The results of this study showed a relationship between teen dating violence victimization and bully victimization. Currently prevention programs occur in isolation of each other whereby, the focus is on single forms of violence. An organizational social change impact of this study could be to move the field of teen dating violence prevention towards a co-occurrence focus . Using the results from this study whereby spending time with a parent as a mediating variable which showed that respondents who reported more days spent having dinner with a parent were less likely to report being a victim of dating violence and bullying, may inform and change the family system . Social change for the family system as it relates to

the results of this study can help to educate parents on the important role they play in prevention of dating violence and bullying. On an individual social change level, teens who may not be aware of behaviors and personal factors which puts them at risk for victimization such as shown in this study ( substance use, gender, age, age of first sexual intercourse) can be educated regarding same by incorporating these results into the evidence based practice of practitioners in the field of violence prevention which might change behaviors of teens . Changes in behaviors of teens as it relates to teen dating violence and bullying, may lead to decrease victimization and long term healthy social and intimate relationships. Although the results from this study may not be generalized to populations outside of the sample, researchers in the field of prevention of teen dating violence, youth violence, bullying, and intimate partner violence could build on this study to better impact how public health workers advocate for funding and frame public policy. Furthermore, prevention of teen dating violence may lead to decreases in rates of intimate partner violence as there has been an established link between victimization and perpetration of dating violence in youth and adult intimate partner violence (Grych & Swan, 2012). As a result of the association found in this study as it relates to co-occurrence of teen dating violence victimization and bully victimization, there is a potential to transform how researchers approach studies involving not only teen dating violence but also adult intimate partner violence whereby there might be consideration of co-occurrence of adult bully victimization and adult intimate partner violence . The application of quantitative methods using archival data from the 2013 YRBSS to conduct this study successfully, affords other researchers the opportunity to conduct similar

studies in other populations and compare results to create social change on a larger scale as this study cannot be generalized to larger populations.

### **Conclusions**

Teen dating violence and bully victimization are preventable. Violence is a learned behavior which can be changed based on the social learning theory (Bandura, 1973). Limited studies have examined the co-occurrence of various forms of violence. This study's results showed that there is an association between teen dating violence victimization and bully victimization. Further research which examines if bully victimization makes one more likely to be a victim of teen dating violence is warranted. Public health has focused on identifying risk factors for teen dating violence and bully victimization but struggles to identify protective factors mostly due to the limited research which has been conducted on protective factors (Center for Disease Control and Prevention, 2012a). This research indicated potential protective factor such as eating dinner with a parent but it also identified risk factors such as gender, age, age of first sexual intercourse and substance use. The risk factors which make this study stand out among other research is age of first sexual intercourse and substance use. Respondents who had sexual intercourse at age 11 or younger were more likely to report being a victim of teen dating violence and where there were reports of higher substance use, respondents had higher teen dating violence victimization and bully victimization score. Further research which examines whether using drugs/alcohol put teens in situations where they get bullied or whether they do drugs/alcohol as a result of being bullied is needed. Although this study did not confirm other studies results whereby, African American teens reported being more likely to being a victim of teen dating violence,

however; this study does show that there is a relationship between race/ethnicity and teen dating victimization and bully victimization which should be used to inform prevention programs.

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## Appendix A: 2013 Palm Beach Youth Risk Behavior Survey

*2013 Palm Beach Youth Risk Behavior Survey*

Items identified by bold print represent the subscales that will be used to measure variables in the present study.

**1. How old are you?**

- A. 12 years old or younger
- B. 13 years old
- C. 14 years old
- D. 15 years old
- E. 16 years old
- F. 17 years old
- G. 18 years old or older

**2. What is your sex?**

- A. Female
- B. Male

**3. In what grade are you?**

- A. 9th grade
- B. 10th grade
- C. 11th grade
- D. 12th grade
- E. Ungraded or other grade

**4. Are you Hispanic or Latino?**

- A. Yes

B. No

5. **What is your race? (Select one or more responses.)**

A. American Indian or Alaska Native

B. Asian

C. Black or African American

D. Native Hawaiian or Other Pacific Islander

E. White

6. How tall are you without your shoes on?

7. How much do you weigh without your shoes on?

The next 4 questions ask about safety.

