

ASSOCIATIONS BETWEEN DATING VIOLENCE AND PREGNANCY
PREVENTION BEHAVIOR AMONG U.S. ADOLESCENTS: FINDINGS FROM THE
2013, 2015, AND 2017 YOUTH RISK BEHAVIOR SURVEYS

by

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Abstract

Unplanned pregnancy rates continue to remain significantly higher among adolescents attending high school in the United States in comparison to adolescents in other industrialized countries. Previous research studies have shown that the use of pregnancy prevention methods is influenced by various social determinants. The aim of this study was to determine how dating violence victimization affects the frequency of use of pregnancy prevention methods among adolescents attending high school in the United States.

Specifically, to what extent does dating violence victimization affect an adolescent's ability to recognize use of pregnancy prevention methods are needed (precontemplation) and actually consistently using a prevention method during sexual activity (action). Guided by the precontemplation and action tenets of the transtheoretical model (Prochaska & Di Clemente, 1994) and Erickson's developmental theory (1968), the goal of this study was to determine if an association existed between dating violence victimization, physical and/or sexual, grade, race, gender, and frequency of use of pregnancy prevention behaviors among adolescents attending high school in the United States. Data sets were also examined to determine if a relationship existed between acts of dating violence and use of prevention methods, mental health, and alcohol and drug use.

Using selected items from the 2013, 2015, and 2017 Youth Risk Behavior Survey, a secondary analysis of data was conducted. A sample of high school students yielded results from 10,473 questionnaires. Analyses of the questionnaire responses indicated there is an associative relationship between dating violence victimization and the frequency of use of pregnancy prevention methods. This results of this study also revealed a relationship between dating violence, associative factors, and use of pregnancy prevention methods.

However, significance varied based on race, gender, grade level, and type of dating violence victimization. On this basis, it is recommended stakeholders use these findings to develop pregnancy prevention interventions based on individual needs guided by race, gender, grade level, and type of dating violence experienced. This study provides a framework for the development of new innovative approaches to advance prevention strategies through policies, practices, and programs based on current research.

DEDICATION

This dissertation is dedicated to my mother, Joanne L. Saffold-Miles. Gone but not forgotten... your support and encouragement are resonating in my soul.

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CHAPTER I: INTRODUCTION

The discourse around teenage pregnancy is multifaceted and includes topics such as the economic impact on society, ethics of abortion, infant abandonment, effects of single parenthood on children, etcetera. According to the United Nations International Children's Emergency Fund (UNICEF, 2008), teenage pregnancy is defined as conceiving between the ages of 13-19 years of age. Globally, approximately 16 million teenagers give birth each year, which accounts for roughly 11% of births. Dating back to the 1970s, discourses regarding teenage pregnancy focused on the economic drain on society caused by this epidemic (Tapia, 2005). Historically, the discourse shifted depending on the political climate and other social dynamics. Teenage pregnancy impacts the entire community. According to the Centers for Disease Control (CDC, 2018) teen mothers are more likely to have low socioeconomic status in their lifetime resulting in a dependency on public assistance. Children of teenage mothers are more likely to be born premature and abused. In addition, female children are more likely to become teenage parents and male children are more likely to be incarcerated at some point in their lifetime. These factors contribute to negative outcomes and predict generational poverty within the family for teenage pregnancy girls.

Unfortunately, statistics show sexually active adolescents continue to not use pregnancy prevention methods consistently. Results of the 2015 Young Risk Behavior Surveillance (YRBS) survey indicated 41% of high school students reported having sexual intercourse (Kann, McManus, Harris, et al. 2016). However, despite widespread initiatives, only 53.8% used a condom to prevent pregnancy during their last sexual encounter. Although there have been significant declines in teenage pregnancy rates in

the United States, rates remain substantially higher in poverty-stricken and urban areas. In addition, disparities in rates exist across races. Evidence shows inequality in education and lack of opportunities resulting from financial constraints negatively impact poverty-stricken environments (CDC, 2018). These urban areas are not only plagued by poverty but also other multifaceted social determinants. Evidence has shown this population of adolescents engages in risky behaviors as a result of negative social exposure in their environment. Through the lens of the lived experience of this researcher, this population is at risk of partaking in activities without considering the consequences, such as unprotected sex putting this group at greater risk of unplanned pregnancies and resulting adverse outcomes. “There is significant disparity in the rates of teen and unintended pregnancy by race/ethnicity, education, and income level. The unintended pregnancy rate is higher in poor women compared with their wealthier counterparts” (Parks & Peipert, 2013, p. 682). In addition, disparities continue to exist between sexually active and non-sexually active subgroups. Risk sexual behaviors, mental health, and drug and alcohol use are predictors that contribute to unplanned pregnancies among adolescents in the United States. Data collection at the local, state, and national level is a critical component of developing effective interventions for high risk groups. Large data sets such as the Youth Risk Behavior Surveillance (YRBS) can be used to analyze variables that affect the use of prevention methods in adolescents. Understanding the forces that drive these behaviors is challenging but critical to the development of effective adolescent pregnancy prevention interventions and programs.

Background and Justification

During the 1990s, pregnancy rates decreased in the United States secondary to the increase in use of contraceptives. According to the CDC (2016), condom use among sexually active teens increased during the period of 1991–2003 from 46% to 63%. However, the rates did not change significantly from 2003–2015. Condom use rates among sexually active teen actually decreased from 63% to 57%. Pregnancies reported by women that are unplanned and/or unwanted are considered unintended pregnancies. According to Finer and Zolna (2016), almost half (45%) of the 6.1 million pregnancies occurring annually in the United States are unintended. Teenagers are among the highest group for unplanned pregnancies partly because of the lack of use of effective contraceptives. Approximately 195,000 babies were born to teen mothers aged 15 to 19 years old in 2017. This is a record low for the United States (Martin et al., 2017). However, the teenage pregnancy rate in the United States remain substantially higher than in other industrialized nations (Sedgh et al., 2015).

Adolescent parenthood is associated with many negative outcomes including increased high school dropout rates of parents, child neglect, and cyclic occurrence of teenage pregnancy for children of teenage parents. In addition, according to The National Campaign to Prevent Teen and Unplanned Pregnancy (2013), children born to teenage parents are more likely to have other poorer outcomes including health and behavioral issues in comparison to children born to middle age parents. Unplanned pregnancies also affect community members who are stakeholders in the healthcare of pregnant adolescents. Available resources for teenage parents such as public assistance programs, foster care, criminal justice services, and healthcare expenses are estimated to cost United

States taxpayers approximately \$9.4 billion dollars annually (CDC, 2019). These costs also include fees for prenatal care, labor and delivery, and postpartum care. This financial burden emphasizes the critical importance of addressing all factors that contribute to adolescent pregnancy in the United States.

Dating violence among teens has been identified as a contributing factor to increased risk for teenage pregnancy. Labeled “the hidden epidemic” by Sousa (1999), teen dating violence has been identified as a contributing factor to negative outcomes among adolescents. Victims of dating violence are more likely to not use pregnancy prevention methods in comparison to their retrospective counterparts. Victims of teen dating violence are more likely to engage in unhealthy behaviors that result in negative outcomes including teenage pregnancy. According to the CDC (2012), teen dating violence can be physical, emotional, or sexual. Teen dating violence also includes stalking. Due to the increased use of technology, teen dating violence can occur via social media, online applications, and phone text messages. According to a report published by Redfield et al. (2018), results from the 2017 national YRBS indicated the prevalence of dating violence among teens in the United States ranged 6.8% to 11.9% (median of 9.2%) across 20 large urban school districts. These shocking results solidify the need for further investigation and the development of effective interventions.

It is evident there is a decrease in access to health care, income, and lack of positive influence in poverty-stricken areas. There is evidence of effective prevention methods such as condoms and birth control pills available and yet pregnancy among teens remains an issue. Adolescent pregnancy rates continue to be higher in poverty-stricken areas even with the availability of no cost options and increased access to care.

Further exploration is needed to identify variables other than barriers to access and cost that affect the use of prevention methods. Literature is lacking information on the correlation between the use of pregnancy prevention methods and contributing factors affecting teenagers including dating violence, mental health, and alcohol and drug use. This study addresses gaps in knowledge regarding the association between dating violence and lack of prevention methods use among sexually active adolescents and risk behaviors, mental health, and drug and alcohol abuse as predictors for teenage pregnancy.

Statement of the Problem

Teenage pregnancy rates have consistently declined worldwide over the past decade. In spite of these declines, the teen birth rate in the United States remains one of the highest among all industrialized countries (CDC, 2019). In an effort to develop effective techniques to prevent teenage pregnancy, researchers must consider the multifaceted dynamics of contributing factors associated with teenage pregnancy. Data from several studies identified low socio-economic status as a barrier for the prevention of teenage pregnancy. According to the CDC (2016), there is a strong association between teenage pregnancy and area-based deprivation. This is evident by rates continuing to be significantly lower in areas of higher socioeconomic status. There is also a link between poverty and lack of available health services. However, research studies have not sufficiently explored the use of prevention methods associated with risk sexual behaviors, dating violence, mental health, and alcohol and drug use.

The prevalence of adolescent pregnancy warrants further examination of the association of risk factors and the impact of dating violence on the use of prevention methods. Bonomi et al. (2013) found that dating violence among adolescents contributed

to adverse outcomes including unfavorable health outcomes such as depressive symptoms and frequent sexual risk behaviors. Using secondary analysis from the YRBS, this researcher analyzed the association between dating violence and the use of pregnancy prevention methods and associative effects of mental health and drug and alcohol use. Specifically, the researcher used the database to analyze the use of pregnancy prevention methods associated with risk sexual behaviors and/or dating violence among adolescents attending high school.

Purpose of the Study

The purpose of this study was to determine if an association existed between dating violence victimization, use of pregnancy prevention methods, grade, gender, ethnicity, and type of dating violence among adolescents; and to examine the association between dating violence victimization and risk sexual behaviors, mental health, and drug/alcohol use on use pregnancy prevention methods.

Significance of the Study

This researcher explored the effects of dating violence among adolescents attending high school in the United States by seeking to determine if an association exists between the use of prevention methods and the incidence of dating violence victimization. This researcher sought to examine adolescents' risk sexual behaviors, mental health, or drug/alcohol use and analyze the relationship between the aforementioned factors, dating violence, and use of pregnancy prevention methods.

Research Questions

R1: Is dating violence associated with prevention methods in adolescents

R2: Does risk sexual behaviors, mental health, or drug/alcohol use serve as a factor between dating violence and the use of prevention methods in adolescents?

Definition of Terms

The following definitions, adopted were utilized in this study:

Physical dating violence is:

Defined as the intentional use of physical force with the potential for causing death, disability, injury, or harm. Physical violence includes, but is not limited to: scratching, pushing, shoving, throwing, grabbing, biting, choking, shaking, hair-pulling, slapping, punching, hitting, burning, use of a weapon (gun, knife, or other object), and use of restraints or one's body, size, or strength against another person (Breiding et al., 2015, p. 11).

Sexual dating violence is:

Defined as a sexual act that is committed or attempted by another person without freely given consent of the victim or against someone who is unable to consent or refuse. Sexual violence can also occur when a perpetrator forces or coerces a victim to engage in sexual acts with a third party (Breiding et al., 2015, p. 11).

Teenage/adolescent pregnancy is defined as conceiving between the ages of 13–19 years of age (UNICEF, 2008).

Justification of Conceptual Framework

The researcher used the tenets of the transtheoretical model (TTM) as the organizing framework of this research to conceptualize factors affecting adolescent use of pregnancy prevention methods, including adolescents' readiness for change. This theoretical model, guided by the work of Prochaska and Di Clemente (1983), provides a framework within which to predict and understand the relationship between the intentional behavioral change and the psychological processes involved in an individual's progression between stages (See Appendix A). The precontemplation to model guided by

the study. This researcher analyzed factors that affect an individual's progression from the precontemplation stage to the action stage.

Tenets of the Transtheoretical Model (TTM)

The TTM has been used in past studies to successfully analyze the health behaviors of individuals in regard to substance abuse, smoking, and drinking among others. Interventions using the TTM take into consideration the physical and social environments of the population influencing an individual's readiness for change to healthier habits. The theory implies individuals change behaviors during a cyclical process occurring over time. The cyclical process includes stages based on an individual's readiness and motivation to change their behavior. Readiness to change is a critical concept of this theory influenced by the attitude towards the expected outcome. TTM is composed of five constructs that identify behaviors specific to a person's intention and readiness to take control over their actions and implement positive lifestyle changes. Individuals progress through a cyclical process with the following stages: (a) precontemplation, (b) contemplation, (c) preparation, (d) action, and (e) maintenance that work together to predict behavioral achievement based on motivation and ability.

The precontemplation stage includes individuals who do not recognize the need for change or do not have any interest in changing. The contemplation stage includes individuals who are thinking about changing the negative behavior possibly in the next 6 months. Individuals in the preparation stage are actively planning for change possibly in the next 30 days. During the action stage, individuals actually adopt and implement new habits. The last stage, maintenance, includes individuals who have been practicing the healthier behavior for more than 6 months. According to Horowitz (2003), "The stages of

change are the temporal dimension of the TTM that describe when particular shifts in attitudes, intentions, and behaviors occur that result in the adoption of healthier habits and the cessation of unhealthy ones” (p. 305). Individuals can relapse during any stage and require new interventions to motivate the individual to restart the behavior change.

