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## Sexual Minority Students' Negative Experiences in High School

Abena Pinamang

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Sexual Minority Students' Negative Experiences in High School

Abena Pinamang

A Thesis Submitted to the Graduate Faculty of

GRAND VALLEY STATE UNIVERSITY

In

Partial Fulfillment of the Requirements

For the Degree of

Master of Science in Criminal Justice

School of Criminology, Criminal Justice, and Legal Studies

August 2023

**Thesis Approval Form**



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## **Dedication**

I dedicate this work to my family and friends who supported me every step of the way.

### **Acknowledgements**

I am immensely grateful to my thesis committee members for their support throughout the time of this project. A special thanks to Dr. Tonisha Jones, my thesis chair, for her guidance and unwavering support. Her profound knowledge, insightful feedback, and constructive criticism have been instrumental in shaping the direction and quality of this work. I am truly grateful for her mentorship and dedication to my success. I am also grateful to Dr. Carrie Buist, a member of my thesis committee, for her immense knowledge and passion for promoting Queer Criminology. Furthermore, I am grateful to Dr. Lee, a member of my thesis committee, for her time and patience in assisting me run my statistical analysis. Without the support of my thesis committee members, I would not have had the motivation to complete this thesis. I am extremely grateful for your support.

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### **Abstract**

Schools are supposed to be a safe space for learning and development for all students regardless of race or gender however, many sexual minority students experience extreme forms of victimization in school which results in poor academic performance, suicidal ideation, illegal drug use, alcohol use and weapon carrying on school property. The current study aimed to identify the school experiences of sexual minority students and to determine whether they have the same experiences as their heterosexual peers. Secondary data obtained from the 2019 Youth Risk Behavior Surveillance System was used for analysis. The results of the study found that sexual minority students experience more bullying and are more likely to develop suicidal ideations and carry weapons to school than their heterosexual peers. The results also found that students who identify as bisexual are more likely to engage in alcohol and illegal drug use than their heterosexual peers. Additionally, future directions for making the school climate safe for all students are discussed.

*Keywords:* Lesbian, gay, bisexual, heterosexual, sexual minority students, negative school experiences.

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## Abbreviations

Centers for Disease Control and Prevention- CDC

Lesbian, gay and bisexual- LGB

Lesbian, gay, bisexual and transgender- LGBT

Lesbian, gay, bisexual, transgender and queer or questioning- LGBTQ

Grade Point Average- GPA

Gay, Straight Alliance- GSA

Primary Sampling Unit- PSU

Sexual and Gender Minority- SGM

Statistical Package for the Social Sciences- SPSS

Secondary Sampling Unit- SSU

YRBSS- Youth Risk Behavior Surveillance System

United States- U.S

## Chapter 1: Introduction

### Introduction

Schools are designed as a place of learning and development for the betterment of lives. According to the Centers for Disease Control and Prevention (CDC) (2016), children spend over six hours every day in school which makes schools a critical place for children's development. Studies have shown that a positive learning environment promotes feelings of safety and connectedness (Voight et al., 2015) and also lowers suicidal ideation among sexual and gender minority (SGM) students (Marraccini & Brier, 2017). Considering the role schools play in adolescents' development, it is important to maintain a conducive learning environment. Hopson et al. (2014) define a conducive learning environment as one that promotes diversity, equity and encourages inclusion of all students. Additionally, a conducive learning environment promotes a sense of belongingness and sets the foundation for emotional connections between teachers and students (Blum et al., 2002; Ioverno & Russell, 2020).

In the past, school climate research focused on the experiences of heterosexual students however, in recent years, studies on school climate have begun exploring the experiences of sexual and gender minority students focusing mainly on their sexual risk behaviors (Kosciw et al., 2012). According to the CDC (2022), the term sexual minority refers to any individual who identifies as either a lesbian, gay, or bisexual. The CDC further defines a lesbian as a woman open to sexual relations with other women and a gay as a man open to having sexual relations with other men. Similarly, the CDC defines a bisexual as an individual who is open to having sexual relations with both people of their gender and other genders.

Aside from focusing on sexual risk behaviors among the youth, recent school climate studies have taken a special interest in school safety due to increased levels of bullying and victimization reported across schools in the United States (Kosciw et al., 2012). Studies have found that bullying and victimization have made schools a hostile environment for most youth who identify as lesbian, gay, bisexual, and transgender (LGBT) ( Rankin & Beemyn, 2012). Aside from LGBT students, studies have shown that youth who identify as people of color and are caught between the intersection of race and sexual identity experience more victimization than heterosexual students (Hong et al., 2021). Additionally, the 2019 National School Climate Survey found that 44.9% of Latinx youth who identify as LGBT were bullied as a result of their race and sexual identity (Kosciw et al., 2020).

Intersectionality refers to how people from marginalized backgrounds experience oppression as a result of their identity (Crenshaw, 1991). Besides, bullying and victimization, other studies have reported that LGBT youth face discrimination and harassment as a result of their sexual orientation and gender identity (Kosciw et al., 2012). In effect, many LGBT youth develop feelings of sadness or hopelessness, difficulty concentrating in school, and a lack of desire to pursue higher education (Kosciw et al., 2015). Additionally, some sexual minority youth develop mental health issues like depression, anxiety, and suicidal ideation which impacts their health negatively (Russell et al., 2016). Other studies have shown that victimization reduces LGBT youth's access to education since they report high rates of dropout and truancy due to feelings of unsafety in school (Kosciw et al., 2012). The lack of supportive services and friendly school policies is linked to feelings of unsafety (Day et al., 2018). Likewise, low levels of engagement and poor academic performance have also been shown as factors why sexual and gender minority youth lose interest in school (Murdock & Bolch, 2005).

Despite the hostile conditions that drive students out of the educational system, research has found that sexual minority youth that attends schools with supportive adults and has inclusive curriculum are likely to develop feelings of safety and pursue further education upon completion (Kosciw et al., 2010). For instance, a study by (Kosciw et al., 2010) reported that the presence of supportive adults in schools promotes a sense of attachment to schools and reduces suicidal ideation among sexual minority students (Goodenow et al., 2006). Similarly, Kosciw et al. (2010) reported that sexual minority students in schools with inclusive curriculum experience high levels of acceptance from their peers.

Further studies by Szalacha (2003) have shown that schools with anti-bullying policies promote a sense of belongingness and safety for sexual minority youth. Additionally, the study also reported that schools that have Gay-Straight Alliance clubs (GSA) report lower levels of victimization among sexual minority students. For instance, a study by Toomey et al. (2011) reported that sexual and gender minority students who have GSAs in their school have reduced levels of depression and anxiety and have better mental well-being. Considering the benefits of a conducive school climate, it is important to put in place measures that would make schools safe for the diverse student population.

### **Purpose**

Although previous studies have shed light on the school experiences of sexual and gender minority youth, there remain several gaps in the literature. Research comparing the school experiences of lesbian, gay or bisexual (LGB) students and heterosexual students is limited. Previous studies have discussed only the school experiences of transgender youth (Day et al., 2018; McGuire et al., 2010) whereas others have focused on the school experiences of LGBTQ youth (Aragon et al., 2014; Russell et al., 2021). This current study aims to identify the school experiences of lesbian, gay

or bisexual high school students and compare their school experiences to those of their heterosexual peers.

### **Scope**

This study examines the school experiences of both heterosexual and LGB high school students between 9<sup>th</sup> and 12<sup>th</sup> grade in schools in all 50 States in the United States of America. In terms of school selection, the target population is all public, private, and Catholic high schools across the United States.

### **Research Questions**

This study seeks to identify the school experiences of lesbian, gay or bisexual students and compare their school experiences to those of their heterosexual peers. To achieve this, the study answers the following research questions:

1. What negative experiences do lesbian, gay and bisexual students face in high school?
2. Do lesbian, gay and bisexual students have the same school experiences as their heterosexual peers?

### **Significance**

This study contributes to the growing literature on the challenges lesbian, gay and bisexual youth face in High School. The study will also inform policymakers about the interventions and measures to support lesbian, gay or bisexual students.

This study comprises five chapters. The first chapter provides an introduction to the school climate. The chapter provides an overview of the impact of hostile school environments on sexual

minority students and also discusses some benefits of having a conducive school environment. The second chapter reviews existing literature on the topic. This chapter is divided into three sections. The first section discusses the experiences of students who identify as lesbian or gay and bisexual. The second section discusses some of the causes of the negative experiences and the final section discusses the impacts of these negative experiences on students who identify as lesbian, gay, and bisexual students.

Chapter Three discusses research methodology. This section is divided into four parts. The first section provides information about how the data for the study was obtained. The second section discusses the sampling design which talks about how respondents for the study were selected. The third part discusses the variables that were selected for analysis, how they were coded, and the level of measurement for each variable. Finally, the last section discusses the statistical package used for analysis. Chapter Four provides information about the results of the study. This chapter contains information about every variable that was included in the analysis. The final chapter provides a discussion of the findings of the study. This chapter is divided into four parts. The first section provides a detailed discussion of the findings of the study. The second section discusses implications for schools and policymakers. The third section discusses some of the limitations of the study. The final section provides suggestions for future research and a conclusion to the study.

## Chapter 2: Review of Literature

### SGM Students' Negative School Experiences

#### Bullying

The CDC (2015) defines bullying as a form of violence that threatens the well-being of youth. A study by Dunn et al. (2015) reported that bullying is considered a public health issue in the United States due to the large number of cases that were recorded in the past two decades. Bullying can occur in various forms such as electronic/cyberbullying, verbal bullying, and physical bullying (Webb et al., 2021) and the act can be perpetuated by either an individual or a group (Baiden et al., 2019). Cyberbullying refers to the use of social media platforms to harass or convey aggressive behaviors to weaker individuals (Abreu & Kenny, 2017). Similarly, verbal bullying refers to the use of abusive words to mock a weaker person. On the other hand, physical bullying involves the use of force to intimidate a weaker person (Delgado, 2011).

Concerning cyberbullying, a study by Moran et al. (2018) found that the introduction of social media platforms like Snapchat, Instagram, and Facebook has increased cyberbullying among the youth. Additionally, the study reported that cyberbullying is difficult to control due to the anonymity on social media platforms. Conversely, another study by Aoyama et al. (2011) found that perpetrators of cyberbullying often go unpunished because they use fake identities. Further studies have also shown that the limited contextual cues on virtual platforms reduce social accountability among the youth and stir interpersonal conflict (Alhajji et al., 2019). Specifically, a study by Cooper and Blumenfeld (2012) reported that LGBT youth are more likely to experience cyberbullying than heterosexual youth as a result of their association with gay-straight alliance clubs.

In terms of verbal bullying, research has shown that high school students who experience



verbal harassment are at a greater risk of developing depression, anxiety, and sleep disorders (Marshall et al., 2015). For instance, the 2011 National School Climate Survey found that over 80% of lesbian, gay, bisexual, and transgender youth had experienced verbal harassment as a result of their sexual orientation and gender identity, and over two-thirds of them reported feelings of unsafety as a result of their sexual orientation (Kosciw et al., 2012). Research has shown that sexual minority youth report hearing words like "dyke", "fag", "queer", "homo" and "gay" daily in school (Rivers & Noret, 2008). For instance, the 2017 National School Climate Survey found that 70.1% of sexual minority youth reported verbal harassment whereas 98.5% reported hearing homophobic words in school (Kosciw et al., 2018). Research has shown that lesbian, gay, bisexual, transgender and queer (LGBTQ) students experience severe levels of discomfort when homophobic words are used on them (Kosciw et al., 2016).

Concerning physical bullying, research has shown that perpetrators often engage in stealing victims' personal belongings, hitting, spitting, and pushing which often results in fights among the two parties (Cooper & Blumenfeld, 2012). A study by Kosciw et al. (2016) found that 37.8% of LGBTQ students reported that their properties were either stolen or intentionally destroyed in school. Additionally, the study also found that 27% of LGBTQ students reported experiencing physical bullying as a result of their sexual orientation. Further studies have shown that gender non-conformity also leads to bullying (Dunn et al., 2015). According to Young and Sweeting (2004), boys who possess feminine traits stand a greater chance of being bullied. Research by Espelage (2012) found that as children progress from middle to high school, bullying changes from physical and verbal assaults to gender-based forms like homophobic teasing and sexual harassment.

A negative effect of bullying is that it leads to serious mental health issues (Kosciw et al., 2016). A study by Copeland et al. (2013) found that students who experience bullying face severe mental health issues and also perform poorly academically. Similarly, a study by Phillips et al. (2017) found that sexual minority youth are more likely to become suicidal and also engage in the use of illegal substances. Further studies have also shown that bullying increases the idea of self-harm and depression among LGBTQ youth (Liu & Mustanski, 2014). Lastly, research has found that bullying increases depression and anxiety among sexual and gender-minority youth (Kosciw et al., 2016).

### **Causes of Negative School Experiences**

#### **Lack of Social Support**

Research by Castro and Sujak (2014) found that high schools in the United States do not meet the needs of sexual minority youth. High schools are places that present various complexities to adolescents' development. Most of these complexities arise from the discovery of one's sexuality in high school (Castro & Sujak, 2014). Sexual minority youth are considered the invisible adolescent population (Nichols, 1999) due to their underrepresentation in schools. Research by Castro and Sujak (2014) found that sexual minority youth are underrepresented in both academics and social activities in school.

One major way of underrepresentation is the lack of an LGBTQ-inclusive curriculum (Russell et al., 2006). LGBTQ inclusive curriculum reflects the history and lived experiences of the LGBTQ population (Russell et al., 2010). Research has shown that LGBTQ-inclusive curriculums are rare in schools (Castro & Sujak, 2014), and schools that have them often use the wrong contextualization (Macgillivray, 2000). Other studies have reported that high schools promote heteronormativity through the use of hidden curriculums (Castro & Sujak, 2014).