8. How often do you wear a seat belt when riding in a car driven by someone else?

A. Never

B. Rarely

C. Sometimes

D. Most of the time

E. Always

9. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

A. 0 times

B. 1 time

C. 2 or 3 times

D. 4 or 5 times

E. 6 or more times

10. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?

- A. I did not drive a car or other vehicle during the past 30 days
- B. 0 times
- C. 1 time
- D. 2 or 3 times
- E. 4 or 5 times
- F. 6 or more times

11. During the past 30 days, on how many days did you text or e-mail while driving a car or other vehicle?

- A. I did not drive a car or other vehicle during the past 30 days
- B. 0 days
- C. 1 or 2 days
- D. 3 to 5 days
- E. 6 to 9 days
- F. 10 to 19 days
- G. 20 to 29 days
- H. All 30 days

The next 11 questions ask about violence-related behaviors.

12. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?

- A. 0 days
- B. 1 day

C. 2 or 3 days

D. 4 or 5 days

E. 6 or more days

13. During the past 30 days, on how many days did you carry a gun?

A. 0 days

B. 1 day

C. 2 or 3 days

D. 4 or 5 days

E. 6 or more days

14. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club on school property?

A. 0 days

B. 1 day

C. 2 or 3 days

D. 4 or 5 days

E. 6 or more days

15. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?

A. 0 days

B. 1 day

C. 2 or 3 days

D. 4 or 5 days

E. 6 or more days

16. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?

- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times
- G. 10 or 11 times
- H. 12 or more times

17. During the past 12 months, how many times were you in a physical fight?

- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times
- G. 10 or 11 times
- H. 12 or more times

18. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?

- A. 0 times
- B. 1 time

- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or more times

19. During the past 12 months, how many times were you in a physical fight on school property?

- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times
- G. 10 or 11 times
- H. 12 or more times

20. Have you ever been physically forced to have sexual intercourse when you did not want to?

- A. Yes
- B. No

**21. During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon.)**

- A. I did not date or go out with anyone during the past 12 months
- B. 0 times
- C. 1 time

- D. 2 or 3 times
- E. 4 or 5 times
- F. 6 or more times

**22. During the past 12 months, how many times did someone you were dating or going out with force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)**

- A. I did not date or go out with anyone during the past 12 months
- B. 0 times
- C. 1 time
- D. 2 or 3 times
- E. 4 or 5 times
- F. 6 or more times

The next 5 questions ask about bullying. Bullying is when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.

**23. During the past 12 months, have you ever been bullied on school property?**

A. Yes

B. No

**24. During the past 12 months, have you ever bullied someone else on school property?**

A. Yes

B. No

**25. During the past 12 months, have you ever been electronically bullied? (Count being bullied through e-mail, chat rooms, instant messaging, websites, or texting.)**

A. Yes

B. No

**26. During the past 12 months, have you ever been the victim of teasing or name calling because of your weight, size, or physical appearance?**

A. Yes

B. No

**27. During the past 12 months, have you ever been the victim of teasing or name calling because someone thought you were gay, lesbian, or bisexual?**

A. Yes

B. No

The next question asks about hurting yourself on purpose.

28. During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?

A. 0 times

B. 1 time

C. 2 or 3 times

D. 4 or 5 times

E. 6 or more times

The next 5 questions ask about sad feelings and attempted suicide.

Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.

29. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?

A. Yes

B. No

30. During the past 12 months, did you ever seriously consider attempting suicide?

A. Yes

B. No

31. During the past 12 months, did you make a plan about how you would attempt suicide?

A. Yes

B. No

32. During the past 12 months, how many times did you actually attempt suicide?

A. 0 times

B. 1 time

C. 2 or 3 times

D. 4 or 5 times

E. 6 or more times

33. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

A. I did not attempt suicide during the past 12 months

B. Yes

C. No

The next 10 questions ask about tobacco use.