Prevention of teenage pregnancy falls into the realm of both biomedicalization and medicalization. According to Giami and Perrey (2012), “The concept of biomedicalization helps to better understand the passage from the medicalization of some conditions to the medicalization of health and ordinary lifestyles” (p. 354). For years, teenage pregnancy prevention strategies focused solely on behavioral modifications. Prevention has shifted from behavioral modifications, such as teaching abstinence alone, to the use of pharmacological interventions. Replacing the need for individual change shifts the burden of teenage pregnancy prevention from the individual to the efficient use of medications. However, making the target population aware of the problem and possible solutions is not sufficient to influence or change intentions to prevent teenage pregnancy. The use of pregnancy prevention methods is a complex health behavior requiring the initiation rather than cessation of behavior, for example smoking. Therefore, characteristics of the TTM relevant to promoting the consistent use of prevention methods is different than ideas formulated for the cessation of smoking.

A major limitation of behavioral change programs is that they are based on an action paradigm. For example, pregnancy prevention strategies often focus on decreasing costs of prevention methods and access to clinical services. The aforementioned strategies are indeed critical components of pregnancy prevention initiatives. However, the factors are only applicable to adolescents who are ready and willing to take action.

These strategies are not effective for adolescents who do not recognize the need for change or have any interest in changing. Exploring factors that increase an adolescent's understanding for the need of behavior change to the individual actually implementing the new habits needs to be explored further. Prochaska et al. (1994) suggested positive lifestyle modifications most likely occur over time through a series of stages. In addition, because the stages are not necessarily linear, the active use of various strategies and processes are required in order for the individual to be capable of adapting to the different stages that occur during behavioral change. Individuals may regress to earlier stages of change when faced with factors that threaten progress. Prochaska and Di Clemente (1994) emphasized the critical importance of systematically exploring the determining social factors of behavior change. Identifying to what extent preventative methods are under an individual's control and understanding mechanisms for behavior change are needed in order to design effective prevention strategies. These identified beliefs should then serve as the guiding framework for adolescent pregnancy prevention programs.

One must consider the thinking processes of an adolescent. The juvenile brain is basically a psyche or ban, a psychosocial stage among youth and adulthood, and between the profound quality educated by the kid, and the morals to be created by the grown-up (Erikson, 1963). A strong sense of self and personal identity are the underlying driving forces determining both behavior and intention. According to Erikson (1968), establishing personal identity hinges on the availability of belief systems and roles, the meanings of each to the individual, and the intersection of these beliefs and roles. During Erikson's fifth stage of the developmental theory, identity versus role confusion, adolescents explore personal values and beliefs in a search of personal identity.

According to Bee (1992), through exploration occurring during this stage an adolescent develops a reintegrated feeling of self, of what one needs to do or be, and of one's proper sex task. The values an adolescent set for themselves during this stage is the foundation of the precontemplation phase of the model. During this time, an individual may begin to recognize and understand the need for change in their behavior. However, this realization may not progress from precontemplation to action if dating violence is a factor in their dating relationship.

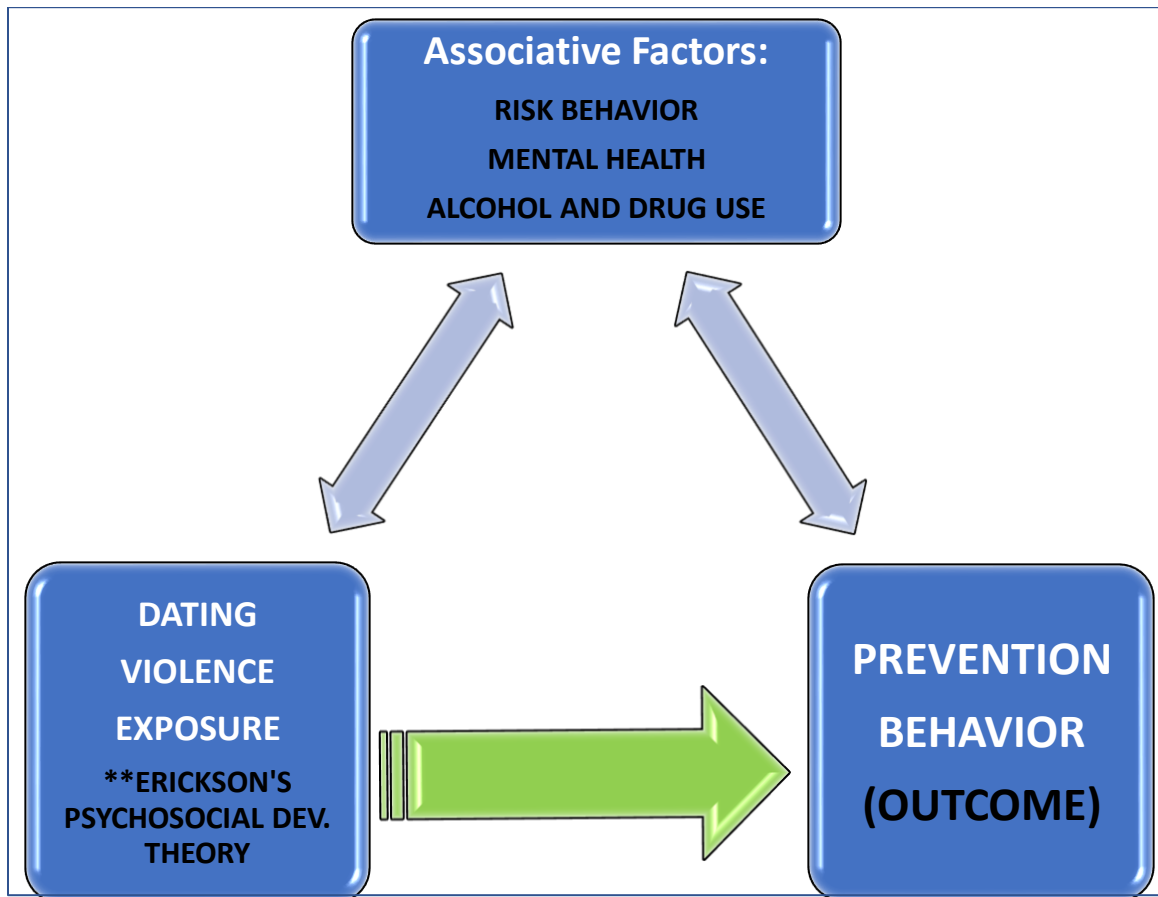
The inability to develop a sense of self results in an identity crisis. The identity crisis is of critical importance in an individual's development. Failure to resolve an identity crisis can cause identity confusion negatively affecting an individual throughout their lifespan. Adolescents who are victims of dating violence are more likely to report an increased number of adverse outcomes during young adulthood in comparison to adolescents to who are not victims of dating violence (Exner-Cortens et al., 2013). A key component of the TTM is the emphasis on one's self-efficacy and their environment. Past experiences and personal factors act as guiding forces in influencing one's behavior. Adverse childhood experiences play a critical role in the decisional balance of adolescents. According to the CDC (2018), adverse childhood experiences (ACEs) is the term used to describe traumatic experiences that occur to people under the age of 18 including abuse and neglect. Adverse childhood experiences have been linked to an increase in risky sexual behaviors and unintended pregnancies.

This researcher applied the precontemplation and action theoretical tenets of the TTM as it relates to Erickson's developmental theory identity versus role confusion and the development of adolescents' self-efficacy. Figure 1 graphically depicts the two tenets

of the TTM, precontemplation (dating violence and associative factors) and action (prevention behavior as the outcome) used for this study. The precontemplation to action model served as the conceptual framework for this research to analyze social factors that impact pregnancy prevention behavior of adolescents in an effort to develop and disseminate interventions specifically tailored to the target population.

Figure 1

A theoretical map of the research study



CHAPTER II: REVIEW OF THE LITERATURE

Literature Search Strategy

The researcher used the Rutgers University library to perform the literature review search. Articles used for reference were peer-reviewed and available as full-text. The majority of articles came from CINAHL and ERIC. However, the researcher reviewed articles from other databases for significance and/or to help the reader establish a strong foundation of the research content. Articles were filtered by year range (2011–2018) and included the following keywords: *teenage pregnancy*, *teenage pregnancy AND risk sexual behavior*, *teen pregnancy AND dating violence*, *adolescent pregnancy prevention*, *adolescent pregnancy and mental health*, *teenage pregnancy AND drug and alcohol use*.

Literature Review

The review of literature suggested knowledge of prevention options as one of the most effective methods of teenage pregnancy prevention. However, use depends on factors such as access, knowledge of options and recommendations of healthcare providers. Horowitz (2003) stated:

Practitioners need to focus on shifting decisional balance in the early stages of condom use when perceived cons are high. For individuals in the precontemplation and contemplation stages, practitioners should consider using consciousness raising and self-reevaluation to emphasize the advantages of using pregnancy prevention methods. Providing assistance with enhancing self-efficacy should be addressed in the later stages (preparation, action, maintenance) when the advantages of condom use are realized. (p. 319).

Dating violence has been identified as a critical factor negatively affecting the self-efficacy and decisional ability of female adolescents. Findings from previous research studies suggest the onset of dating violence among adolescents was at or before ages 15–16 years old for females (Shorey et al., 2017). This study analyzed the impact of psychological and developmental factors on an adolescent's choice to use preventative methods.

A View Through the Lens of Erikson's Developmental Theory

Previous research studies focus primarily on behavioral modifications. Adolescence is a crucial developmental stage presenting a number of challenges related to intimacy and the emergence of beginning romantic relationships (Van de Bongardt et al., 2015). Developing effective prevention strategies requires researchers to address developmental stages of adolescents. Hall et al. (2019) found evidence of an association between increased exposure to adverse experiences during childhood and an increased risk of unintended first pregnancies among young adult females in a large cohort study. Negative experiences during adolescence, such as dating violence, is an important factor in an individual's health and willingness to both learn and change. Victims may not be willing to learn or implement effective prevention behaviors based off of the opinions of their partners.

Prevention Behaviors

There are many contributing factors negatively impacting the prevention behaviors of adolescents. Prevention behavior is an indicator of the likelihood of an adolescent partaking in risky sexual activity and/or using preventive methods. Yen et al. (2010) suggested contraceptive methods that do not require patient participation or

follow-up has the potential to decrease unplanned pregnancies because patient compliance is not required. In 2007, the American College of Obstetricians and Gynecologists (ACOG) Committee published a statement supporting the use of intrauterine devices as safe in adolescents. The committee also outlined the major benefits of this choice in comparison to other contraceptive options. Intrauterine devices are the best available option and yet they continue to be underutilized by this population. In a review by McNicholas and Peipert (2012), long-acting reversible contraceptives (LARC) were found to be a safe and effective method of pregnancy prevention in this population. It was highly recommended for LARC methods to be used as the first line of defense for prevention of teenage pregnancy in adolescents seeking contraception. Although this method is highly recommended and an effective prevention method, adolescents fail to utilize this method. The 2017 YRBS survey results showed that of the 28.7% currently sexually active high school students nationwide, only 4.1% reported that either they or their sexual partner had used an intrauterine device. No pregnancy prevention method was used by 13.8% of sexually active adolescents surveyed (Redfield et al., 2018). Unfortunately, utilization of other pregnancy prevention methods among sexually active adolescents continue to fail as well.

Many high school students admitted to engaging in sexual risk behaviors that could potentially result in both short-term and long-term negative outcomes such as sexually transmitted infections, HIV, and unplanned pregnancies. According to the 2017 YRBS survey results published by Redfield et al. (2018), 39.5% of students surveyed never had sexual intercourse, and 9.7% of students admitted to being sexually active with four or more persons during their life. Of the sexually active teens surveyed, only 53.8%

reported using a condom during their last sexual intercourse. This equates to 46.2% of currently sexually active adolescents in the United States continuing to fail to use prevention methods that prevent unintended pregnancies.

Barriers such as lack of access to health care, cost, and lack of knowledge regarding options contribute to the decreased use of contraceptives in urban populations. Fleming et al. (2010) conducted a study at an urban family planning clinic. The study included surveying 252 women, ages 14–26 years about IUDs as well as their birth control history. Fifty-five percent had not heard of LARC methods including intrauterine devices. This is a clear example that sufficient knowledge of pregnancy prevention options is low in adolescents and young women. Unfortunately, this is the group with the highest number of unintended pregnancies. Therefore, healthcare providers should make it a priority to provide adequate education of contraceptive options available to this patient group. Eisenberg et al. (2013) stressed the high forthcoming expense of contraceptives is one of the most significant obstructions to utilization. Arrangement of no-cost contraception has been shown to essentially decrease the high schooler birth rate, abortions, and repeat abortions. In an effort to reduce unplanned pregnancies in the St. Louis region, the Contraceptive CHOICE Project removed the aforementioned barriers to LARC use. Secura et al. (2014) published an article discussing the results of the prospective cohort study; which included 1404 female participants aged 15–19 years of age. The findings indicated teenagers provided with no cost contraception options have much lower rates of unintended pregnancies, births, and abortions. As a result of the study, Birgisson et al. (2015) reported the results of the CHOICE Project proved when access and cost barriers are removed and women are provided with comprehensive,

accurate, unbiased counseling, women prefer the most effective, reversible contraceptive methods to prevent pregnancy.