Hidden curriculums are unofficial rules and structures and a silent culture in schools from which students learn behaviors and attitudes. Though the hidden curriculum does not appear in any school's mission and lesson plan, it predicts dominant cultural and social values about need to be taught in schools (Ritzer, 2007). Through this informal curriculum, students learn that cultural norms and beliefs are the standards of society and schools reward those who abide by these norms (Ritzer, 2007). Further studies have shown that some schools did not include LGBTQ topics in their curriculum due to state and school district restrictions, community opinions, and the personal beliefs of the staff (Castro & Sujak, 2014). Also, LGBTQ topics were excluded from the curriculum because some teachers believed that they lacked the training and resources to teach those topics (Ngo, 2003). As a result of the lack of an LGBTQ-inclusive curriculum, many students face discrimination and rejection from both teachers and their peers (Castro & Sujak, 2014). Research by Schneider and Owens (2000) highlights that schools need to educate students about openness, tolerance, and acceptance of other genders which is key to building a safe school environment.

Aside from the lack of an LGBTQ-inclusive curriculum, the lack of supportive adults in school affects sexual and gender minority students negatively (Castro & Sujak, 2014). Aside from teaching, school officials serve as a support system for the youth and also set policies that are conducive to the school's climate (Kosciw et al., 2016). Research has shown that the inclusion of LGBTQ topics in schools' curricula is not enough rather more attention needs to be paid to the education of teachers, school administrators, and counselors so that they can provide support for sexual and gender minority students (Schneider & Owens, 2000). A study by Craig et al. (2018) found that LGBT students experience victimization from both teachers and their peers. In the case of teachers, they often victimize LGBT students by being biased or showing prejudice toward them

(Craig et al., 2018). As a result, many LGBT students who experience victimization and harassment fail to report it to school authorities because they believe that no attention would be taken against the perpetrators (Kosciw et al., 2016). Studies have shown that school counselors, teachers, and administrators can play a significant role in bridging the gap between sexual and gender minority students and their families, peers, and the larger community (Goodrich et al., 2013). For instance, the 2015 National School Climate Survey reported that 58% of LGBT students were willing to discuss issues on sexuality with teachers whereas 51.7% were willing to discuss LGBT issues with staff members who specialize in mental health (Kosciw et al., 2016). Additional research has shown that students in schools with supportive adults report increased levels of safety and low absenteeism (Kosciw et al., 2010).

Aside from the lack of support from schools, LGBT youth struggle to find support from within their families (Castro & Sujak, 2014). Research by Flowers and Buston (2001) found that racial minority youth can adapt better than sexual minority youth due to the shared cultural values they have with their family members. For instance, if someone makes fun of a person because of their cultural values and beliefs, it is easier to identify a relative with a similar experience however if you get mocked as a result of your sexual orientation and gender identity, it is difficult to seek comfort from the family since few people identify as sexual minorities (Castro & Sujak, 2014). Research has shown that identifying people with commonalities reduces minority stress (Flowers & Buston, 2001).

## **Consequences of Negative Experiences**

### **Poor Academic Performance**

Research has found that constant exposure to violent environments has a negative impact on student's academic performance (Fisher et al., 2018). Further studies have shown that bullying

(Bontempo & D'Augelli, 2002) and social isolation (Ueno, 2005) have a negative impact on LGBT students' academic performance. This is because LGBT students develop feelings of unsafety and become less attached to school activities (Kosciw et al., 2009). Once students become less attached to school activities, they engage in absenteeism which results in poor academic performance (Kosciw et al., 2009).

School absenteeism or truancy refers to the act of intentionally skipping school due to a lack of interest or respect for authority (Poteat et al., 2011). According to McCray (2006), students become truant when they have an unstable family life, receive less support from the community, and also find themselves in a negative school environment. Similarly, a study by Hollar and Moore (2004) found that truancy leads to delinquency issues such as property crimes, gang involvement, and alcohol usage. Further research has found that school absenteeism or truancy stems from discrimination, substance use, and mental health disorders (Burton et al., 2014). For instance, a 2010 study on students between 7<sup>th</sup> and 12<sup>th</sup> grade found that truancy is more prevalent among sexual minority students than heterosexual students (Poteat et al., 2011). Additional studies by Kosciw et al. (2016) found that 44.3 % of LGBTQ students missed school as a result of experiencing discrimination. Furthermore, a study by Birkett et al. (2009) reported that most LGBTQ students who have experienced victimization fake illnesses as a means of avoiding school. Additionally, a study by Kosciw et al. (2010) found that 29.1% of LGBT students had skipped classes at least once while 30% had missed school at least once in the past 30 days due to feelings of unsafety in schools. Comparing truancy rates across educational levels, the research found that heterosexual student's truancy levels had risen from 7% in middle schools to 14 % in high schools whereas LGBTQ students reported 22% truancy levels in both middle and high schools (Robinson & Espelage, 2011).

Other studies have found that marginalization affects LGBTQ students' academic performance (Aragon et al., 2014). The critical race theory explains that people from marginalized groups possess skills and abilities which are often undermined by the privileged class in society (Yosso, 2005). Some marginalized students are denied admission because college campuses do not have the necessary structures to support the needs of these students (Feldman et al., 2020). For instance, a study by Kosciw et al. (2018) found that most schools lack gendered dormitories and bathrooms which makes the school environment unsafe for LGBTQ youth. In practice, only a few individuals from marginalized populations can enter colleges whereas many students from privileged communities can easily gain college admission (Feldman et al., 2020). A study by Erikson et al. (2005) found that an individual's family background played a significant role in their educational attainment. Another study by Bandura (1989) reported that an individual's family, friends, and school environments increased their motivation to learn and pursue higher education. The National School Climate Survey found that 50% of LGBT students in their senior year had plans to pursue further education however 13.6% of those who had experienced bullying and victimization reported that they had no plans of pursuing higher education (Kosciw et al., 2010). Further research by Aragon et al. (2014) reported that LGBT students had lower chances of graduating from high school and attending college whereas heterosexual students had higher chances of attending a four-year college.

One important factor is that truancy and marginalization often affect sexual and gender minority students' grade point average (GPA) (Aragon et al., 2014). GPA serves as an indicator of a student's success in school (Hallfors et al., 2002). Colleges set students' acceptance rates based on GPA whereas employers select applicants based on their GPA from school (Aragon et al., 2014). Research has shown that students with less attachment to schools are often unprepared and receive lower grades on tests (Hallfors et al., 2002). Also, the 2015 National School Climate Survey found

that 38% of LGBTQ students reported school absence whereas 56.5 % reported receiving poor grades (Kosciw et al., 2016). Additional studies found that LGBTQ youth who experienced victimization had low GPAs and were unlikely to pursue post-secondary education (Kosciw et al., 2020).

Conversely, research has found that students who experience feelings of unsafety are less likely to perform well in reading and maths (Milam et al., 2010). Other studies on school tracking systems found that Black students comprised the majority of students in lower academic track classes whereas the advanced academic classes were made of white students (McCardle, 2020). This segregation in learning often prevents sexual minority students from gaining vital information that will foster their academic success (McCardle, 2020).

### **Minority Stress**

Meyer (1995) explains that marginalized individuals face a greater risk of developing chronic stressors which can affect their mental health. The term "minority stress" refers to the disproportional health challenges sexual and gender minority individuals face due to their minority status (Meyer, 2003). Sexual and gender minority individuals are likely to experience stressors such as internalized homophobia, rejection, and bias as a result of their sexual orientation and gender expression (Bishop et al., 2020). Research has found that people experience minority stress when their characteristics and beliefs are different from societal expectations (Meyer, 1995). For instance, a study by Button (2015) found that parading heterosexuality as the societal standard increases homophobia. Another study found that sexual minority individuals are likely to develop mental health issues due to perceived stigma from society (Meyer, 2003). To better understand minority stress, Meyer (1995) grouped them into three namely: internalized homophobia, perceived stigma, and exposure to discrimination and violence.

Internalized homophobia occurs when an individual directs the negative stigma from society toward oneself (Meyer, 1995). The self-construction of this stigma makes internalized homophobia an internalized process (Frost & Meyer, 2009). Aside from the internalization of negative attitudes, research has shown that disclosure of one's sexual orientation and disconnection from other sexual minority groups increases internalized homophobia (Newcomb & Mustanski, 2010). Additional studies have shown that a conflict between a person's identity and social environment results produces mental health outcomes (Meyer, 1995). For instance, a study by Newcomb and Mustanski (2010) reported that internalized homophobia leads to anxiety and depression among sexual minority individuals. Another study by Meyer (1995) on gay men reported a positive link between internalized homophobia and mental health-related distress such as guilt, demoralization, and suicidal ideation.

Concerning perceived stigma, research has found that the higher a person perceives stigma, the greater the chances of experiencing minority stress (Meyer, 1995). Research has shown that perceived stigma is associated with fear of discrimination, rejection, and prejudice (Bishop et al., 2020). Fear of discrimination and violence on the other hand increases vigilantism among sexual and gender minority individuals thereby increasing their chances of developing mental health issues (Hatchel et al., 2019). The perceived sense of discrimination and alienation which is derived from the idea of non-conformity to societal standards increases sexual and gender minority individuals to various mental health conditions such as depression, anxiety, and suicidal ideation (Meyer, 1995).

### **Mental Health Issues**

In the United States, mental health issues as some of the greatest threats to the development of sexual minority youth (Proulx et al., 2019). Sexual minority youth are often at risk of developing both short-term and long-term mental health problems due to the increased levels of violence and bullying



they experience in school (O'Malley Olsen et al., 2014). Research has found that increased levels of victimization increase mental health issues among sexual minority youth (Heck et al., 2014). Similarly, the 2015 National School Climate Survey found that victimization and discrimination decrease the well-being of sexual minority youth and leads to anxiety and depression (Kosciw et al., 2016). Aside from this, other research has found that sexual minority youth are more likely to engage in suicidality, and drug and alcohol usage (Doxbeck 2020; Kosciw et al., 2016). Part of this issue is a result of a lack of supportive services and access to mental healthcare (Ard & Makadon, 2012).

Within the healthcare system, studies have found that most healthcare professionals lack training on the needs of sexual minority youth which often results in diagnoses (Ard & Makadon, 2012). A 2010 study reported sexual minority youth had a lack of trust in the health system and were less likely to use their school health resources (Williams & Chapman, 2011). The disparities in healthcare treatment often makes many sexual and gender minority patients conceal their sexual identity (Ard & Makadon, 2012). The authors further explain that the disparity in treatment causes some sexual minority youth to disengage with the healthcare system and resort to self-medication.

### **Suicide**

The Centers for Disease Control and Prevention (2021), defines suicide as the act of deliberately injuring oneself to end one's life. In the United States, the second leading cause of death among youth aged between 10 and 24 is suicide (Sullivan et al., 2015). Suicidal ideation comprises having thoughts of ending one's life, putting in place strategies to end one's life, and past attempts to commit suicide (David Klonsky et al., 2012).

Within the educational sector, suicidal ideation among adolescents remains one of the biggest challenges in United States schools (Kann et al., 2018). A study by Mortier et al. (2017) found that 3.2 % of college students have a history of attempted suicide while 22.3% of college students have other suicidal ideations. Research has found that depression, sexuality, bullying, and trauma are the leading causes of suicide among sexual minority youth (Di Giacomo et al., 2018). For instance, the 2017 Youth Risk Behavior Surveillance Survey found that 17.2 % of students in high school considered committing suicide (Kann et al., 2018). Depression among adolescents is also characterized by feelings of hopelessness. A study by Phillips (2020) which reviewed the Trevor Project found that more than half of transgender and non-binary youth are likely to commit suicide as a result of having mental health disorders. Additional studies by Chu et al. (2010) found that the variations in suicide rates among students are based on their demographics. For instance, a study by Stone et al. (2018) reported that the actual suicide rates among boys are higher whereas girls report higher numbers of attempted suicide. According to Kann et al. (2018), suicide rates are higher among female sexual minority youth than male sexual minority youth. Further studies have shown that suicidal ideation often leads to truancy and poor academic performance (Epstein et al., 2019). A meta-analysis study conducted by Marshal et al. (2011) found that sexual minority youth experience higher rates of depression and stand a greater chance of reporting suicidality than their heterosexual peers. Another study found that sexual minority youth are at increased risk of developing mental disorders like post-traumatic stress disorder, anxiety, and depression (Bostwick et al., 2014).

Additional research has shown that students who have poor writing and verbal skills are likely to develop suicidal ideation (Daniel et al., 2006). For instance, a study by Hatzenbuehler et al. (2011) found that 22% of sexual minority students in 11<sup>th</sup> Grade attempted suicide in 2010 while only 4% of

heterosexual students attempted suicide. Similarly, the 2015 Youth Risk Behavior Survey found that 43% of sexual minority youth considered suicide while only 15% of their heterosexual peers also considered suicide (Zaza et al., 2016).

### **Drug Use**

According to Doxbeck (2020), illegal substance use among high school students in the United States has become a public health issue. Existing research has shown that the chances of sexual minority youth engaging in illegal substance abuse are very high (Mereish et al., 2017). A study by Johnston et al. (2016) found that alcohol and cigarette use among high school students has decreased, however, the use of marijuana and e-cigarettes are still on the rise. According to Singh et al. (2016), between 7.9% to 16% of teens use e-cigarettes more than normal cigarettes. Research has found that the inhalation of these drugs poses a significant health threat, especially to the youth (Doxbeck, 2020). Another study also found that sexual minority youth have a greater chance of engaging in alcohol and drug use than heterosexual youth (Bowers et al., 2015). Additional studies by Marshal et al. (2008) found that sexual minority youth had a greater likelihood of engaging in substance use than their heterosexual counterparts.

To understand the high rates of alcohol and drug usage among LGB students, Reed et al. (2010) found that these students engage in substance use due to the victimization they encounter in school. Again, Woodford et al. (2015) found that lesbian, gay, bisexual and questioning youth are likely to engage in alcohol use due to the increased levels of harassment they face.