34. Have you ever tried cigarette smoking, even one or two puffs?

A. Yes

B. No

35. How old were you when you smoked a whole cigarette for the first time?

A. I have never smoked a whole cigarette

B. 8 years old or younger

C. 9 or 10 years old

D. 11 or 12 years old

E. 13 or 14 years old

F. 15 or 16 years old

G. 17 years old or older

36. During the past 30 days, on how many days did you smoke cigarettes?

A. 0 days

B. 1 or 2 days

C. 3 to 5 days

D. 6 to 9 days

E. 10 to 19 days

F. 20 to 29 days

G. All 30 days

37. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

A. I did not smoke cigarettes during the past 30 days

- B. Less than 1 cigarette per day
- C. 1 cigarette per day
- D. 2 to 5 cigarettes per day
- E. 6 to 10 cigarettes per day
- F. 11 to 20 cigarettes per day
- G. More than 20 cigarettes per day

38. During the past 30 days, how did you usually get your own cigarettes? (Select only one response.)

- A. I did not smoke cigarettes during the past 30 days
- B. I bought them in a store such as a convenience store, supermarket, discount store, or gas station
- C. I bought them from a vending machine
- D. I gave someone else money to buy them for me
- E. I borrowed (or bummed) them from someone else
- F. A person 18 years old or older gave them to me
- G. I took them from a store or family member
- H. I got them some other way

39. During the past 30 days, on how many days did you smoke cigarettes on school property?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days

E. 10 to 19 days

F. 20 to 29 days

G. All 30 days

40. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?

A. Yes

B. No

41. During the past 12 months, did you ever try to quit smoking cigarettes?

A. I did not smoke during the past 12 months

B. Yes

C. No

42. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

A. 0 days

B. 1 or 2 days

C. 3 to 5 days

D. 6 to 9 days

E. 10 to 19 days

F. 20 to 29 days

G. All 30 days

43. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

The next 6 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

**44. During your life, on how many days have you had at least one drink of alcohol?**

- A. 0 days
- B. 1 or 2 days
- C. 3 to 9 days
- D. 10 to 19 days
- E. 20 to 39 days
- F. 40 to 99 days
- G. 100 or more days

45. **How old were you when you had your first drink of alcohol other than a few sips?**

- A. I have never had a drink of alcohol other than a few sips
- B. 8 years old or younger
- C. 9 or 10 years old
- D. 11 or 12 years old
- E. 13 or 14 years old
- F. 15 or 16 years old
- G. 17 years old or older

46. **During the past 30 days, on how many days did you have at least one drink of alcohol?**

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

47. **During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?**

- A. 0 days
- B. 1 day
- C. 2 days

D. 3 to 5 days

E. 6 to 9 days

F. 10 to 19 days

G. 20 or more days

48. During the past 30 days, what is the largest number of alcoholic drinks you had in a row, that is, within a couple of hours?

A. I did not drink alcohol during the past 30 days

B. 1 or 2 drinks

C. 3 drinks

D. 4 drinks

E. 5 drinks

F. 6 or 7 drinks

G. 8 or 9 drinks

H. 10 or more drinks

49. During the past 30 days, how did you usually get the alcohol you drank?

A. I did not drink alcohol during the past 30 days

B. I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station

C. I bought it at a restaurant, bar, or club

D. I bought it at a public event such as a concert or sporting event

E. I gave someone else money to buy it for me

F. Someone gave it to me

G. I took it from a store or family member

H. I got it some other way

The next 3 questions ask about marijuana use. Marijuana also is called grass or pot.

**50. During your life, how many times have you used marijuana?**

A. 0 times

B. 1 or 2 times

C. 3 to 9 times

D. 10 to 19 times

E. 20 to 39 times

F. 40 to 99 times

G. 100 or more times

**51. How old were you when you tried marijuana for the first time?**

A. I have never tried marijuana

B. 8 years old or younger

C. 9 or 10 years old

D. 11 or 12 years old

E. 13 or 14 years old

F. 15 or 16 years old

G. 17 years old or older

**52. During the past 30 days, how many times did you use marijuana?**

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

The next 10 questions ask about other drugs.