The aforementioned study did not address other social determinants associated with the lack of use of pregnancy prevention methods among adolescents. Unintended pregnancies continue to occur even when resources such as no-cost contraception and access to care are available to the adolescents in the community. Therefore, it is a priority for researchers to analyze social factors that affect the aforementioned determinants negatively influencing the use of contraception methods among adolescents in the United States.

Dating Violence

Previous research studies have identified a link between dating violence victimization and pregnancy prevention behaviors of adolescents. “Dating violence” is interpreted by the United States Department of Justice (2019) as violence committed by a person who is or has been in a relationship of an intimate or romantic nature with the victim. Vagi et al. (2015) conducted a cross-sectional study of the 2013 YRBS. Findings from the study estimated that about 21% of high school aged female respondents and 10% of high school aged male respondents who have dated experience physical and/or sexual dating abuse. According to Redfield et al. (2018), results of the 2017 YRBS survey indicate the prevalence of forced sexual intercourse among adolescents attending schools in large urban districts across 34 states range from 5.7% to 19.2%. Among approximately 68% of students nationwide who dated someone in the last 12 months before the survey, 6.9% had been forced to do “sexual things” including being forced to have sexual intercourse. Hébert et al. (2017) conducted a study of 8,194 high school

adolescents and found one out of five girls reported some form of sexual coercion in their relationships. The sexual coercion included tactics such as arguments as well as physical force in the majority of cases reported. Subsequently, the ability move to from the precontemplation phase to the action phase of the conceptual model is jeopardized.

Mental Health

Both bullying and suicidal ideation among adolescents are areas that continue to be explored in research studies. In a study conducted by Redfield et al. (2018), results of the 2017 YRBS survey indicated that in the year before the survey, approximately 19% of high school students were bullied on school property. Shockingly, 7.4% of high school students attempted suicide. Other researchers confirmed the relationship between the two factors. Geel et al. (2014) found the correlation between peer victimization and suicide attempts in children and adolescents is robust. Meta-analysis confirmed the strength of the relationship. Dating violence is a form of peer victimization that has been found to be a major contributor of unfavorable health outcomes including symptoms of unstable mental health. Holmes and Sher (2013) stressed the association between an increase in suicidal ideation and dating violence among adolescents is a major public health concern that must be examined. Several researchers explored the impact abuse victimization has on mental health. Nahapetyan et al. (2014) found victims of dating violence in high school have a significantly higher chance of also displaying behaviors of suicidal ideation.

Adolescents with present indicators of mental health, such as depression and suicidal ideation, may not be interested in changing prevention behavior. Therefore, adolescents with mental health issues may lack the ability to move from

precontemplation to action. In a research study that explored the link between four types of peer victimization, Kim et al. (2018) discovered dating violence had a profound direct effect on attempted suicide among both male and female high school students. Further research that focuses on the causal relationship between suicidality and dating violence is needed to help develop a better understanding of the association between the two factors (Holmes & Sher, 2013). This study addressed the association between suicidality and victims of dating violence. In addition, outcomes of this study will help researchers develop a better understanding of how suicidality affects an adolescent's ability to make decisions in regard to pregnancy prevention behavior.

Alcohol and Drug Use

Substance use among adolescents has become common. A shocking percentage of high school students reported substance abuse during the YRBS survey. In fact, approximately 36% of students used marijuana in their lifetime, and 30% reported current alcohol use (Redfield et al., 2018). Previous researchers focused on substance use among adolescents. Research on substance use among adolescents tends to be largely focused on prevalence, differences between socioeconomic status, and youth in urban areas. However, researchers often fail to focus on the impact of substance use on dating violence among adolescents and the association of use of pregnancy prevention methods. This is unfortunate because a relationship between TDV and substance use has been confirmed by researchers. Espelage et al. (2018) emphasized combined alcohol and drug use was a significant risk factor for TDV among adolescents. Youth who are not yet victims of dating violence increase chances of victimization when partaking in substance use. Epstein-Ngo et al. (2013) conducted an observational study examining substance use

among adolescents in the Emergency Department of Hurley Medical Center. The results of the study indicated youth who use substances may be at an increased risk of becoming a victim of dating violence (Epstein-Ngo et al., 2013). Some youth with a history of dating violence reported using illegal substances at the beginning of the relationship to build confidence, during the relationship to manage the violence encountered by their partner, and afterward as a coping mechanism for the ending of the relationship (Baker, 2016). Substance use was also found to be encouraged by an abuser in an effort to manipulate the victims of dating violence. In a study by Hébert et al. (2017), one out of five adolescent girls surveyed reported some form of sexual coercion tactics by their romantic partner that included using alcohol or drugs to influence their willingness to engage in sexual activity.

Adolescents may not be interested in changing prevention behavior when under the influence of drugs and/or alcohol. This presents a huge issue for the 18.8% of 28.7% sexually active high school students who admittedly drunk alcohol or used drugs prior to their last sexual intercourse (Redfield et al., 2018). Adolescents' decision to use pregnancy prevention methods may be negatively influenced by substance use. These negative influences are potentially dramatically increased when coupled with dating violence. Additionally, the action phase of the conceptual framework is jeopardized even for adolescents who progress from the precontemplation phase if the individual is under the influence of substance use before or during a sexual encounter.

Gaps in the Literature

In summary, the review of literature suggested there was possibly an association between dating violence and the use of prevention methods among adolescents. Niolon et

al. (2015) stressed that although evidence suggested that TDV rates may be high among high-risk urban middle school students, research is limited, and minimal prevention efforts have targeted this population. Previous cross-sectional research studies show teen dating violence is associated with self-destructive behaviors including risky sexual behaviors, alcohol, and drug use (Vagi et al., 2015). However, previous research has not examined to what extent dating violence affects the use of prevention methods or if risk sexual behaviors, mental health, or drug/alcohol use play an associative role between dating violence and the use of prevention methods in adolescents. In addition, previous research has not addressed how these factors affect adolescents' ability to move from the precontemplation phase to the action phase when they are victims of dating violence. The present research study addressed the aforementioned identified gaps in literature.

CHAPTER III: METHODOLOGY

The present study aimed to determine whether there is an association between dating violence and pregnancy prevention behaviors among adolescents in the United States. Using quantitative methodology, the associative relationship between participants' use of prevention methods and dating violence, sexual behavior, mental health, alcohol and drug use was measured. This study used data from the 2013, 2015, and 2017 Youth Risk Behavior Surveillance System (YRBSS). The YRBS was established in 1990 with the goal of monitoring health risk behaviors that are contributing factors to health outcomes of adolescents in the United States. The cross-sectional survey has been conducted biannually since 1991. The State and Local Youth Risk Behavior Survey questionnaires are comprised of questions designed to collect data on the following areas: (a) demographics, (b) violence, (c) tobacco use, (d) alcohol and other drug use, (e) sexual behaviors, and (f) physical inactivity. In addition, the survey also monitors the prevalence of health-related behaviors contributing to chronic illnesses among adolescents such as asthma and obesity. Data is collected every odd year from the national survey administered to students in grades nine through 12 attending both public and private schools in the United States. According to the CDC (2018), data monitoring the behaviors of more than 4 million students have been collected between the years 1991 and 2017.

The YRBSS questionnaire reportedly has high levels of reliability and validity using published information and test-retest methods. Previous research confirms data gathered from adolescents using this method is credible. YRBS internally reviewed the data collection procedure using two test–retest reliability study of the questionnaire and

validated both the procedure and the data analysis of the database. Participation in the survey is completely voluntary requiring both student and parental permission.

Precautionary measures, such as self-administered questionnaires, are implemented to ensure anonymity of participants. Only a small percentage of students completing the survey were identified as being untruthful during internal reliability checks. The CDC also determined that although situational factors may impact self-reported behaviors among adolescents, the validity of a self-reported measure is not decreased. In addition, all state coordinators approve the reliability and validity of the YRBSS. Brener et al. (2004) reported further details regarding the psychometric properties of the YRBS.

Analytic Sample

The YRBS is completed in biannual waves. Using a three-stage cluster sample, the national YRBS produced a sample representative of ninth through 12th grade students attending all public, Catholic, and other private schools in the 50 states and District of Columbia excluding Minnesota, Oregon, Washington, and Wyoming. The Virgin Islands, Puerto Rico, and trust territories were also excluded from the sample population. Students were sampled from systematically selected schools.

Students attending systematically selected schools, in ninth through 12th grades were administered questionnaires after both student and parental consent were received. The sampling frame included questionnaires completed during a required class for the grade level or a particular time of day. Using systematic equal probability sampling with a random start, classes were selected from each participating school. Students completed the self-administered questionnaire recording their responses on an answer sheet or

computer scannable booklet. Eaton et al. (2010), Eaton et al. (2012), and Kann et al. (2016) provide more details for this sampling design and data collection methodology.

Kann et al. (2014) reported the 2013 national YRBS yielded an 88% student response rate from 148 public and private schools. A total of 13,583 completed surveys were used for data analysis. This number excluded the 50 questionnaires that failed quality control. Usable questionnaires from the 2015 national YRBS totaled 15,624 after the exclusion of 89 questionnaires due to quality control failure. The results included questionnaires from 125 public and private schools with a 86% student response rate (Kann, Olsen, McManus, et al., 2016).

According to Kann et al. (2018), the 2017 national YRBS received a response from 144 of the 192 participating sampled schools. Calculations determined approximately 75% of sampled schools submitted questionnaires for analysis. Questionnaires administered to over 18,000 sampled students yielded responses from approximately 15,000 students. However, only 14,765 questionnaires were usable for analysis after data editing. After data editing calculations determined the overall student response rate was approximately 60%. According to the CDC (2017), adjustments for both oversampling of Black and Hispanic students and nonresponses were addressed by applying a weighting factor. The overall weights were scaled to the weighted count of students equaling the total sample size. The weighted proportions of students were equal to the projected student population for the survey year.

This research study used selected items from the 2013, 2015, and 2017 YRBS questionnaires (see Appendix B). The three-wave samples contained completed questionnaires on a total of 43,972 students excluding questionnaires that failed quality

control. The resulting larger sample size increased estimate reliability of the prevalence of dating violence and use of pregnancy prevention methods among high school students.

Measures

The researcher of this study used selected items from the 2013, 2015, and 2017 YRBS questionnaire (see Appendix B). The association of interest in this study was dating violence, the independent variable. Associative factors in this study were sexual risk behavior, mental health, and alcohol and drug use. The dependent variable (outcome) of interest in this study was pregnancy prevention behavior of adolescents surveyed.

The YRBS codebook outlines instructions for coding data. For QN# and QNword variables, a column contains text that summarizes the “responses of interest”, and the codes “1” and “2” for “Yes” and “No” respectively to indicate whether or not the question response was one of interest (2017 YRBS Guidebook, 2018). Because of skewed frequency levels and for ease in interpretation of the ratios, the responses for the variables included in this study were dichotomized into 0 times and 1 or more times for all bivariate and multivariate analyses.

Prevention Behavior

The researcher measured prevention behavior association using the YRBS questionnaire. The sexual behavior section of the questionnaire contains seven questions. However, six was not used because the data collected from these questions were irrelevant to the current study. For the purpose of this analysis, variable Q65 was used. The selected question, “The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?”, was used to measure the prevalence of contraception use among high school students. Quantitative variable Q65 represented

students who have engaged in sexual intercourse and students who did or did not use a pregnancy prevention method the last time they had sexual intercourse.

Dating Violence

Dating violence association was measured using the YRBS questionnaire. The violence-related behavior section of the questionnaire contains 11 questions. However, nine were not used because the data collected from these questions were irrelevant to the current study. For the purpose of this analysis variable Q21–22 were used. The selected questions were used to measure the frequency of both dating violence and sexual violence experienced by students surveyed. Dichotomous variable Q21, “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)” represented students that have been forced to engage in sexual activity. Dichotomous variable 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)” represented students who were victimized by a partner. A composite score was created to analyze the data.

Sexual Risk Behavior

Sexual risk behavior association was measured using the YRBS questionnaire. The sexual behavior section of the questionnaire contains nine questions. However, five were not used because the data collected from these questions were irrelevant to the current study. For the purpose of this analysis variable Q60–62, and 64 were used. Quantitative variable Q60, “How old were you when you had sexual intercourse for the

first time?”, was used to measure the age of first intercourse. The prevalence of sexual activity including number of sexual partners and use of a pregnancy prevention method during sexual intercourse were measured by Q61 “During your life, with how many people have you had sexual intercourse?”, Q62 “During the past 3 months, with how many people did you have sexual intercourse?”, and Q64 “The last time you had sexual intercourse, did you or your partner use a condom?” A composite score was created to analyze the data.

Alcohol and Drug Use

Alcohol and drug use association were measured using the YRBS questionnaire. For the purpose of this analysis, variable Q63 was used. “Did you drink alcohol or use drugs before you had sexual intercourse the last time” was used to measure the prevalence of alcohol and drug use among high schools completing the survey. The dichotomous variable Q63 represented students who did or did not use drugs or drink alcohol before engaging in sexual intercourse.

Mental Health

Mental health association was measured using the YRBS questionnaire. Questions directed at assessing various aspects of mental health are addressed throughout the questionnaire. For the purpose of this analysis, variable Q25 was used. Dichotomous variable Q25 is “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?” The dichotomous variable Q25 represented students who may consider taking their own life because they feel depressed about the future.

Study Covariates

Covariates such as gender (Q2), grade (Q3), and race (Q5) potentially influence the relationship between prevention behavior and dating violence. Therefore, these variables were also included in the analysis.

