THE IMPACT OF SEX, BULLYING, FORCED SEXUAL CONTACT, AND BODY

DISSATISFACTION ON DEPRESSIVE SYMPTOMS AND SUICIDE RISK

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ABSTRACT

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THE IMPACT OF SEX, BULLYING, FORCED SEXUAL CONTACT, AND BODY
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Many adolescents engage in "health-risk" behaviors in the United States. This study explores the effects of these behaviors on adolescents. Traditional bullying, cyber-bullying, sexual assault, and body dysphoria's effect on depression and increased suicide risk are the focus of this dissertation. Data from the 2015 Youth Risk Behavior Surveillance System (YRBSS) compiled by the Centers for Disease Control and Prevention (CDC) are analyzed for this purpose. Logistic regression and multiple regression are used to explore the relationships between these variables. Adolescent females appear to be at increased risk of depression and suicide due to school bullying, cyber-bullying, sexual assault, and body dysphoria. Results from the YRBSS indicate that many high school students are engaged in health-risk behaviors associated with suicide which is a leading cause of death among teens in the United States. The results support the hypotheses that adolescent female victims of traditional bullying, sexual assault, and body dissatisfaction are more at risk of depression, suicidal thoughts, plans, and implementation. Cyber-bullying had a stronger impact on whether adolescent males reported that they felt sad and hopeless, made a suicide plan, and were a suicide risk than it did for girls.

iii

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

INTRODUCTION

Bullying, depression, and suicide threaten millions of adolescents each year, and the rates of each malady have been increasing (Klomek, Sourander, and Gould 2010). This study examines the association between depressive disorders, bullying, and suicide among adolescent females. I will compare adolescent males and females with respect to suicidal tendencies and depression, and the extent to which these differences may be related to bullying victimization, forced sexual contact, and body dissatisfaction. This study will utilize statistical analysis of data compiled by The Centers for Disease Control and Prevention (CDC) that has collected data concerning self-perceptions, depression, and suicide risk behaviors of adolescents (aged 12-18), in its 2015 data set titled "Youth Risk Behavior Surveillance System (YRBSS)."

Bullying is defined by Olweus (1991) as repeated exposure to negative actions over time by one or more perpetrator(s). Hinduja and Patchin (2009) extend this definition of bullying to include: direct-physical or direct-verbal (insults or name-calling) assault, indirect-relational (spreading rumors), and cyber (electronic forms of negative contact) assault. This research will add to the body of literature concerning bullying peer victimization, corresponding depressive symptoms, and suicidal tendencies among adolescent females.

Beyond the initial consequences, many victims are left with long-term negative emotions and feelings. Females are more affected than males long term by their own admission, which may relate to male refusal to acknowledge victimization (Hinduja and Patchin 2009). Younger victims tend to say that they are sad, while older victims express anger. Remarkably, one third of children in counseling report victimization by cyber-bullying (Mitchell, Finkelhor, and Becker-Blease 2007).

Bullying can result in acting out by the victims (Agnew 2006). A history of being bullied as an early adolescent predicted subsequent criminal convictions (Ericson 2001). Bullying can become a failed solution to life's pressures. Bullies, as well as their victims, tend to become hopeless (Rigby and Slee 1999). Thoughts of suicide and violence against others proliferate among victims. Both bullies and their victims think of and commit suicide at higher rates (High 2007; Hinduja and Patchin 2010).

Gender roles contribute to the risk of sexual violence (Kershner 1996). Depression is a consequence of sexual violence (Ackard and Neumark-Sztainer 2002). Eating disorders and suicide attempts may also follow (Raj, Silverman, and Amaro 2000; Silverman et al. 2001).

I expect to find that the differences in depression and suicidal tendencies among adolescent males and females will be correlated with higher rates of bullying victimization, forced sexual contact, and body dissatisfaction among females. This would support the theory that these factors may function as intermediate variables between sex

(male/ female), suicidal tendencies, and depression. The lack of correlation would suggest that there may be other factors mediating the male/female differences. More specifically, this study explores the following research questions:

1. What factors predict the likelihood that female respondents would report that they felt sad or hopeless almost every day, for two weeks in a row, and that they stopped pursuing their usual activities?

2. What factors predict the likelihood that female respondents would report that they had made a suicide plan?

3. What factors predict the likelihood that female respondents would be a suicide risk?

RATIONALE

This study contributes to the literature involving depressive disorders and suicide among adolescents. Also, this dissertation may help to elucidate the increased rate of depressive disorders, suicidal ideation, and suicide attempts associated with bullying behavior, forced sexual contact, and body dysphoria among adolescent females. The few findings that are available do indicate that bullying and peer victimization lead to depressive disorders and suicidal tendencies (Klomek et al. 2010). Remarkably, the clinical implications indicate that adolescent males and females have a markedly different risk profile. A statistical analysis of the relationship between bullying behaviors, cyber-bullying, forced sexual contact, and body dysphoria affecting depressive disorders and suicidal tendencies among adolescent females is likely to shed light on these crucial facets. Indications of a public health problem in need of attention and intervention have

been made during the last two decades (Bond et al. 2001; Evans et al. 2001; Klomek et al. 2010).

This study will also enhance our understanding of this issue in three respects. First, most of the literature concerning self-perceptions, depression, and suicidal thoughts of adolescents has been qualitative and there is very little quantitative research on this subject matter. Second, sociological concepts have rarely been used to describe the risk behaviors (of suicidal thoughts, body dysphoria, and depressive disorders) among adolescents. Third, there is a dearth of studies concerning self-perceptions, depression, and suicidal thoughts of adolescents in the sociological literature.

OVERVIEW

Chapter One describes the purpose, rationale, and overview. Chapter Two reviews the literature concerning depressive disorders and suicidal risk among adolescent females in the United States. Chapter Three describes the data, data collection, and data analysis. Chapter Four describes the findings and addresses the research questions. Chapter Five summarizes the key findings, implications, limitations, and recommendations for future research.

CHAPTER II

REVIEW OF THE LITERATURE

Chapter Two starts with a review of literature concerning traditional bullying, depressive disorders, and suicide risks among adolescent females. It will then attend to the literature on cyber-bullying, depressive disorders, and suicide risks among the same population. Then, this research will turn to the studies concerning forced sexual contact and its relationship with depressive disorders and suicide risks. Finally, this research will review the literature on female adolescent body dysphoria (dissatisfaction with one's body) and its relationship with depressive disorders and suicide risks.

TRADITIONAL BULLYING AND CYBER-BULLYING

According to Hinduja and Patchin (2014), criminologists, sociologists, psychologists, and psychiatrists have been reviewing the effects of bullying on adolescents for years and the term bullying has been generally defined as a type of harassment or motiveless aggression directed toward an individual or group. Erling Roland (1989) believes that bullying tends to continue over time, which changes the definition to include psychological or physical long-lasting violence rather than episodic harassment. In 2001, Tonja Nansel and her colleagues at the National Institute of Health defined bullying as hostile behavior causing "repeated intentional harm" and often involving a power differential. The Department of Education, Health Resources, and Services Administration and the Centers for Disease Control and Prevention worked with

numerous experts to develop an all-encompassing definition of bullying (Gladden et al. 2014). These authors state that "Bullying is any unwanted aggressive behavior(s) by another youth or youth group that may inflict distress which includes psychological, social, physical, or educational harm."

There are several considerations concerning these definitions of bullying. One important connotation is that bullying behavior is intentional whether verbal, physical, electronic, or written. Laws are changing to include bullying as a crime. Intent is a fundamental component of the law. In 2014 the Louisiana State Legislature defined cyber-bullying as "the transmission of any electronic textual, visual, written, or oral communication with the malicious and willful intent to coerce, abuse, torment, or intimidate a person." One wonders how difficult it would be to hold someone criminally responsible for bullying, as prosecutors would have to prove that not only did a person engage in a wrongful act, but, that they did so with a guilty mind (*mens rea).* Nevertheless, both academic and legal institutions define bullying to include intent.

Academics have categorized bullying in different ways. Some have focused on direct (overt) aggression while others have focused on indirect (covert relational) aggression. According to Hawker and Boulton (2000), direct aggression includes violence that is physical in nature (assault), but can include violence that is verbal in nature (threatening or mocking). Van der Wal, De Wit, and Hirasing (2003) extend their definition of indirect aggression to include manipulating, gossiping, social sabotage, excluding, and other behaviors destructive to interpersonal relationships.

In writing their prevention program on bullying, Olweus, Limber, and Mihalic (1999) posited that one characteristic that distinguishes bullying behavior is that it is repetitive, which is why the behavior can be so emotionally and psychologically damaging. Furthermore, these authors bolster their claim by maintaining that repetitive bullying creates a situation where the victim of bullying behavior incessantly worries about what the bully will do next and alters his or her daily routine to avoid contact with the bully.

Authors Craig et al. (2009) agree that power differentials such as socio-economic status, intelligence, age, race, social competence, strength, and popularity set the stage for bullying behavior. Technological proficiency can also give a bully an upper hand. According to these authors, there are many factors which can give a bully perceived or actual power over a victim. In their international study of 202,056 students, Craig et al. (2009), found that an average of 26 percent of adolescents were enmeshed in the world of bullying behavior either as the perpetrator, victim, or both. In 2002 the United States Department of Education and the U.S. Department of Justice studied 15,686 adolescents and identified that 11 percent of the participants were victims of bullying each year (DeVoe et al. 2002). Dake, Price, and Telljohann (2003) argued that the pervasiveness of bullying in American elementary schools is between 14 and 19 percent; while the middle school rate of bullying is between 3 and 10 percent. By and large, even conservative examinations maintain that at least 5 percent of adolescents are victimized by bullies

every day, and those figures probably are much higher (Lagerspetz et al. 1982; Kaltiala-Heino et al. 2000).

In the United States, the National Crime Victimization Survey has been monitoring bullying since 1989 (Truman and Planty 2012). This survey has been illuminating as in 2009 nearly 7 million adolescents responded that they had been bullied at school. According to these authors, the percentage of adolescents exposed to bullying behavior at school did not change much over a ten-year period.

BULLYING AND SUICIDE RISK

Adolescent suicide risk is a public health concern in the United States. According to Cash and Bridge (2009), it is the third leading cause of death among adolescents in the United States. Kim, Leventhal, Koh, and Boyce (2009) state that being bullied is associated with an increased risk for suicide among adolescents. According to these authors, the discoveries on the link between bullying and suicide risk behaviors are mixed among male and female adolescents.

Advances in social media and technology have provided bullies with another venue to perpetrate their aggression toward their victims and even though there is a plethora of information on cyber-bullying (Bauman 2009; Burgess-Proctor, Hinduja, and Patchin 2009; Bauman and Pero 2011), to date there is a scarcity of research concerning the relationship between cyber-bullying and suicide risk among adolescents. Hinduja and Patchin (2010) believe that traditional victims of schoolyard bullying are at less of a suicide risk than victims of cyber-bullying.

Wang, Ianotti, and Nansel (2009) examined whether traditional schoolyard bullying, cyber-bullying victimization, and suicidal risks were moderated by gender. They found that the gender differences were noteworthy; for female adolescents, cyber-bullying victimization was strongly associated with depression and ultimately suicide. Rosenfeld (2000) extended this finding and stated that adolescent males are more likely to externalize negative experiences, whereas adolescent females are more likely to internalize them. According to this author, adolescent males are more likely to engage in traditional schoolyard bullying than their female counterparts, and adolescent females are more prone to the more pervasive cyber-bullying. Furthermore, Greene, Rubin, Hale, and Walters (1996) added that, because cyber-bullying perpetrators endeavor to publicly humiliate their victims' social status, the female victim, more so than her male counterpart, may be haunted by a belief that the complete social world with which she interacts is aware of her embarrassment, which leads to further depression and suicidal tendencies.

Many authors (Klomek et al. 2007; Bauman, Toomey, and Walker 2013; Kowalski and Limber 2013; Takizawa, Maughan, and Arseneault 2014) have written about the victims' psychological and psychosomatic distress caused by bullying. Other authors have discussed bullying as causing chronic illness and eating disorders among victims (Striegel-Moore et al. 2002). In 2001, Nels Ericson of the Office of Juvenile Justice and Delinquency Prevention wrote a "profile fact sheet" on adolescent bullying and stated that victims tormented by bullies are often humiliated, lonely, insecure, and

terrified of going to school. Ericson (2001) also stated that victims of bullying often struggle with social and emotional adjustments, and have difficulty making friends. Consequences of bullying victimization during adolescence have included long-term depression, self-pity, and anger that extends into adulthood causing more serious bouts of depression and distress among victims than non-victims (Hawker and Boulton 2000; Van der Wal et al. 2003; Takizawa et al. 2014). According to Bauman et al. (2013), adolescent bullying victimization increases the likelihood of experiencing suicidal thoughts by ten percent among adolescent males and more than twenty percent among adolescent females. These authors also state that adolescents tormented by bullying tend to consider suicide and attempt suicide more often than non-victims.