## **Alcohol Use**

Studies have shown that LGBT youth are more likely to consume alcohol than their heterosexual peers (Newcomb et al., 2012). Research has shown that one of the major reasons why sexual minority youth are more likely to consume more alcohol is as a result of the stigma and discrimination they face in school (Talley et al., 2016). A study by Birkett et al. (2009), found that LGBT students experience higher levels of victimization, such as verbal and physical abuse in school more than their heterosexual peers. The study also found that these victimizations result in high levels of alcohol and drug use among lesbian, gay, bisexual and questioning youth. Further research by Meyer (2003) has shown that minority groups are likely to consume more alcohol and drugs due to minority stress.

Meyer (2003) defines minority stress as the challenges people who identify with sexual minority groups face as a result of their marginalized status. According to Abreu and Kenny (2017), LGBTQ students often experience bullying, harassment, and lack of peer acceptance. These stressors can have detrimental effects on their mental health, leading to higher levels of anxiety, depression, and alcohol consumption. A recent study by Toomey et al. (2018) supports this notion, highlighting the impact of minority stress on alcohol use among LGBTQ adolescents. The study found that higher levels of victimization and discrimination were associated with increased alcohol use and related problems.

Another study by Marshal et al. (2013) found that sexual minority youth use alcohol as a coping mechanism for the minority stress they face. This notion is supported by another study conducted by Ali et al. (2018), which found that LGBTQ students reported higher levels of alcohol consumption as a means of escaping minority stress. Similarly, a study by Woodford et al. (2015) also

mentioned that constant harassment increases alcohol use among sexual minority individuals however those with strong resilience would be able to cope better.

Additional studies found that alcohol consumption is high among sexual minority students due to a lack of supportive environments. A study by Kosciw et al. (2015) examined the impact of school support on the well-being of LGBTQ students. The study found that students in schools with supportive policies and resources had lower levels of substance use and alcohol consumption. Conversely, students in schools with unsupportive environments reported higher levels of substance abuse.

Furthermore, the intersectionality of sexual orientation and mental health issues can create serious health challenges for sexual minority youth and lead to the use of alcohol as a coping mechanism (Newcomb et al., 2012). A study by Watson et al. (2017) demonstrated that LGBTQ students with higher levels of depressive symptoms were more likely to engage in heavy drinking. The increased levels of mental health issues among sexual minority youth make it difficult for them to avoid the use of alcohol (Talley et al., 2016). For instance, a study by Hatzenbuehler (2009) reported that lesbian, gay, and bisexual individuals consume high levels of alcohol than people who identify as heterosexual.

### **Weapon Carrying**

Previous studies have shown that sexual minority students are more likely to carry weapons to school than their heterosexual peers (Streed et al., 2020). A study by Baiden et al. (2019) found that sexual minority students were more likely to report carrying weapons than heterosexual students. This trend is consistent with a study by Burton et al. (2014), which also found that sexual minority youth

were more likely to carry weapons as a means of protection. One of the major reasons why sexual minority youth carry weapons is as a result of vulnerability. According to CDC (2016), some sexual minority youth feel vulnerable as a result of their sexual orientation and gender identity and in effect carry weapons as a means of protection. Other studies also found that constant bullying, harassment and victimization increases the likelihood that sexual minority students will engage in weapon carrying in schools (Streed et al., 2020). Additional studies found that constant exposure to physical and verbal harassment can lead to feelings of vulnerability, fear, and insecurity which increases weapon carrying among sexual minority youth (Castro & Sujak, 2014).

Another reason why sexual minority youth are likely to carry weapons is as a result of mental health issues. A study by Burton et al. (2014) found that sexual minority youth are likely to face mental health issues like depression, anxiety, and suicidal ideation than their heterosexual peers. These mental conditions can make them vulnerable and increase their chances of carrying weapons to school. According to Streed et al. (2020), weapon carrying serves as a coping mechanism for dealing with mental health conditions like anxiety.

Other studies found that sexual minority youth are likely to carry weapons due to fear of hate crimes and discrimination (Phillips et al., 2020). The CDC (2016) sheds light on the increased risk of hate crimes and discrimination faced by sexual minority youth. The constant fear of being targeted due to their sexual orientation or gender identity can compel these individuals to arm themselves for self-defense purposes (Streed et al., 2020).

Further studies have shown that sexual minority youth are likely to carry weapons as a result of a lack of trust in school authorities. Henderson et al. (2020) discuss the relationship between sexual minority youth and their trust in authorities, such as school officials or law enforcement. Due to past experiences of discrimination or neglect, these individuals may perceive a lack of support or

protection from schools. This lack of trust can result in a heightened sense of vulnerability and the belief that carrying a weapon is necessary to ensure personal safety.

Additional studies have found that sexual minority youth are likely to carry weapons as a result of peer influence and social exclusion. Semprevivo et al. (2019) emphasize the role of social exclusion and peer influence in weapon carrying among sexual minority youth. Isolation from mainstream social groups can lead to seeking acceptance and validation from alternative peer groups. In some cases, these groups may endorse or engage in activities involving weapons, creating a subculture that normalizes weapon possession (Streed et al., 2020).

### **Feelings of Sadness or Hopelessness**

Numerous studies have highlighted the increased vulnerability of sexual minority youth to feelings of sadness or hopelessness (Marshall et al., 2011). Studies have found that sexual and gender minority students develop feelings of sadness due to safety concerns (Fisher et al., 2018). Research has shown that although the term “safety” has been used by many researchers, there is no consistency in its measurement (Farrall et al., 1997). This difference is due to the lack of consensus in defining safety as a construct (Ferraro & Lagrange, 1988).

A study by Rinehart and Espelage (2016) found that sexual minority youth experience higher rates of discrimination and victimization in educational settings. Such discrimination can manifest in various forms, including verbal and physical harassment, creating an uncondusive environment that contributes to feelings of sadness and hopelessness. A study by Kosciw et al. (2018) found that increased levels of verbal, physical, and cyberbullying contribute to feelings of sadness or hopelessness. Another study by Russell et al. (2011) also found that the persistent fear of harassment leads to feelings of unsafety which produces emotional stress. Additional studies found that a lack of

supportive school environments can lead to feelings of sadness (Kosciw et al., 2010). Also, studies have shown that school environments that lack policies to protect LGBTQ students from discrimination can create a sense of isolation and increase levels of sadness or hopelessness (Kosciw et al., 2015). Contrarily, a study by Toomey et al. (2020) emphasized that a conducive school environment promotes feelings of safety for sexual and gender minority students.

Another reason why LGBTQ students develop feelings of sadness is as a result of stigma and social exclusion (Kosciw et al., 2010). According to Castro and Sujak (2014), constant bullying, social stigma, and hostility leads to feelings of isolation, shame, and low self-esteem among LGBTQ students. These stressors often result in feelings of sadness or hopelessness (Marshal et al., 2011). Other studies have also found that rejection from peers can also lead to feelings of sadness or hopelessness (Poteat & Russell, 2013).



## **Chapter 3: Methodology**

### **Design**

The current study utilizes secondary data obtained from the 2019 National Youth Risk Behavior Surveillance System (YRBSS) collected by the CDC. The main research question of this study is to identify whether lesbian, gay and bisexual high school students have the same school experiences as their heterosexual peers.

### **Research Questions**

The present study answers the following questions:

3. What negative experiences do lesbian, gay and bisexual students face in high school?
4. Do lesbian, gay and bisexual high school students have the same school experiences as their heterosexual peers?

### **Sampling**

The YRBSS contains territorial, national, state, tribal government, and local school-based surveys of 9<sup>th</sup> to 12<sup>th</sup> grade students in all 50 States in America. The target population was all public, private, and Catholic High Schools. The survey is conducted every two years during the Spring period. The YRBSS used a three-stage cluster sample design to select participants for the study. The primary sampling unit (PSU) is usually the first stage of a multi-cluster sampling design (Murphy, 2008). Typically, multi-cluster sampling designs have large units that can be further divided into smaller units.

The first sampling frame was made up of 1,257 PSUs including entire counties or sessions of larger counties (Underwood et al., 2020). The 1,257 PSUs were divided into 16 strata based on their

Metropolitan unit and the percentage of Black and Hispanic students in each stratum (Underwood et al., 2020). Out of the 1,257 PSUs, 54 were selected based on the probability which is proportional to the school enrollment size for that strata.

The second sampling frame was a secondary sampling unit (SSU). The secondary sampling unit is used to sample smaller units from the larger unit which was chosen in the first sampling frame (Acharya et al., 2013). High schools with grades 9 to 12 were considered whole schools while schools that had other grades were considered fragment schools (Underwood et al., 2020). Cluster schools were then formed by combining fragment schools with other schools. During the school selection process, schools that had been merged into a cluster were considered as single schools. Schools with more than 25 students in a grade were considered large whereas schools with a population of less than 25 students in a particular grade were considered small (Underwood et al., 2020).

One-fourth of small schools were selected from the Primary Sampling Unit with probability proportional to the enrollment size whereas three large schools were selected from the primary sampling unit with probability proportional to enrollment size. Out of the 54 PSUs created, 162 SSUs were selected proportional to the school enrolment size (Underwood et al., 2020). To ensure adequate representation of students in smaller schools, an additional 15 SSUs were added making a total of 177 SSUs. The total SSUs represented 184 physical schools. The final sampling frame involved the random selection of either one or two classrooms from each grade (9<sup>th</sup> to 12<sup>th</sup>) from either a required course or a required class period (Underwood et al., 2020). Students who belonged to any of the sampled classes were considered eligible to participate in the survey.

After obtaining the sample population, questionnaires were administered to the study participants. To reduce the oversampling of Black and Hispanic students, a weighting factor was

placed on race/ethnicity, sex, and grades variable to create a balance and also check non-responsiveness. The total weights were adjusted to ensure the number of students selected for the study matched the total sample size. A total of 17,025 students were sampled for the study however 13,872 answered the questionnaires. All invalid questionnaires were considered missing data. After data cleaning, 13,677 questionnaires were considered valid for the study. This resulted in a student response rate of 80.3%. Out of the 181 schools sampled, 136 schools met the criteria for the study. This resulted in a school response rate of 75.1%. The overall response rate for the study was 60.3%.

### **Measurement**

*Sexual Identity.* This variable was measured with one question. Participants were asked which of the following best describes their sexual identity: heterosexual, gay or lesbian, bisexual, and not sure. The not-sure responses were blocked and treated as missing data. Thus, the sexual identity variable in the current study only contains heterosexual, gay or lesbian, and bisexual responses. The response options were recoded as 1 representing heterosexual, 2 representing gay or lesbian, and 3 representing bisexual respectively.

*Bullying.* This variable was measured with two questions. The first question asked whether participants had experienced bullying on school property in the past 12 months. The response options were yes if you have ever experienced bullying in the past 12 months and no if you have never experienced bullying in the past 12 months. Since this is a dichotomous variable, the response options were recoded as 1 indicating yes and 0 indicating no respectively. The second question asked whether participants had experienced electronic bullying in the past 12 months. The response options were yes if you have experienced electronic bullying in the past 12 months and no if you have never experienced electronic bullying in the past 12 months. Since this is a dichotomous variable, the

response options were recoded as 1 indicating yes and 0 indicating no respectively.

*Difficulty Concentrating in School.* This variable was measured with one question.

Participants were asked whether they experienced difficulty concentrating in school as a result of physical, emotional, or mental problems. The response options were yes if they have experienced difficulty concentrating and no if they have never experienced difficulty concentrating in school. Since this is a dichotomous variable, the response options were recoded as 1 indicating yes and 0 indicating no respectively.

*Poor Academic Performance.* This variable was measured with grades in school. Participants were asked about their grades in school in the past 12 months. The response options were mostly A's, mostly B's, mostly C's, mostly D's, mostly F's, none of these grades, and not sure. None of these grades and not sure responses accounted for 0.8% and 3.4 % respectively. These two responses were blocked and treated as missing data in the analysis. Grades in school are reversely coded ranging from 1 indicating mostly F's to 5 indicating mostly A's. This variable was treated as a ratio variable.

*Suicide.* This variable was measured with one question. Participants were asked whether they considered suicide in the past 12 months. The response options were yes and no. Since this is a dichotomous variable, the response options were recoded as 1 indicating yes and 0 indicating no respectively.

*Drug Usage.* This variable was measured with one question. Participants were asked whether they had used illegal drugs at school in the past 12 months. The response options were yes and no. Since this is a dichotomous variable, the response options were recoded as 1 indicating yes and 0 indicating no respectively.

*Alcohol Usage.* This variable was measured with one question. Participants were asked about their alcohol consumption in the past 30 days. The response options were 0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 to 29 days, and all 30 days. Current alcohol usage is treated as a ratio variable as a result, the response options were not recoded.

*Weapon carrying.* This variable was measured with one question. Participants were asked the number of days they carried a weapon such as a gun, knife, or club to school in the past 30 days. The response options were 0 days, 1 day, 2 or 3 days, 4 or 5 days, and 6 or more days. Since weapon carrying is treated as a ratio variable, the response options were not recoded.

*Feelings of Sadness or Hopelessness.* This variable was measured with one question. Participants were asked whether they felt sad or hopeless in the past 12 months. The response options were yes and no. Since this is a dichotomous variable, the response options were recoded as 1 indicating yes and 0 indicating no respectively.

### **Analysis Plan**

The Statistical Package for Social Sciences (SPSS) version 29 was used to analyze the secondary data obtained from the 2019 National Youth Risk Behavior Surveillance System. Descriptive statistics were used to determine the frequencies and percentages of all the variables that were included in the study. Additionally, descriptive statistics provide demographic information about the study participants which makes it easier to understand how their background affects their school experiences.

To understand how lesbian, gay and bisexual students' school experiences compare to those of heterosexual students, Chi-square and ANOVA tests were performed. Chi-square tests were

performed to determine which group of students was more likely to report higher rates of bullying, suicidal ideation, drug usage, and feelings of sadness. Furthermore, One-Way ANOVA test was performed to determine whether there is a statistically significant difference between the grades obtained by lesbian gay, bisexual, and heterosexual students. Lastly, One-Way ANOVA test was performed to determine whether there is a statistically significant difference between lesbian or gay, bisexual, and heterosexual students' alcohol and weapon usage. For all analyses, a *p-value* less than 0.05 was used as a threshold for statistical significance.