Hypotheses

Based on previous research studies and theory, the following hypotheses regarding the use of prevention methods among adolescents were tested:

Hypothesis 1: Adolescents who completed the YRBS and reported experiencing dating violence will be more likely to also report less use of prevention methods than adolescents not reporting experiencing dating violence.

Hypothesis 2: There is a significant relationship between dating violence victimization, mental health issues, and use of prevention methods among adolescents.

Hypothesis 3: There is a significant relationship between dating violence victimization, sexual risk factors, and use of prevention methods among adolescents.

Hypothesis 4: There is a significant relationship between dating violence victimization, alcohol and drug use, and use of prevention methods among adolescents.

Analysis

The researcher conducted all statistical analysis using IBM Statistical Package for the Social Sciences (SPSS) software Version 26. The analysis was carried out in accordance with the aforementioned hypotheses of the study. The data analysis occurred in three stages: univariate, bivariate, and multivariate. The univariate analysis described the characteristics of all study samples. Categorical variables were summarized using frequencies and proportions. Continuous variables were summarized using means and

standard deviations. Hypothesis 1 was analyzed with a chi-square test and multinomial logistic regression to assess the association between dating violence and use of prevention methods. Hypothesis 2, the role of mental health issues, sexual risk, and alcohol and drug use on the relationship between dating violence and use of prevention method, was assessed using logistic regression. Mental health issues, sexual risk, and alcohol and drug use were used as associative factors of the effects of use of prevention method on dating violence in the analysis. More specifically, the direct effect of use prevention method on dating violence and indirect effect of use prevention method on dating violence through the mental health sexual risk behavior, alcohol and drug use were examined.

Multivariate logistic regression models were used to analyze the data from the YRBS sample of years 2013, 2015, and 2017. Separate logistic regression models with either female or male students were run with race, sexual dating violence (SDV), and physical dating violence (PDV) as categorical variables and grade level as covariates. The independent variable was dating violence. The dependent variable was the use of pregnancy prevention methods. Gender and grade level were included in the model to assess if there were significant similarities or differences. Data analysis was conducted using SPSS version 26. The researcher selected this software because it accommodates complex multistage sampling designs with and without replacement. Three stages of sampling were included, with clustering and stratification at each stage.

CHAPTER IV: RESULTS

In this chapter, the study results regarding the association of pregnancy prevention behavior in adolescents and dating violence are presented. In addition, the relationship between pregnancy prevention behavior of adolescents and dating violence by sexual risk behavior, mental health, and alcohol and drug use will also be examined in this chapter.

Sample

Over 43,000 questionnaires were completed by students attending high school in 2013, 2015, and 2017 YRBS. However, for the purpose of this study, students were excluded who responded they never dated and thus were not asked the dating violence questions. After the aforementioned exclusions, the number of questionnaires used for this data analysis totaled 10,473. As indicated in Table 1, 5041 (48.1%) respondents identified as male and 5,432 (51.9%) as female. Other demographic characteristics included grade and race. Thirty five percent of students included in the data analysis were in 12th grade. Over 56% ($N=5908$) of respondents identified their race as White with the minority group being Multiple-Race at 7.7% ($N=801$).

Table 1

Demographic Characteristics

Measure		<i>N</i>	%
Gender	Male	5,041	48.1
	Female	5,432	51.9
Grade	9 th	1,427	13.6
	10 th	2,324	22.2
	11 th	3,015	28.8
	12 th	3,706	35.4
Race	NH White	5,908	56.4
	NH Black	1,476	14.1
	Hispanic	2,288	21.8
	Multiple-Race	801	7.7

As shown in Table 2, 13.4% ($N=1,401$) of the 10,473 sexually active students reported not using pregnancy prevention methods during their last sexual encounter. Almost 11% ($N=1,115$) reported experiencing sexual dating violence and 13.9% of students reported physical dating violence victimization. Over 19% ($N=2,042$) of sexually active students reported drinking alcohol or using drugs before their last sexual encounter. Shockingly, 38% ($N=3,908$) reported feeling sad or hopeless. These results supported the purpose of this research study which was to examine to what extent does dating violence affect the use of prevention methods or if risk sexual behaviors, mental health, or drug/alcohol use play an associative role between dating violence and the use of prevention methods in adolescents.

Table 2

<i>Variable Descriptive</i>			
Measure	Y/N	<i>N</i>	%
No pregnancy prevention method used			
	Yes	1,401	13.4
	No	9,072	86.6
Experienced sexual dating violence			
	Yes	1,115	10.7
	No	9,358	89.3
Experienced physical dating violence			
	Yes	1,454	13.9
	No	9,020	86.1
Felt sad or hopeless			
	Yes	3,980	38
	No	6,494	62
Drank alcohol or used drugs before last sexual intercourse			
	Yes	2,042	19.5
	No	8,433	80.5

Use of Pregnancy Prevention Methods by Grade

Multivariate logistic regression analyses, involving the 2013, 2015, and 2017 YRBS data sets, revealed significant differences across grade levels. Results indicated

younger female students are at an increased risk for not using pregnancy prevention methods during sexual activity. Results, displayed in Table 3, show that the odds of not using pregnancy prevention method was 1.36 times higher among female students in ninth grade than 12th grade ($OR = 1.36, p = .035$). However, there were no significant differences with pregnancy prevention method use with 10th and 11th grade female students when compared with 12th grade female students. There were no significant differences with pregnancy prevention method use across grade levels for male students. These results suggested, based on Erickson's developmental theory, female students in the 9th grade have not developed a sense of self. As a result, the need for change in behavior is not recognized. However, while use of prevention methods among girls in ninth grade in comparison to other grades differ, but the use of prevention methods across grade levels for male students does not. Thus, male students develop a sense of self and understand one's appropriate sex role as early as ninth grade. In addition, the likelihood of using pregnancy prevention method increased consistently from ninth grade to 11th grade for both female and male students.

Table 3

Use of Pregnancy Prevention Methods by Grade

Pregnancy Prevention method was not used				
Gender	Grade	OR [95% CI]	b(SE)	p
Females	9	1.36 [1.02, 1.80]	2.13	.035
	10	1.15 [.92, 1.45]	1.22	.226
	11	0.84 [.66, 1.05]	-1.54	.125
	12	Ref		
Males	9	1.15 [.84, 1.56]	.879	.381
	10	1.12 [.85, 1.48]	.837	.404
	11	0.95 [.71, 1.27]	-.352	.725
	12	Ref		

Use of Pregnancy Prevention Methods by Race

Results, displayed in Table 4, indicated a statistical significance across racial/ethnic groups. Results indicated the odds of not using pregnancy prevention method was 2.2 times higher among non-Hispanic Black females than White female students ($OR = 2.2, p < .001$). In addition, Hispanic female students had 2.14 times higher odds ($OR = 2.14, p < .001$) and non-Hispanic other race female students had 1.54 times higher odds ($OR = 1.54, p = .004$) of not using pregnancy prevention method compared to Non-Hispanic White female students. The odds of not using pregnancy prevention method was 1.59 times higher among Hispanic males than White male students ($OR = 1.59, p < .001$). Statistically, these results suggest race accounts for some of the adolescent pregnancy disparities that currently exist among minority female students in comparison to White female students. However, with the exception of Hispanic male students, use of prevention methods does not appear to be explained by differences in race.

Table 4

Use of Pregnancy Prevention Methods by Race

Pregnancy Prevention method was not used				
Gender	Race	OR [95% CI]	b(SE)	p
Females	NH Other	1.54 [1.16, 2.05]	2.97	.004
	NH Black	2.20 [1.74, 2.79]	6.6	<.001
	Hispanic	2.14 [1.66, 2.75]	5.99	<.001
	NH White	Ref		
Males	NH Other	1.19 [.85, 1.66]	1.04	.301
	NH Black	1.27 [.92, 1.74]	1.48	.142
	Hispanic	1.59 [1.27, 2]	4.02	<.001
	NH White	Ref		

Hypotheses Testing

Hypothesis 1 stated that adolescents who reported experiencing dating violence will be more likely to also report less use of prevention methods than adolescents not reporting experiencing dating violence. Logistic regression was conducted to compare the odds of using pregnancy prevention methods among adolescents who reported experienced dating violence in comparison to students who did not report victimization. Students were divided by gender and type of dating violence reported; sexual dating violence or physical dating violence. The findings for Hypothesis 1 are summarized in Table 5 and Table 6.

Association Between SDV Victimization and Use of Prevention Method by Gender

Results, displayed in Table 5, indicated that the odds of not using pregnancy prevention method was 1.74 times higher among male students who experienced SDV in comparison to students who did not experience SDV ($OR = 1.74, p = .001$). Findings for male victims of sexual dating violence support Hypothesis 1. Therefore, the null hypothesis was rejected for male adolescents. However, there were no significant differences between female students that experienced SDV victimization and female students that did not experience SDV victimization on pregnancy prevention method use ($OR = 1.06, p = .606$). The findings for female victims of sexual dating violence did not support Hypothesis 1. The null hypothesis was not rejected in regard to female adolescents. There was a substantially significant relationship between sexual dating violence and use of prevention methods among adolescent male students, but not for female students. These findings suggested that male adolescent students are more affected by sexual dating violence victimization than are female students.

Table 5*Association Between SDV and Use of Pregnancy Prevention Methods by Gender*

Gender	Type of DV	Y/N	Pregnancy Prevention Method		
			OR [95% CI	b(SE)	p
Females	SDV Victimization	Yes	1.06 [.84, 1.34]	.52	.606
		No	Ref		
Males	SDV Victimization	Yes	1.74 [1.26, 2.41]	3.36	.001
		No	Ref		

Association Between PDV Victimization and Use of Prevention Method by Gender

Results, displayed in Table 6, indicated that odds of not using pregnancy prevention method was 1.43 times higher among the female student who experienced the PDV victimization compared to students who did not experience PDV victimization (OR = 1.43, $p = .004$). Statistically, there is a substantially significant relationship between physical dating violence and use of prevention methods among adolescent female students, but not for male students. This suggested that female adolescent students were more affected by physical dating violence victimization than male students. Findings for female victims of physical dating violence support Hypothesis 1. There was not a significant difference between male students that experienced PDV victimization and those that did not on pregnancy prevention method use. The findings for male adolescents did not support Hypothesis 1 ($p=0.141$). The null hypothesis was not rejected in regard to male adolescents.

Table 6*Association Between PDV and Use of Pregnancy Prevention Methods by Gender*

Gender	Type of DV	Y/N	Pregnancy Prevention Method		
			OR [95% CI	b(SE)	<i>p</i>
Females	PDV victimization	Yes	1.43 [1.12, 1.81]	2.95	.004
		No	Ref		
Males	PDV victimization	Yes	1.29 [.92, 1.79]	1.48	.141
		No	Ref		

Hypothesis 2 stated that mental health issues, sexual risk, and alcohol and drug use serve as associative factors between dating violence and use of prevention methods. Multivariate logistic regression analyses from three survey years (2013, 2015, and 2017) were conducted to determine the relationship between dating violence and the use of prevention methods. Sexual risk, mental health, and alcohol and drug use were included in the analysis as variables to determine association. Separate analyses of data by gender was estimated for all students using the logistic regression model.

Relationship Between Dating Violence Victimization (no covariates) and Prevention Use

The 2013, 2015, and 2017 YRBS questionnaires measured students' exposure to physical and sexual dating violence. The researcher measured the relationship between dating violence victimization, both sexual and physical, and no use of prevention methods at last sexual encounter. Results, displayed in Table 7, indicated that the odds of not using a prevention method at last sexual encounter was 1.63 times higher among male students who were victims of dating violence in comparison to male students who were not victims of dating violence ($OR = 1.63, p < .001$). The odds of not using a prevention

method at last sexual encounter was 1.37 times higher among female students who were victims of dating violence than for female students who did not experience dating violence ($OR = 1.37, p < .001$). Findings revealed a significant relationship between dating violence victimization and prevention use at last sexual encounter regardless of gender suggesting exposure to dating violence account for the increased likelihood of not using pregnancy prevention methods regardless of gender.

Table 7

Relationship Between Dating Violence Victimization (no covariates) and Prevention Use at Last Sexual Encounter by Gender

Gender	Variable	Y/N	% (SE)	Pregnancy Prevention Method		<i>p</i>
				OR [95% CI]	b(SE)	
Males	Dating violence victimization	Yes	47.5 (2.18)	1.63 [1.37, 1.93]	5.7	< .001
		No	35.7 (1.06)	Ref		
Females	Dating violence victimization	Yes	55.2 (1.52)	1.37 [1.19, 1.57]	4.46	< .001
		No	47.4 (1.26)	Ref		

Note: Dating violence victimization is either physical or sexual dating violence victimization (or both).

Relationship Between Mental Health, Dating Violence, and No Pregnancy

Prevention Use

Mental health as an associative factor between dating violence victimization and prevention use was measured. As indicated in Table 8, results indicated the odds of not using a prevention method at last sexual encounter was 1.53 times higher among male students who had depressive symptoms and were victims of dating violence than for male students who did not have depressive symptoms and were victims of dating violence ($OR = 1.53, p < .001$). These results support Hypothesis 2; therefore, the null hypothesis was rejected for male students. The odds of prevention use for female students was not

impacted by depressive symptoms and dating violence victimization among female students. There was not a significant difference of use of prevention methods between female students that had depressive symptoms and experienced dating violence in comparison to female students who were victims of dating violence victimization but did not have depressive symptoms ($OR = 1.01, p = .854$). The null hypothesis for female students was not rejected. Results indicated use of pregnancy prevention method is negatively affected among male students who are victims of dating violence and have depressive symptoms, in comparison to female students who experience victimization and have depressive symptoms.