Many American schools have put forth a "zero tolerance" policy for bullying and cyber-bullying as part of their intervention effort (American Psychological Association Zero Tolerance Task Force 2008). Nevertheless, these authors also note that the schools' zero tolerance policies have not proven to reduce traditional schoolyard bullying or cyber-bullying among adolescent students. Bauman (2009) calls for "restorative justice" or a problem-solving approach as a resolution to this important public concern.

In the end, there has been much definitional debating among researchers, policymakers, school administrators, and legislators regarding bullying. Each group wants to conceptualize it according to their constituents. Researchers want to define bullying in a way that is measurable. Policymakers and legislators want to define bullying so that it can withstand legal scrutiny and convert laws into guidelines for school

administrators. In 2011, the New Jersey Legislature passed the "Anti-Bullying Bill of Rights Act" which legally requires principals to complete a formal report for the superintendent of each incident of bullying within ten school days and that report must be presented to the school board.

According to Internet Live Stats (2017) there are nearly 4 billion internet users worldwide. The World Population Clock announces that there are 7.442 billion people on Earth and roughly 325 million of them are American. Of this population, more than 85 percent of adolescents now have a smart phone, more than 95 percent of these adolescents send and receive texts, and 80 percent take and share pictures of themselves and friends using social networking sites (Henley 2010). Madden, Lenhart, Duggan, Cortesi, and Gasser (2013) state that at least four out of five adolescents use social networking sites. Prensky (2001) used the terms *digital natives* and *digital immigrants* to describe how adolescents have grown up with electronic devices, social media, gaming devices, and the internet. He states that adolescents being raised in the Information Age see technology as a continuous extension of their "real-world" behaviors and many are completely embedded in an online culture that is inseparable from their offline world (Prensky 2001).

The proliferation of the smart phone has radically increased the adolescent use of social media for communications with others in some capacity. Susannah Stern (1999) states that social media allows adolescents to "display the selves they are, the selves they wish to become, and the selves they wish others to see." According to Boyd (2014),

adolescents feel emotionally close and connected by participating in their twenty-four-hour social community.

Many researchers have written about the advantages of social media interactions among adolescents. Their ability to relate with others and to give and receive social support is well noted (Ito et al. 2008; Lenhart et al. 2011). According to Madden, Lenhart, Duggan, Cortesi, and Gasser (2013) social media allows adolescents to develop their character while promoting self-discovery and identity management among an age group whose self-worth stems mainly from peer approval, popularity, and current cultural trends. Boyd (2014) adds that online networking is an unconstrained and unfettered public space that supports socialization and the assimilation of cultural information. Adolescents today are involved in activities at school and at home that are directly supervised by adults. Boyd (2007) believes that public spaces such as the mall, the ice cream parlor, and the skating rink have become unwelcoming to adolescents who are not supervised by an adult.

Furthermore, many schools now use social media to send messages and important information to students and parents (Hass 2006; Walsh 2011). These authors continue that coaches, administrators, and teachers all utilize social media sites in different ways. Therefore, all are taking advantage of the benefits of social networking to assist in building a strong school community. In her "Guidebook for Social Media in the Classroom," teacher Vicki Davis describes the myriad ways in which teachers are using social media in the classroom (2014). According to her guidebook, teachers are tweeting,

writing blogs, connecting with other classrooms through social media, and creating podcasts on You Tube (Davis 2014). She states that it is imperative to teach adolescents how to communicate online (Davis 2014).

Singer, Brush, and Lublin (1965) have defined "deindividuation" as a "subjective state in which people lose their self-consciousness." Diener (1998) complements this definition by explaining that adolescents' online forums influence their behavior more than social norms or potential consequences. Katz and Rice (2002) also propose that online interactions liberate adolescents from traditional behavioral restraints, thus, deindividuating them away from self-awareness and self-regulation.

While social media and emails can be stored on a server, text messages often cannot (Wade 2013). Also, social networks are not legally held responsible for contents placed on the web by their users due to the Communications Decency Act of 1996 (Wardell 2013). It is common knowledge that terms of service can play a pivotal role in ending online behavior that violates their terms. According to Simmons (2003), gossip occurs more frequently by adolescent girls than boys, especially when contentions arise between rivals. Ironically, Boyd (2010) found that many adolescents are secretly harassing themselves online to get attention from others. Englander (2012) found that 10 percent of college freshman admitted that they secretly cyber-bullied themselves in high school to get attention from others. Patchin and Hinduja (2010) found that those who are most likely to harm another, whether emotionally, psychologically, or physically, online

or otherwise, are those who have access to at least some personal information about their victim, and quite possibly befriended their victim at some point.

Jean Twenge and her colleagues (2017) observed that when the smartphone possession passed 50 percent of the population in 2011, starting in 2012, childhood isolation, depression, and suicide rates increased among 10 to 14-year-olds (Twenge et al. 2017). Social interactions, including dating, decreased (Sherman, Wells, and Twenge 2017). Sleep deprivation increased (Twenge 2015). Before electronic information was available, children were not necessarily aware of events they missed (Gentile et al. 2012). They could see their friends without their photographs being published (Park and Twenge 2017). They could go home and escape bullying, which was less public to begin with (Gentile et al. 2012).

Occupational Therapist Victoria Prooday (2017) maintains that twenty percent of 10-14-year-olds have mental health issues. ADHD has increased by forty-three percent, depression has increased by thirty-seven percent, and suicide has increased by two hundred percent (Centers for Disease Control and Prevention 2015). Parents are largely missing from the lives of children and children have few boundaries or duties (Twenge et al. 2017). A healthy diet, exercise, and sufficient sleep are lacking in children's lives and they have reduced social lives and free time (Campbell et al. 2010). Despite the increased need, there is no corresponding increase in mental health care available for children (Stagman and Cooper 2010; Twenge 2015).

CYBER-BULLYING DIFFERENCES BETWEEN GIRLS AND BOYS

There is a substantial amount of research that finds male adolescents are more implicated in traditional bullying (Borg 1999; Kumpalainen, Rasanen, and Henttonen 1999; Espelage, Bosworth, and Simon 2000; Seals and Young 2003). Research also shows that adolescent females are involved in more indirect and less visible methods of bullying such as gossip or rumors and that this type of bullying causes emotional and psychological distress among its victims (Bjorkqvist, Lagerspetz, and Kaukainin 1992; Crick and Grotpeter 1995; Owens, Shute, and Slee 2000; Wiseman 2002; Simmons 2003).

According to the "Youth Internet Safety Survey," which was funded by the National Center for Missing and Exploited Children (NCMEC), 69 percent of adolescent females were cyberbullied or sexually solicited online (Jones, Mitchell, and Finkelhor 2013). Sociologists Schneider, O'Donnell, Stueve, and Coulter (2012) surveyed 20,000 adolescents in a Massachusetts high school and found that 7.2 percent of the adolescent females were harassed online compared to 5.6 percent of the adolescent males; and that 11.1 percent of these adolescent girls were both bullied online and at school, compared to 7.6 percent of the adolescent boys. Felix and McMahon (2006) found that most of the adolescent girls they surveyed reported being ignored (45.6 percent), disrespected (42.9 percent), threatened (11.2 percent), or scared for their safety (6.2 percent).

Wiseman (2002) confirms that adolescent girls experience more verbal bullying than their adolescent male counterparts. According to Wiseman (2002), this type of

bullying is emotional and psychological with distinctions in the form of "social sabotage" which is accelerated by social media. Andreou (2001) enhances Wiseman's research by adding that adolescent females are culturally and socially guarded from manifesting aggressive behaviors, but social media allows them to act from a safe place using their smart phone or other electronic means of communication. Brown (2003) adds that, traditionally females have been taught from a very young age that acting out in an aggressive or violent manner is un-lady-like or not "feminine."

Seals and Young (2003) have indicated that cyber-bullying and traditional bullying tends to peak in middle school. The "Youth Internet Safety Survey" has found that 13 to 15-year-olds are most likely to cyber-bully (Jones et al. 2013). According to Hinduja and Patchin (2008), adolescents who spend an inordinate amount of time unsupervised on social media are more likely to experience cyber-bullying. As we introduce younger children to technology, we are more likely to see these younger children start to experience online bullying as well.

In the second wave of the "Youth Internet Safety Survey," out of 1,500 adolescents surveyed, 43 percent were victims of cyber-bullying and claimed to know their perpetrators (Wolak, Mitchell, and Finkelhor 2007). Kowalski and Limber (2007) found that one out of two cyber victims knew their aggressor. Ybarra, Mitchell, Finkelhor, and Wolak (2007) found that 12.6 percent of bullied adolescents were bullied online as well as offline. According to Jones, Mitchell, and Finkelhor (2013), over 60 percent of the victims claimed that their perpetrator was a former friend.

Ironically, Kowalski and Limber (2013) found a connection between online and offline bullying as adolescents who reported being bullied on the schoolyard were nearly three times as likely to be bullied online. The National Center for Educational Statistics (2013) found that adolescents claimed to be bullied more at school than on social media. Levy, Cortesi, Gasser, Crowley, Beaton, Casey, and Nolan (2012) also confirm that traditional bullying still occurs more than cyber-bullying.

Schoolyard bullying victims as well as cyber-bullying victims often feel anxious, sad, and depressed (Ybarra and Mitchell 2007). Aseltine, Gore, and Gordon (2000) add that the victims are angry, embarrassed, scared, and they are more likely to cause self-harm or act out. These authors also explain that eating disorders may be tied to adolescent bullying (Aseltine et al. 2000; Ybarra and Mitchell 2007). Many adolescents who are bullied online or otherwise have very low self-esteem (Nansel et al. 2001).

There are several problematic behaviors of adolescents that are associated with bullying. Property damage, stealing, poor performance in school, alcohol, and drug use have been noted (Ybarra and Mitchell 2004). Others include, substance abuse and violent sexual behavior (Litwiller and Braush 2013). Alarmingly, victims of cyber-bullying are five times more likely to carry a weapon to school according to Ybarra, Diener-West, and Leaf (2007).

In 2010, suicide was the second leading cause of death among adolescents, with 1,449 suicides among adolescents that were bullied (Centers for Disease Control and Prevention 2010). Numerous studies have documented the association between bullying

and suicide (Rigby and Slee 1999; Baldry and Winkel 2003; Mills et al. 2004). High (2007), has coined the term "bullicide" to refer to adolescents that have been, "bullied to death." It is noteworthy that less than 10 percent of adolescents who were bullied online or otherwise told a parent, and less than 5 percent told a teacher (Hinduja and Patchin 2006).

Many authors have written about how similar the victims' emotional reactions to cyber-bullying are to traditional schoolyard bullying (Berson, Berson, and Ferron 2002; Ybarra and Mitchell 2007; Beckman, Hagquist, and Hellstrom 2012; Kowalski and Limber 2013). Authors have also indicated that the victims' emotions of feeling sad, anxious, angry, and depressed need to be addressed because criminal behavior or interpersonal hostility can ensue (Aseltine et al. 2000; Mazerolle et al. 2000). Victims of bullying may feel so depressed that they develop eating disorders or act-out aggressively to cope with their victimization (Haynie et al. 2001).

Kowalski and Limber (2007) theorize that retribution is one reason why adolescents cyber-bully. Romer (2011) posits that adolescents lack self-control when it comes to social media and may not see the consequences of their action. Adolescents may turn to bullying as a coping mechanism, or it may be acquired and reinforced by their peer groups (Hinduja and Patchin 2006).

According to Gemma Mullin (2017) and Aisling Moloney (2017), "The Blue Whale Game" is a competition mediated by social media handlers in which the leader instructs multiple players to engage in progressively extreme self-destructive behaviors

18

over a 50-day period culminating in suicide. This includes self-mutilation, scary movies, sleep deprivation, and hashtags that include "Blue Whale," "Sea of Whales," "I'm in the game," "Wake me at 4:20," "F58," and several others (Khazov-Cassia 2017). The game appears to have originated in Russia and is quite popular in India with players in several other countries (BBC 2017; Maloney 2017; Mann 2017 Mullen 2017).