## Chapter 4: Results

### Sample Characteristics

A total of 136 schools were included in the study. Out of the 13,872 questionnaires distributed, 13,677 were considered valid to be used for analysis after data cleaning. Table 1 displays the demographic characteristics of the study participants, including their age, race/ethnicity, school grade, and the demographic information of all other variables included in the study. The data reveals that the majority of the participants (87.6%) identified as heterosexual, while 9.3% identified as bisexual, and 3.1% identified as gay or lesbian. Concerning age, the study found that the majority of the participants ranged from 12 years old or younger (coded as 1) to 18 years old or older (coded as 6), and the mean value was 4.94, which indicated 15 years old. Concerning race, the study found that 50.4% identified as White, 15.4% identified as Black or African American, and 15.3% identified as having multiple Hispanic backgrounds. Additionally, 7.6% of the participants identified as Hispanic or Latino, 5% identified as having multiple Non-Hispanic backgrounds, 4.7% identified as Asian, 1.1% identified as Indian or Alaskan Native, and 0.5% identified as Native Hawaiian or having other Pacific Island origin.

In terms of educational grade, the participants ranged between 1 and 4 with grade 9 (coded as 1) and grade 12 (coded as 4) and the mean value was 2.41 which indicated 10<sup>th</sup> grade. In terms of bullying, the study found that 79.9% of the participants indicated that they have never experienced bullying in school whereas the remaining 20.1% responded that they have experienced bullying in school. Furthermore, 84.1% of the participants reported that they have never experienced electronic bullying whereas the remaining 15.9% indicated that they have experienced electronic bullying. With regards to the level of difficulty concentrating in school, 62.1 % of the participants reported that they

have never encountered difficulties concentrating in school whereas the remaining 37.9% reported that they have experienced difficulties concentrating in school. In terms of academic performance, the range of their grades was from F's (coded as 1) to A's coded as 5 and the mean value of their grades was 4.13 which indicated grades mostly C's. In terms of suicidal ideation, 80.4 % of the respondents reported that they have never considered suicide whereas the remaining 19.6 % reported that they have never considered suicide.

Additionally, the study found that 77.8% of the participants have never used illegal drugs in school whereas the remaining 22.2% reported engaging in the use of illegal drugs in school. With alcohol usage, the range of responses was from 1 to 7 with 1 (coded as 0 days) and 7 coded as (all 30 days) and the mean value was 1.53 which indicated 6 to 9 days. Additionally, the response rates for weapon carrying ranged from 1 to 5 with 1 (coded as 0 days) and 5 (coded as 6 or more days). The mean value was 1.08 which indicated 2 or 3 days. Lastly, with feelings of sadness, 63.3% of the participants indicated that they have never experienced feelings of sadness whereas the remaining 36.7% indicated that they have experienced feelings of sadness.

**Table 1. Demographic Characteristics of the Sample**

<b>Sample Demographic Characteristics (N=13,677)</b>				
Variables	Range	Mean	N	%
Sexual Identity				
Heterosexual			10,853	87.6
Gay or Lesbian			380	3.1
Bisexual			1,151	9.3
Age	1-6	4.94		
Race				
Indian/Alaska Native			145	1.1
Asian			618	4.7
Black or African American			2,040	15.4
Native Hawaiian/Other Pacific Islander			69	0.5
White			6,668	50.4
Hispanic/Latino			1,009	7.6



Multiple –Hispanic			2,029	15.3
Multiple Non-Hispanic			661	5
Educational Grade	1-4	2.41		
Bullying at School				
Yes			2,703	20.1
No			10,744	79.9
Electronic Bullying				
Yes			2,138	15.9
No			11,347	84.1
Difficulty Concentrating in School				
Yes			3,195	37.9
No			5,245	62.1
Grades in School	1-5	4.13		
Considered Suicide				
Yes			2,633	19.6
No			10,804	80.4
Illegal Drug Usage at School				
Yes			2,946	22.2
No			10,335	77.8
Current Alcohol Usage	1-7	1.53		
Weapon Carrying at School	1-5	1.08		
Feelings of Sadness or Hopelessness				
Yes			4,926	36.7
No			8,495	63.3

## Bivariate Analyses

### Bullying

The data shows that there is a statistically significant difference between a student's sexual identity and the possibility of being bullied at school ( $\chi^2 = 179.274$ ;  $p$ -value= 0.001). Specifically, the results found that students who identify as bisexual are the most likely to be bullied in school followed by those who identify as gay or lesbian. Conversely, the data shows that heterosexual students experience lower rates of bullying in school.

**Table 2. Chi-Square Test for Bullying at School**

Variable	Heterosexual		Gay/Lesbian		Bisexual		Chi-square	p-value
	N	%	N	%	N	%		
Yes	1,911	17.8	115	32.1	366	32.7	179.274	0.001***
No	8,823	82.2	243	67.9	754	67.3		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Electronic bullying

The data shows that there is a statistically significant difference between a student's sexual identity and the possibility of experiencing electronic bullying ( $x^2 = 154.328$ ;  $p\text{-value} = 0.001$ ). Specifically, the data shows that students who identify as gay or lesbian are the most likely to experience electronic bullying followed by students who identified as bisexual. Contrarily, the data shows that heterosexual students were the least likely to experience electronic bullying.

**Table 3. Chi-Square Test for Electronic Bullying**

Variable	Heterosexual		Gay/Lesbian		Bisexual		Chi-square	p-value
	N	%	N	%	N	%		
Yes	1,518	14.1	98	26.8	300	26.5	154.328	0.001***
No	9,238	85.9	268	73.2	833	73.5		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Difficulty Concentrating in School

The data shows that there is a statistically significant difference between a student's sexual identity and the ability to concentrate in school ( $x^2 = 350.124$ ;  $p\text{-value} = 0.001$ ). Specifically, students who identify as bisexual are the most likely to encounter difficulty concentrating followed by those who identify as gay or lesbian students. On the other hand, the data shows that students who identify as heterosexual are the least likely to encounter difficulty concentrating in school.

**Table 4. Chi-Square Test for Difficulty Concentrating in School**

Variable	Heterosexual		Gay/Lesbian		Bisexual		Chi-square	p-value
	N	%	N	%	N	%		
Yes	2,219	33.1	114	58.2	473	66.7	350.124	0.001***
No	4,483	66.9	82	41.8	236	33.3		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Poor Academic Performance

In terms of academic performance measured with grades in school, the data indicates that there is a statistically significant difference in the grades attained by each category of students ( $p$ -value=0.001). Specifically, gay or lesbian and bisexual students reported lower grades than heterosexual students. Between gay or lesbian and bisexual students, bisexual students reported slightly lower grades than gay or lesbian students. Heterosexual students on the other hand reported receiving higher grades in school.

**Table 5. One-Way ANOVA Test for Poor Academic Performance**

Sexual Identity	N	Mean	S.D.	F	p-value
Heterosexual	10,036	4.1616	0.8849	16.243	0.001***
Gay or Lesbian	348	4.023	0.9778		
Bisexual	1,050	4.0133	0.8982		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Suicide

The data reveals that there is a statistically significant difference between a student's sexual identity and the possibility of considering suicide ( $\chi^2=859.996$ ;  $p$ -value =0.001). Specifically, students who identify as bisexual are at the highest risk of considering suicide followed by gay or lesbian students however, the data reveals that heterosexual students have the lowest risk of considering suicide.

**Table 6. Chi-Square Test for Suicide**

Variable	Heterosexual		Gay/Lesbian		Bisexual		Chi-square	p-value
	N	%	N	%	N	%		
Yes	1,635	15.2	148	41	549	48.9	859.996	0.001***
No	9,090	84.8	213	59	574	51.1		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Drug Usage

The data reveals that there is a statistically significant difference between a student's sexual identity and the likelihood of engaging in illegal drug usage in school ( $\chi^2=61.675$ ;  $p$ -value = 0.001). Specifically, the data shows that bisexual students have the greatest chance of using illegal drugs in school followed by gay or lesbian students. Contrarily, the data shows that heterosexual students have the lowest possibility of engaging in illegal drug use in school.

**Table 7. Chi-Square Test for Drug Usage**

Variable	Heterosexual		Gay/Lesbian		Bisexual		Chi-square	p-value
	N	%	N	%	N	%		
Yes	2,252	21.1	99	27.9	346	30.8	61.675	0.001***
No	8,408	78.9	256	72.1	778	12.8		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Alcohol Use

In terms of alcohol usage, the data reveals that there is a statistically significant difference in the alcohol consumption rate of each category of students ( $p$ -value=0.001). Specifically, students who identify as gay or lesbian reported higher levels of alcohol consumption than heterosexual students. Between students who identify as gay or lesbian and bisexual those who identify as bisexual reported slightly lower grades than gay or lesbian students. Heterosexual students on the other hand reported consuming low levels of alcohol.

**Table 8. One-Way ANOVA Test for Alcohol Use**

Sexual Identity	N	Mean	S.D.	F	p-value
Heterosexual	10,104	1.51	1.012	6.875	0.001***
Gay or Lesbian	335	1.65	1.132		
Bisexual	1,067	1.61	1.089		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Weapon Carrying

According to the data, there is a statistically significant difference between a student's sexual identity and the likelihood of carrying weapons to school ( $p$ -value=0.001). Specifically, students who identify as gay or lesbian reported a higher tendency of carrying weapons to school than heterosexual students. Additionally, students who identify as gay or lesbian reported slightly higher chances of carrying weapons than those who identify as bisexuals. Heterosexual students on the other hand reported a lower tendency of carrying weapons to school.

**Table 9. One-Way ANOVA Test for Weapon Carrying at School**

Sexual Identity	N	Mean	S.D.	F	p-value
Heterosexual	10,253	1.06	0.430	14.171	0.001***
Gay or Lesbian	346	1.13	0.609		
Bisexual	1,103	1.12	0.617		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

### Feelings of Sadness or Hopelessness

The data shows that there is a statistically significant difference between a student's sexual identity and the possibility of feeling sad or hopeless in school ( $\chi^2=678.469$ ;  $p$ -value=0.001). Precisely, students who identify as bisexual are the most likely to develop feelings of sadness or hopelessness followed by those who identify as gay or lesbian. Contrarily, the data shows that heterosexual students are the least likely to develop feelings of sadness or hopelessness.

**Table 10. Chi-Square Test for Feelings of Sadness or Hopelessness**

Variable	Heterosexual		Gay/Lesbian		Bisexual		Chi-square	p-value
	N	%	N	%	N	%		
Yes	3,421	31.9	210	58	771	68.9	678.469	0.001***
No	7,296	68.1	152	42	348	31.1		

Note: \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

## Chapter 5: Discussion and Conclusions

### Findings

This study aimed to identify the school experiences of lesbian, gay, and bisexual high school students and compare their school experiences to those of their heterosexual peers. The results of the study are consistent with existing literature that has shown that sexual minority youth have more negative experiences in high school than their heterosexual peers (Marshall et al., 2013; O'Malley Olsen et al., 2014; Webb et al., 2021).

The results of the study indicate that students who identify as bisexual reported a higher occurrence of physical bullying, whereas those who identify as lesbian or gay experienced more electronic bullying. Interestingly, students identifying as heterosexuals did not report significant rates of any form of bullying. This result is consistent with prior research that demonstrates sexual minority youth encounter more bullying than their heterosexual counterparts (Webb et al., 2021, Kessel Schneider et al., 2015). To understand this phenomenon, some studies have found that hostile school environments expose sexual and gender minority students to bullying (Kosciw et al., 2009). Further studies have reported that schools without anti-bullying policies report high levels of bullying victimization (O'Malley Olsen et al., 2014; Webb et al., 2021). Subsequently, other studies found that sexual minority students experience more bullying than heterosexual students due to lower rates of acceptance of their sexual orientation and gender identity (Webb et al., 2021; Arnett et al., 2019).

Concerning drug usage, the results indicate that students who identify as bisexual had the highest chance of engaging in illegal drug usage while heterosexual students were the least likely to use illegal drugs in school. This result is consistent with prior studies that reported that sexual minority youth have a greater chance of engaging in the use of illegal substances than their

heterosexual peers (Marshal et al., 2008; Kosciw et al., 2016). To understand this phenomenon, some studies have found that internalized homophobia, psychological distress, and peer association are likely to trigger illegal drug usage among sexual minority students (Marshal et al., 2008; Watson et al., 2017). Research has found that sexual minority individuals develop internalized homophobia when they are unable to freely express their sexual identity (Meyer, 2003). Those who struggle to express their identity and also experience victimization often turn to the use of illegal substances as a coping mechanism (Marshal et al., 2011; Watson et al., 2017).

Similarly, another study found that sexual minority students are likely to engage in illegal substance use due to the high levels of psychological distress they face from both society and schools (Marshal et al., 2008). The constant victimization and prejudice they face can create a sense of isolation which may drive them to use illegal substances (Marshal et al., 2011). Other studies have also shown that the use of illegal substances is prevalent among sexual minority youth due to peer association (Marshal et al., 2008; Mustanski et al., 2011). Sexual minority youth usually network with other students who share similar experiences. Oftentimes the influence of peers who use illegal substances can increase sexual minority students' likelihood of engaging in substance use (Marshal et al., 2008).

Concerning poor academic performance, the results indicate that bisexual students are more likely to report lower grades than their heterosexual peers. This finding aligns with past research that links poor academic performance among sexual minority students to difficulty concentrating (Marshal et al., 2013; Poteat, 2018). Concentration is a critical factor in academic achievement (Poteat, 2018), and sexual minority students who struggle with mental health challenges, such as depression, tend to have lower grades and are less likely to complete their education (Puckett et al., 2022). Additionally,



studies have shown that hostile school environments can significantly impact students' ability to concentrate and excel academically (Russell & Joyner, 2001; Kosciw et al., 2021). Sexual minority students who face high levels of victimization are more likely to have a lower grade point average and feel unsafe at school (Kosciw et al., 2021).