**53. During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?**

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

**54. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?**

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times

F. 40 or more times

**55. During your life, how many times have you used heroin  
(also called smack, junk, or China White)?**

A. 0 times

B. 1 or 2 times

C. 3 to 9 times

D. 10 to 19 times

E. 20 to 39 times

F. 40 or more times

**56. During your life, how many times have you used  
methamphetamines (also called speed, crystal, crank, or ice)?**

A. 0 times

B. 1 or 2 times

C. 3 to 9 times

D. 10 to 19 times

E. 20 to 39 times

F. 40 or more times

**57. During your life, how many times have you used ecstasy  
(also called MDMA)?**

A. 0 times

B. 1 or 2 times

C. 3 to 9 times

D. 10 to 19 times

E. 20 to 39 times

F. 40 or more times

**58. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?**

A. 0 times

B. 1 or 2 times

C. 3 to 9 times

D. 10 to 19 times

E. 20 to 39 times

F. 40 or more times

**59. During your life, how many times have you taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?**

A. 0 times

B. 1 or 2 times

C. 3 to 9 times

D. 10 to 19 times

E. 20 to 39 times

F. 40 or more times

**60. During your life, how many times have you used synthetic marijuana (also called K2 or Spice)?**

A. 0 times

B. 1 or 2 times

- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 to 99 times
- G. 100 or more times

**61. During your life, how many times have you used a needle to inject any illegal drug into your body?**

- A. 0 times
- B. 1 time
- C. 2 or more times

**62. During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?**

- A. Yes
- B. No

The next 9 questions ask about sexual behavior.

**63. Have you ever had sexual intercourse?**

- A. Yes
- B. No

**64. How old were you when you had sexual intercourse for the first time?**

- A. I have never had sexual intercourse
- B. 11 years old or younger
- C. 12 years old

- D. 13 years old
- E. 14 years old
- F. 15 years old
- G. 16 years old
- H. 17 years old or older

65. During your life, with how many people have you had sexual intercourse?

- A. I have never had sexual intercourse
- B. 1 person
- C. 2 people
- D. 3 people
- E. 4 people
- F. 5 people
- G. 6 or more people

66. During the past 3 months, with how many people did you have sexual intercourse?

- A. I have never had sexual intercourse
- B. I have had sexual intercourse, but not during the past 3 months
- C. 1 person
- D. 2 people
- E. 3 people
- F. 4 people
- G. 5 people
- H. 6 or more people

67. Did you drink alcohol or use drugs before you had sexual intercourse the last time?

- A. I have never had sexual intercourse
- B. Yes
- C. No

68. The last time you had sexual intercourse, did you or your partner use a condom?

- A. I have never had sexual intercourse
- B. Yes
- C. No

69. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? (Select only one response.)

- A. I have never had sexual intercourse

- B. No method was used to prevent pregnancy
- C. Birth control pills
- D. Condoms
- E. An IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon)
- F. A shot (such as Depo-Provera), patch (such as Ortho Evra), or birth control ring (such as NuvaRing)
- G. Withdrawal or some other method
- H. Not sure

70. During your life, with whom have you had sexual contact?

- A. I have never had sexual contact
- B. Females
- C. Males
- D. Females and males

71. Which of the following best describes you?

- A. Heterosexual (straight)
- B. Gay or lesbian
- C. Bisexual
- D. Not sure

The next 5 questions ask about body weight.

72. How do **you** describe your weight?

- A. Very underweight
- B. Slightly underweight

C. About the right weight

D. Slightly overweight

E. Very overweight

73. Which of the following are you trying to do about your weight?

- A. Lose weight
- B. Gain weight
- C. Stay the same weight
- D. I am not trying to do anything about my weight

74. During the past 30 days, did you go without eating for 24 hours or more (also called fasting) to lose weight or to keep from gaining weight?

- A. Yes
- B. No

75. During the past 30 days, did you take any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight? (Do not count meal replacement products such as Slim Fast.)