The Blue Whale Game appears to date back to 2013 (Banerjie 2017). When the instruction to commit suicide is given on the 50th day, the curator threatens violence against the players' family and friends in case of noncompliance (Moloney 2017). One of the tasks assigned to players is to cut their arm with a figure of a blue whale or the symbol F58 (Banerjie 2017; Khazov-Cassia 2017; Moloney 2017).

A 17-year-old girl in Russia is suspected of inventing the Blue Whale Game and she has been arrested for death threats against players and their family members to coerce the players to continuing the game until the end (Mann 2017). According to this author, a 22-year-old male in Russia is serving three years in prison for supervising players in the Blue Whale Game and a 26-year-old male in Russia is also a candidate for having originated the game. He too has been arrested (Moloney 2017).

Tasks assigned to players by the leader of a cell appear to be designed to inflict emotional and physical trauma which ultimately ends in death (Mann 2017; Moloney 2017). According to Khazov-Cassia (2017), "The Russian Public Internet-Technology Center tracked 4,000 hashtags of the Blue Whale Challenge in January of 2017." At least three deaths in the United States are attributed to the game (CNN News Atlanta 2017;

Ferguson and Swenson 2017). The Russian Government has stated that 720 minors committed suicide in 2016 and 15 more minors committed suicide in January 2017 (Khazov-Cassia 2017). Authorities around the world are responding to this perceived crisis. The State of Texas, for example has promulgated the following clause in its Penal Code, "A person commits an offense if, with intent to promote or assist the commission of suicide by another, he aids or attempts to aid the other to commit or attempt to commit suicide" (Texas Penal Code 2017).

School districts across the United States have been warning parents about the suicide game that targets adolescents into committing suicide (Rosenfield 2017). In Natick, Massachusetts the Superintendent of Schools, Peter Sanchioni warned parents to monitor their children's use of social media and to continuously ask them if they have joined any new games or challenges (Orfanides 2017). According to Rosenfield (2017), a Google spokesman told him that Google is removing apps that violate Google policies, however the curators of the Blue Whale Game simply change the name on their apps which has led Google to initiate an app review. Instagram has also removed announcements promoting the Blue Whale Game and refers players to counseling (Cornish 2017).

Many authors have written about reducing adolescent cyber-bullying. They believe that a first step would be to have continuing deliberations by parents, caregivers, and teachers with adolescents about their online behaviors (Rigby 2008; Cassidy, Brown, and Jackson 2012). Adolescents should be taught what constitutes appropriate or

inappropriate online behavior (Richard, Schneider, and Mallet 2012). Authors suggest

that parents go online with their adolescents to discover which sites their adolescents use

to communicate with others and to be aware of the social networks in which their

children interact (Madden et al. 2013).

ADOLESCENT GIRLS AND SEXUAL ASSAULT

A history of victimization with sexual violence results in an increased risk of

adolescent suicide (Martin et al. 2004; Howard and Wang 2005). Adolescent girls report

sexual violence at a higher rate than adolescent boys (Walker et al. 2004; Howard and

Wang 2005; Basile et al. 2006; Turner, Finkelhor, and Ormrod 2006). Nearly 56,000

minor girls were treated at hospital emergency rooms in America from 2004 to 2006,

because of sexual violence perpetrated on them (Centers for Disease Control and

Prevention 2009). Between 12 percent and 35 percent of women in different areas of the

United States indicate that they were victims of sexual violence during adolescence

(Putnam 2003).

Victims of childhood sexual violence continue to be mentally affected as adults

(Barnyard, Williams, and Siegel 2004; Howard and Wang 2005; Chen, Dunne and Han

2006; Schilling, Aseltine, and Gore 2007). Depression is more common among

adolescents who have been victims of sexual violence (Putnam 2003). The pattern of

depression from early sexual violence continues into the high school years (Osofsky

1999; Schilling et al. 2007). Sexual violence results in depression more often than other

types of abuse (McCrae, Chapman, and Christ 2006). Adolescent girls subjected to sexual

violence are more likely to internalize consequences, including depression, than adolescent boys (Cleary 2000; Walker et al. 2004). The adverse consequences of sexual violence worsen with time (Anda et al. 2006; Hussey, Chang, and Kotch 2006;Tyler, Johnson, and Brownridge 2008;).

Stigmatization from traumatic sexualization leads to depression (Feiring, Taska, and Chen 2002; Pachankis 2007). Sexual violence damages children's cognitive frame impairing their ability to trust others (Littleton et al. 2006). Early childhood violence may elevate subsequent "cortisol" production, prolonging the consequences of sexual trauma (Van der Vegt et al. 2009), resulting in exhaustion and depression (Van Voorhees and Scarpa 2004). The child's ability to produce cortisol becomes exhausted and the normal 24-hour cycle in cortisol levels is believed to remain low during the day resulting in depression (Van Voorhees and Scarpa 2004). Adrenal stress affects long-term memory formation (McGough and Roozendaal 2002).

A history of sexual violence is associated with a higher incidence of suicidal thoughts, suicide attempts, and successful suicides (Cleary 2000; Molnar, Berkman, and Buka 2001; Tyler 2002; Mann 2003; Howard and Wang 2005; Basile et al. 2006). The experience of sexual violence more than doubles the likelihood of a first suicide attempt by adolescent girls (Rosenberg et al. 2005). Depression appears as an intermediate variable between sexual violence and suicide in young women (Martin et al. 2004).

Any violent relationship tends to cause depression which increases the likelihood of suicidal behavior (Ackard and Neumark-Sztainer 2002). Teenage female victims of

dating violence say that they have attempted suicide 60 percent more often than nonvictims (Olshen et al. 2007). Victims of rape and dating violence are more likely to identify themselves as having eating disorders (Ackard and Neumark-Sztainer 2002).

According to Allison and Slupik (1996), about half of all American women experience violence from men at some point in their lives. The Centers for Disease Control and Prevention (2014) adds that 25 percent of ninth grade students have experienced dating violence and 8 percent have been victims of sexual dating violence. Harris and Associates (1997) share that one in five high school adolescent girls report having been physically or sexually abused. According to Johnson, Roberts, and Worell (1999), rape is a crime primarily committed against young females. Adolescents are the highest risk for sexual assault with more than half of reported sexual assaults occurring in dating situations. A total of 12.5 percent of adolescent females in high school reported being forced to have sexual intercourse without consent (Centers for Disease Control and Prevention 2016b). Snyder and Sickmund (1999) posit age 14 is an adolescent female's year of greatest risk of sexual assault.

The impact of sexual violence on the welfare of an adolescent girl is substantial as risk for pregnancy, sexually transmitted disease, depression, suicide attempts, and unhealthy weight loss are noted (Johnson et al. 1999). These authors also state that the cycle of dating violence is linked with childhood experiences in the home in that observing family violence is related to a quadrupled increase in male adolescents' likelihood to assault their girlfriend. According to Harris and Associates (1997), more

than half of women who report childhood or adolescent abuse have experienced domestic violence as an adult.

Sexual assault is prevalent with 20 to 30 percent of females having histories of sexual victimization in childhood, adolescence, or adulthood (McCloskey 1997; Russell and Bolen 2000). One out of three child sex abuse victims reported repeated victimization or sexual re-victimization (Arata 2002). According to Golding (1999) and Resnick (1993), females with a history of sexual assault are more likely to have psychological and physical health problems including posttraumatic stress disorder, depression, aggression, and eating disorders. Lamb (2000) demonstrates that young females appear to be participating in more violent behavior which may help understand the higher number of suicide attempts among young females. The American Association of Suicidology (2001) mentions that there has been an increase in completed suicide by females, especially for teens, so that suicide has risen to the third leading cause of death.

PREVENTION PROGRAMS AND SUICIDE RISK

Many authors have written about adolescents that have been victims of serious physical dating violence and that nearly 18 percent of female adolescents have been sexually victimized by dating partners (Foshee 1996; O'Keefe and Treister 1998; Coker et al. 2000; Silverman et al. 2001). Adolescent dating violence prevention programs have listed "risk factors" that include alcohol, drugs, depression, low self-esteem, and insufficient social skills (Avery-Leaf et al. 1997; Foshee et al. 1998). Many authors believe that physical and sexual dating violence varies by gender with adolescent females

being much more likely than males to be victims of sexual dating violence (Malik, Sorenson, and Aneshensel 1997; O'Keefe 1997; Foshee et al. 2001). Other adolescent dating violence prevention programs have researched "social ecological models" with "social environmental predictors" such as peer environment, family environment, social norms, and "individual level predictors" being personal competencies, other problem behaviors, and demographic characteristics (Foshee et al. 1996; Halpern et al. 2001).

Foshee and Bauman (1992) found that support of traditional gender stereotypes predicts early sexual activity among adolescents. Resnick and Blum (1985) add that adolescent females who supported traditional gender stereotypes and were sexually active were less likely to use contraceptives. Unfair expectations of romantic partners based on stereotypical gender models have led to dating violence (Foshee and Langwick 2004). Adolescent males who support traditional gender stereotypes are more likely to sexually assault their romantic partners compared to adolescent males who do not support traditional gender stereotypes (Burt 1980; Check and Malamuth 1983; Koss et al. 1985).

Brockington (2001) recounted that several researchers have shown a link between sexual assault, sexual abuse, domestic violence, and suicide attempts among females. Fondacaro and Butler (1995) reported that various studies on the link between sexual assault and suicidal behavior in adolescence found mixed results, with most studies showing more suicidal ideation in sexual assault female victims than non-victimized females. Santa Mina and Gallop (1998) reviewed studies of sexual assault and suicidal

behavior from 1988 to 1998 and found evidence of more self-harm, suicidal ideation, and suicidal behavior among victims than non-victims of sexual assault.

Davidson et al. (1996) found, in a national sample, that sexual assault was related to an increased risk of a lifetime of suicide attempts and a history of sexual trauma among females. Molnar, Berkman, and Buka (2001) examined the National Comorbidity Survey data and found that odds of suicide attempts were greater for females and males who had a sexual victimization history, however females reported more suicide attempts than males in the sample. Romans, Martin, Anderson, Herbison, and Mullen (1995) interviewed 252 female sexual assault victims and 225 female non-victims; they found that female victims described more self-harm experiences than non-victims especially if the abuse was frequently perpetrated.

Borowsky, Ireland, and Resnick (2001) analyzed data from the National Longitudinal Study of Adolescent Health organized from 1995 to 1996 and found that perceived emotional well-being, as well as parent and family attachment, protected adolescent females against suicide attempts. These authors also found that risk factors for suicide included prior suicide attempts, drug and alcohol abuse, and educational challenges among adolescent females. Nelson, Higginson, and Grant-Worley (1994) examined a large sample of Oregon high school students and found that students who were sexually abused in the past year reported more suicidal ideation compared with nonvictims. Physical and sexual dating violence victims have an increased risk of substance use, eating disorders, sexual risk behaviors, pregnancy, and attempted suicide

than non-victims (Silverman et al. 2001). Adolescent girls also reported more suicidal ideation and suicide attempts than adolescent boys who reported sexual abuse (Bensley et al. 1999; Coker et al. 2000; Ackard and Neumark-Sztainer 2002).

Globally, 20 percent of adolescent females and 8 percent of adolescent males have experienced a sexual assault in the last year and sexual assault is a well-known risk factor for suicidal behavior (Pereda et al. 2009), The physical and psychological effects of sexual assault can cause traumatic stress which will increase the risk factor of suicide, as the physical and psychological effects of exposure to sexual assault will affect coping with the subsequent traumatic event (Stoltenborgh et al. 2011). The risk of suicide caused by posttraumatic stress disorder and major depressive disorder have been noted (Fergusson, McLeod, and Horwood 2013). Adolescent suicidal behavior can be caused by socioeconomic status and exposure to harsh parenting (Sugaya et al. 2012). First suicide attempts usually occur in adolescence (Rhodes et al. 2011). The propensity to attempt suicide is inheritable according to Mann (2003). Risky sex and drug use will also increase suicide risk among adolescent females (Homma et al. 2012). To recapitulate, there are many studies that show clear links between sexual victimization and increased risk of suicide attempts and suicidal ideation among adolescent girls.