Table 8

Relationship Between Dating Violence Victimization, Mental Health, and No Prevention Use by Gender

Gender	Variable	Y/N	Pregnancy Prevention Method		
			OR [95% CI]	b(SE)	p
Males	Depressive symptoms	Yes	1.53 [1.29, 1.82]	4.83	< .001
		No	Ref		
Females	Depressive symptoms	Yes	1.01 [.89, 1.16]	.19	.854
		No	Ref		

Notes: Dating violence victimization is either physical or sexual dating violence victimization (or both). Depressive symptoms = felt sad/hopeless for at least 2 weeks during the past 12 months.

Relationship Between Sexual Risk, Dating Violence, and No Prevention Use

Sexual risk as an associative factor between dating violence victimization and prevention use was measured. Questionnaire responses confirming first sexual intercourse before age 13 and sexual intercourse with four or more partners at the time of

the survey were used as benchmarks. As shown in Table 9, results for male students indicated first sexual intercourse before age 13 was not an associative factor between dating violence victimization and prevention use at last sexual encounter ($OR = 1.01, p = .91$). These results do not support Hypothesis 2. However, results indicated the odds of not using a prevention method was 1.35 times higher among male students with four or more sexual partners ($OR = 1.35, p = .003$). These findings support Hypothesis 2. Therefore, the null hypothesis was rejected.

For female students, results indicated both first sexual intercourse before age 13 and sexual intercourse with four or more partners were associated with dating violence victimization and prevention use. The odds of not using a prevention method during the last sexual encounter was 1.44 times higher among female students who were victims of dating violence and first engaged in sexual intercourse before age 13 ($OR = 1.44, p = .031$). In addition, the odds of not using prevention methods was 1.84 times higher among female students who were victims of dating violence and had engaged in sexual intercourse with 4 or more partners ($OR = 1.84, p < .001$). Refer to Table 9. These findings, in regards to female adolescents, support Hypothesis 2 and support rejecting the null hypothesis.

Generally speaking, positive sexual risk factors and dating violence victimization are more strongly related to decreased pregnancy prevention use in comparison to students without positive sexual risk factors. Table 9 shows both first sexual intercourse before age 13, sexual intercourse with four or more partners, and dating violence are associated with decreased use of pregnancy prevention method among female students. Similarly, there was a strong association for male students who have engaged in sexual

intercourse with four or more partners. However, first sexual intercourse before age 13 was not a positive factor in use of pregnancy prevention method among males. Sexual intercourse with four or more partners and exposure to dating violence negatively affected use of prevention methods among adolescents. First sexual intercourse before age 13 negatively affects female students more than it does male students. This suggests female students are more affected by age of first sexual intercourse, than male students.

Table 9

Relationship Between Sexual Risk, Dating Violence, and No Pregnancy Prevention Use

Gender	Sexual Risk Factors	Y/N	Pregnancy Prevention Method		
			OR [95% CI	b(SE)	p
Males	First sexual intercourse before age 13	Yes	1.01 [.82, 1.24]	.11	.910
		No	Ref		
	Sexual intercourse with four or more partners	Yes	1.35 [1.11, 1.64]	3.02	.003
		No	Ref		
Females	First sexual intercourse before age 13	Yes	1.44 [1.04, 2]	2.19	.031
		No	Ref		
	Sexual intercourse with four or more partner	Yes	1.84 [1.56, 2.16]	7.49	< .001
		No	Ref		

Note: Dating violence victimization is either physical or sexual dating violence victimization (or both).

Relationship Between Alcohol and/or Drug Use, Dating Violence, and No Prevention Use

Alcohol and drug use as an associative factor between dating violence victimization and condom use was measured. Results for both male and female students revealed statistical significance. Thus, supporting Hypothesis 2. Results indicated the odds of not using a condom was 1.27 times higher among male students who were

victims of dating violence and used alcohol and/or drugs prior to their last sexual encounter ($OR = 1.27, p = .04$). Results indicated the odds of not using a condom was 1.42 times higher among female students who were victims of dating violence and used alcohol and/or drugs prior to their last sexual encounter ($OR = 1.42, p = .003$). Refer to Table 10. Alcohol and/or drug use are strongly related to dating violence victimization and not using pregnancy prevention methods for both female and male adolescents. Both male and female students tend to not use a pregnancy prevention method if they are victims of dating violence and they partake in alcohol and/or drug use prior to sexual activity.

Table 10

Relationship Between Alcohol and Drug Use, Dating Violence, and No Prevention Use
Pregnancy Prevention Method

Gender	Alcohol and Drug Use	Y/N	OR [95% CI	b(SE)	<i>p</i>
Males	Alcohol/drugs before last sexual intercourse	Yes No	1.27 [1.01, 1.58] Ref	2.08	.04
Females	Alcohol/drugs before last sexual intercourse	Yes No	1.42 [1.13, 1.77] Ref	3.08	.003

Note: Dating violence victimization is either physical or sexual dating violence victimization (or both).

Summary

This chapter presented the results of data collected from a total of 10,473 YRBS questionnaires completed by a sample of students attending high school in 2013, 2015, and 2017. The purpose of this quantitative study was to determine if there was an association between dating violence, both sexual and physical, and the use of pregnancy

prevention methods among adolescents attending high school. Acts of violence were found to be positively associated with intent to use pregnancy prevention methods supporting Hypothesis 1. Additionally, results indicated a positive association between dating violence victimization and engaging in unprotected sex and alcohol and drug use among adolescents. However, statistical significance varied based upon gender and the type of dating violence experienced.

CHAPTER V: DISCUSSION

The purpose of this study was to examine the association between dating violence and pregnancy prevention behaviors, using the precontemplation and action tenets of the transtheoretical model and Erickson's developmental theory. A secondary analysis of the 2013, 2015, and 2017 YRBS data sets were examined to determine if associations existed between acts of dating violence and (a) prevention behaviors, (b) mental health, and (c) alcohol and drug use among United States high school students. This chapter presents a discussion of the significant findings based on the study hypotheses and the theoretical framework. Implications for future research and recommendations for adolescent pregnancy prevention programs will be discussed. Finally, study design considerations, including strengths and limitations of the study conclude this dissertation.

Discussion of Key Findings

Analysis of 10,473 questionnaires yielded significant results. The key findings in this study illuminated the impact of dating violence on the use of pregnancy prevention methods among adolescents who completed the 2013, 2015, and 2017 YRBS. The results of this study add important gender-specific evidence that there is a relationship between dating violence and the frequency of use of pregnancy prevention methods. Frequencies of dating violence victimization and a significant relationship between use of prevention methods was revealed. Lastly, a relationship between dating violence, associative factors, and use of pregnancy prevention methods was identified.

Demographic Factors and Use of Prevention Methods

Both race and grade were used as demographic factors in the study. Non-Hispanic, Black, and Hispanic female adolescents attending high school in the United

States reported a higher likelihood of not using pregnancy prevention methods in comparison to White females. Results of this study found Hispanic males were 1.5 times more likely to not use pregnancy prevention methods in comparison to male adolescents of other races. No significant differences were found among other male races. The findings of the effect of race on prevention use are consistent with those of previous studies conducted by Martin et al. (2017). In addition, Kann et al. (2016) reported a higher prevalence of many health-risk behaviors among sexual minority students compared with nonsexual minority and White students.

This could be attributed to the lack of pregnancy prevention programs specifically designed to address the social and cultural factors that negatively affect diverse populations. For example, Hispanics are more likely to not use pregnancy prevention methods in comparison to other races. This could be the result of religious, social, and cultural influences. According to Ospino (2017), Hispanics account for 71% of the growth of the Catholic religion in the United States; approximately 60% of all Catholics in the United States younger than 18 years of age are Hispanic. This strong belief in the Catholic religion could explain why Hispanic adolescents are more likely to not use pregnancy prevention methods in comparison to their peers. The Catholic church strongly opposes the use of any artificial pregnancy prevention methods such as condoms or birth control pills. In fact, the use of birth control is considered sinful since the act of sexual intercourse should be for procreation. This could explain the phenomenon behind the findings from this study as to why both Hispanic males and females were more likely to not use pregnancy prevention methods in comparison to their peers of other races. This group may not ground by the theoretical framework of this study. These students'

religious beliefs and cultural influences prevent them from even considering or contemplating using birth control out of fear of committing an immoral act. Socially, these students may also not feel comfortable discussing possible pregnancy prevention options with family members or friends out of embarrassment and shame if their social circle is also of the Catholic faith. Consequences of these shameful feelings include social isolation and an increased willingness to depend on their sexual partner for support and guidance in regards to the use of contraceptives.

Black females were also found to be at a significantly elevated risk for not using pregnancy methods in comparison to their White peers. “Race” in itself may not be a determining factor in the use of prevention methods. It may be best to consider the social determinants and biases associated with adolescents of a particular race. Factors that contribute to disparities in adolescent pregnancy among both Blacks and Hispanics include limited access to services, poverty, and politics affecting state policies (Rodriguez & O’Donnell, 2020). As a matter of fact, the United States Supreme Court recently upheld a regulation under the Affordable Care Act, which was introduced by the administration of President Trump that allows employers with religious objections to limit insurance coverage of contraceptives. The passing of this regulation significantly reduces access to pregnancy prevention services; particularly for those of lower socioeconomic status who rely on insurance benefits made possible by the Affordable Care Act. Additionally, the current civil unrest is a stark reminder of the history of bias, abuse, and inequities which currently exist throughout our institutions. These inequities have resulted in mistrust of organizations, including the healthcare system, by the Black community. This mistrust, across generations, has resulted in hesitancy of this group to

access healthcare services. Consequently, Black females are less likely to utilize contraceptive methods resulting in higher unplanned pregnancy rates. Let it be noted that this is not because they do not recognize the need to use contraceptive methods but instead hesitancy to access healthcare services prevents this group from acquiring prevention methods. The aforementioned reasons could also explain why this study did not yield significant results for Black male students. These students do not need to access healthcare services to use pregnancy prevention methods; condoms can be purchased from local neighborhood stores.

It is possible the perceived consequences of not using prevention methods may be reduced among Hispanic and Black adolescents in comparison to their White counterparts due to the social environment surrounding these groups. Higher incidence rates of teenage pregnancy among Hispanic and Black students signifies teenage pregnancy is both socially and culturally accepted among these groups. Research shows the children of teenage parents are at a higher risk of becoming parents during their adolescent years resulting in a continuous cycle of generational poverty (CDC, 2019). However, results from this study cannot determine to what extent these social and cultural factors affect an adolescent's decision to move from precontemplation to the action tenet of the transtheoretical model.

Erickson's developmental theory was used as a reference to assist this researcher with understanding age-related factors that may affect adolescents' ability to move from precontemplation to action. Results of this study indicate female students in the ninth grade are of particular interest. The odds of not using pregnancy prevention methods during sexual activity was significantly higher for these students in comparison to

students, both male and female, in any other grade. These results support earlier findings by Witner et al. (2018) that revealed nonuse of contraceptives was significantly higher among students in the ninth grade than among 11th and 12th graders. During the psychosocial crisis of identity versus role confusion (Erikson, 1968), adolescents are attempting to discover who they are and understand their role in relationships. The difference between ninth grade female students and students in other grades, both male and female, is likely attributable to the inability of ninth grade female students to develop their identity, a strong sense of who they are and their values. As a result, this group is at an increased risk for not using pregnancy prevention methods. During this stage, adolescents try different things while exploring their independence and beliefs. This could explain why females in the ninth grade are less likely to use prevention methods consistently in comparison to older female and male students. Results were not statistically significant for students in 10th to 12th grade which fits Erickson's developmental theory used in this study. According to Erickson (1968), younger adolescents are more likely to struggle with establishing their identity in comparison to the older groups; in this case students in upper grade levels. When an adolescent is able to successfully develop what Erickson (1968) referred to as identity, there is no confusion regarding their role in relationships nor their beliefs. Defining this identity for themselves empowers an adolescent to take control and decide what is important to them including preventing unplanned pregnancies regardless of the beliefs of others. Findings from this study signifies the importance of intervention programs using Erickson's theory as a reference guide for creating intervention initiatives that address the developmental stages of adolescents.

Based on Erickson's developmental theory, findings of this study indicate the need for change is not realized by female students in the ninth grade. Adolescents face a number of challenges as a result of intimacy and romantic relationships (Van de Bongardt et al., 2015). One of the many challenges' female students in the ninth-grade face could be fear of losing their romantic relationship if the use of prevention methods is demanded of their sexual partner. In addition, if this is their first romantic encounter, it is possible their role in the relationship is unclear. Consequently, use of prevention methods are not used unless the use is initiated by their sexual partner. Findings from this study could also be reflective of the inability of this particular group to access pregnancy preventative services. Lack of access to services could explain why the odds of not using a pregnancy prevention method is significantly higher for this group in comparison to male students and female students in other grade levels. Students in this age group are more likely to rely on others for transportation due to the inability to drive. This limits their ability to access services independently. Blake et al. (2003) found adolescents attending schools where condoms were provided were twice as likely to use condoms in comparison to students attending schools that do not provide condoms. Providing condoms in school eliminates the need for transportation to access services thereby increasing the likelihood of use of condoms. Doing so would enhance this group's ability to move from the precontemplation to action tenet of the transtheoretical framework used in this study. If the adolescent has decided to use prevention methods, increasing access increases the likelihood the adolescent will do so as planned.