- A. Yes
- B. No

76. During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight?

- A. Yes
- B. No

The next 9 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time

you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

77. During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)

- A. I did not drink 100% fruit juice during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

78. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)

- A. I did not eat fruit during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

79. During the past 7 days, how many times did you eat green salad?

- A. I did not eat green salad during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

80. During the past 7 days, how many times did you eat potatoes?

(Do not count french fries, fried potatoes, or potato chips.)

A. I did not eat potatoes during the past 7 days

B. 1 to 3 times during the past 7 days

C. 4 to 6 times during the past 7 days

D. 1 time per day

E. 2 times per day

F. 3 times per day

G. 4 or more times per day

81. During the past 7 days, how many times did you eat carrots?

A. I did not eat carrots during the past 7 days

B. 1 to 3 times during the past 7 days

C. 4 to 6 times during the past 7 days

D. 1 time per day

E. 2 times per day

F. 3 times per day

G. 4 or more times per day

82. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)

A. I did not eat other vegetables during the past 7 days

B. 1 to 3 times during the past 7 days

C. 4 to 6 times during the past 7 days

- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

83. During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not count diet soda or diet pop.)

- A. I did not drink soda or pop during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

84. During the past 7 days, how many glasses of milk did you drink? (Count the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)

- A. I did not drink milk during the past 7 days
- B. 1 to 3 glasses during the past 7 days
- C. 4 to 6 glasses during the past 7 days
- D. 1 glass per day
- E. 2 glasses per day

F. 3 glasses per day

G. 4 or more glasses per day

85. During the past 7 days, on how many days did you eat  
breakfast?

A. 0 days

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 days

G. 6 days

H. 7 days

The next 5 questions ask about physical activity.

86. During the past 7 days, on how many days were you  
physically active for a total of at least 60 minutes per day? (Add up all the  
time you spent in any kind of physical activity that increased your heart  
rate and made you breathe hard some of the time.)

A. 0 days

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 days

G. 6 days

H. 7 days

87. On an average school day, how many hours do you watch TV?

A. I do not watch TV on an average school day

B. Less than 1 hour per day

C. 1 hour per day

D. 2 hours per day

E. 3 hours per day

F. 4 hours per day

G. 5 or more hours per day

88. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad or other tablet, a smartphone, YouTube, Facebook or other social networking tools, and the Internet.)

A. I do not play video or computer games or use a computer for something that is not school work

B. Less than 1 hour per day

C. 1 hour per day

D. 2 hours per day

E. 3 hours per day

F. 4 hours per day

G. 5 or more hours per day

89. In an average week when you are in school, on how many days do you go to physical education (PE) classes?

A. 0 days

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 days

90. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)

A. 0 teams

B. 1 team

C. 2 teams

D. 3 or more teams

The next 3 questions ask about preventive health care.

91. When was the last time you saw a doctor or nurse for a check-up or physical exam when you were not sick or injured?

A. During the past 12 months

B. Between 12 and 24 months ago

C. More than 24 months ago

D. Never

E. Not sure

92. When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?

A. During the past 12 months

B. Between 12 and 24 months ago

C. More than 24 months ago

D. Never

E. Not sure 93. Have you ever been tested for HIV, the virus that causes AIDS? (Do not count tests done if you donated blood.)

A. Yes

B. No

C. Not sure

The next 5 questions ask about other health-related topics.

94. Have you ever been taught about AIDS or HIV infection in school?

A. Yes

B. No

C. Not sure

95. Has a doctor or nurse ever told you that you have asthma?

A. Yes

B. No

C. Not sure

**96. During the past 7 days, on how many days did you eat dinner at home with at least one of your parents or guardians?**

A. 0 days

B. 1 day

C. 2 days

D. 3 days

E. 4 days

F. 5 days

G. 6 days

H. 7 days

97. When you feel sad, empty, hopeless, angry, or anxious, with whom would you most likely talk about it?

A. I do not feel sad, empty, hopeless, angry, or anxious

B. Parent or other adult family member

C. Teacher or other adult in this school

D. Other adult

E. Friend

F. Sibling

G. Not sure

98. Do you agree or disagree that you feel like you belong at this school?

A. Strongly agree

B. Agree

C. Not sure

D. Disagree

E. Strongly disagree

The next question asks about planning for the future.