THE ROLE OF BODY IMAGE, DEPRESSION, AND SUICIDE

Teenage depression has been correlated with suicide and suicidal thoughts for up to a year afterwards (Mazza and Reynolds 1998). Adolescent females have been depressed and many have had suicidal thoughts (Reifman and Windle 1995). Body

dysphoria in young females has led to depression (Rierdan and Koff 1997). Depressed adolescents have complained of negative perceptions of their bodies (Rierdan, Koff, and Stubbs 1988). Depressed young women have tended to use negative adjectives in describing their bodies (Rierdan, Koff, and Stubbs 1987). Body dysphoria and dieting among young girls has portended bulimic tendencies (Shepherd and Ricciardelli 1998).

Unsuccessful dieting and bulimia have led to depression (Stice et al. 2000). Ninety percent of those in their mid to late teens with eating disorders are female (Miotto et al. 2003). Persons with eating disorders remain at an increased risk of suicidal behavior throughout their lives (Corcos et al. 2002; Miotto et al. 2003). Eating disorders rival substance abuse as predictors of untimely death (Harris and Barraclough 1998). Young girls with eating disorders have thought of suicide and have committed suicide more frequently than those who do not have eating disorders (Neumark-Sztainer et al. 1998). According to these authors, the suicide rate for anorexic females is about 23 times the normal suicide rate. Suicidal teenagers tend to have more negative thoughts about their bodies (Orbach et al. 2004). Body dysphoria has led to eating disorders and depression (Tiggerman 1994; Thompson et al. 1995; Rierdan and Koff 1997; Shepherd and Ricciardelli 1998). Body dysphoria is also a predictor of suicide (Miotto et al. 2003; Orbach et al. 2004; Brausch and Muehlenkamp 2007).

According to Yahoo Lifestyle News (2017) "bonespiration" is a social search word in the process of replacing "thinspiration" to locate photos online of unhealthy thin girls using hashtags. These photos can be found on Instagram and Twitter. The photos

identified tend to have bones pushing out of taut skin. Other search words to perform this task have been banned on social media dating back to 2012 (Perloff 2014). Young females use these search-words to find images that encourage their eating disorders, according to Catherine Talbot (2017). The young women who post these photos tend to have their own eating disorders as well. Along with bonespiration, other search words used in this capacity include thigh gap, bikini bridge, A4 paper challenge, and rib cage bragging. Use of hashtag mermaid thighs finds photographs of normal weight girls as a counterpoint (Yahoo Lifestyle News 2017).

Search words on social media produce thin body images for "thinspiration," "fit body images" with a subgroup of "thin body images" for "fitspiration," and extremely thin body images for "bonespiration," according to Talbot (2017). The images may be found on Instagram, Twitter, and WeHeartIt according to Yahoo (2017). Body dysphoria proceeds from a socially promulgated standard of thinness (Groesz, Levine, and Murnen 2002; Tiggermann and McGill 2004; Bell, Lawon, and Dittmar 2007).

Young girls start out being more susceptible to body dysphoria (Macali et al. 2014). This leads to eating disorders (Ackard, Croll, and Kerney-Cooke 2002; Neumark-Sztainer et al. 2006; Allen, Byrne, and Crosby 2015) and emotional problems (Paxton et al. 2006). Social media are replacing traditional media as a crucible in which public opinion is formed (Sundar et al. 2013; Perloff 2014). Social media increasingly shape the body images desired by young girls (Perloff 2014).

"Thinspiration" includes photographs of thin young females along with weight loss advice (Boero and Pascoe 2012). This is perceived to promote eating disorders (Francis 2017; Zolfagharifard 2017). It has historically been produced by persons who glamorize a lifestyle involving eating disorders (Lapinski 2009). Its semi-naked photos portray thinness as sexy (Ghaznavi and Taylor 2015). "Bonespiration" promotes even thinner, bonier images (Ghaznavi and Taylor 2015). "Fitspiration" ostensibly encourages healthy activity and eating (Tiggermann and Zaccardio 2016). However, it may be depressing to many in its emphasis on a single fit, thin body type (Ghaznavi and Taylor 2015). In all cases, the message is similar (Boepple and Thompson 2016).

DISCUSSION

Despite great strides in the study of traditional bullying, cyber-bullying, sexual assault, and body dissatisfaction, further studies should continue to address areas where data are sparse and understanding of causal relationships limited. The literature reviewed in this chapter does support the relationships this dissertation intends to examine between my independent and dependent variables. This study utilizes a large sample size of a national data set (YRBSS) of adolescents who report that they are feeling sad, helpless, and suicidal because of bullying, cyber-bullying, sexual assault, and body dysphoria. The extant literature contains some references to these correspondences, but it lacks the requisite rigor to establish a verifiable relationship between body dissatisfaction, sexual assault, and bullying, on the one hand, and depression and suicide, on the other. This dissertation will explicitly articulate the risk factors that the literature has, hitherto, only

hinted at and discussed in a dissembled manner. Thus, this study will help the field move closer to a more comprehensive model.

RESEARCH QUESTIONS

Research Question 1: What factors predict the likelihood that female respondents would report that they felt sad or hopeless almost every day for two weeks in a row and that they stopped pursuing their usual activities?

Research Question 2: What factors predict the likelihood that female respondents would report that they made a suicide plan?

Research Question 3: What factors predict the likelihood that female respondents would be a suicide risk?

HYPOTHESES

1. Adolescent girls who experienced bullying on school property over the last 12 months are more likely to report that they felt sad and hopeless than adolescent boys who experienced bullying on school property over the last 12 months.

2. Adolescent girls who perceive themselves to be overweight are more likely to report that they felt sad and hopeless than adolescent boys who perceive themselves to be overweight.

3. Adolescent girls who experience electronic bullying over the last 12 months are more likely to report that they felt sad and hopeless than adolescent boys who experience electronic bullying.

4. Adolescent girls who experience physical force to have sexual intercourse (when they did not want to) are more likely to report that they felt sad and hopeless than adolescent boys who experience physical force to have sexual intercourse (when they did not want to).

5. Adolescent girls who experienced bullying on school property over the last 12 months are more likely to report that they made a suicide plan than adolescent boys who experienced bullying on school property over the last 12 months.

6. Adolescent girls who perceive themselves to be overweight are more likely to report that they made a suicide plan than adolescent boys who perceive themselves to be overweight.

7. Adolescent girls who experience electronic bullying over the last 12 months are more likely to report that they made a suicide plan than adolescent boys who experience electronic bullying over the last 12 months.

8. Adolescent girls who experience physical force to have sexual intercourse (when they did not want to) are more likely to report that they made a suicide plan than adolescent boys who experience physical force to have sexual intercourse (when they did not want to).

9. Adolescent girls who experienced bullying on school property over the last 12 months are more likely to be a suicide risk than adolescent boys who experienced bullying on school property over the last 12 months.

10. Adolescent girls who perceive themselves to be overweight are more likely to be a suicide risk than adolescent boys who perceive themselves to be overweight.

11. Adolescent girls who experience electronic bullying over the last 12 months are more likely to be a suicide risk than adolescent boys who experience electronic bullying over the last 12 months.

12. Adolescent girls who experience physical force to have sexual intercourse (when they did not want to) are more likely to be a suicide risk than adolescent boys who experience physical force to have sexual intercourse (when they did not want to).

CHAPTER III

METHODOLOGY

This chapter describes first the data and sample. Next the variables and data collection will be considered. This is followed by discussion of the data analysis process.

DATA AND SAMPLE

The data for this analysis are from the 2015 "Youth Risk Behavior Surveillance System" (YRBSS) survey compiled by the Centers for Disease Control and Prevention. The sample size is 15,506 students; 7,749 students are male, and 7,757 students are female. The students surveyed are ages 12 to 18 years.

This sample was obtained by a three-stage cluster design that produced a nationally representative sample of students in grades 9-12 who attend public and private schools. The first stage sampling frame consisted of 1,259 primary sampling units which consisted of counties, sub-areas of large counties, and smaller adjacent counties. In the second stage, 180 schools with students in grades 9-12 were sampled with probability proportional to school enrollment size. The third stage sampling consisted of random sampling of students in grades 9-12 in either one or two classrooms from a required subject (English or Math) or a required period (homeroom or second period). All students in sampled classes were eligible to participate (Centers for Disease Control and Prevention 2016b).

VARIABLES

Dependent Variables

There are three dependent variables. The first dependent variable is <u>felt sad or hopeless</u> almost every day for two weeks in a row, and that they stopped doing their usual activities. It is measured by respondents answering 1= 1 yes or 2=2 no to the survey question Q26. This variable will be recoded to 1=1 yes, and 2=0 no, so that yes becomes the reference category. The second dependent variable is <u>made a suicide plan</u>. It is measured by respondents answering 1=1 yes or 2=2 no to the survey question Q28. This variable will also be recoded to 1=1 yes, and 2=0 no, so that yes becomes the reference category. The third dependent variable is <u>suicide risk</u>. This is an index that will be created by combining the variables <u>seriously considered attempting suicide</u> (Q27), <u>made a suicide plan</u> (Q28), and <u>suicide attempt that resulted in an injury, poisoning, or overdose</u> (Q30). Seriously considered attempting suicide is measured by respondents answering 1=1 yes or 2=2 no to the survey question Q27 and will be recoded to 1= 1 yes, I seriously considered attempting suicide or 2= 0 no, so that yes becomes the reference category for Q27. Made a suicide plan is measured by respondents answering 1=1 yes or 2=2 no to the survey question Q28. This variable will be recoded to 1=1 yes, and 2=0 no, so that yes becomes the reference category for Q28. Suicide attempt is measured by respondents answering 1= I did not attempt suicide during the past 12 months, 2= yes Q30. This variable will be recoded to 1=0 no, I did not attempt suicide and 2=1 yes, I did attempt suicide, so that yes becomes the reference category for Q30.

Independent Variables

Sex is measured by respondents answering 1= female or 2= male to the survey question Q2. This variable will be recoded to 1=1 female and 2=0 male, so that female becomes the reference category for the female analyses. Then this variable will be recoded to 1=0 female and 2=1 male, so that male becomes the reference category for the male analyses. Bullied on school property over the last 12 months is measured by respondents answering 1=1 yes or 2=2 no to the survey question Q24. This variable will be recoded to 1=1 yes, and 2=0 no, so that yes becomes the reference category. Bullied electronically over the last 12 months is measured by respondents answering 1= yes or 2= no to the survey question Q25. This variable will also be recoded to 1=1 yes, and 2=0 no, so that yes becomes the reference category. Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to) is measured by respondents answering 1=1 yes or 2= 2 no to the survey question QN21. This variable will be recoded to 1=1 yes, and 2=0 no, so that yes becomes the reference category. Percentage of students who describe themselves as overweight when they were not is measured by respondents answering 1= 1yes or 2=2 no to the survey question QN69. This variable will be recoded to 1=1 yes, and 2=0 no, so that yes becomes the reference category.

DATA COLLECTION

In 2015 data were collected from 9th to 12th graders from 1259 county sized areas, including parts of large counties, and groups of smaller counties; 54 representative areas

were chosen. Next, 180 schools were chosen from the 54 representative areas and the data was weighted by school size. Finally, one or two classes or school periods were selected. Students willing to participate from classes allowed to participate provided the collected data. One class was used if it had sufficient numbers of minorities and two classes were used if not (Centers for Disease Control and Prevention 2016b).

DATA ANALYSIS

Descriptive statistics are used to report characteristics of the respondents. Results are reported for the analysis of three dependent variables (felt sad or hopeless, seriously considered suicide, and suicide risk). Logistic regression will be used to examine the impact of the predictor variables on the dependent variables "Felt Sad or Hopeless" and "Made a Suicide Plan." Since these dependent variables of interest are categorical, the most appropriate statistical procedure is logistic regression. Multiple Regression is the most appropriate test to use with a continuous dependent variable and categorical independent variables. The first research question relates to the dependent variable "Felt Sad and Hopeless." Hypotheses 1-4 will be tested regarding this question. The second research question relates to the dependent variable "Made a Suicide Plan." Hypotheses 5-8 will be tested regarding this question. The third research question relates to the dependent variable "Suicide Risk." Hypotheses 9-12 will be tested regarding this question.

This chapter has described the data and sample. Then the variables and data collection were considered, followed by discussion of the data analysis process. The next Chapter will look at the results with reference to the research questions and hypotheses.

CHAPTER IV

FINDINGS

This chapter reports the findings with reference to the research questions and hypotheses. This chapter first presents a description of the characteristics of respondents. This is followed by a presentation of the diagnostics for the data. The third section presents results of the analyses for each of the three dependent variables.

DESCRIPTIVE STATISTICS

Table 1 indicates that exactly three quarters of the respondents were between 15 and 17 years of age. The largest percentage of respondents (25.9 percent) were 16 years old. The respondents were evenly divided between male (50 percent) and female (50 percent). The largest single percentage of the respondents (27.2 percent) were in the 9th grade.