It is clear cultural, religious, social, and developmental influences have a negative impact on sexual behavior and the choice to use prevention methods. Hamilton et al.

(2019) reported teen birth rates declined 7% from 2017 to 2018. However, teen pregnancy rates remain significantly higher among younger Hispanics and Black adolescents in comparison to their White counterparts. Findings from this study highlight the need for pregnancy prevention initiatives encompassing racial differences, not just White adolescents as the target population. In addition, further exploration is needed to identify to what extent are adolescents' decisions to use pregnancy prevention based off of their cultural and spiritual beliefs. Interviews and focus groups should be conducted to identify themes that influence or prohibit pregnancy prevention use among various races, cultures, and religions. These themes, in addition to the results of this study, should be used as a guide to build effective intervention programs to address these issues.

Dating Violence and Use of Pregnancy Prevention Methods

Hypothesis 1 stated that an associative relationship existed between dating violence victimization and the frequency of use of prevention methods among adolescents who completed the 2013, 2015, and 2017 YRBS. This hypothesis was derived from the precontemplation and action tenets of the transtheoretical model which proposed the need to examine factors which may affect the stages and processes of self-change. The purpose of this study was to investigate the effect of factors that may influence an adolescent's willingness to change and/or prohibit the behavioral change from taking place. In this case, adolescents' self-change is reflected by the individual deciding to use pregnancy prevention methods and consistently doing so during sexual encounters. The influencing or prohibiting factor is dating violence victimization. Findings from this study indicate progression from the precontemplation stage to the action stage is affected by dating violence victimization.

A recent survey in the United States revealed more than 8% of high students reported physical dating violence and almost 7% reported sexual dating violence victimization (CDC, 2017). Wingood et al. (2001) found adolescents who experienced dating violence were less likely to use condoms during intercourse. Roberts et al. (2005) identified a significant association between dating violence and lack of condom use as well as a history of pregnancy among sexually active adolescents. Results from this study, conducted over a decade later, support the findings from earlier research regarding the relationship between dating violence victimization and decreased use of pregnancy prevention methods.

Findings from this research study show important gender-specific results in the relationship between dating violence and use of pregnancy prevention methods. This study found that, among the sexually active adolescents attending high school in the United States, the odds of not using pregnancy prevention methods during last sexual intercourse encounter were higher for male students who were victims of sexual dating violence compared to those without. It is possible male victims of sexual dating violence do not feel empowered to use prevention methods during sexual encounters. It is also possible the aggressor takes control of the sexual encounter and therefore would be in control of deciding if prevention methods would be used or not. Findings in regards to female victims of sexual dating violence were not significant. It is important to note the findings in regards to female students could be a result of misconceptions in regards to sexual violence. The misconceptions may include that female participants do not view the sexual encounter as being forced because of the relationship with the partner. Instead sexual intercourse could be viewed as a “duty” or a part of being in a romantic

relationship whether they are a willing participant or not. Because the sexual encounter is not viewed as forced, the female may be comfortable with choosing to use a prevention method. Additionally, the female student may choose to use a prevention method unbeknownst to the dating partner such as birth control pills or an IUD to prevent pregnancy in anticipation of the forced sexual encounter. Unfortunately, males are not able to use other prevention methods such as birth control pills and IUDs in comparison to their female counterparts. Therefore, male students lack the ability to employ prevention methods prior to sexual acts.

The aforementioned reasons could also explain why although the results for female victims of sexual dating violence were not significant, the effect of physical dating violence on the use of pregnancy prevention methods for female students was statistically significant. Physical dating violence, such as being slapped or hit by the partner, may not be viewed as an expectation or part of the romantic relationship. Therefore, physical dating violence may evoke fear and powerlessness to choose to use prevention methods. However, a student may not disclose they are a victim of dating violence. The question, in regard to physical dating violence, specifically asks if the student was intentionally injured by their dating partner. The adolescent completing the survey may truly believe the injuries inflicted by their partner is not intentional. Additionally, findings regarding male victims of physical dating violence were not significant. This could be the result of the male student being too embarrassed to disclose being a victim of physical dating violence. Research and intervention initiatives are limited in regard to male victims of intimate partner violence. The majority of research in regard to dating violence has been focused on female victims. Consequently, the male

student may truly be unaware they are a victim of physical dating violence compared with female victims. This study fills a gap in the literature; examining the relationship between male adolescents being victims of dating violence and to what extent does this victimization affect the likelihood of using prevention methods during sexual activity. Findings from this study highlight the importance of the need for intervention programs to target male victims as well as female victims of dating violence in order to increase the use of prevention methods among adolescents.

Overall, the findings indicate that, regardless of the type of dating violence experienced, both male and female victims are at a significantly increased risk for not using pregnancy prevention methods. The current study replicated findings in the literature regarding the increased risk of unplanned pregnancy being one of the potential consequences of adolescent intimate partner violence (Silverman et al., 2004) due to less use of pregnancy prevention methods for both female and male victims of dating violence, depending on the type of dating violence experienced. However, severity of neither physical or sexual dating violence is measured using the YRBS. Empowerment or powerlessness to use pregnancy prevention methods could possibly be influenced by the severity and/or frequency of the dating violence; not just solely based on the act itself. According to Silverman et al. (2001), lack of information on the severity of reported dating violence limits the interpretation of study results. Of further importance is that regardless of the gender of the student and type of violence experienced, this study indicates victims of dating violence are unable to establish identity (Erickson, 1968) because dating violence victimization prohibits the adolescent from understanding their role in the relationship. Thus, dating violence victimization is a barrier preventing

progression from precontemplation to action. These findings fit the framework of the study; dating violence victimization has a negative impact on one's ability to move through the stages of the transtheoretical model thereby preventing behavioral change.

Dating Violence, Associative Factors, and Use of Prevention Methods

Hypothesis 2 stated that mental health issues, first sexual intercourse before age 13, sexual intercourse with four or more partners, and alcohol and drug use serve as associative factors between dating violence and use of prevention methods. This hypothesis, like hypothesis 1, was derived from the precontemplation and action tenets of the transtheoretical model. A previous study conducted by Silverman et Al. (2001) found substance use, pregnancy, sexual risk behavior, and suicidality were associated with dating violence against adolescent girls. In this study, mental health issues, sexual risk, and alcohol and drug use were examined to analyze if one or more of the aforementioned factors affect an individual's progression from the precontemplation stage to the action stage when the adolescent is a victim of dating violence. This study sought to examine if dating violence victimization affected an adolescent's, both male and female, ability to progress from the precontemplation stage to the action stage. Moreover, in addition to being a victim of dating violence, to what extent does the presence of other factors affect the individual's ability to change their behavior and remain in the action stage of the transtheoretical model. The results from this study provide strong support for the notion that sexual behavior, mental health, and alcohol and drug use predict less use of pregnancy prevention methods among adolescent victims of dating violence.

As noted by Islam and Laugen (2015), the odds of condom use were reduced for those with depression compared with adolescents without, both male and female. In

addition, insight was also gained from a study conducted by Ely et al. (2009) in regard to the correlation between dating violence and mental health problems that can significantly impact adolescents. Bivariate logistic regression analyses of both 1997 and 1999 YRBS data indicated dating violence was associated with suicidality among adolescent girls (Silverman et al., 2001). However, after a thorough literature search, a gap in the literature revealed more research is needed to investigate the association between dating violence, mental health, and use of pregnancy prevention methods among male students. In this study, a significant relationship was noted between the use of prevention methods, dating violence, and mental health. The findings indicated dating violence victimization and depressive symptoms significantly affected use of prevention methods among male students, the effect was not statistically significant for female students. The significant effect of dating violence victimization and depressive symptoms on the use of pregnancy prevention methods among males could be indicative of purposeful planning to create a child. The male student is looking to leave a piece of themselves behind in the world if the depressive symptoms actually lead to a suicide attempt. Another possible explanation is both the depressive symptoms and dating violence victimization caused a lack of caring about the future and therefore consequences of their actions are not considered. Let it be noted, the planned pregnancy theory does not apply if the male student is engaging in sexual activity with a same-sex partner. However, intercourse with a same sex partner could also explain not using pregnancy prevention methods. Adolescents engaging in sexual intercourse with same sex partners do not fit into the transtheoretical framework of this study. These students cannot be expected to move from

precontemplation to action and consistently use pregnancy prevention methods because preventing pregnancy is not a concern for this group.

Edin and Kefalas (2013) reported the adolescent and young adult female participants viewed motherhood as an attempt to fill a void; with the goal of filling gaps in their lives and having someone to love them. This could explain why there is not a difference in frequency of use of prevention methods among females who are victims of dating violence and have depressive symptoms in comparison to those who do not have depressive symptoms. In other words, dating violence victimization, whether physical or sexual, could result in less use of prevention methods among females regardless of the presence of depressive symptoms if indeed the female is seeking to fill a void. On the other hand, perhaps depressive symptoms are not an influencing factor among females because an unplanned pregnancy may not be viewed as a negative by dating violence victims; instead a chance to increase happiness with the hopes of eliminating the violence in the relationship.

The results obtained from this study were consistent with previous findings that indicated the incidence of dating violence victimization was related to sexual risk behaviors and decreased use of pregnancy prevention methods among adolescents. More specifically, female adolescents who reported experiencing dating violence were more likely to report sexual intercourse with four or more partners, first sexual intercourse before age 13, and decreased use of pregnancy prevention method. Engaging in sexual intercourse with four or more partners and dating violence victimization were associated with decreased use of pregnancy prevention method among male adolescents. Several other research studies regarding the association between dating violence and health risk

factors also found a strong relationship between dating violence and sexual risk behavior (Ramisetty-Mickler et al., 2006; Silverman et al., 2004; Silverman et al., 2001; Valoris et al., 1999). Results from the aforementioned studies support the findings of this current research. Implications of this study highlight the critical importance of the consistent use of pregnancy prevention methods to prevent unintentional pregnancies. The relationship between dating violence and the associative factors identified in this study also bring attention to the need for victims of dating violence to be screened for sexually transmitted infections because of the potential consequences of engaging in high risk behaviors such as first sexual intercourse before age 13, sexual intercourse with four or more partners, and sexual intercourse with multiple partners without using condoms.

Earlier reports of sexually active adolescents also showed an association between decreased use of pregnancy prevention methods and alcohol and drug use in comparison to those who used prevention methods (Liddon et al., 2016). Previous multivariate analyses suggested a strong correlation between dating violence victimization, substance use, and engaging in poorly protected sex (Anderson et al., 2006; Silverman et al., 2001). The current study replicated findings in the aforementioned literature regarding the relationship between alcohol and/or drug use, dating violence victimization, and decreased use of prevention method among both female and male adolescents. Directionality is unclear, but it should be noted adolescents who experience dating violence are at a significantly increased risk for multiple high-risk behaviors including not using prevention methods, mental health concerns, sexual risk behavior, and using alcohol, and other substances before intercourse. It is unclear whether the associative factors were present before the dating violence began, or as a result of another

undetermined factor that was not included in the variable analysis of this study. For example, it is not surprising victims of dating violence may experience both diminished self-esteem and self-efficacy as a result of the abuse. However, this diminished self-esteem could be related to depressive symptoms that were present before the dating violence began. Regardless of the timeframe the associative factors occurred, both low self-esteem and depressive symptoms prevent an adolescent from achieving identity (Erickson, 1968). Therefore, these students are less likely to progress from precontemplation to action and use prevention methods during sexual activities. Other potential consequences of dating violence include unplanned pregnancy. Silverman et al. (2004) revealed adolescent girls who reported dating violence victimization in the last year were twice as likely to also have become pregnant in comparison to other female adolescents in the United States. Again, as previously discussed, dating violence victimization potentially elicits powerlessness to enforce the use of pregnancy prevention methods. The will to choose to use a prevention method is significantly altered by this powerlessness and resulting loss of control and self-efficacy.

Alcohol and drug use, being a student in ninth grade, all races with the exception of White students, and being a victim of dating violence increases the odds of having not used pregnancy prevention methods on the precontemplation/action model of this study. The aforementioned are significant contributors to the precontemplation/action model and explain the phenomenon of not using pregnancy prevention methods. The statistically significant variables have an influence on whether or not students use pregnancy prevention methods during sexual activity. The findings from this study explain the phenomenon in varying degrees. Sexual dating violence victimization, students in grades

10th and 11th, and White students were not contributing variables to the precontemplation/action model. For example, results indicated if sexual dating violence victimization was removed from the model, the removal would not have an effect on the outcome. In other words, removal would not explain less of the phenomenon of not using pregnancy prevention methods. However, not using pregnancy prevention methods at last sexual intercourse was associated with dating violence victimization and alcohol and drug use prior to sexual activity for both male and female students. Findings for these variables were statistically significant which confirms these are contributing factors to the precontemplation/action model of this study. Both alcohol and substance use cloud one's judgement preventing an individual from making sound decisions while intoxicated. Therefore, even if the need for change is recognized (precontemplation), the alcohol and drug use prevent the individual from consistently adopting the new habit (action); in this case the use pregnancy prevention methods. Findings from this study indicate not using alcohol or drugs prior to sexual intercourse would have a positive effect on the prevention behavior; increasing the use of pregnancy prevention methods among both male and female students. As previously stated, younger adolescents are more likely to struggle with establishing their identity in comparison to students in the upper grade levels. The inability to understand their role in the relationship negatively affects the likelihood of the adolescent to move to the action stage and use prevention methods during sexual encounters. In regards to race, the dynamics plaguing high risk groups are multifaceted. There are many factors that influence whether or not the adolescent will use prevention methods. Addressing these factors is critical in order to help adolescents in high-risk groups recognize the need for change (precontemplation) and facilitate the change

behavior (action).