99. How likely is it that you will complete a post high school program such as a vocational training program, military service, community college, or 4-year college?

A. Definitely will not

B. Probably will not

C. Probably will

D. Definitely will

E. Not sure

## Appendix B: Notes on Variables and Missing Values in this Study

### **ViolScoreAggregate variable:**

This is an aggregate of 2 variables, Q22ADJ and Q23ADJ, to give a score on date violence:

### **Q22ADJ: Description: Times physically hurt by dates in the last 12 months?**

#### **Possible adjusted responses:**

- 0 - Original code was 1 or 2
- 1 - Original code was 3
- 2 - Original code was 4
- 4 - Original code was 5
- 6 - 6 or more times

#### **Original Responses:**

- 1 - I did not date the past 12
- 2 - 0 times
- 3 - 1 time
- 4 - 2 or 3 times
- 5 - 4 or 5 times
- 6 - 6 or more times

### **Q23ADJ: Description: Forced to do sexual things by dates?**

#### **Possible adjusted responses:**

- 0 - Original code was 1 or 2
- 1 - Original code was 3
- 2 - Original code was 4
- 4 - Original code was 5
- 6 - 6 or more times

#### **Original Responses:**

- 1 - I did not date the past 12
- 2 - 0 times
- 3 - 1 time
- 4 - 2 or 3 times
- 5 - 4 or 5 times
- 6 - 6 or more times

The aggregated ViolScoreAggregate variable coded meanings are as follows:

**Coded responses for the aggregated ViolScoreAggregate variable:**

- 0 - Either did not date or was never physically hurt or forced to have sex.
- 1 - Hurt or forced 1 time
- 2 - Hurt or forced 2 or 3 times
- 3 - Hurt or forced 3 or 4 times
- 4 - Hurt or forced 4 or 5 times
- 5 - Hurt or forced 5 or 6 times
- 6 - Hurt or forced 6 or more times
- 7 - Hurt or forced 7 or more times
- 8 - Hurt or forced 8 or more times
- 10 - Hurt or forced 10 or more times
- 12 - Hurt or forced 12 or more times

**SubstanceUse variable:**

This is an aggregate of 13 variables (Q41, Q42, Q47, Q49, Q50, Q51, Q52, Q53, Q54, Q55, Q56, Q57, and Q91). The original ordinal scores were kept for all but one. The 12 that were not changed were in a progressive order of intensity; whereas, the variable that changed (Q42) was in an opposite direction of intensity, except for the use of one (never drank) – therefore it was reversed, except for a value of one (never drank). Each of the 13 variables are described below along with their possible values. The missing values for the DrugUse variable occur when all 13 variables have missing values for a particular

participant; otherwise, all given numbers are added to give the aggregated score for SubstanceUse.

**SubstanceUseGroups:** From the aggregate total, another variable SubstanceUseGroup was created into group the frequencies and was coded as follows:

0 = 0-5 Negligible Use

1 = 6-13

2 = 14-22

3 = 23-30

4 = 31-39

5 = 40-50

6 = 51-60

7 = 61-79

### **Handling the Missing Values when Transforming**

#### **ViolScoreAggregate:**

The aggregate for this date-violence variable includes Q22 and Q23. The original values for both variables did not include a value of 0 – thus, the original missing values were first set to 0 for Q22 and Q23, and then the Q22ADJ and Q23ADJ values transformed to “Missing”. Therefore, when these adjusted values were added, and both of the adjusted variables were missing, then the ViolScoreAggregate shows “Missing” – but if at least one of the adjusted values had a value, that value appears as the ViolScoreAggregate value and it is not considered missing if at least one of the variables has a valid value (not missing).

$\text{ViolScoreAggregate} = \text{Q22ADJ} + \text{Q23ADJ}$  if neither of the variables are missing.

$\text{ViolScoreAggregate} = \text{Q22ADJ}$  if Q23ADJ is missing.

$\text{ViolScoreAggregate} = \text{Q23ADJ}$  if Q22ADJ is missing.