Table 1. Characteristics of Respondents

Characteristic	N	percent
Age		
12 or younger	43	.3
13 years old	17	.1
14 years old	1684	10.8
15 years old	3817	24.5
16 years old	4033	25.9
17 years old	3833	24.6
18 years or older	2131	13.7

Table 1 Continued
Sex

Female	7757	50.0
Male	7749	50.0

Grade

9th grade	4003	25.8
10th grade	3938	25.8
11th grade	3930	25.4
12th grade	3601	23.0
Ungraded or other	35	.2

Race/Ethnicity

Am. Ind. /Alaska	482	2.0
Asian	736	4.8
Black or Afr. Am.	1944	16.2
Hawaiian or Other	249	1.5
White	8666	69.0
Other	3968	6.5

DIAGNOSTICS

The data were examined for the presence of outliers and for multicollinearity. An inspection of histograms and frequencies failed to indicate the presence of outliers. Collinearity diagnostics were examined for the presence of multicollinearity among the predictor variables. An examination of the collinearity diagnostics failed to indicate the presence of multicollinearity among any of the predictors. In addition, inter-correlations between the predictor variables were within normally accepted ranges.

LOGISTIC REGRESSION ANALYSIS

Analysis I: Feeling Sad or Hopeless

This analysis assessed the impact of the predictor variables on the first dependent variable, which was the likelihood that respondents would report that they felt sad or hopeless. The results are reported in Tables Two and Three. Separate analyses were computed for females and for males. Each model contained four independent variables: bullied on school property, electronic bullying, forced sexual assault, and body dysphoria. The full model for females containing all predictors was statistically significant ($\chi^2 = 828.767$, DF = 4, N = 7194, p < .0005), indicating that the model could distinguish between respondents who reported and did not report feeling sad or hopeless.

The model explained between 10.9 percent (Cox and Snell R square) and 14.7 percent (Nagelkerke R squared) of the variance in feeling sad or hopeless among adolescent females and correctly classified 67.0 percent of the cases. Each of the predictor variables were significant at the p < .0005 level. For females, sexual assault had the strongest independent effect on the likelihood of feeling sad or hopeless (B = 1.0).

Table 2. Likelihood of Reporting Felt Sad or Hopeless for Females (2015)

	B	S.E.	Wald	df	p	OR	95% CI for OR	
							Lower	Upper
Bullied at School	.81	.07	142.145	1	.000***	2.3	1.97	2.58
Cyber-bullying	.81	.07	127.703	1	.000***	2.3	1.96	2.59
Sexual Assault	1.0	.09	143.075	1	.000***	2.8	2.34	3.27
Body dysphoria	.29	.05	32.595	1	.000***	1.3	1.21	1.49
Constant	-.94	.04	654.63	1	.000***	3.9		
χ^2					828.767			
DF					4			

Note: **p ≤ .05 **p ≤. 01 ***p ≤. 001***N = 7194

As shown in Table 2, all independent variables made a unique statistically significant contribution to the model (bullied on school property, cyber-bullying, forced sexual assault, and body dysphoria). The strongest predictor of a female adolescent reporting that they felt sad or hopeless was sexual assault (OR = 2.8). This indicates that adolescent female respondents who had reported being sexually assaulted were 2.8 times more likely to report that they felt sad or hopeless than those who did not describe themselves as being sexually assaulted, controlling for all other factors in the model.

Table 3. Likelihood of Reporting Felt Sad or Hopeless Males 2015

	B	S.E.	Wald	df	p	OR	95% CI for OR Lower	Upper
Bullied at School	.68	.08	72.075	1	.000***	1.9	1.68	2.29
Cyber-bullying	1.1	.09	130.956	1	.000***	2.9	2.47	3.58
Sexual Assault	.74	.13	27.893	1	.000***	2.0	1.59	2.73
Body dysphoria	.16	.07	5.697	1	.017**	1.2	1.03	1.33
Constant	-1.6	.04	1811.41	1	.000***	.186		
χ^2					406.373			
DF					4			

Note: *p $\leq$ .05 **p $\leq$ .01 ***p $\leq$ .001***N = 7179

The full model for males containing all predictors is statistically significant (χ^2 = 406.373, DF = 4, N = 7179, p < .005). The model explained between .055 percent (Cox and Snell R square) and .086 percent (Nagelkerke R squared) of the variance in feeling sad or hopeless among adolescent males and correctly classified 79.8 percent of the cases. Each of the predictor variables except for body dysphoria (p < .01) were p < .001 level. Interestingly, for males, cyber-bullying had the strongest independent effect on the likelihood of feeling sad or hopeless (B = 1.1).

Findings for the analysis for males are reported in Table 3. As shown in Table 3, all independent variables made a unique statistically significant contribution to the model (sex, bullied on school property, cyber-bullying, forced sexual assault, and body dysphoria). The strongest predictor of a male adolescent reporting that they felt sad or hopeless was cyber-bullying which recorded an odds ratio of 2.9. This indicates that

adolescent male respondents who had self-described themselves as being cyber-bullied were 2.9 times more likely to report that they felt sad or hopeless than those who did not self-describe themselves as being cyber-bullied, controlling for all other factors in the model.

The first research question asks what factors predict the likelihood that female respondents would report that they felt sad or hopeless almost every day for two weeks in a row and that they stopped doing their usual activities. The findings are reported in Table 2. As noted above, the factors that are most strongly related to whether female respondents reported "Feeling Sad and Hopeless" are, respectively, Sexual Assault (B = 1.0, p < .001), Bullied at School (B = .81, p < .001), Cyber-bullying (B = .81, p < .001), and Body Dysphoria (feeling overweight; B = .29, p < .001).

Hypotheses one through four compared adolescent girls and adolescent boys in terms of the impact of bullying and other negative behavior on the likelihood of reporting that they felt sad or hopeless. The first hypothesis stated that adolescent girls who experienced bullying on school property over the last 12 months are more likely to report that they felt sad and hopeless than adolescent boys who experienced bullying on school property over the last 12 months. The findings concerning this hypothesis are reported in Tables 2 and 3. Tables 2 and 3 indicate that bullying on school property had a stronger impact on whether girls reported that they felt sad and hopeless than it did for boys (B = .81, p < .001; B = .68, p < .001). For female adolescents, the odds ratio was 2.3 (see Table 2), whereas for male adolescents the odds ratio was 1.9 (see Table 3). This indicates that female

adolescent respondents who experienced bullying on school property over the last 12

months were 2.3 times more likely to report that they felt sad or hopeless than girls who

did not report experiencing bullying on school property. Adolescent males who

experienced bullying on school property over the last 12 months males (see Table 3)

were 1.9 times more likely to report that they felt sad and hopeless than adolescent males

who did not report experiencing bullying, controlling for all other factors in the model.

hypothesis was confirmed.

The second hypothesis stated that adolescent girls who perceive themselves to be

overweight are more likely to report that they felt sad and hopeless than adolescent boys

who perceive themselves to be overweight. The findings from Tables 2 and 3 indicate

that perceiving themselves as overweight had a stronger impact on whether girls reported

that they felt sad and hopeless than it did for boys ($B = .29$, $p < .001$; $B = .16$, $p < .01$).

For female adolescents the odds ratio was 1.3 (see Table 2) whereas for male adolescents

the odds ratio was 1.2 (see Table 3). This indicates that female adolescent respondents

who perceived themselves to be overweight were 1.3 times more likely to report that they

sad or hopeless than female adolescents who did not perceive themselves as overweight.

Adolescent males who perceived themselves to be overweight were 1.2 times more likely

to report feeling sad and hopeless than were adolescent males who did not report

themselves to be overweight, controlling for all other factors in the model. Hence, this

hypothesis was confirmed.

The third hypothesis stated that adolescent girls who experienced electronic bullying over the last 12 months are more likely to report that they felt sad and hopeless than adolescent boys who experience electronic bullying. The findings are reported in Tables 2 and 3. Tables 2 and 3 indicate that contrary to this hypothesis, experiencing electronic bullying had a stronger impact on whether boys reported that they felt sad and hopeless than it did for girls (B = .81, p < .001; B = 1.1, p < .001). Table 2 indicates that female adolescent respondents who experienced electronic bullying were 2.3 times more likely to report that they felt sad or hopeless than adolescent girls who did not experience electronic bullying. Conversely, Table 3 indicates that adolescent males who experienced electronic bullying who were 2.9 times more likely to feel sad or hopeless than adolescent boys who did not experience electronic bullying, all other factors in the model. Hence, this hypothesis was not confirmed.

The fourth hypothesis stated that adolescent girls who experienced physical force to have sexual intercourse (when they did not want to) are more likely to report that they felt sad and hopeless than adolescent boys who experienced physical force to have sexual intercourse (when they did not want to). The findings from Tables 2 and 3 indicate that adolescent girls who experienced physical force to have sexual intercourse were more likely to report feeling sad and hopeless than were adolescent boys (B = 1.0, p < .001; B = .74, p < .001). The odds ratio for adolescent girls was 2.8 (see Table 2) and for adolescent boys was 2.0. This indicates that female adolescent respondents who experience physical force to have sexual intercourse (when they did not want to) months were 2.8 (see Table 2)

times more likely to report that they felt sad or hopeless than female adolescents who did

not report having experienced physical force to have sexual intercourse. Adolescent

males who experienced physical force to have sexual intercourse were 2.0 (see Table 3) times

more likely to report feeling sad and hopeless than adolescent boys who did not report

experiencing sexual assault, controlling for all other factors in the model. Hence, this

hypothesis was confirmed.

Analysis II: Made a Suicide Plan

This analysis assessed the impact of the predictor variables on the second

dependent variable, which was the likelihood that respondents would report that they had

made a suicide plan. The results are reported in Tables 4 and 5. Separate analyses were

computed for females and for males. Each model contained four independent variables;

bullied on school property, electronic bullying, forced sexual assault, and body

dysphoria. The full model for females containing all predictors was statistically

significant ($\chi^2 = 720.548$, DF = 4, N = 7081, p < .0005), indicating that the model could

distinguish between respondents who reported and did not report making a suicide plan.

The model explained between 9.7 percent (Cox and Snell R square) and 15.5 percent

(Nagelkerke R squared) of the variance in feeling sad or hopeless among adolescent

females and correctly classified 81.0 percent of the cases. Each of the predictor variables

were significant at the p < .0005 level. For females, sexual assault had the strongest

independent effect on the likelihood of making a suicide plan (B = 1.0).

Table 4. Likelihood of Reporting They Made a Suicide Plan for Females 2015

| | B | S.E. | Wald | df | p | OR | 95% CI for OR | |
							Lower	Upper
Bullied at School	.929	.08	148.869	1	.000***	2.53	2.1	2.9
Cyber-bullying	.646	.08	66.344	1	.000***	1.90	1.6	2.2
Sexual Assault	1.06	.09	156.245	1	.000***	2.88	2.4	3.4
Body dysphoria	.397	.06	39.196	1	.000***	1.48	1.3	1.6
Constant	-2.1	.05	1780.04	1	.000***	.118		
χ^2 DF					720.548 4			

Note: *$p \leq .05$ **$p \leq .01$ ***$p \leq .001$*** N = 7081

As shown in Table 4, all independent variables made a unique statistically significant contribution to the model (bullied on school property, cyber-bullying, forced sexual assault, and body dysphoria). The strongest predictor of a female adolescent reporting that they made a suicide plan was sexual assault (OR = 2.88). This indicates that adolescent female respondents who had reported being sexually assaulted were 2.88 times more likely to report that they made a suicide plan than those who did not report themselves having been sexually assaulted, controlling for all other factors in the model.

Table 5. Likelihood of Reporting They Made a Suicide Plan Males 2015

	B	S.E.	Wald	df	p	OR	95% CI for OR	
							Lower	Upper
Bullied at School	.757	.10	55.404	1	.000***	2.13	1.7	2.6
Cyber-bullying	1.19	.11	110.13	1	.000***	3.29	2.0	3.8
Sexual Assault	1.04	.17	44.126	1	.000***	2.81	2.6	4.1
Body dysphoria	.286	.08	10.308	1	.000***	1.33	1.1	1.5
Constant	-2.7	.05	2173.93	1	.000***	.067		
χ^2					720.548			
DF					4			

Note: *p ≤ .05 **p ≤ .01 ***p ≤ .001*** N = 7037,

Findings for the analysis for males are reported in Table 5. The full model for males containing all predictors is statistically significant (χ^2 = 720, DF = 4, N = 7037, p < .005). The model explained between .05 percent (Cox and Snell R square) and .10 percent (Nagelkerke R squared) of the variance in making a suicide plan among adolescent males and correctly classified 90.2 percent of the cases. Each of the predictor variables were significant at the p < .001 level. Interestingly, for males, cyber-bullying had the strongest independent effect on the likelihood of making a suicide plan (B = 1.19).