These interpretive results support the hypotheses of the study. The negative experiences inhibit adolescents' ability to achieve identity (Erickson, 1968) and stay true to themselves and their beliefs. Instead, the adolescent stays in role confusion and does not gain the ability to demand prevention methods are used by their sexual partners. Results from this study suggest it is not that the individual wishes to not do better (precontemplation); instead their circumstances prevent them from knowing where to start to begin the change (action). The pathway from precontemplation to action is disguised by violence victimization, alcohol and drug use, race, and other individual experiences.

Study Design Considerations and Limitations

The YRBS is the only national data set for high school students. Data are only collected from youth who attend school. Other adolescents who are not currently attending school do not have an opportunity to complete the survey. Therefore, the results are not representative of all persons in the age group (CDC, 2018). Risk behaviors may be more prevalent among students with poor school attendance (Silverman et al., 2001). Therefore, reported risk behaviors may not be accurate in this study due to the likelihood of less participation in the survey by students who are frequently absent from school or students who have dropped out.

The gender and sex of the dating partners were not examined during this study. Relationships between variables could be associated with the sex of the aggressor. Additionally, adolescents involved in same-sex relationships could account for the lack of pregnancy prevention use among these students. Preventing pregnancy is not a concern

for this group which would explain not use prevention methods. Therefore, the sex of the partner should be considered in future studies as a potential impact factor.

The national YRBS is a cross-sectional survey that contains a standard set of questions; changing questions is prohibited. The extent of overreporting or underreporting cannot be determined because results are self-reported and not actual observed. Questions on the YRBS are carefully selected to collect information on a variety of risk factors which may impact the health of adolescents and young adults. However, explanatory variables needed for comprehensive analysis are limited. As a result, limitations include the inability to show causality. Although data analysis confirmed a relationship between dating violence victimization, associative factors, and use of prevention methods, directionality of the association cannot be established from this study. In other words, it is impossible to determine if dating violence victimization causes the associative factors and less use of prevention methods, if associative factors and less use of prevention methods cause dating violence victimization, or whether the relationship is reciprocal. Further research, utilizing qualitative methodology such as interviews and focus groups, is needed to establish directionality of these relationships. Additionally, there are no questions included on the YRBS that explore an adolescents' perception in regards to abortion. Perhaps, the use of prevention methods is related to the adolescent's feelings toward abortion. For example, if abortion is viewed as a viable solution to unplanned pregnancies, the consequences of not using pregnancy prevention methods may not be considered. Further qualitative research will be needed to explore the possible relationship between dating violence victimization, perception in regards to abortion, and use of prevention methods among adolescents.

The questionnaire is completed using the self-report method. It is possible adolescents completing the survey provide answers that are socially acceptable out of fear of being judged should the questionnaire not be kept anonymous as guaranteed in the questionnaire instructions. Other limitations to this study include the inability to examine other factors that prevent adolescents from moving from precontemplation to action such as cultural and religious influences. Covariates such as religious beliefs should be examined. The YRBS does not include questions regarding religious or spiritual beliefs of the adolescent. Therefore, establishing a relationship between religious influences and use of pregnancy prevention methods could not be established. Marital status and age of the adolescents' parents and the presence of other teenage parents in the student's social circle are also important factors. Identifying cultural and social influences could help provide explanations behind the behaviors of the high-risk groups. Again, the children of adolescent parents are at an increased risk of also becoming pregnant during their teenage years. The presence of other adolescent parents in one's social circle increases the acceptability of teenage pregnancy explaining the lack of use of pregnancy prevention methods. Additionally, according to Wiltz (2015), poverty is an influencing factor in high teen birth rates. The current socioeconomic status of the adolescents' parents is critical but unfortunately is not able to be assessed by the YRBS survey. Lack of examining the adolescents' socioeconomic status as a covariance affects the results. Therefore, these results do not reflect the actual relationship between poverty and birth rates among adolescents.

Recommendations for Future Research

These limitations aside, findings provide implications for needed changes to

health policies for adolescent pregnancy prevention initiatives. Although some policies are showing a reduction in teenage pregnancy rates, there are gaps in progress; especially among students in the ninth grade, all races with the exception of White students, and victims of dating violence. Knowledge regarding effective strategies to reduce dating violence and pregnancy among adolescents has continued to increase over the past few decades. However, there are limited studies on dating violence specifically among male adolescents. In addition, there is limited research that examined factors that influence adolescents' decision to change their prevention behavior (precontemplation) and actually doing so (action) in association with race, alcohol and drug use, grade, and risk behavior. In the future, dating violence models should examine race, grade, and alcohol and drug use and risk behaviors.

Identified gender-specific differences should be used as the framework for community-wide prevention initiatives. However, one could challenge the reliability of the gender differences. In regard to males, a possible explanation for the gender differences may be males mark "yes" on the survey are assuming females used birth control during sexual activity. This narrative is formed without sufficient evidence, which unfortunately cannot be tested using data from the YRBS, as there are no questions included in the survey that address this topic. Better understanding of a male's perspective in regard to dating violence and using pregnancy prevention methods could guide best practices in prevention efforts as well. Qualitative studies, conducted separately by gender, would further contribute to the findings of this study. Qualitative research, including focus groups and interviews, would help researchers gain a better understanding of adolescents' perspective in regards to dating violence and use of

pregnancy prevention methods. Qualitative studies could assist a researcher with gaining insight of adolescents' perception of their ability to access pregnancy prevention health services. Critically important would be how adolescents "feel" about accessing these services. For example, are they comfortable discussing prevention method options with their healthcare providers? Additionally, adolescents' perspective regarding abortion needs further exploration.

Recommendations for targeted evidence-based approaches and research should include replicating this study using samples from future YRBS surveys. Doing so would identify trends to help direct future program planning initiatives and areas of needed improvement. The development, implementation, and evaluation of community intervention programs specifically designed to target and address the associative relationships discovered during this study is crucial. For example, this researcher identified students in the ninth grade as a high-risk group for not using prevention methods confirming the importance of using Erickson's developmental theory as a guide for intervention programs. Initiatives should focus on helping this particular age group to develop an understanding of their role in relationships and a sense of self to avoid role confusion. Programs should be multifaceted, designed to address adolescents in both the identity and role confusion stages, gender-specific, and address differences across racial groups. Critically important, as indicated by the results of this study, is the development of further research studies and initiatives tailored to address sexual dating victimization of male adolescents. Both Archer (2000) and O'Leary (2000) agreed physical aggression by women must be taken seriously in order to effectively address partner abuse. However, findings from this study confirmed male students are also victims of partner

abuse; specifically, sexual dating violence. This study fills a gap in the literature regarding the effect of sexual dating violence on the use of pregnancy prevention methods for male students.

Conclusion

The discourse surrounding adolescent pregnancy has changed over past years; policies driven by the views of political figures. Results of this study indicate significant differences continue to exist between races/ethnicities. These disparities have also been noted in previous studies. Romero et al (2016) noted disparities by race continue to exist despite declines in adolescent births in the United States. This fact brings attention to the continued failed efforts of pregnancy prevention programs developing effective strategies to close these gaps.

Two additional goals of Healthy People 2020 among adolescents are to reduce pregnancies of females aged 15–17 years old (HP2020 objective: FP-8.1) and reduce pregnancies of females aged 18–19 years old (HP2020 objective: FP-8.2) among adolescents (Healthy People, 2010). Deemed a “winnable battle” by the CDC (2013), the implementation of effective strategies to prevent teenage pregnancy has the potential to impact health on a large scale. The CDC recognizes dating violence as an ACE. Adverse childhood experiences have a negative effect on an individual’s health. According to Hall et al. (2019), adverse experiences are associated with unintended first pregnancies. Results of the present study confirm these views; dating violence was proven to be associated with prevention behavior. Significantly reducing the prevalence of dating violence in adolescent relationships can potentially increase the use of pregnancy prevention methods among adolescents, ultimately decreasing teenage pregnancy rates.

In addition to the aforementioned recommendations for evidence-based approaches, a better understanding of the role of state policies in regard to teen birth rates are needed (Beltz et al., 2015). It is imperative we consider the developmental stages of adolescents, using Erickson's developmental theory as a guide in order to develop effective strategies. This idea is also supported by Kappeler and Farb (2014) who emphasized the importance of adolescent development is often overlooked by the general public and health practitioners. The researcher of this study identified factors that could potentially impact an adolescent's ability to move from precontemplation to action tenets of the transtheoretical model. It is critical for community-wide intervention programs to incorporate comprehensive approaches that include collaborative partnerships between healthcare professionals, educators, policymakers, and community members. Findings from this study add to the evidence that dating violence victimization is associated with frequency of use of prevention methods among adolescents. Results of this study fills a gap in the literature regarding the association between dating violence victimization, associative factors, and use of prevention methods among adolescents in high school using both Erickson's developmental theory and the precontemplation to action tenets of the transtheoretical model as a guiding framework. This study emphasizes the critical need for innovative programs that address both female and male victims of dating violence. Additionally, interventions which incorporate initiatives that address the developmental stages of an adolescent are needed. Due to its impact on adolescent pregnancy prevention, it is imperative dating violence be addressed, as teenage pregnancy has serious implications for the futures of both adolescent parents and their children. This research contributes to better understanding the relationship between

dating violence and use of prevention methods. Now more than ever, it is imperative stakeholders develop evidence-based interventions to reducing unplanned pregnancies among adolescents.

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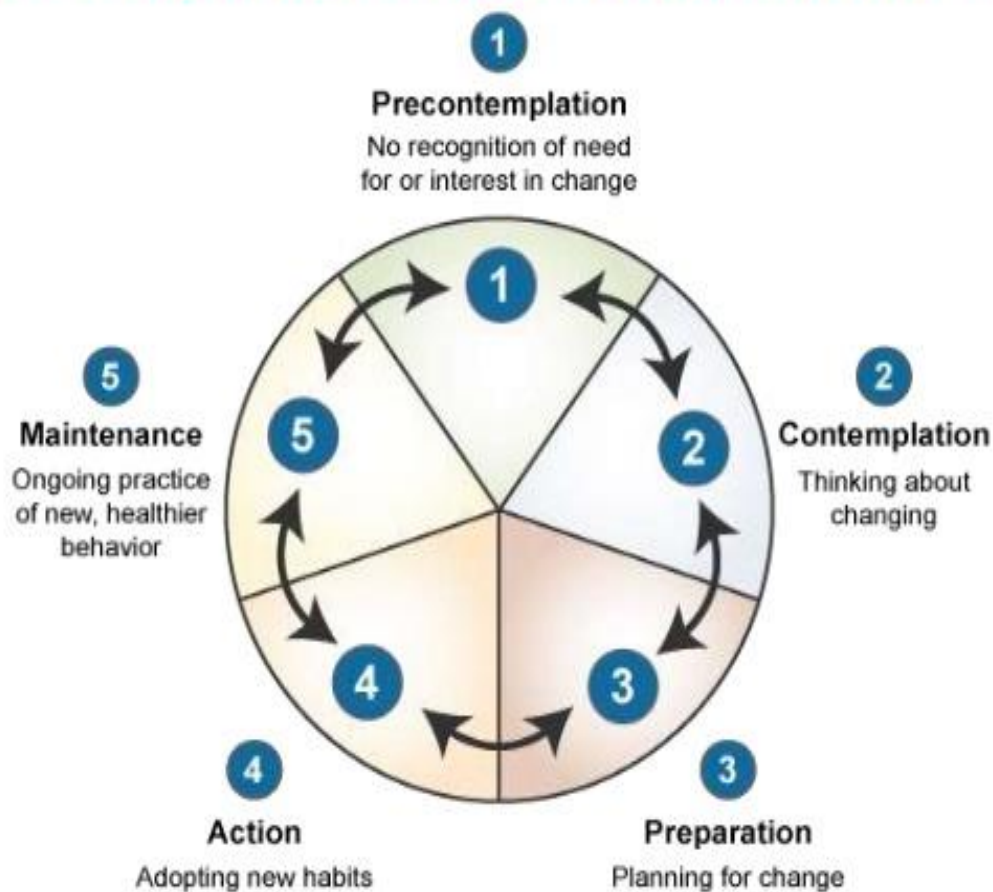
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Appendix A: Theoretical Model

“Stages of change”

Transtheoretical model of behaviour change



Prochaska, DiClemente & Norcross (1992)

Appendix B: Youth Risk Behavior Survey

2017 State and Local Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

Directions

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: A B ● D.
- If you change your answer, erase your old answer completely.