Other studies have shown that sexual minority youth who experience high levels of victimization are more likely to have a low-grade point average and feel unsafe at school (Kosciw et al., 2021). The lack of social support could be another factor in why lesbian, gay, or bisexual students experience more academic challenges than heterosexual students. Prior studies have shown that students who do not receive adequate support in school develop feelings of sadness and isolation which distract them from their studies (Eisenberg & Resnick 2006; Kosciw et al., 2018). Other studies have shown that sexual minority students do not perform well academically due to chronic stress (Meyer, 2003). Chronic stress occurs as a result of the constant bullying and discrimination and it impairs their cognitive function and attention span. This lowers their ability to concentrate and excel academically. Other studies have shown that untreated mental health conditions could affect a person's attention span which affects their academic performance (Marshal et al., 2011).

Concerning suicide, the results of the study found that students who identify as bisexual had the highest possibility of considering suicide. Consistent with most results from the study, students who identify as heterosexual had the least likelihood of considering suicide. Similarly, the results align with previous studies that found that sexual minority youth are more likely to develop suicidal ideation than their heterosexual peers (Hatzenbuehler et al., 2014; Mustanski et al., 2014). To explain this phenomenon, prior research found that minority stress is a key factor in suicidality among lesbian, gay, and bisexual youth (Haas et al., 2010). Minority stress occurs as a result of internalized

homophobia and constant discrimination (Meyer, 2003). People who experience minority stress often develop suicidal ideation (Haas et al., 2010). Internalized homophobia often occurs when sexual minority youth are questioned about their sexual identity (Poteat et al., 2013). The constant bullying about sexual identity can lead to feelings of sadness or guilt. The inability to act or seek help when faced with such a situation can lead to anxiety and suicidal ideations (Mustanski et al., 2014).

Other studies found that a lack of social support can lead to suicidal ideation among sexual minority youth. Goodenow et al. (2008) found that sexual minority youth lack social support as a result of rejection from family and friends. Other studies found that a lack of access to mental healthcare can increase suicidal ideation among sexual minority youth (Hatzenbuehler et al., 2014; McConnell et al., 2018). Sexual minority individuals often face challenges like financial constraints, discrimination in hospitals, and a lack of supportive healthcare providers. In effect, many sexual minority individuals tend not to seek medical help which worsens their mental health issues. Feelings of isolation coupled with untreated mental health disorders increase an individual's chance of committing suicide (Marshall et al., 2011).

Regarding weapon carrying, the results indicate that sexual minority students are more likely to carry weapons than their heterosexual peers. These results align with existing literature that has shown that sexual minority youth tend to carry weapons to school more frequently than their heterosexual counterparts (Goldbach et al., 2017; Hatzenbuehler et al., 2014; Kosciw et al., 2019). To explain this phenomenon, some studies report that high rates of victimization lead to feelings of insecurity and can cause sexual minority youth to carry weapons to school for self-defense (Hatzenbuehler et al., 2014). This is mainly because carrying weapons gives them a sense of protection. Also, sexual minority youth are likely to carry weapons due to perceived vulnerability. A

study by Hatzenbuehler et al. (2014) reported that because many sexual minority youths have a lot of untreated mental health issues, they perceive themselves as vulnerable and carry weapons to school as a means of protection. Another reason why sexual minority youth carry weapons to school is a result of social exclusion and marginalization (Goldbach et al., 2017; Kosciw et al., 2019). Studies have found that sexual minority students face marginalization in both society and schools.

To address this issue, they often adopt a defensive mechanism that involves carrying weapons as a means of establishing control (Goldbach et al., 2017). Another intriguing reason why sexual minority youth are likely to carry weapons to school is due to a lack of supportive school systems (Kosciw et al., 2019). Studies have shown that sexual minority youth excel in school environments that have supportive adults, safe spaces, and inclusive curricula. The absence of these support systems often poses a threat to sexual minority youth and increases their likelihood of engaging in risky behaviors such as carrying weapons to school (Russell et al., 2012).

In terms of alcohol usage, the results of the study reveal a statistically significant difference between the drinking behaviors of students who identify as bisexual, gay, or lesbian, and those who identify as heterosexual. Undoubtedly, the findings are consistent with previous studies that found that sexual minority youth are more likely to consume alcohol than their heterosexual peers (Hatzenbuehler et al., 2014; Pachankis et al., 2014). Prior studies have shown that sexual minority youth are more likely to associate with peers who share similar interests (Marshall et al., 2008; Mustanski et al., 2011). Majority of the peers they associate with often experience a lot of stressors and resort to heavy alcohol usage as a coping mechanism. Forming associations with such peers can increase their likelihood of engaging in higher rates of alcohol consumption since they also experience a lot of stressors from both the school and the family (Coulter et al., 2021). Other studies

also attribute the high levels of alcohol consumption among sexual minority youth to the minority stress they face (Meyer, 2003; Pachankis et al., 2014).

Considering the constant bullying, discrimination, and stigma sexual minority youth face, they often have a high tendency of engaging in risky behaviors unlike heterosexual students who do not encounter a lot of stressors in school (Pachankis et al., 2014). The majority of them resort to alcohol usage as a coping strategy or as a means of escaping the stressors they face in school (Hatzenbuehler, 2009). Further studies have shown that the lack of social support also increases the drinking behavior of sexual minority youth (McCabe et al., 2009). Due to the isolation many sexual minority youth faces, they tend to seek support from social spaces like bars and clubs where they feel welcomed and accepted. Although these environments seem welcoming, they are mostly filled with alcohol content, and hanging around in such environments increases sexual minority youth's chances of engaging in alcohol use and also learning other risky behaviors (Pachankis et al., 2014).

Finally, the findings suggest that students who identify as bisexual are the most likely to develop feelings of sadness or hopelessness whereas heterosexual students were the least likely to develop feelings of sadness. Undoubtedly, these results are consistent with previous studies that found that sexual minority youth are more likely to develop feelings of sadness or hopelessness than their heterosexual peers (Goodenow et al., 2006; Ryan et al., 2010). Due to the rejection and stigmatization sexual minority youth face from both family and peers, the majority of them feel sad or hopeless (Ryan et al., 2010). Previous studies have shown that constant bullying and victimization can lead to internalized homophobia which also leads to feelings of sadness or hopelessness (Poteat et al., 2013). Further studies have shown that the lack of supportive school environments also increases the likelihood of sexual minority students feeling sad at school (Goodenow et al., 2006). Oftentimes,

sexual minority students lack access to mental healthcare, safe spaces in schools, inclusive curricula, and supportive staff. The lack of access to these important resources can reduce their desire to be in school and develop a sense of withdrawal or isolation from the school environment (Kosciw et al., 2016).

### **Implications**

The findings of this study raise serious concerns for schools and policymakers. One important issue that needs to be considered is the implementation of comprehensive anti-bullying programs (O'Malley Olsen et al., 2014). Prior research has shown that schools that have comprehensive anti-bullying programs report lower rates of bullying especially among sexual minority students (Hatzenbuehler et al., 2014). To make school environments conducive for sexual minority students, it is important to develop inclusive policies that protect them from all forms of bullying and harassment. These programs can include school-specific and community-specific interventions (O'Malley Olsen et al., 2014). This can ensure that sexual minority youth receive adequate support from both the school and the community.

Also, schools should provide adequate support and resources to support sexual and gender minority students. Research has found that sexual minority youth do not feel safe in schools as a result of a lack of access to safe spaces like gendered bathrooms and LGBTQ+ resource centers (Jarpe-Ratner et al., 2021). Conversely, research has found that sexual minority students in schools that have LGBTQ+ resources and clubs have increased levels of connectedness and experience positive academic outcomes (O'Malley Olsen et al., 2014).

Another important issue that needs attention is the introduction of an LGBTQ+ inclusive curriculum (GSA) in high schools (Burton et al., 2014; Castro & Sujak, 2014). Recent studies have

found that schools with LGBTQ+ inclusive curriculum report high levels of connectedness and lower rates of prejudice (O'Malley Olsen et al., 2014). LGBTQ+ inclusive curriculum is important because it discusses the history and culture of individuals who identify as Queer and gives a better understanding and appreciation of their sexual and gender identity (Castro & Sujak, 2014). In effect, LGBTQ+ topics should not be considered as an "optional read" but rather inculcated into the academic curriculum (Castro & Sujak, 2014). This will promote acceptance and reduce the stigmatization of sexual minority youth (Birkett et al., 2009).

Though some studies have reported that the introduction of LGBTQ inclusive curriculum increases acceptance of LGBTQ youth, the introduction of the Parental Rights in Education Act ("Don't say gay" bill) will have a negative impact on LGBTQ students in schools. In 2022, 21 states have introduced the Don't Say Gay law while several others have passed similar versions of the legislation. According to Goldberg and Abreu (2023), the bill bans the introduction of LGBTQ topics among kindergarten to 3<sup>rd</sup> Grade students. Furthermore, the bill allows parents to decide whether or not their children should receive education about LGBTQ issues. A study by Kline et al. (2022) found that the introduction of this bill might create a hostile environment for both LGBTQ teachers and youth and prevent them from coming to school. Similarly, the study also found that the introduction of the bill may reduce LGBTQ students' level of engagement and sense of connection to schools (Kline et al., 2022).

Another important factor is the introduction of gay-straight alliance (GSAs) clubs in High Schools. GSAs are student-led organizations that provide support for both heterosexual and LGBTQ youth (O'Malley Olsen et al., 2014). Studies have shown that schools that have GSAs report low levels of truancy and other risky behaviors such as drinking, weapon carrying, illegal drug use, and suicidal ideations (Poteat et al., 2012).

## **Study Limitations**

There are several limitations to this study that needs to be discussed. First, the study used secondary data which made it difficult to measure other important variables like access to mental healthcare, access to safe spaces in school, family support, homelessness, and types of bullying which were not captured in the 2019 Youth Risk Behavior Surveillance System. These variables are important because they could help explain why sexual minority students report high levels of victimization in school than heterosexual students. The absence of these variables restricts the study to the use of variables that were only included in the survey, therefore the impact of these variables on sexual minority students' behavior cannot be analyzed. Also, the data was self-reported which means that the students might have answered the questionnaires based on their understanding. Considering the nature of surveys, respondents cannot often seek clarity because questionnaires are designed to be self-explanatory.

Additionally, it is difficult to identify students who concealed their identities due to fear of being victimized. Considering the victimization many sexual minority youth face especially bisexual individuals face, they are likely to be unresponsive to the survey or provide wrong information due to fear of stigmatization. Second, the survey question about sexual identity is not reflective of all the various sexual minority groups. There is a possibility that some students were unsure of their sexual identity or were unwilling to disclose their sexual identity due to fear of victimization. Also, transgender, questioning, asexual, and other queer individuals were not included in the sexual identity question.

Another limitation is that the questions on bullying did not measure all the various forms of bullying and the gadgets used by perpetrators. Adequately capturing the various types of bullying

would help identify the ones sexual minority students are more likely to experience and design the right intervention programs to assist them. Also, identifying the gadgets and platforms frequently used in electronic bullying would help schools identify the root of electronic bullying and take adequate measures to reduce it.

Furthermore, though the YRBSS is a national school climate data, it does not include state-specific questions. Including state-specific questions like "*Which state are you from*" could help identify which states sexual minority students encounter more challenges in schools and design the necessary interventions to assist them.

Finally, the data only contains information about high school students who are still in school. The data does not capture information about truant students. This makes it difficult to determine whether the experiences of the students in school are the same as the experiences of high school students who have become truants or dropped out. Regardless of these limitations, this research is among the few studies that utilize a descriptive study to investigate the challenges lesbian, gay, and bisexual students face in high schools.

### **Future Research Directions**

Based on the findings of this study, future research should focus on exploring the kinds of supportive systems in place to assist sexual minority students in school. More importantly, future research should consider using a qualitative approach to gain more in-depth information about the challenges sexual minority youth face since close-ended questionnaires do not offer the opportunity to ask in-depth questions.



Another important consideration for future research is including all Queer groups in the research. This study focused specifically on students who identify as lesbian or gay and bisexual. Future studies should focus on the experiences of other queer individuals who identify as asexual, questioning, or intersex we hardly have any data on their experiences. Considering that bullying is one of the major challenges sexual minority youth face in school, it is important for future research to conduct in-depth studies on the various types of bullying and identify the common platforms where bullying often occurs. This will help schools design the right intervention to assist victims of bullying. Another important factor future research could consider is gathering state-specific information about the demographics of respondents. This can help identify which states sexual minority youth need more school interventions.

Lastly, future research should consider using an intersectional approach to explore the school experiences of sexual and gender minority youth. Intersectionality is defined as the means through which individuals from marginalized backgrounds experience systems of oppression (Crenshaw, 1991). To understand sexual minority students' motivation to complete school and pursue higher education, it is important to implore an intersectional approach to identify the racial, gender, and cultural factors that hinders their progress. Research has shown that racial minorities like African American and Latinx youth are likely to experience more bullying than white youth (Peguero, 2012). Similarly, another study by Dache-Gerbino et al. (2018) found that though the school enrolment rate for Hispanic and Latinx students has increased in the past two decades, the majority of them preferred to stay at home with their families due to fear of victimization in school. Considering the negative effects of race on sexual minority youth, future studies must shed more light on the topic to impact policy change.

## **Conclusions**

It is an unfortunate reality that sexual minority students frequently encounter negative experiences such as bullying, discrimination, and prejudice in High School. These experiences can have severe consequences, including feelings of sadness, poor academic performance, difficulty concentrating in school, suicidal ideation, and even weapon carrying in schools. Naturally, this can discourage many of these students from pursuing higher education however, there are effective measures that can be taken to address these issues. School regions should implement comprehensive anti-bullying policies, train teachers, promote LGBTQ inclusive curriculum and safe spaces to support sexual and gender minority students. Additionally, the formation of Gay-Straight Alliance clubs should be encouraged to promote healthy collaboration among LGBTQ and heterosexual students.