As shown in Table 5, all independent variables made a unique statistically significant contribution to the model (sex, bullied on school property, cyber-bullying, forced sexual assault, and body dysphoria). The strongest predictor of a male adolescent reporting that they made a suicide plan was cyber-bullying which recorded an odds ratio

of 3.29. This indicates that adolescent male respondents who had self-described themselves as being cyberbullied were 3.29 times more likely to report that they made a suicide plan than those who did not self-describe themselves as being cyber-bullied, controlling for all other factors in the model.

The second research question asks what factors predict the likelihood that female respondents would report that they made a suicide plan. The findings are reported in Table 4. As noted above, the factors that are most strongly related to whether female respondents reported making a suicide plan are, respectively, Sexual Assault (B = 1.1, p < .001), Bullied at School (B = .93, p < .001), Cyber-bullying (B = .65, p < .001), and Body Dysphoria (feeling overweight; B = .40, p < .001).

Hypotheses five through eight compared adolescent girls and adolescent boys in terms of the impact of bullying and other negative behavior on the likelihood of reporting that they made a suicide plan. Hypothesis five stated that adolescent girls who experienced bullying on school property over the last 12 months are more likely to report that they made a suicide plan than adolescent boys who experienced bullying on school property over the last 12 months. The findings concerning this hypothesis are reported in Tables 4 and 5. Tables 4 and 5 indicate that bullying on school property had a stronger impact on whether girls reported that they made a suicide plan than it did for boys (B = .929, p < .001; B = .757, p < .001). For female adolescents, the odds ratio was 2.5 (see Table 4), whereas for male adolescents the odds ratio was 2.1 (see Table 5). This indicates that female adolescent respondents who experienced bullying on school property over the last 12

months were 2.5 times more likely to report that they made a suicide plan than girls who

did not report experiencing bullying on school property. Adolescent males who

experienced bullying on school property over the last 12 months males (see Table 5)

were 2.1 times more likely to report that they made a suicide plan than adolescent males

who did not report experiencing bullying, controlling for all other factors in the model.

hypothesis was confirmed.

The sixth hypothesis stated that adolescent girls who perceive themselves to be

overweight are more likely to report that they made a suicide plan than adolescent boys

who perceive themselves to be overweight. The findings from Tables 4 and 5 indicate

that perceiving themselves as overweight had a stronger impact on whether girls reported

that they made a suicide plan than it did for boys ($B = .397$, $p < .001$; $B = .286$, $p < .001$).

For female adolescents the odds ratio was 1.5 (see Table 4) whereas for male adolescents

the odds ratio was 1.3 (see Table 5). This indicates that female adolescent respondents

who perceived themselves to be overweight were 1.5 times more likely to report that they

made a suicide plan than female adolescents who did not perceive themselves as

overweight. Adolescent males who perceived themselves to be overweight were 1.3 times

more likely to report that they made a suicide plan than were adolescent males who did

not report themselves to be overweight, controlling for all other factors in the model. This

hypothesis was confirmed.

The seventh hypothesis stated that adolescent girls who experience electronic

bullying over the last 12 months are more likely to report that they made a suicide plan

than adolescent boys who experience electronic bullying. The findings are reported in Tables 4 and 5. Tables 4 and 5 indicate that contrary to this hypothesis, experiencing electronic bullying had a stronger impact on whether boys reported that they made a suicide plan than it did for girls (B = .65, p < .001; B = 1.2, p < .001). Table 2 indicates that female adolescent respondents who experienced electronic bullying were 1.9 times more likely to report that they made a suicide plan than adolescent girls who did not electronic bullying. Conversely, Table 5 indicates that adolescent males who experienced electronic bullying who were 3.3 times more likely to report that they made a suicide plan than adolescent boys who did not experience electronic bullying, all other factors in the model. This hypothesis was not confirmed.

The eighth hypothesis stated that adolescent girls who experienced physical force to have sexual intercourse (when they did not want to) are more likely to report that they made a suicide plan than adolescent boys who experienced physical force to have sexual intercourse (when they did not want to). The findings from Tables 4 and 5 indicate that adolescent girls who experienced physical force to have sexual intercourse were more likely to report making a suicide plan than were adolescent boys (B = 1.06, p < .001; B = 1.04, p < .001). The odds ratio for adolescent girls was 2.88 (see Table 4) and for adolescent boys was 2.81. This indicates that female adolescent respondents who experienced physical force to have sexual intercourse (when they did not want to) were 2.88 (see Table 4) times more likely to report that they made a suicide plan than female adolescents who did not report having experienced physical force to have sexual

intercourse. Adolescent males who experienced physical force to have sexual intercourse were 2.81 (see Table 5) times more likely to report that they made a suicide plan than adolescent boys who did not report experiencing sexual assault, controlling for all other factors in the model. Hence, this hypothesis was confirmed.

MULTIPLE REGRESSION ANALYSES

Analysis III: Suicide Risk

This analysis assessed the impact of the predictor variables on the third dependent variable, which was the likelihood that female respondents would be a suicide risk. The results are reported in Tables 6 and 7. Separate regression analyses were computed for females and for males. Each model contained four independent variables: bullied on school property, electronic bullying, forced sexual assault, and body dysphoria. The full model for females containing all predictors was statistically significant (F = 58457, R^2 = .043, N = 7081, p < .0001), indicating that the model could distinguish between respondents who were and were not a suicide risk. The model explained 4.3 percent of the variance in suicide risk among adolescent females. Each of the predictor variables were significant at the p < .0001 level. For females, being bullied at school had the strongest independent effect on the likelihood of being a suicide risk (B = .16, SE = .02, p < .001).

Table 6. Likelihood of Suicide Risk for Females (2015)

Variable	B	S.E.B	Beta	p	
Bullied at School	.16	.02	.113	.000***	
Cyber-bullying	.10	.02	.069	.000***	
Sexual Assault	.15	.02	.082	.000***	
Body dysphoria	.07	.01	.064	.000***	
Constant	2.13	.01		.000***	
R^2					.043
F					58.457***

Note: *p ≤ .05 **p ≤ .01 ***p ≤ .001*** N = 5405

As shown in Table 6, all independent variables made a unique statistically significant contribution to the model (bullied on school property, cyber-bullying, forced sexual assault, and body dysphoria). The strongest predictor of a female adolescent being a suicide risk was being physically bullied at school (B = .16, SE = .02, p < .001). This indicates that adolescent female respondents who had reported being physically assaulted at school were .16 times more likely to be a suicide risk than those who did not describe themselves as being physically assaulted at school, controlling for all other factors in the model.

Table 7. Likelihood of Suicide Risk for Males (2015)

Variable	B	S.E.B	Beta	p		
Bullied at School	.13	.19	.106	.000***		
Cyber-bullying	.14	.02	.091	.000***		
Sexual Assault	.01	.03	.003	.000***		
Body dysphoria	.03	.03	.032	.000***		
Constant	2.09	.01		.000***		
R^2						.029
F						40.407***

Note: *p ≤ .05 **p ≤ .01 ***p ≤ .001*** N = 5575

The full model for males containing all predictors is statistically significant (F = 40.407, R^2 .029, N = 5575, p < .001). The model explained 2.9 percent of the variance in suicide risk among adolescent males. Each of the predictor variables were at the p < .001 level. Interestingly, for males, cyber-bullying had the strongest independent effect on the likelihood of being a suicide risk (B = .14).

Findings for the analysis for males are reported in Table 7. As shown in Table 7, all independent variables made a unique statistically significant contribution to the model (sex, bullied on school property, cyber-bullying, forced sexual assault, and body dysphoria). The strongest predictor of a male adolescent being a suicide risk was cyber-bullying (B = .14, SE = .02, p < .001). This indicates that adolescent male respondents who had self-described themselves as being cyberbullied were .14 times more likely to be a

suicide risk than those who did not self-describe themselves as being cyber-bullied, controlling for all other factors in the model.

The third research question asks what factors predict the likelihood that female respondents would be a suicide risk. The findings are reported in Table 6. As noted above, the factors that are most strongly related to whether female respondents were a suicide risk are, respectively, Sexual Assault (B =.15, p < .001), Bullied at School (B = .16, p < .001), Cyber-bullying (B =.10, p < .001), and Body Dysphoria (feeling overweight; B = .07, p < .001).

Hypotheses nine through twelve compared adolescent girls and adolescent boys in terms of the impact of bullying and other negative behavior on the likelihood of being a suicide risk. The ninth hypothesis stated that adolescent girls who experienced bullying on school property over the last 12 months are more likely to be a suicide risk than adolescent boys who experienced bullying on school property over the last 12 months. The findings concerning this hypothesis are reported in Tables 6 and 7. Tables 6 and 7 indicate that bullying on school property had a stronger impact on whether girls were a suicide risk than it did for boys (B = .16, p < .0001; B =.13, p < .001). This indicates that female adolescent respondents who experienced bullying on school property over the last 12 months were .16 times more likely to be a suicide risk than girls who did not report experiencing bullying on school property. Adolescent males who experienced bullying on school property over the last 12 months (Table 7) were .13 times more likely to be a

suicide risk than adolescent males who did not report experiencing bullying, controlling for all other factors in the model. This hypothesis was confirmed.

The tenth hypothesis stated that adolescent girls who perceive themselves to be overweight are more likely to be a suicide risk than adolescent boys who perceive themselves to be overweight. The findings from Tables 6 and 7 indicate that perceiving themselves as overweight had a stronger impact on whether girls were a suicide risk than it did for boys (B = .07, p < .001; B =.03, p < .001). This indicates that female adolescent respondents who perceived themselves to be overweight were .07 times more likely to be a suicide risk than female adolescents who did not perceive themselves as overweight. Adolescent males who perceived themselves to be overweight were .03 times to be a suicide risk than were adolescent males who did not report themselves to be overweight, controlling for all other factors in the model. Hence, this hypothesis was confirmed.

The eleventh hypothesis stated that adolescent girls who experience electronic bullying over the last 12 months are more likely to be a suicide risk than adolescent boys who experience electronic bullying. The findings are reported in Tables 6 and 7. Tables 6 and 7 indicate that contrary to this hypothesis, experiencing electronic bullying had a stronger impact on whether boys reported that they were a suicide risk than it did for girls (B = .10, p < .001; B =.14, p < .001). Table 6 indicates that female adolescent respondents who experienced electronic bullying were .10 times more likely to be a adolescent girls who did not experience electronic bullying. Conversely, Table 7

indicates that adolescent males who experienced electronic bullying who were .14 times more likely to be a suicide risk than adolescent boys who did not experience electronic bullying, all other factors in the model. Hence, this hypothesis was not confirmed.

Hypothesis twelve stated that adolescent girls who experience physical force to have sexual intercourse (when they did not want to) are more likely to be a suicide risk than adolescent boys who experience physical force to have sexual intercourse (when they did not want to). The findings from Tables 6 and 7 indicate that adolescent girls who experienced physical force to have sexual intercourse were more likely to be a suicide risk than were adolescent boys (B =.15, p < .001; B = .01, p < .001). This indicates that female adolescent respondents who experience physical force to have sexual intercourse (when they did not want to) were .15 (Table 6) times more likely to be a suicide risk than female adolescents who did not report having experienced physical force to have sexual intercourse. This indicates that adolescent males who experienced physical force to have sexual intercourse were .01 (Table 7) times more likely to be a suicide risk than adolescent boys who did not report experiencing sexual assault, controlling for all other factors in the model. Hence, this hypothesis was confirmed.

CHAPTER V

CONCLUSIONS

SUMMARY

Surveys show that being a female adolescent increases the likelihood that a person will feel sad or hopeless, may stop usual activities for two weeks or longer, or may consider suicide. Adding traditional school bullying, sexual assault, and body dysphoria to adolescent female anxieties substantially increases the likelihood of depression and suicide. Thus, female adolescents start out at a higher risk of suicide and depression, and their vulnerability is exacerbated by school bullying, cyber-bullying, sexual assault, and body dysphoria, or any combination thereof. The results support the hypotheses that adolescent female victims of traditional bullying, sexual assault, and body dissatisfaction are more at risk of depression, suicidal thoughts, plans, and implementation. Cyber-bullying had a stronger impact on whether boys reported that they felt sad and hopeless, made a suicide plan, and were a suicide risk than it did for girls. Specifically, hypotheses one, two, four, five, six, eight, nine, ten, and twelve were confirmed. Hypotheses three, seven, and eleven were not confirmed.