$\text{ViolScoreAggregate} = \text{Missing}$  if Q22ADJ and Q23ADJ are both missing.

**BullyScoreAggregate:**

This variable is an aggregate of four variables, Q24, Q25, Q88, and Q89, to give a score on experiencing bullying. This variable is only considered missing if all four variables (Q24, Q25, Q88, and Q89 are missing). If only one to three of the variables are missing, then a sum of the remaining values are given as the value of BullyScore Aggregate.

$\text{BullyScoreAggregate} = (\text{Q24} + \text{Q25} + \text{Q88} + \text{Q89})$  if none of the variables are missing.

$\text{BullyScoreAggregate} = (\text{Q25} + \text{Q88} + \text{Q89})$  if Q24 is missing.

$\text{BullyScoreAggregate} = (\text{Q88} + \text{Q89})$  if Q24 and Q25 are missing.

$\text{BullyScoreAggregate} = (\text{Q89})$  if Q24, Q25, and Q88 are missing.

$\text{BullyScoreAggregate} = (\text{Q88})$  if Q24, Q25, and Q89 are missing.

$\text{BullyScoreAggregate} = (\text{Q25} + \text{Q88})$  if Q24 and Q89 are missing.

$\text{BullyScoreAggregate} = (\text{Q25} + \text{Q89})$  if Q24 and Q88 are missing.

$\text{BullyScoreAggregate} = (\text{Q25})$  if Q24, Q88, and Q89 are missing.

$\text{BullyScoreAggregate} = (\text{Q24} + \text{Q88} + \text{Q89})$  if Q25 is missing.

$\text{BullyScoreAggregate} = (\text{Q24} + \text{Q89})$  if Q25 and Q88 are missing.

BullyScoreAggregate = (Q24 + Q88) if Q25 and Q89 are missing.

BullyScoreAggregate = (Q24) if Q25, Q88, and Q89 are missing.

BullyScoreAggregate = (Q24 + Q25 + Q89) if Q88 is missing.

BullyScoreAggregate = (Q24 + Q25 + Q88) if Q89 is missing.

BullyScoreAggregate = (Q24 + Q25) if Q88 and Q89 are missing.

BullyScoreAggregate = Missing if Q24, Q25, Q88 and Q89 are all missing.

### **Handling the Missing Values when Transforming**

#### **SubstanceUse:**

There were no variables that were aggregates of this variable which had 0 as a valid value, therefore, all missing values were initially transformed to 0. Then, the addition, of all of the 13 variables (Q41, Q42, Q47, Q49, Q50, Q51, Q52, Q53, Q54, Q55, Q56, Q57, and Q91), was completed and the sums were put into the variable referred to as SubstanceUse. Finally, a transformation was done on SubstanceUse changing all 0 values to missing. As a result, only the sums that added to 0 are considered missing, and this only takes place if all 13 variables are missing. The missing for the SubstanceUse variable carries over to a missing value for the SubstanceUseGroups.

## Appendix C: Permission to Use 2013 Palm Beach County YRBS Data Set and

### Questionnaire

-----Original Message-----

From: Whittle, Lisa (CDC/OID/NCHHSTP) (CDC/OID/NCHHSTP) <[klw4@cdc.gov](mailto:klw4@cdc.gov)>  
To: 'Rosemarie Hemmings' <[rhemm18005@aol.com](mailto:rhemm18005@aol.com)>  
Sent: Tue, Aug 23, 2016 2:01 pm  
Subject: RE: YRBS Contact Form

Yes, Palm Beach county gave permission for you to use their data. People download our questionnaire and may use it for their studies (not funded by us) at any time so no it is not copyrighted.

**From:** Rosemarie Hemmings [<mailto:rhemm18005@aol.com>]  
**Sent:** Tuesday, August 23, 2016 4:59 PM  
**To:** Whittle, Lisa (CDC/OID/NCHHSTP) <[klw4@cdc.gov](mailto:klw4@cdc.gov)>  
**Subject:** Re: YRBS Contact Form

Lisa,

Hope all is well with you. I am finalizing my study and my review committee is asking me about if the 2013 Palm Beach County Youth Risk Behavior **Survey** was is in the public domain. I believe it was but just making sure. Also is it copyrighted? I used the dataset as my study was a secondary analysis study but I have to attach a copy of the survey to the study.