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?
 Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example

Height	
Feet	Inches
5	7
③	⑩
④	①
●	②
⑥	③
⑦	④
	⑤
	⑥
	●
	⑧
	⑨
	⑩
	⑪

Height	
Feet	Inches
③	⑩
④	①
⑤	②
⑥	③
⑦	④
	⑤
	⑥
	⑦
	⑧
	⑨
	⑩
	⑪

7. How much do you weigh without your shoes on?
 Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight Pounds		
1	5	2
①	①	①
●	①	①
②	②	●
③	③	③
	④	④
	●	⑤
	⑥	⑥
	⑦	⑦
	⑧	⑧
	⑨	⑨

Weight Pounds		
①	①	①
①	①	①
②	②	②
③	③	③
	④	④
	⑤	⑤
	⑥	⑥
	⑦	⑦
	⑧	⑧
	⑨	⑨

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 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
14. **During the past 12 months**, on how many days did you carry a **gun**? (Do **not** count the days when you carried a gun only for hunting or for a sport, such as target shooting.)
 - 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 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
19. Have you ever been physically forced to have sexual intercourse when you did not want to?
- A. Yes
 - B. No
20. During the past 12 months, how many times did **anyone** 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. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or more times

21. 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
22. 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

The next 2 questions ask about bullying. Bullying is when 1 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 been **electronically** bullied? (Count being bullied through texting, Instagram, Facebook, or other social media.)
- A. Yes
 - B. No

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.

25. 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

26. During the past 12 months, did you ever **seriously** consider attempting suicide?
 - A. Yes
 - B. No
27. During the past 12 months, did you make a plan about how you would attempt suicide?
 - A. Yes
 - B. No
28. 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
29. **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 4 questions ask about cigarette smoking.

30. Have you ever tried cigarette smoking, even one or two puffs?
 - A. Yes
 - B. No
31. How old were you when you first tried cigarette smoking, even one or two puffs?
 - A. I have never tried cigarette smoking, not even one or two puffs
 - 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
32. 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

33. 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

The next 3 questions ask about electronic vapor products, such as blu, NJOY, Vuse, MarkTen, Logic, Vapin Plus, eGo, and Halo. Electronic vapor products include e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens.

34. Have you ever used an electronic vapor product?
- A. Yes
 - B. No
35. During the past 30 days, on how many days did you use an electronic vapor product?
- 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
36. During the past 30 days, how did you **usually** get your own electronic vapor products? (Select only **one** response.)
- A. I did not use any electronic vapor products during the past 30 days
 - B. I bought them in a store such as a convenience store, supermarket, discount store, gas station, or vape store
 - C. I got them on the Internet
 - D. I gave someone else money to buy them for me
 - E. I borrowed them from someone else
 - F. A person 18 years old or older gave them to me
 - G. I took them from a store or another person
 - H. I got them some other way

The next 3 questions ask about other tobacco products.

37. During the past 30 days, on how many days did you use **chewing tobacco, snuff, dip, snus, or dissolvable tobacco products**, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, Copenhagen, Camel Snus, Marlboro Snus, General Snus, Ariva, Stonewall, or Camel Orbs? (Do not count any electronic vapor products.)
- 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
38. 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
39. During the past 12 months, did you ever try **to quit** using **all** tobacco products, including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products?
- A. I did not use any tobacco products during the past 12 months
 - B. Yes
 - C. No

The next 4 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.

40. 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

41. 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
42. 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
43. 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 2 questions ask about how many drinks of alcohol you have had in a row, that is, within a couple of hours. For the first question, the number of drinks you need to think about is different for female students and male students.

44. During the past 30 days, on how many days did you have **4** or more drinks of alcohol in a row (if you are **female**) or **5** or more drinks of alcohol in a row (if you are **male**)?
- 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

45. During the past 30 days, what is the largest number of alcoholic drinks you had in a row?
- 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

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

46. 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
47. 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
48. 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.

49. 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
50. 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
51. 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
52. 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
53. 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

54. During your life, how many times have you used **synthetic marijuana** (also called K2, Spice, fake weed, King Kong, Yucatan Fire, Skunk, or Moon Rocks)?
- 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 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
56. During your life, how many times have you taken **prescription pain medicine** without a doctor's prescription or differently than how a doctor told you to use it? (Count drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet.)
- 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 a needle to inject any **illegal** drug into your body?
- A. 0 times
 - B. 1 time
 - C. 2 or more times
58. 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.

59. Have you ever had sexual intercourse?
- A. Yes
 - B. No

60. 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
61. 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
62. 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
63. 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
64. 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

65. 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
66. 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
67. Which of the following best describes you?
- A. Heterosexual (straight)
 - B. Gay or lesbian
 - C. Bisexual
 - D. Not sure

The next 2 questions ask about body weight.

68. How do **you** describe your weight?
- A. Very underweight
 - B. Slightly underweight
 - C. About the right weight
 - D. Slightly overweight
 - E. Very overweight
69. 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

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.

70. 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
71. 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
72. 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
73. 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

74. 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
75. 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
76. 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
77. 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

78. 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.

79. 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
80. 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
81. 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 iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media.)
- 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

82. 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
83. 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 question asks about concussions. A concussion is when a blow or jolt to the head causes problems such as headaches, dizziness, being dazed or confused, difficulty remembering or concentrating, vomiting, blurred vision, or being knocked out.

84. During the past 12 months, how many times did you have a concussion **from playing a sport or being physically active**?
- A. 0 times
 - B. 1 time
 - C. 2 times
 - D. 3 times
 - E. 4 or more times

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

85. 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
86. 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

87. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
 - B. No
 - C. Not sure
88. On an average school night, how many hours of sleep do you get?
- A. 4 or less hours
 - B. 5 hours
 - C. 6 hours
 - D. 7 hours
 - E. 8 hours
 - F. 9 hours
 - G. 10 or more hours
89. During the past 12 months, how would you describe your grades in school?
- A. Mostly A's
 - B. Mostly B's
 - C. Mostly C's
 - D. Mostly D's
 - E. Mostly F's
 - F. None of these grades
 - G. Not sure

**This is the end of the survey.
Thank you very much for your help.**

Appendix C: State and Local Risk Behavior Survey

2015 State and Local Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

2015 Standard HS YRBS

Directions ☒ Use a #2 pencil only. ☒ Make dark marks.
 ☒ Fill in a response like this: A B ☒ D. ☒ If you change your answer, erase your old answer completely.

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?
 Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example

Height	
Feet	Inches
5	7

Height	
Feet	Inches

ℳ	℔
↗	℔
⑥	℔
≡	ℳ
✕	↗
	℔
	≡
	⑥
	er
	&
	●
	11 ○

ℳ	℔
↗	℔
℔	℔
≡	ℳ
✕	↗
	℔
	≡
	✕
	er
	&
	●
	11 ○

7. How much do you weigh without your shoes on?
 Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight		
Pounds		
1	5	2
℔	℔	℔
⑥	℔	℔
℔	℔	⑥
ℳ	ℳ	ℳ
	↗	↗
	⑥	℔
	≡	≡
	✕	✕
	er	er
	&	&

Weight		
Pounds		
℔	℔	℔
℔	℔	℔
℔	℔	℔
ℳ	ℳ	ℳ
	↗	↗
	℔	℔
	≡	≡
	✕	✕
	er	er
	&	&

The next 5 questions ask about safety.

8. **When you rode a bicycle** during the past 12 months, how often did you wear a helmet? A. I did not ride a bicycle during the past 12 months
 B. Never wore a helmet
 C. Rarely wore a helmet
 D. Sometimes wore a helmet

- E. Most of the time wore a helmet
 - F. Always wore a helmet
9. 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
10. 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
11. 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
12. 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.

13. 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
14. 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
15. 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
16. 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
17. 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
18. 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
19. 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
20. 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
21. Have you ever been physically forced to have sexual intercourse when you did not want to?
- A. Yes
 - B. No
22. 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
23. 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 2 questions ask about bullying. Bullying is when 1 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.

24. During the past 12 months, have you ever been bullied **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

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.

26. 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
27. During the past 12 months, did you ever **seriously** consider attempting suicide?
- A. Yes
 - B. No
28. During the past 12 months, did you make a plan about how you would attempt suicide?
- A. Yes
 - B. No
29. 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

30. **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 8 questions ask about tobacco use.

31. Have you ever tried cigarette smoking, even one or two puffs?
- A. Yes
 - B. No
32. 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
33. 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
34. 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
35. 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 got them on the Internet
 - 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
36. 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
37. 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
38. 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 2 questions ask about electronic vapor products, such as blu, NJOY, or Starbuzz. Electronic vapor products include e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, ehookahs, and hookah pens.

39. Have you ever used an electronic vapor product?
- A. Yes
 - B. No

40. During the past 30 days, on how many days did you use an electronic vapor product?
- 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.

41. 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
42. 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
43. 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

44. 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
45. 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
46. 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.

47. 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

48. 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
49. 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.

50. 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
51. 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
52. 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
53. 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
54. 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
55. During your life, how many times have you used **synthetic marijuana** (also called K2, Spice, fake weed, King Kong, Yucatan Fire, Skunk, or Moon Rocks)?
- 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 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
57. 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

58. 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
59. 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.

60. Have you ever had sexual intercourse?
A. Yes
B. No
61. 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
62. 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
63. 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
64. 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
65. 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
66. 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

67. 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
68. Which of the following best describes you?
- A. Heterosexual (straight)
 - B. Gay or lesbian
 - C. Bisexual
 - D. Not sure

The next 2 questions ask about body weight.

69. How do **you** describe your weight?
- A. Very underweight
 - B. Slightly underweight
 - C. About the right weight
 - D. Slightly overweight
 - E. Very overweight
70. 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

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.

71. 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

72. 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
73. 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
74. 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
75. 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
76. 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
77. 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
78. 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
79. 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.

80. 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
81. 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
82. 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
83. 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
84. 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 5 questions ask about other health-related topics.

85. 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
86. 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
87. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
 - B. No
 - C. Not sure
88. On an average school night, how many hours of sleep do you get?
- A. 4 or less hours
 - B. 5 hours
 - C. 6 hours
 - D. 7 hours
 - E. 8 hours
 - F. 9 hours
 - G. 10 or more hours
89. During the past 12 months, how would you describe your grades in school?
- A. Mostly A's
 - B. Mostly B's
 - C. Mostly C's
 - D. Mostly D's
 - E. Mostly F's
 - F. None of these grades
 - G. Not sure

This is the end of the survey.
Thank you very much for your help.

Appendix D: State and Local Youth Risk Behavior Survey

2013 State and Local Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

DIRECTIONS

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: ☐ A ☐ B ☒ C ☐ D
- If you change your answer, erase your old answer completely.

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?

Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example

2

2013 standard YRBS

Height	
Feet	Inches
5	7
3	0
4	1
	2
6	3
7	4
	5
	6
	8
	9
	10
	11

Height	
Feet	Inches
3	0
4	1
5	2
6	3
7	4
	5
	6
	7
	8
	9
	10
	11

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

Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight		
Pounds		
1	5	2
0	0	0
	1	1
2	2	
3	3	3
	4	4
		5
	6	6
	7	7
	8	8
	9	9

Weight		
Pounds		
0	0	0
1	1	1
2	2	2
3	3	3
	4	4
	5	5
	6	6
	7	7
	8	8
	9	9

The next 5 questions ask about safety.

8. **When you rode a bicycle** during the past 12 months, how often did you wear a helmet?
- A. I did not ride a bicycle during the past 12 months
 - B. Never wore a helmet
 - C. Rarely wore a helmet

- D. Sometimes wore a helmet
 - E. Most of the time wore a helmet
 - F. Always wore a helmet
9. 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
10. 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
11. 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
12. 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.

13. 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
14. 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
15. 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
16. 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
17. 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
18. 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
19. 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
20. 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
21. Have you ever been physically forced to have sexual intercourse when you did not want to?
- A. Yes
 - B. No
22. 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

23. 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 2 questions ask about bullying. Bullying is when 1 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.

24. During the past 12 months, have you ever been bullied **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

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.

26. 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
27. During the past 12 months, did you ever **seriously** consider attempting suicide?
- A. Yes
 - B. No
28. During the past 12 months, did you make a plan about how you would attempt suicide?
- A. Yes

- B. No
29. 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
30. **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.

31. Have you ever tried cigarette smoking, even one or two puffs?
- A. Yes
 - B. No
32. 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
33. 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
34. 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
35. 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
36. 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
37. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?
- A. Yes
 - B. No
38. 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

39. 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
40. 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.

41. 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
42. 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
43. 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
44. 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
45. 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
46. 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.

47. 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
48. 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
49. 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 9 questions ask about other drugs.

50. 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
51. 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
52. 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
53. 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
54. 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
55. 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
56. 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
57. 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
58. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?
- A. Yes
 - B. No

The next 7 questions ask about sexual behavior.

59. Have you ever had sexual intercourse?
- A. Yes
 - B. No
60. 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
61. 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
62. 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
63. 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
64. 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
65. 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

The next 5 questions ask about body weight.

66. How do **you** describe your weight?
- A. Very underweight
 - B. Slightly underweight
 - C. About the right weight
 - D. Slightly overweight
 - E. Very overweight
67. 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
68. 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
69. 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
70. 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.

71. 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
72. 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
73. 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
74. 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
75. 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
76. 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

77. 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
78. 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
79. 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.

80. 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
81. 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
82. 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
83. 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
84. 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 2 questions ask about other health-related topics.

85. Have you ever been taught about AIDS or HIV infection in school?
- A. Yes
 - B. No
 - C. Not sure
86. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
 - B. No
 - C. Not sure

**This is the end of the survey.
Thank you very much for your help.**