DISCUSSION

The purpose of this dissertation is to examine the relationships between sex (male and female), bullying (traditional and cyber), forced sexual assault, and body dissatisfaction on depressive symptoms and suicide risk. This research analyses the 2015

survey data from the Centers for Disease Control and Prevention (CDC) which conducts the Youth Risk Behavior Surveillance Study (YRBSS). This dissertation analyzes data from the 2015 YRBSS survey which demonstrates that young (12-18-year-olds) females who experience bullying at school, forced sexual assault, and body dysphoria have a higher incidence of depressive symptoms and suicide risk.

The dissertation hypothesized that sex (male/female) differences in depression and suicidal thoughts, plans, and behaviors would be correlated with increased bullying (traditional / cyber), forced sexual assault, and body dysphoria. It has been reported that bullied victims have a higher rate of suicide (Kim et al. 2009). Also, cyber-bullying has been strongly correlated with depression and suicidal behavior (Wang et al. 2009). Further, sexual assault increases the risk of suicide for adolescents (Howard and Wang 2005). It has been verified that adolescent girls complain of sexual assault more than adolescent boys (Basile et al. 2006), depression is more prevalent among victims of sexual violence (Putnam 2003), and adolescent girls with body dysphoria tend to be more depressed (Rierdan and Koff 1997).

Most of the above hypotheses demonstrate the vulnerability of female adolescents to depression and suicide. The only result that did not support the hypothesis was cyber-bullying; experiencing electronic bullying had a stronger impact on whether boys reported that they felt sad and hopeless, made a suicide plan, and were a suicide risk than it did for girls. Hence, this hypothesis was not confirmed.

This dissertation verified that adolescent females report feeling sad or hopeless 47 percent more often if they report having been bullied on school property, 40 percent more often if they report having been cyber-bullied, 38 percent more often if they report being forced to have unwanted sex, and 78 percent more often if they report body dysphoria.

Adolescent females also report making a plan to commit suicide 42 percent more often if they report having been bullied on school property, 35 percent more often if they report that they were forced to have sex, and 70 percent more often if they report body dysphoria. These results from analysis of the YRBSS data are obtained keeping other variables constant. The five independent variables derived from the YRBSS survey are sex, traditional bullying, cyber-bullying, sexual assault, and body dysphoria. These variables correctly predicted reports of sadness or hopelessness among 73.3 percent of the adolescent female respondents. These independent variables correctly predicted 85.5 percent of adolescent females who reported making a suicide plan. Adolescent females reporting traditional bullying, sexual assault, and body dissatisfaction have higher "suicide indices" calculated by assigning one point each for seriously contemplating suicide, making a suicide plan, and attempting suicide that resulted in an injury, poisoning, or overdose.

These results support the hypotheses that adolescent female victims of traditional bullying, sexual assault, and body dysphoria are more at risk of depression, and suicidal thoughts, plans, and implementations. The result that did not support the hypothesis was cyber-bullying as that predictor had a stronger impact on whether boys reported that they

61

felt sad and hopeless, made a suicide plan, and were a suicide risk than it did for girls. Thus, hypotheses three, seven, and eleven were not confirmed.

Depression and suicide constitute two substantial risks for those who are young and female in America. Traditional bullying, sexual assault, and body dysphoria are important factors to address in screening for risk and prevention of suicide among female adolescents. The success of suicide interventions during adolescence may be enhanced if bullying, cyber-bullying, sexual assault, and body dissatisfaction are also integrated into strategies for change.

IMPLICATIONS

The results from this analysis respond to the dissertation's research questions which argues that bullying (both traditional and cyber varieties), sexual assault, and body dissatisfaction are predictors of depressive disorders and suicide. There may be challenges and opportunities in combatting the public health problem of adolescent depression and suicide; first that suicidal ideation and depressive symptoms may peak earlier than adolescence; secondly, successful interventions to reduce the adolescent suicide rate must focus on reducing risk factors for depression (e.g. reduce traditional and cyber-bullying, sexual assault, and body dissatisfaction).

The high proportion of children in early adolescence experiencing depressive symptoms and self-injurious behavior suggests the need for suicide prevention programs to target early adolescents (e.g. pre-teens) rather than the later high school years when

mortality from suicide is higher. Suicide prevention programs will also need to help

protective factors such as improving parental and peer support.

LIMITATIONS

One limitation of this study may be inappropriateness of the data. Primary data

are collected with a concrete idea in mind, usually to answer a research question or just to

meet certain objectives. Secondary data sources may provide this research with vast

amounts of information, but it does not validate appropriateness. This is simply because

they have been collected to answer a different research question or objectives

(Denscombe 2010).

A second limitation may be a lack of control over data quality. Government and

other official institutions are often a guarantee of quality data, but it is not always the

case (Saunders et al. 2011). It has been repeatedly stated that another limitation is related

to the fact that the data was not collected by this researcher, and thus, this researcher has

had no control over the procedures that were used or the specific questions that were

asked.

RECOMMENDATIONS FOR FURTHER RESEARCH

The study presented here could be replicated by ethnic groups to see if they differ.

It also could be replicated in other countries. Other surveys and data sets could be

collected. Existing surveys and data sets could be mined to conduct similar studies.

Additional independent variables such as economic status, parents' education, religious

affiliation, family connectedness, social ties, participation in sports, parents' employment

status, access to support systems, and internet savviness could be evaluated. Path analysis of the variables could also be done. It would also be interesting to follow up these variables with qualitative research.

FINAL STATEMENT

According to the Centers for Disease Control and Prevention (2015), suicide is currently the second leading cause of death in young people ages 10-19. Current research posits that in the United States, one in every seven youth has seriously considered suicide or made a plan to commit suicide (Centers for Disease Control and Prevention 2016a). Depression and suicide represents major public health problems among adolescents. The National Center for Health Statistics (2016) reports that female adolescent completed suicide rates have increased 75 percent in the last 15 years. Decreasing the overall lethality of adolescent depression and suicide attempts must rise to a national priority.

This research has analyzed some of the variables that can help health practitioners understand the underlying causes of depression and suicide. This dissertation argues that bullying (both traditional and cyber varieties), sexual assault, and body dissatisfaction are predictors of depressive disorders and suicide. Certainly, these predictors are both preventable and treatable. This is the bright light at the end of the tunnel. Mobilizing resources to move in that direction should be a matter of national policy and public debate.

REFERENCES

Ackard, D., Croll, J.K., and Kerney-Cooke, A. 2002. "Dieting Frequency Among College
Females Association with Disordered Eating, Body Image, and Related
Psychological Problems." *Journal of Psychosomatic Response* 52(3):129-136.

Ackard, D. and Neumark-Sztainer, D. 2002. "Date Violence, and Date Rape among
Adolescents: Associations with Disordered Eating Behaviors, and Psychological
Health." *Child Abuse, and Neglect* 26(1):455-473.

Agnew, R. 2006. *Pressured into Crime: An Overview of General Strain Theory.* New
York, NY: Oxford University Press.

Allen, K.L., Byrne S.M., and Crosby, R.D. 2015. "Distinguishing between Risk-factors
for Bulimia Nervosa, Binge Eating Disorder, and Purging Disorder." *Journal of
Youth Adolescents* 44(8):1580-1591.

Allison, K. and Slupik, R. 1996. *American Medical Association: Complete Guide to
Women's Health*. New York, NY: Random House.

American Association of Suicidology. 2001. "USA Suicide: 1999 Official Final Data."
Retrieved October 10, 2017. (http://www.aas.org)

American Psychological Association Zero Tolerance Task Force. 2008. "Are Zero
Tolerance Policies Effective in Schools? An Evidentiary Review, and
Recommendations." *American Psychologist* 63(9): 852–862.

Anda, R. F., Felitti, V. T., Bremner, J. D., Walker, J. D., Whitfield, C., Perry, B. D., and

    Giles, W. H. 2006. "The Enduring Effects of Abuse, and Related Adverse

    Experiences in Childhood: A Convergence of Evidence from Neurobiology, and

    Epidemiology." *European Archives of Psychiatry and Clinical Neuroscience*

    256(2):174-186.

Andreou, E. 2001. "Bully/Victim Problems, and Their Association with Coping Behavior

    in Conflictual Peer Interactions among School-Age Children." *Educational*

    Psychology 21(1):59-66.

Arata, C. M. 2002. "Child Sexual Abuse, and Sexual Re-victimization." *Clinical*

    Psychology: Science and Practice 9(1):135-164.

Aseltine, R., Gore S., and Gordon, J. 2000. "Life Stress, Anger, and Anxiety, and

    Delinquency: An Empirical Test of General Strain Theory." *Journal of Health*

    and Social Behavior 41(3):256-275.

Avery-Leaf, S., Cascaradi, M., O'Leary, K. D., and Cano, A. 1997. "Efficacy of a Dating

    Violence Prevention Program on Attitudes Justifying Aggression." *Journal of*

    Adolescent Health 22(1):11-7.

Baldry, A. and Winkel F. 2003. "Direct, and Vicarious Victimization at School, and at

    Home as Risk Factors for Suicidal Cognition among Adolescents. "*Journal of*

    Adolescents 26(6)703-716.

Banerjie, M. 2017. "I Have Come Back: Engineering Student Saved from Blue Whale

    Suicide Game." *NDTV.* Retrieved October 10, 2017 (https://www.ndtv.com/india-

news/i-have-come-back-engineering-student-saved-from-blue-whale-suicide-game-1743126).

Barnyard, V. L., Williams, L.M., and Siegel, J.A. 2004. "Childhood Sexual Abuse: A Gender Perspective on Context, and Consequence." *Child Maltreatment* 9(1):223-238.

Basile, K. C., Black, M. C., Simon, T. R., Arias, I., Brener, N. D., and Saltzman, L.E. 2006. "The Association between Self-Reported Lifetime History of Forced Sexual Intercourse, and Recent Health-Risk Behaviors: Findings from 2003 National Youth Risk Behavior Survey." *Journal of Adolescent Health* 39(1):752-787.

Bauman, S. 2009. "Cyber-bullying: A Virtual Menace." Pp. 1-20 in G. Chandana (Ed.), *Cyber-bullying, A Menace*. Hyderabad, India: Amicus Books.

Bauman, S. and Pero, S. 2011. *Cyber-bullying: What Counselors Need to Know?* Alexandria, VA: American Counseling Association.

Bauman, S., Toomey R., and Walker, J. 2013. "Associations among Bullying, Cyber-bullying, and Suicide in High School Students." *Journal of Adolescence* 36(2):341-350.

BBC World News. 2017. "Blue Whale: Should you be worried about Online Pressure Groups?" *BBC World News,* April 27. Retrieved October 10, 2017. (http://www.bbc.com/news/world-39729819).

Beckman, L., Hagquist C., and Hellstrom, L. 2012. "Does the Association with Psychosomatic Health Problems Differ Between Cyber-bullying, and Traditional Bullying?" *Emotional, and Behavioral Difficulties* 17(4):421-434.

Bell, B.T., Lawon, R., and Dittmar, H. 2007. "The Impact of Thin Models in Music Videos on Adolescent Girls Body Dissatisfaction." *Body Image* 4(2):137-145.

Bensley, L. S., Van Eenwyk, J., Spicker, S.J., and Schoder, J. 1999. "Self-Reported Abuse History, and Adolescent Problem Behaviors: Antisocial, and Suicidal Behaviors." *Journal of Adolescent Health* 24(1):163-172.

Berson, I., Berson, M., and Ferron, J. 2002. "Emerging Risks of Violence in the Digital Age: Lessons for Educators from an Online Study of Adolescent Girls in the United States." *Journal of School Violence* 1(2):51-71.

Bjorkqvist, K., Lagerspetz, K., and Kaukainin, A. 1992. "Do Girls Manipulate and Boys Fight? Developmental Trends in Regard to Direct, and Indirect Aggression." *Aggressive Behavior* 18(1):117-127.

Boepple, L. and Thompson, J.K. 2016. "A Current Analytic Comparison of Fitspiration versus Thinspiration." *International Journal of Eating Disorders* 49(1):98-101.