Rosemarie Hemmings

-----Original Message-----

From: Whittle, Lisa (CDC/OID/NCHHSTP) (CDC/OID/NCHHSTP) <[klw4@cdc.gov](mailto:klw4@cdc.gov)>  
To: '[rhemm18005@aol.com](mailto:rhemm18005@aol.com)' <[rhemm18005@aol.com](mailto:rhemm18005@aol.com)>  
Sent: Fri, Jan 15, 2016 11:50 am  
Subject: FW: FW: YRBS Contact Form

Hi Rosemary,

The attached zip folder has Palm Beach's YRBS data in available formats as well at the codebook.

Please let me know if you have questions.

Lisa

Lisa Whittle, MPH

Health Scientist  
Division of Adolescent and School Health  
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention  
Centers for Disease Control and Prevention

[404.718.8084](tel:404.718.8084)

[klw4@cdc.gov](mailto:klw4@cdc.gov)

**From:** Pete Stewart [<mailto:william.stewart@palmbeachschools.org>]  
**Sent:** Thursday, January 14, 2016 7:28 PM  
**To:** Whittle, Lisa (CDC/OID/NCHHSTP) <[klw4@cdc.gov](mailto:klw4@cdc.gov)>  
**Subject:** Re: FW: YRBS Contact Form

Yes.

Pete Stewart, MPH, CPH

On Jan 14, 2016 3:14 PM, "Whittle, Lisa (CDC/OID/NCHHSTP)" <[klw4@cdc.gov](mailto:klw4@cdc.gov)> wrote:

Hi Pete,

Do you give permission for me to send Rosemary your data? See below.

Thanks

Lisa

Lisa Whittle, MPH

Health Scientist

Division of Adolescent and School Health

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Centers for Disease Control and Prevention

[404.718.8084](tel:404.718.8084)

[klw4@cdc.gov](mailto:klw4@cdc.gov)

**From:** Rosemarie Hemmings [<mailto:rhemm18005@aol.com>]  
**Sent:** Monday, January 11, 2016 11:51 PM  
**To:** Whittle, Lisa (CDC/OID/NCHHSTP) <[klw4@cdc.gov](mailto:klw4@cdc.gov)>  
**Cc:** [William.Stewart@palmbeach.k12.fl.us](mailto:William.Stewart@palmbeach.k12.fl.us); [rhemm18005@aol.com](mailto:rhemm18005@aol.com)  
**Subject:** Re: YRBS Contact Form

I have received IRB approval for my study ( see below) and I am formally requesting the 2013 YRBS dataset from Palm Beach County, Florida for SPSS.

----- Forwarded message -----

From: **IRB** <[irb@waldenu.edu](mailto:irb@waldenu.edu)>  
Date: Mon, Jan 11, 2016 at 4:30 PM  
Subject: IRB Materials Approved - Rosemarie Hemmings  
To: "Rosemarie Hemmings ([rosemarie.hemmings@waldenu.edu](mailto:rosemarie.hemmings@waldenu.edu))" <[rosemarie.hemmings@waldenu.edu](mailto:rosemarie.hemmings@waldenu.edu)>  
Cc: "Peter B. Anderson" <[peter.anderson@waldenu.edu](mailto:peter.anderson@waldenu.edu)>  
Dear Ms. Hemmings,

This email is to notify you that the Institutional Review Board (IRB) confirms that your study entitled, "Teen dating violence: Co-occurrence with bullying among African American teens living in South Florida," meets Walden University's ethical standards. Our records indicate that you will be analyzing data provided to you by the CDC, specific to Palm Beach County, as collected under its oversight. Since this study will serve as a Walden doctoral capstone, the Walden IRB will oversee your capstone data analysis and results reporting. The IRB approval number for this study is 01-11-16-0156590.

Thank you,  
Rosemarie Hemmings