## Appendix A

Form Approved  
OMB No.: 0920-  
0493

Expiration Date:  
9/30/2019

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2019 National

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Youth Risk Behavior Survey

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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.

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: CDC Reports Clearance Officer, 1600 Clifton Road, MS D-74, Atlanta, GA 30333, ATTN:PRA (0920-0493)

**Directions**

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: A B ● D.

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	①
④	①
●	②
⑥	③
⑦	④
	⑤
	⑥
	●
	⑧
	⑨
	⑩
	Ⓜ

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

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 JUUL, Vuse, MarkTen, and blu. Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods.

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 who can legally buy these products 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 Copenhagen, Grizzly, Skoal, or Camel Snus? (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 5 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. 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
41. 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
42. During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row, that is, within a couple of hours (if you are female) or 5 or more drinks of alcohol in a row, that is, within a couple of hours (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
43. 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
44. 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 pot, weed, or cannabis.

45. 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
46. 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
47. 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 question asks about synthetic marijuana use. Synthetic marijuana also is called Spice, fake weed, K2, King Kong, Yucatan Fire, or Skunk.

48. During your life, how many times have you used synthetic 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 2 questions ask about the use of prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it. For these questions, count drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet.

49. 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?
- 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 the past 30 days, 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?
- 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.

51. 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
52. 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

53. 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
54. During your life, how many times have you used methamphetamines (also called speed, crystal meth, crank, ice, or meth)?
- 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 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
56. During your life, how many times have you used hallucinogenic drugs, such as LSD, acid, PCP, angel dust, mescaline, or mushrooms?
- 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 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



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 12 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 times did you drink a can, bottle, or glass of a sports drink such as Gatorade or Powerade? (Do not count low-calorie sports drinks such as Propel or G2.)
- A. I did not drink sports drinks during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
79. During the past 7 days, how many times did you drink a bottle or glass of plain water? (Count tap, bottled, and unflavored sparkling water.)
- A. I did not drink water during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
80. During the past 7 days, how many 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
81. 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

82. Are there any foods that you have to avoid because eating the food could cause an allergic reaction, such as skin rashes, swelling, itching, vomiting, coughing, or trouble breathing?
- A. Yes
  - B. No
  - C. Not sure

The next 6 questions ask about physical activity.

83. 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
84. During the past 7 days, on how many days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days
85. 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

86. 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 playing games, watching videos, texting, or using social media on your smartphone, computer, Xbox, PlayStation, iPad, or other tablet.)
- 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
87. 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
88. 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.

89. 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 10 questions ask about other health-related topics.

90. 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
91. During the past 12 months, have you been tested for a sexually transmitted disease (STD) other than HIV, such as chlamydia or gonorrhea?
- A. Yes
  - B. No
  - C. Not sure
92. During the past 12 months, how many times did you use an indoor tanning device such as a sunlamp, sunbed, or tanning booth? (Do not count getting a spray-on tan.)
- 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
93. When you are outside for more than one hour on a sunny day, how often do you wear sunscreen with an SPF of 15 or higher?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
94. 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
95. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
  - B. No
  - C. Not sure



96. 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
97. 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
98. Because of a physical, mental, or emotional problem, do you have serious difficulty concentrating, remembering, or making decisions?
- A. Yes
  - B. No
99. How well do you speak English?
- A. Very well
  - B. Well
  - C. Not well
  - D. Not at all

This is the end of the survey.

Thank you very much for your help.

## References

- Abreu, R. L., & Kenny, M. C. (2017). Cyberbullying and LGBTQ youth: A systematic literature review and recommendations for prevention and intervention. *Journal of Child & Adolescent Trauma*, 11(1), 81–97. <https://doi.org/10.1007/s40653-017-0175-7>
- Abreu, R. L., Townsend, D., Mitchell, Y., Ward, J., Audette, L., & Gonzalez, K. A. (2022). LGBTQ qualitative and mixed methods research in counseling psychology: A content analysis. *The Counseling Psychologist*, 50(5), 708–737. <https://doi.org/10.1177/00110000221092481>
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it? *Indian Journal of Medical Specialities*, 4(2). <https://doi.org/10.7713/ijms.2013.0032>
- Alhajji, M., Bass, S., & Dai, T. (2019). Cyberbullying, mental health, and violence in adolescents and associations with sex and race: Data from the 2015 youth risk behavior survey. *Global Pediatric Health*, 6. <https://doi.org/10.1177/2333794x19868887>
- Ali, F. R., Diaz, M. C., Vallone, D., Tynan, M. A., Cordova, J., Seaman, E. L., Trivers, K. F., Schillo, B. A., Talley, B., & King, B. A. (2020). E-cigarette unit sales, by product and Flavor Type — United States, 2014–2020. *MMWR. Morbidity and Mortality Weekly Report*, 69(37), 1313–1318. <https://doi.org/10.15585/mmwr.mm6937e2>
- Aoyama, I., Barnard-Brak, L., & Talbert, T. L. (2011). Cyberbullying among high school students. *International Journal of Cyber Behavior, Psychology and Learning*, 1(1), 25–35. <https://doi.org/10.4018/ijcbpl.2011010103>
- Aragon, S. R., Poteat, V. P., Espelage, D. L., & Koenig, B. W. (2014). The influence of peer victimization on educational outcomes for LGBTQ and Non-LGBTQ High School students. *Journal of LGBT Youth*, 11(1), 1–19. <https://doi.org/10.1080/19361653.2014.840761>
- Ard, K. L., & Makadon, H. J. (2012). *Improving the health care of lesbian, gay, bisexual and transgender (LGBT) people: Understanding and eliminating health disparities*. Boston, MA: The Fenway Institute.
- Arnett, J. E., Frantell, K. A., Miles, J. R., & Fry, K. M. (2019). Anti-bisexual discrimination as insidious trauma and impacts on mental and physical health. *Psychology of Sexual Orientation and Gender Diversity*, 6(4), 475–485. <https://doi.org/10.1037/sgd0000344>
- Baiden, P., Tadeo, S. K., Graaf, G., & Respress, B. N. (2019). Examining the association between weapon carrying on school property and suicide attempt among adolescents in the United States. *Social Work in Public Health*, 34(7), 570–582. <https://doi.org/10.1080/19371918.2019.1635945>

- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184. <https://doi.org/10.1037/0003-066x.44.9.1175>
- Birkett, M., Espelage, D. L., & Koenig, B. (2009). LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence*, 38(7), 989–1000. <https://doi.org/10.1007/s10964-008-9389-1>
- Bishop, M. D., Mallory, A. B., Gessner, M., Frost, D. M., & Russell, S. T. (2020). School-based sexuality education experiences across three generations of sexual minority people. *The Journal of Sex Research*, 58(5), 648–658. <https://doi.org/10.1080/00224499.2020.1767024>
- Blum, R. W., McNeely, C., & Rinehart, P. M. (2002). *Improving the odds: The untapped power of schools to improve the health of teens*. University of Minnesota, Center for Adolescent Health and Development.
- Bontempo, D. E., & D’Augelli, A. R. (2002). Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths’ Health Risk Behavior. *Journal of Adolescent Health*, 30(5), 364–374. [https://doi.org/10.1016/s1054-139x\(01\)00415-3](https://doi.org/10.1016/s1054-139x(01)00415-3)
- Bostwick, W. B., Meyer, I., Aranda, F., Russell, S., Hughes, T., Birkett, M., & Mustanski, B. (2014). Mental health and suicidality among racially/ethnically diverse sexual minority youths. *American Journal of Public Health*, 104(6), 1129–1136. <https://doi.org/10.2105/ajph.2013.301749>
- Bowers, S., Lewandowski, J., Savage, T. A., & Woitaszewski, S. A. (2015). School psychologists’ attitudes toward transgender students. *Journal of LGBT Youth*, 12(1), 1–18. <https://doi.org/10.1080/19361653.2014.930370>
- Burton, C. M., Marshal, M. P., & Chisolm, D. J. (2014). School absenteeism and mental health among sexual minority youth and heterosexual youth. *Journal of School Psychology*, 52(1), 37–47. <https://doi.org/10.1016/j.jsp.2013.12.001>
- Castro, I. E., & Sujak, M. C. (2014). “Why can’t we learn about this?” sexual minority students navigate the official and hidden curricular spaces of high school. *Education and Urban Society*, 46(4), 450–473. <https://doi.org/10.1177/0013124512458117>
- Centers for Disease Control and Prevention. (2015). *YRBSS Data Summary & Trends*. Centers for Disease Control and Prevention. [https://www.cdc.gov/healthyyouth/data/yrbs/yrbs\\_data\\_summary\\_and\\_trends.htm](https://www.cdc.gov/healthyyouth/data/yrbs/yrbs_data_summary_and_trends.htm)
- Centers for Disease Control and Prevention. (2016). *The SAGE Encyclopedia of Pharmacology and Society*. <https://doi.org/10.4135/9781483349985.n96>

- Centers for Disease Control and Prevention. (2020). 2019 Youth Risk Behavior Survey. <https://www.cdc.gov/healthyouth/data/yrbs/pdf/2019/2019>
- Centers for Disease Control and Prevention. (2022). *Terminology*. Centers for Disease Control and Prevention. <https://www.cdc.gov/healthyouth/terminology/sexual-and-gender-identity-terms.htm>
- Chu, J. P., Goldblum, P., Floyd, R., & Bongar, B. (2010). The cultural theory and model of suicide. *Applied and Preventive Psychology, 14*(1–4), 25–40. <https://doi.org/10.1016/j.appsy.2011.11.001>
- Cooper, R. M., & Blumenfeld, W. J. (2012). Responses to cyberbullying: A descriptive analysis of the frequency of and impact on LGBT and Allied Youth. *Journal of LGBT Youth, 9*(2), 153–177. <https://doi.org/10.1080/19361653.2011.649616>
- Copeland, W. E., Wolke, D., Angold, A., & Costello, E. J. (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry, 70*(4), 419. <https://doi.org/10.1001/jamapsychiatry.2013.504>
- Coulter, R. W., Paglisotti, T., Montano, G., Bodnar, K., Bersamin, M., Russell, S. T., Hill, A. V., Mair, C., & Miller, E. (2021). Intersectional differences in protective school assets by sexuality, gender, race/ethnicity, and socioeconomic status. *Journal of School Health, 91*(4), 318–330. <https://doi.org/10.1111/josh.13005>
- Craig, S. L., McInroy, L. B., & Austin, A. (2018). “Someone to have my back”: Exploring the needs of racially and ethnically diverse lesbian, gay, bisexual, and Transgender High School students. *Children & Schools, 40*(4), 231–239. <https://doi.org/10.1093/cs/cdy016>
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*(6), 1241. <https://doi.org/10.2307/1229039>
- Dache-Gerbino, A., Kiyama, J. M., & Sapp, V. T. (2018). The dangling carrot: Proprietary institutions and the Mirage of college choice for Latina students. *The Review of Higher Education, 42*(1), 29–60. <https://doi.org/10.1353/rhe.2018.0033>
- Daniel, S. S., Walsh, A. K., Goldston, D. B., Arnold, E. M., Reboussin, B. A., & Wood, F. B. (2006). Suicidality, school dropout, and reading problems among adolescents. *Journal of Learning Disabilities, 39*(6), 507–514. <https://doi.org/10.1177/00222194060390060301>
- David Klonsky, E., Kotov, R., Bakst, S., Rabinowitz, J., & Bromet, E. J. (2012). Hopelessness as a predictor of attempted suicide among first admission patients with psychosis: A 10-year cohort study. *Suicide and Life-Threatening Behavior. https://doi.org/10.1111/j.1943-278x.2011.0066.x*

- Day, J. K., Perez-Brumer, A., & Russell, S. T. (2018). Safe schools? Transgender youth's school experiences and perceptions of school climate. *Journal of Youth and Adolescence*, 47(8), 1731–1742. <https://doi.org/10.1007/s10964-018-0866-x>
- Di Giacomo, E., Krausz, M., Colmegna, F., Aspesi, F., & Clerici, M. (2018). Estimating the risk of attempted suicide among sexual minority youths. *JAMA Pediatrics*, 172(12), 1145. <https://doi.org/10.1001/jamapediatrics.2018.2731>
- Doxbeck, C. R. (2020). Up in smoke: Exploring the relationship between bullying victimization and e-cigarette use in sexual minority youths. *Substance Use & Misuse*, 55(13), 2221–2229. <https://doi.org/10.1080/10826084.2020.1797809>
- Dunn, H. K., Clark, M. A., & Pearlman, D. N. (2015). The relationship between sexual history, bullying victimization, and poor mental health outcomes among heterosexual and sexual minority high school students: A feminist perspective. *Journal of Interpersonal Violence*, 32(22), 3497–3519. <https://doi.org/10.1177/0886260515599658>
- Eisenberg, M. E., & Resnick, M. D. (2006). Suicidality among gay, lesbian and bisexual youth: The role of protective factors. *Journal of Adolescent Health*, 39(5), 662–668. <https://doi.org/10.1016/j.jadohealth.2006.04.024>
- Erikson, R., Goldthorpe, J. H., Jackson, M., Yaish, M., & Cox, D. R. (2005). On class differentials in educational attainment. *Proceedings of the National Academy of Sciences*, 102(27), 9730–9733. <https://doi.org/10.1073/pnas.0502433102>
- Espelage, D. L., Basile, K. C., & Hamburger, M. E. (2012). Bullying perpetration and subsequent sexual violence perpetration among middle school students. *Journal of Adolescent Health*, 50(1), 60–65. <https://doi.org/10.1016/j.jadohealth.2011.07.015>
- Farrall, S., Bannister, J., Ditton, J., & Gilchrist, E. (1997a). Questioning the measurement of the “fear of crime”: Findings from a major methodological study. *British Journal of Criminology*, 37(4), 658–679. <https://doi.org/10.1093/oxfordjournals.bjc.a014203>
- Ferraro, K. F., & LaGrange, R. L. (1988). Are older people afraid of crime? *Journal of Aging Studies*, 2(3), 277–287. [https://doi.org/10.1016/0890-4065\(88\)90007-2](https://doi.org/10.1016/0890-4065(88)90007-2)
- Fisher, C. M., Woodford, M. R., Gartner, R. E., Sterzing, P. R., & Victor, B. G. (2018). Advancing research on LGBTQ Micro aggressions: A psychometric scoping review of measures. *Journal of Homosexuality*, 66(10), 1345–1379. <https://doi.org/10.1080/00918369.2018.1539581>
- Flowers, P., & Buston, K. (2001). “I was terrified of being different”: Exploring gay men's accounts of growing-up in a heterosexist society. *Journal of Adolescence*, 24(1), 51–65. <https://doi.org/10.1006/jado.2000.0362>

- Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals. *Journal of Counseling Psychology, 56*(1), 97–109. <https://doi.org/10.1037/a0012844>
- Goldbach, J. T., Schrager, S. M., & Mamey, M. R. (2017). Criterion and divergent validity of the Sexual Minority Adolescent Stress Inventory. *Frontiers in Psychology, 8*. <https://doi.org/10.3389/fpsyg.2017.02057>
- Goldberg, A. E., & Abreu, R. (2023). LGBTQ parent concerns and parent–child communication about the Parental Rights in Education Bill (“Don’t Say Gay”) in Florida. *Family Relations. https://doi.org/10.1111/fare.12894*
- Goodenow, C., Szalacha, L., & Westheimer, K. (2006). School support groups, other school factors, and the safety of sexual minority adolescents. *Psychology in the Schools, 43*(5), 573–589. <https://doi.org/10.1002/pits.20173>
- Goodenow, C., Szalacha, L. A., Robin, L. E., & Westheimer, K. (2008). Dimensions of sexual orientation and HIV-related risk among adolescent females: Evidence from a statewide survey. *American Journal of Public Health, 98*(6), 1051–1058. <https://doi.org/10.2105/ajph.2005.080531>
- Goodrich, K. M., Harper, A. J., Luke, M., & Singh, A. A. (2013). Best practices for professional school counselors working with LGBTQ youth. *Journal of LGBT Issues in Counseling, 7*(4), 307–322. <https://doi.org/10.1080/15538605.2013.839331>
- Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D’Augelli, A. R., Silverman, M. M., Fisher, P. W., Hughes, T., Rosario, M., Russell, S. T., Malley, E., Reed, J., Litts, D. A., Haller, E., Sell, R. L., Remafedi, G., Bradford, J., Beautrais, A. L., Clayton, P. J. (2010). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality, 58*(1), 10–51. <https://doi.org/10.1080/00918369.2011.534038>
- Hallfors, D., Vevea, J. L., Iritani, B., Cho, H., Khatapoush, S., & Saxe, L. (2002). Truancy, grade point average, and sexual activity: A meta-analysis of risk indicators for youth substance use. *Journal of School Health, 72*(5), 205–211. <https://doi.org/10.1111/j.1746-1561.2002.tb06548.x>
- Hatchel, T., Merrin, G. J., & Espelage, and D. (2018). Peer victimization and suicidality among LGBTQ youth: The roles of school belonging, self-compassion, and parental support. *Journal of LGBT Youth, 16*(2), 134–156. <https://doi.org/10.1080/19361653.2018.1543036>
- Hatzenbuehler, Mark L., Keyes, K. M., & Hasin, D. S. (2009). State-level policies and psychiatric morbidity in lesbian, gay, and bisexual populations. *American Journal of Public Health, 99*(12), 2275–2281. <https://doi.org/10.2105/ajph.2008.153510>

- Hatzenbuehler, M. L., Keyes, K. M., & McLaughlin, K. A. (2011). The protective effects of social/contextual factors on psychiatric morbidity in LGB populations. *International Journal of Epidemiology*, 40(4), 1071–1080. <https://doi.org/10.1093/ije/dyr019>
- Hatzenbuehler, Mark L., Bellatorre, A., Lee, Y., Finch, B. K., Muennig, P., & Fiscella, K. (2014). Retracted: Structural stigma and all-cause mortality in sexual minority populations. *Social Science & Medicine*, 103, 33–41. <https://doi.org/10.1016/j.socscimed.2013.06.005>
- Heck, N. C., Livingston, N. A., Flentje, A., Oost, K., Stewart, B. T., & Cochran, B. N. (2014). Reducing risk for illicit drug use and Prescription Drug Misuse: High School Gay-straight alliances and lesbian, gay, bisexual, and transgender youth. *Addictive Behaviors*, 39(4), 824–828. <https://doi.org/10.1016/j.addbeh.2014.01.007>
- Henderson, E. R., Sang, J. M., Louth-Marquez, W., Egan, J. E., Espelage, D., Friedman, M., & Coulter, R. W. (2020). “Words aren’t supposed to hurt, but they do”: Sexual and gender minority youth’s bullying experiences. *Journal of Interpersonal Violence*, 37(11–12). <https://doi.org/10.1177/0886260520978199>
- Hollar, D., & Moore, D. (2004). Relationship of substance use by students with disabilities to long-term educational, employment, and social outcomes. *Substance Use & Misuse*, 39(6), 931–962. <https://doi.org/10.1081/ja-120030894>
- Hong, J. S., Valido, A., Rivas-Koehl, M. M., Wade, R. M., Espelage, D. L., & Voisin, D. R. (2021). Bullying victimization, psychosocial functioning, and protective factors: Comparing African American heterosexual and sexual minority adolescents in Chicago’s Southside. *Journal of Community Psychology*, 49(5), 1358–1375. <https://doi.org/10.1002/jcop.22521>
- Hopson, L. M., Schiller, K. S., & Lawson, H. A. (2014). Exploring linkages between school climate, behavioral norms, social supports, and academic success. *Social Work Research*, 38(4), 197–209. <https://doi.org/10.1093/swr/svu017>
- Ioverno, S., & Russell, S. T. (2020). Homophobic bullying in positive and negative school climates: The moderating role of Gender Sexuality Alliances. *Journal of Youth and Adolescence*, 50(2), 353–366. <https://doi.org/10.1007/s10964-020-01297-9>
- Jarpe-Ratner, E., & Marshall, B. (2021). Viewing sexual health education through the lens of critical pedagogy: A case study in Chicago public schools. *International Journal of Environmental Research and Public Health*, 18(4), 1443. <https://doi.org/10.3390/ijerph18041443>
- Kann, L., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Bradford, D., Yamakawa, Y., Leon, M., Brener, N., & Ethier, K. A. (2018). Youth risk behavior surveillance — United States, 2017. *MMWR. Surveillance Summaries*, 67(8), 1–114. <https://doi.org/10.15585/mmwr.ss6708a1>

- Kessel Schneider, S., O'Donnell, L., & Smith, E. (2015). Trends in cyberbullying and school bullying victimization in a regional census of high school students, 2006-2012. *Journal of School Health, 85*(9), 611–620. <https://doi.org/10.1111/josh.12290>
- Kline, N. S., Griner, S. B., Neelamegam, M., Webb, N. J., Morales, J. J., & Rhodes, S. D. (2022). Responding to “don’t say gay” laws in the US: Research priorities and considerations for health equity. *Sexuality Research and Social Policy, 19*(4), 1397–1402. <https://doi.org/10.1007/s13178-022-00773-0>
- Kosciw, J. G., Clark, C. M., Truong, N. L., & Zongrone, A. D. (2020). *The 2019 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and Queer Youth in our nation’s schools. A report from GLSEN*. Gay, Lesbian and Straight Education Network (GLSEN). <https://eric.ed.gov/?id=ED608534>
- Kosciw, J. G., Greytak, E. A., & Diaz, E. M. (2009). Who, what, where, when, and why: Demographic and ecological factors contributing to hostile school climate for lesbian, gay, bisexual, and transgender youth. *Journal of Youth and Adolescence, 38*(7), 976–988. <https://doi.org/10.1007/s10964-009-9412-1>
- Kosciw, J. G., Greytak, E. A., Diaz, E. M., & Bartkiewicz, M. J. (2010). *The 2009 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation’s schools*. Gay, Lesbian and Straight Education Network (GLSEN). <https://eric.ed.gov/?id=ED512338>
- Kosciw, J. G., Palmer, N. A., Kull, R. M., & Greytak, E. A. (2012). The effect of negative school climate on academic outcomes for LGBT youth and the role of in-school supports. *Journal of School Violence, 12*(1), 45–63. <https://doi.org/10.1080/15388220.2012.732546>
- Kosciw, J. G., Palmer, N. A., & Kull, R. M. (2015). Reflecting resiliency: Openness about sexual orientation and/or gender identity and its relationship to well-being and educational outcomes for LGBT students. *American Journal of Community Psychology, 55*(1–2), 167–178. <https://doi.org/10.1007/s10464-014-9642-6>
- Lessard, L. M., Watson, R. J., & Puhl, R. M. (2020). Bias-based bullying and school adjustment among sexual and Gender Minority Adolescents: The role of gay-straight alliances. *Journal of Youth and Adolescence, 49*(5), 1094–1109. <https://doi.org/10.1007/s10964-020-01205-1>
- Macgillivray, I. K. (2000). Educational equity for gay, lesbian, bisexual, transgendered, and Queer/questioning students. *Education and Urban Society, 32*(3), 303–323. <https://doi.org/10.1177/0013124500323003>
- Marraccini, M. E., & Brier, Z. M. (2017). School connectedness and suicidal thoughts and behaviors: A systematic meta-analysis. *School Psychology Quarterly, 32*(1), 5–21. <https://doi.org/10.1037/spq0000192>



- Marshal, M. P., Dietz, L. J., Friedman, M. S., Stall, R., Smith, H. A., McGinley, J., Thoma, B. C., Murray, P. J., D'Augelli, A. R., & Brent, D. A. (2011). Suicidality and depression disparities between sexual minority and heterosexual youth: A meta-analytic review. *Journal of Adolescent Health, 49*(2), 115–123. <https://doi.org/10.1016/j.jadohealth.2011.02.005>
- Marshal, M. P., Friedman, M. S., Stall, R., King, K. M., Miles, J., Gold, M. A., Bukstein, O. G., & Morse, J. Q. (2008). Sexual orientation and adolescent substance use: A meta-analysis and Methodological Review. *Addiction, 103*(4), 546–556. <https://doi.org/10.1111/j.1360-0443.2008.02149.x>
- Marshall, A., Yarber, W. L., Sherwood-Laughlin, C. M., Gray, M. L., & Estell, D. B. (2015). Coping and survival skills: The role school personnel play regarding support for bullied sexual minority-oriented youth. *Journal of School Health, 85*(5), 334–340. <https://doi.org/10.1111/josh.12254>
- Marshall, E., Claes, L., Bouman, W. P., Witcomb, G. L., & Arcelus, J. (2015). Non-suicidal self-injury and suicidality in Trans people: A systematic review of the literature. *International Review of Psychiatry, 28*(1), 58–69. <https://doi.org/10.3109/09540261.2015.1073143>
- Maru, G. (2017). Advocacy for and with LGBT students: An examination of high school counselor experiences. *Professional School Counseling, 20*(1a). <https://doi.org/10.5330/1096-2409-20.1a.38>
- Mattocks, K. M., Sullivan, J. C., Bertrand, C., Kinney, R. L., Sherman, M. D., & Gustason, C. (2015). Perceived stigma, discrimination, and disclosure of sexual orientation among a sample of lesbian veterans receiving care in the Department of Veterans Affairs. *LGBT Health, 2*(2), 147–153. <https://doi.org/10.1089/lgbt.2014.0131>
- McCabe, S. E., Hughes, T. L., Bostwick, W. B., West, B. T., & Boyd, C. J. (2009). Sexual orientation, substance use behaviors and substance dependence in the United States. *Addiction, 104*(8), 1333–1345. <https://doi.org/10.1111/j.1360-0443.2009.02596.x>
- McCardle, T. (2020). A critical historical examination of tracking as a method for maintaining racial segregation. *Educational Considerations, 45*(2). <https://doi.org/10.4148/0146-9282.2186>
- McConnell, E. A., Janulis, P., Phillips, G., Truong, R., & Birkett, M. (2018a). Multiple minority stress and LGBT community resilience among sexual minority men. *Psychology of Sexual Orientation and Gender Diversity, 5*(1), 1–12. <https://doi.org/10.1037/sgd0000265>
- Mccray, E. D. (2006). It's 10 a.m.: Do you know where your children are? *Intervention in School and Clinic, 42*(1), 30–33. <https://doi.org/10.1177/10534512060420010501>

- McGuire, J. K., Anderson, C. R., Toomey, R. B., & Russell, S. T. (2010). School climate for transgender youth: A mixed method investigation of student experiences and school responses. *Journal of Youth and Adolescence*, *39*(10), 1175–1188. <https://doi.org/10.1007/s10964-010-9540-7>
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, *72*(4), 138–146. <https://doi.org/10.1111/j.1746-1561.2002.tb06533.x>
- Mereish, E. H., Goldbach, J. T., Burgess, C., & DiBello, A. M. (2017). Sexual orientation, minority stress, social norms, and substance use among racially diverse adolescents. *Drug and Alcohol Dependence*, *178*, 49–56. <https://doi.org/10.1016/j.drugalcdep.2017.04.013>
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, *36*(1), 38. <https://doi.org/10.2307/2137286>
- Meyer, I. H. (2003). Prejudice, social stress, and Mental Health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Milam, A. J., Furr-Holden, C. D., & Leaf, P. J. (2010). Perceived school and neighborhood safety, neighborhood violence and academic achievement in Urban School Children. *The Urban Review*, *42*(5), 458–467. <https://doi.org/10.1007/s11256-010-0165-7>
- Moran, T. E., Chen, C. Y.-C., & Tryon, G. S. (2018). Bully victimization, depression, and the role of protective factors among college LGBTQ students. *Journal of Community Psychology*, *46*(7), 871–884. <https://doi.org/10.1002/jcop.21978>
- Mortier, P., Cuijpers, P., Kiekens, G., Auerbach, R. P., Demyttenaere, K., Green, J. G., Kessler, R. C., Nock, M. K., & Bruffaerts, R. (2017). The prevalence of suicidal thoughts and behaviours among college students: A meta-analysis. *Psychological Medicine*, *48*(4), 554–565. <https://doi.org/10.1017/s0033291717002215>
- Murdock, T. B., & Bolch, M. B. (2005). Risk and protective factors for poor school adjustment in lesbian, gay, and bisexual (LGB) high school youth: Variable and person-centered analyses. *Psychology in the Schools*, *42*(2), 159–172. <https://doi.org/10.1002/pits.20054>
- Murphy, P. (2008). An overview of primary sampling units (PSUs) in multi-stage samples for demographic surveys. In *Proceedings of the American Statistical Association, Government Statistics Section* (pp. 2856–62).
- Mustanski, B., Newcomb, M. E., & Garofalo, R. (2011). Mental health of lesbian, gay, and bisexual youths: A developmental resiliency perspective. *Journal of Gay & Lesbian Social Services*, *23*(2), 204–225. <https://doi.org/10.1080/10538720.2011.561474>

- Mustanski, B., Andrews, R., Herrick, A., Stall, R., & Schnarrs, P. W. (2014). A syndemic of psychosocial health disparities and associations with risk for attempting suicide among young sexual minority men. *American Journal of Public Health, 104*(2), 287–294. <https://doi.org/10.2105/ajph.2013.301744>
- 2016 National Survey on LGBTQ Youth Mental Health. The Trevor Project. (2017). <https://www.thetrevorproject.org/survey-2016/>
- Newcomb, M. E., & Mustanski, B. (2010). Internalized homophobia and internalizing mental health problems: A meta-analytic review. *Clinical Psychology Review, 30*(8), 1019–1029. <https://doi.org/10.1016/j.cpr.2010.07.003>
- Ngo, B. (2003). Citing discourses: Making sense of homophobia and heteronormativity at Dynamic High School. *Equity & Excellence in Education, 36*(2), 115–124. <https://doi.org/10.1080/10665680303513>
- Nichols, S. L. (1999). Gay, lesbian, and bisexual youth: Understanding diversity and promoting tolerance in schools. *The Elementary School Journal, 99*(5), 505–519. <https://doi.org/10.1086/461938>
- O'Malley Olsen, E., Kann, L., Vivolo-Kantor, A., Kinchen, S., & McManus, T. (2014). School violence and bullying among sexual minority high school students, 2009–2011. *Journal of Adolescent Health, 55*(3), 432–438. <https://doi.org/10.1016/j.jadohealth.2014.03.002>
- Phillips, G., Turner, B., Salamanca, P., Birkett, M., Hatzenbuehler, M. L., Newcomb, M. E., Marro, R., & Mustanski, B. (2017). Victimization as a mediator of alcohol use disparities between sexual minority subgroups and sexual majority youth using the 2015 National Youth Risk Behavior Survey. *Drug and Alcohol Dependence, 178*, 355–362. <https://doi.org/10.1016/j.drugalcdep.2017.05.040>
- Phillips, K. (2022). We are all human: A review of the trevor project and the it gets better project. *Journal of Consumer Health on the Internet, 26*(1), 82–91. <https://doi.org/10.1080/15398285.2022.2029279>
- Poteat, V. P., Mereish, E. H., DiGiovanni, C. D., & Koenig, B. W. (2011). The effects of general and homophobic victimization on adolescents' psychosocial and educational concerns: The importance of intersecting identities and parent support. *Journal of Counseling Psychology, 58*(4), 597–609. <https://doi.org/10.1037/a0025095>
- Poteat, V. P., & Russell, S. T. (2013). Understanding homophobic behavior and its implications for policy and Practice. *Theory into Practice, 52*(4), 264–271. <https://doi.org/10.1080/00405841.2013.829729>
- Poteat, V. P., Sinclair, K. O., DiGiovanni, C. D., Koenig, B. W., & Russell, S. T. (2012). Gay-straight alliances are associated with Student Health: A multischool comparison of LGBTQ

- and heterosexual youth. *Journal of Research on Adolescence*, 23(2), 319–330. <https://doi.org/10.1111/j.1532-7795.2012.00832.x>
- Proulx, C. N., Coulter, R. W. S., Egan, J. E., Matthews, D. D., & Mair, C. (2019). Associations of lesbian, gay, bisexual, transgender, and questioning–inclusive sex education with mental health outcomes and school-based victimization in U.S. high school students. *Journal of Adolescent Health*, 64(5), 608–614. <https://doi.org/10.1016/j.jadohealth.2018.11.012>
- Puckett, J. A., Tornello, S., Mustanski, B., & Newcomb, M. E. (2022). Gender variations, generational effects, and mental health of transgender people in relation to timing and status of gender identity milestones. *Psychology of Sexual Orientation and Gender Diversity*, 9(2), 165–178. <https://doi.org/10.1037/sgd0000391>
- Rankin, S., & Beemyn, G. (2012). Beyond a binary: The lives of gender-nonconforming youth. *About Campus: Enriching the Student Learning Experience*, 17(4), 2–10. <https://doi.org/10.1002/abc.21086>
- Reed, E., Prado, G., Matsumoto, A., & Amaro, H. (2010). Alcohol and drug use and related consequences among gay, lesbian and bisexual college students: Role of experiencing violence, feeling safe on campus, and perceived stress. *Addictive Behaviors*, 35(2), 168–171. <https://doi.org/10.1016/j.addbeh.2009.09.005>
- Reynolds, A. L., & Koski, M. J. (1995). Lesbian, gay, and bisexual teens and the school counselor: Building alliances. In G. Unks (Ed.), *The gay teen: Educational practice and theory for lesbian, gay, and bisexual adolescents* (pp. 85-94). New York, NY: Routledge.
- Rinehart, S. J., & Espelage, D. L. (2016). A multilevel analysis of school climate, homophobic name-calling, and sexual harassment victimization/perpetration among middle school youth. *Psychology of Violence*, 6(2), 213–222. <https://doi.org/10.1037/a0039095>
- Ritzer G. (2007). *The Blackwell encyclopedia of sociology*. Malden, MA: Blackwell.
- Rivers, I., & Noret, N. (2008). Well-being among same-sex- and opposite-sex-attracted youth at school. *School Psychology Review*, 37(2), 174–187. <https://doi.org/10.1080/02796015.2008.12087892>
- Robinson, J. P., & Espelage, D. L. (2011). Inequities in educational and psychological outcomes between LGBTQ and straight students in middle and high school. *Educational Researcher*, 40(7), 315–330. <https://doi.org/10.3102/0013189x11422112>
- Russell, S. T., & Joyner, K. (2001). Adolescent sexual orientation and suicide risk: Evidence from a national study. *American Journal of Public Health*, 91(8), 1276–1281. <https://doi.org/10.2105/ajph.91.8.1276>

- Russell, S. T., Kostroski, O., McGuire, J. K., Laub, C., & Manke, E. (2006). LGBT issues in the curriculum promotes school safety. *California Safe Schools Coalition Research Brief*, 4.
- Russell, S. T., Bishop, M. D., Saba, V. C., James, I., & Ioverno, S. (2021). Promoting school safety for LGBTQ and all students. *Policy Insights from the Behavioral and Brain Sciences*, 8(2), 160–166. <https://doi.org/10.1177/237273222111031938>
- Russell, S. T., Day, J. K., Ioverno, S., & Toomey, R. B. (2016). Are school policies focused on sexual orientation and gender identity associated with less bullying? Teachers' perspectives. *Journal of School Psychology*, 54, 29–38. <https://doi.org/10.1016/j.jsp.2015.10.005>
- Ryan, C., Russell, S. T., Huebner, D., Diaz, R., & Sanchez, J. (2010). Family acceptance in adolescence and the health of LGBT Young Adults. *Journal of Child and Adolescent Psychiatric Nursing*, 23(4), 205–213. <https://doi.org/10.1111/j.1744-6171.2010.00246.x>
- Schneider, M. E., & Owens, R. E. (2000). Concern for lesbian, gay, and bisexual kids. *Education and Urban Society*, 32(3), 349–367. <https://doi.org/10.1177/0013124500323005>
- Singh, T., Arrazola, R. A., Corey, C. G., Husten, C. G., Neff, L. J., Homa, D. M., & King, B. A. (2016). Tobacco use among middle and high school students — United States, 2011–2015. *MMWR. Morbidity and Mortality Weekly Report*, 65(14), 361–367. <https://doi.org/10.15585/mmwr.mm6514a1>
- Stone, D. M., Simon, T. R., Fowler, K. A., Kegler, S. R., Yuan, K., Holland, K. M., ... & Crosby, A. E. (2018). Vital signs: trends in state suicide rates—United States, 1999–2016 and circumstances contributing to suicide—27 states, 2015. *Morbidity and Mortality Weekly Report*, 67(22), 617. <https://doi.org/10.15585/mmwr.mm6722a1>
- Streed, C. G., Turner, B., Beach, L. B., Marro, R., Felt, D., Wang, X., & Phillips, G. (2020). Safety and predictors of sexual minority youth carrying weapons. *Journal of Interpersonal Violence*, 37(11–12). <https://doi.org/10.1177/0886260520978183>
- Sullivan, E. M., Annet, J. L., Simon, T. R., Luo, F., & Dahlberg, L. L. (2015). Suicide trends among persons aged 10–24 years—United States, 1994–2012. *Morbidity and Mortality Weekly Report*, 64(8), 201.
- Szalacha, L. A. (2003). Safer sexual diversity climates: Lessons learned from an evaluation of Massachusetts Safe Schools Program for gay and lesbian students. *American Journal of Education*, 110(1), 58–88. <https://doi.org/10.1086/377673>
- Talley, A. E., Gilbert, P. A., Mitchell, J., Goldbach, J., Marshall, B. D., & Kaysen, D. (2016). Addressing gaps on risk and resilience factors for alcohol use outcomes in sexual and gender minority populations. *Drug and Alcohol Review*, 35(4), 484–493. <https://doi.org/10.1111/dar.12387>

- Toomey, R. B., Ryan, C., Diaz, R. M., & Russell, S. T. (2011). High school gay–straight alliances (GSAS) and young adult well-being: An examination of GSA presence, participation, and perceived effectiveness. *Applied Developmental Science, 15*(4), 175–185. <https://doi.org/10.1080/10888691.2011.607378>
- Toomey, R. B., Ryan, C., Diaz, R. M., & Russell, S. T. (2017). Coping with sexual orientation–related minority stress. *Journal of Homosexuality, 65*(4), 484–500. <https://doi.org/10.1080/00918369.2017.1321888>
- Ueno, K. (2005). Sexual orientation and psychological distress in adolescence: Examining interpersonal stressors and social support processes. *Social Psychology Quarterly, 68*(3), 258–277. <https://doi.org/10.1177/019027250506800305>
- Underwood, J. M., Brener, N., Thornton, J., Harris, W. A., Bryan, L. N., Shanklin, S. L., Deputy, N., Roberts, A. M., Queen, B., Chyen, D., Whittle, L., Lim, C., Yamakawa, Y., Leon-Nguyen, M., Kilmer, G., Smith-Grant, J., Demissie, Z., Jones, S. E., Clayton, H., & Dittus, P. (2020). Overview and methods for the youth risk behavior surveillance system — United States, 2019. *MMWR Supplements, 69*(1), 1–10. <https://doi.org/10.15585/mmwr.su6901a1>
- Voight, A., Hanson, T., O’Malley, M., & Adekanye, L. (2015). The Racial School Climate Gap: Within-school disparities in students’ experiences of safety, support, and connectedness. *American Journal of Community Psychology, 56*(3–4), 252–267. <https://doi.org/10.1007/s10464-015-9751-x>
- Watson, R. J., Goodenow, C., Porta, C., Adjei, J., & Saewyc, E. (2017). Substance use among sexual minorities: Has it actually gotten better? *Substance Use & Misuse, 53*(7), 1221–1228. <https://doi.org/10.1080/10826084.2017.1400563>
- Webb, L., Clary, L. K., Johnson, R. M., & Mendelson, T. (2021). Electronic and school bullying victimization by race/ethnicity and sexual minority status in a nationally representative adolescent sample. *Journal of Adolescent Health, 68*(2), 378–384. <https://doi.org/10.1016/j.jadohealth.2020.05.042>
- White, A. E., Moeller, J., Ivcevic, Z., & Brackett, M. A. (2018). Gender identity and sexual identity labels used by U.S. High School Students: A co-occurrence network analysis. *Psychology of Sexual Orientation and Gender Diversity, 5*(2), 243–252. <https://doi.org/10.1037/sgd0000266>
- Williams, K. A., & Chapman, M. V. (2011). Comparing health and mental health needs, service use, and barriers to services among sexual minority youths and their peers. *Health & Social Work, 36*(3), 197–206. <https://doi.org/10.1093/hsw/36.3.197>
- Woodford, M. R., Chonody, J. M., Kulick, A., Brennan, D. J., & Renn, K. (2015). The LGBTQ microaggressions on campus scale: A scale development and validation study. *Journal of Homosexuality, 62*(12), 1660–1687. <https://doi.org/10.1080/00918369.2015.1078205>

- Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of Community Cultural Wealth. *Race Ethnicity and Education*, 8(1), 69–91.  
<https://doi.org/10.1080/1361332052000341006>
- Young, R., & Sweeting, H. (2004). Adolescent bullying, relationships, psychological well-being, and gender-atypical behavior: A gender diagnostic approach. *Sex Roles*, 50(7/8), 525–537.  
<https://doi.org/10.1023/b:sers.0000023072.53886.86>
- Zaza, S., Kann, L., & Barrios, L. C. (2016). Lesbian, gay, and bisexual adolescents. *JAMA*, 316(22), 2355. <https://doi.org/10.1001/jama.2016.11683>