Boero, N. and Pascoe, C.J. 2012. "Pro-Anorexia Communities, and Online Interaction: Bringing the Pro-Anorexic Body Online." *Body Sociology* 8(2):27-57.

Bond, L. Carlin, JB. Thomas, L., Rubin, K., and Patton, G. 2001. "Does Bullying Cause Emotional Problems: A Prospective Study of Young Teenagers?" *British Medicine Journal* 323(1):480-484.

Borg, M. 1999. "The Extent, and Nature of Bullying Among Primary, and Secondary Schoolchildren." *Educational Research* 41(1):137-153.

Borowsky, I. W., Ireland, M., and Resnick, M. D. 2001. "Adolescent Suicide Attempts: Risks, and Protectors." *Pediatrics* 107(1):485-493.

Boyd, D. 2007. "Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life." *MacArthur Foundation Series on Digital Learning- Youth, Identity, and Digital Media.* Edited by David Buckingham. Cambridge, MA: MIT Press.

Boyd, D. 2010. "Digital Self-Harm, and Other Acts of Self-Harassment." Retrieved October 10, 2017. (http://www.zephoria.org/thoughts/archives/2010/12/07/digital-self-harm-and-other-acts-of-self-harassment.html).

Boyd, D. 2014. *It's Complicated: The Social Lives of Networked Teens.* New Haven, CT: Yale University Press.

Brausch, A. M. and Muehlenkamp, J. J. 2007. "Body Image, and Suicidal Ideation in Adolescents." *Body Image* 4(1):207-212.

Briere, J. and Runtz, M. 1986. "Suicidal Thoughts, and Behaviors in Former Sexual Abuse Victims." *Canadian Journal of Behavioral Science* 18(1):413-423.

Brockington, T. 2001. "Suicide in Women." *International Clinical Psychopharmacology* 16(1):7-19.

Brown, L. 2003. *Girlfighting.* New York, NY: New York University Press.

Burgess-Proctor, A., Hinduja, S., and Patchin, J. W. 2009. "Cyber-bullying Research

Summary: Victimization of Adolescent Girls." Retrieved October 10, 2017

(https://cyberbullying.org/cyberbullying-research-summary-victimization-of-

adolescent-girls).

Burt, M. R., 1980. "Cultural Myths, and Support for Rape." *Journal of Personality and

Social Psychology* 38(1):217-230.

Campbell, S. M., Hoffman, B. R., Lance, C. E., and Twenge, J. M. 2010. "Generational

Differences in Work Values: Leisure, and Extrinsic Values Increasing, Social, and

Intrinsic Values Decreasing." *Journal of Management* 36(1):1117-1142.

Cash, S. J. and Bridge, J. A. 2009. "Epidemiology of Youth Suicide, and Suicidal

Behavior." *Current Opinion in Pediatrics* 21(5): 613–691.

Cassidy, W., Brown, K., and Jackson M. 2012. "Making Kind Cool: Parent' Suggestions

for Preventing Cyber-Bullying, and Fostering Cyber-Kindness." *Journal of

Educational Computing Research* 46(4):415-436.

Center for Disease Control and Prevention. 2009. "Sexual and Reproductive Health of

Persons Aged 10-24 Years: United States, 2002-2007." Retrieved October 10,

2017. (https://www.cdc.gov/mmwr/preview/mmwrhtml/ss5806a1.htm).

Centers for Disease Control and Prevention. 2010. "Web-Based Injury Statistics Query

and Reporting System." Retrieved October 10, 2017.

(http://www.cdc.gov/injury/wisqars/index.html).

Centers for Disease Control and Prevention 2014. "Factsheet on Dating Violence."

    Retrieved October 10, 2017

    (https://www.cdc.gov/violenceprevention/pdf/teen-dating-violence-2014-a.pdf).

Centers for Disease Control and Prevention 2015. "National Health and Nutrition

    Examination Survey (NHANES)." Retrieved October 10, 2017

    (https://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-among-

    children.shtml).

Centers for Disease Control and Prevention 2016a. "Morbidity and Mortality Report:

    Youth Risk Behavior Surveillance-United States 2015." Retrieved October 10,

    2017.

    (https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2015/ss6506_updated.pdf).

Centers for Disease Control and Prevention 2016b. Youth Risk Behavior Surveillance,

    2015. In CDC Surveillance Summaries. Retrieved October 10, 2017.

    (https://www.cdc.gov/mmwr/volumes/65/ss/ss6506a1.htm).

Check, J. and Malamuth, M. N. 1983. "Sex Role Stereotyping and Reactions to

    Depictions of Stranger versus Acquaintance Rape." *Journal of Personality and*

    Social Psychology 45(1):344-356.

Chen, J.M., Dunne M.P., and Han, P. 2006. "Child Sexual Abuse: Associations with

    Sadness, Suicidality and Risk Behaviors among Adolescent Girls." *Journal of*

    Adolescent Health 38(1):671-682.

Cleary, S. D. 2000. "Adolescent Victimization and Associated Suicidal and Violent

    Behaviors." *Adolescence* 35(1):671-682.

CNN News Atlanta. 2017. "Teen Girl Died from Playing Blue Whale Suicide Game,

    Family Says." Retrieved October 10, 2017

    (http://kron4.com/2017/07/11/teen-girl-died-from-playing-blue-whale-suicide-

    game-family-says/).

Coker, A.L., McKeown, R. E., Sanderson, M., Davis, K. E., Valois, R. F., and Heubner,

    S. 2000. "Severe Dating Violence and Quality of Life among South Carolina High

    School Students." *American Journal of Preventative Medicine* 19(1):220-227.

    Communications Decency Act. Pub. L. No. 104-104 (Tit. V), 110 Stat. 133

    (1996), codified at 47 U.S.C. 223, 230.

Corcos, M., Taieb, O., Benoit-Lamy, S. Paterniti, S., Jeammet, P., and Flament, M. F.

    2002. "Suicide Attempts in Women with Bulimia Nervosa: Frequency and

    Characteristics." *Psychiatry Scandinavia* 106(1):381-386.

Cornish, N. 2017. "Parents Warned as Online Suicide Game Linked to Death of 130

    Teens Goes Viral." *9 Honey News,* May 1. Retrieved October 10, 2017.

    (http://honey.nine.com.au/2017/04/28/09/32/blue-whale-suicide).

Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton,

    B., Molocho, M., Gaspar de Mato, M., Overpeck, M., Due, P., and Pickett, W.

    2009. "A Cross-National Profile of Bullying and Victimization, Among

Adolescents in 40 Countries." *International Journal of Public Health* 54(1):216-224.

Crick, N. and Grotpeter, J. 1995. "Relational Aggression, Gender, and Social-Psychological Adjustment." *Child Development* 66(1):610-722.

Dake, J., Price, J., and Telljohann, S.K. 2003. "The Nature and Extent of Bullying at School." *Journal of School Health* 73(5):173-180.

Davidson, J. R. T., Hughes, D. C., George, L. K., and Blazer, D. G., 1996. "The Association of Sexual Assault and Attempted Suicide within the Community." *Archives of General Psychiatry* 53(1):550-555.

Davis, V. 2014. "A Guidebook for Social Media in the Classroom." *Education Trends.* Retrieved October 10, 2017. (https://www.edutopia.org/blog/guidebook-social-media-in-classroom-vicki-davis).

Denscombe, M. 2010. "The Good Research Guide: For Small Scale Research Projects." New York, NY: McGraw-Hill Education.

DeVoe, J.F., Peter, K., Kaufman, P., Ruddy, S., Miller, A., Planty, M., Snyder, T.D., Duhart, D., and Rand, M.R. 2002. *Indicators of School Crime and Safety.* NCES 2003. 2009 Washington D.C.: U.S. Department of Education, National Center for Education Statistics, and U.S. Department of Justice, Bureau of Justice Statistics.

Diener, E. 1998. "Deindividuation: The Absence of Self-Awareness and Self-Regulation in Group Members." In *the Psychology of Group Influence,* edited by Paul B. Paulus. Hillsdale, NJ: 209-242.

Englander, E. 2012. "Digital Self Harm: Frequency, Type, Motivations, and Outcomes."

Retrieved October 10, 2017.

(http://vc.bridgew.edu/cgi/viewcontent.cgi?article=1004&context=marc_reports).

Ericson, N. 2001. *Addressing the Problem of Juvenile Bullying: Office of Juvenile Justice
and Delinquency Program Fact Sheet, 27.* Washington, DC: US Department of
Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency
Prevention. Retrieved October 10, 2017.

(https://www.ncjrs.gov/pdffiles1/ojjdp/fs200127.pdf).

Espelage, D. Bosworth, K., and Simon, T. 2000. "Examining the Social Context of
Bullying Behaviors in Early Adolescence." *Journal of Counseling and
Development* 78:326-333.

Evans, W. P., Marte R.M., Betts S., and Silliman, B. 2001. Adolescent Suicide Risk and
Peer-Related Violent Behaviors and Victimization. *Journal of Interpersonal
Violence* 16(12): 1330-1348.

Feiring, C., Taska, L., and Chen, K. 2002. "Trying to Understand Why Horrible Things
Happen: Attribution, Shame, and Symptom Development Following Sexual
Abuse." *Child Maltreatment* 7(1):25-39.

Felix, E., and McMahon S. 2006. "Gender and Multiple Forms of Peer Victimization:
How Do They Influence Adolescent Psychosocial Adjustment? *Violence and
Victims.* 21(6):707-724.

Ferguson, A., and Swenson, K. 2017. "Texas Family says Teen Killed Himself in
Macabre Blue Whale Online Challenge That's Alarming Schools." *The
Washington Post.* Retrieved   October 10, 2017.
([https://www.washingtonpost.com/news/morning-mix/wp/2017/07/11/texas-
family-says-teen-killed-himself-in-macabre-blue-whale-online-challenge- thats-
alarming-schools/?utm_term=.88a3d290ca24](https://www.washingtonpost.com/news/morning-mix/wp/2017/07/11/texas-family-says-teen-killed-himself-in-macabre-blue-whale-online-challenge-thats-alarming-schools/?utm_term=.88a3d290ca24)).

Fergusson, D.M., McLeod, G. F., and Horwood, L. J. 2013. "Childhood Sexual Abuse
and Adult Developmental Outcomes: Findings from a 30-Year Longitudinal
Study." *Child Abuse Neglect* 37(9):664-674.

Fondacaro, K. M. and Butler, W. M. 1995. "Suicidality in Female Survivors of
Childhood Sexual Abuse." *Women and Suicidal Behavior.* New York, NY:
Springer.

Foshee, V. A. 1996. "Gender Differences in Adolescent Dating Abuse Prevalence, Types
and Injuries." *Health Education Research* 11(3):275-286.

Foshee, V. A. and Bauman, K. E. 1992. "Gender Stereotyping and Adolescent Sexual
Behavior: A Test of Temporal Order." *Journal of Applied Social Psychology*
22(1):1561-1579.

Foshee, V. A., Bauman, K. E., Arriaga, X. B., Helms, R. W., Koch, G. G., and Linder, G.
F. 1998. "An Evaluation of Safe Dates, an Adolescent Dating Violence
Prevention Program." *American Journal of Public Health* 88(1):45-50.

Foshee, V. A. and Langwick, S. 2004. *Safe Dates: An Adolescent Dating Abuse Prevention Curriculum.* Center City, MN: Hazelden Publishing and Educational Services.

Foshee, V. A., Linder, G. F., Bauman, K. E., Langwick, S. A., Arriaga, X. B., and Heath, J. L. 1996. "The Safe Dates Project: Theoretical Basis, Evaluation Design and Selected Baseline Findings." *American Journal of Preventative Medicine* 12(5):39-47.

Foshee, V. A., Linder, F., MacDougall, J. E., and Bangdiwala, S. 2001. "Gender Differences in the Longitudinal Predictors of Adolescent Dating Violence." *Preventative Medicine* 32(2):128-141.

Francis, E. 2017. "Mother, Daughter Warns Others about Dangers of Thinspiration" Accessed October 18, 2017.

(http://fox17online.com/2016/06/02/dangers-of-thinspiration-websites-what-parents-need-to-know/comment-page-1/).

Gentile, B., Twenge, J. M., Freeman, E. C., and Campbell, W. K. 2012. "The Effect of Social Networking Websites on Positive Self-Views: An Experimental Investigation. *Computers in Human Behavior* 28(1):1929-1933.

Ghaznavi, J. and Taylor, L.D. 2015. "Bones, Body Parts and Sex Appeal: An Analysis of #thinspiration Images on Social Media. *Body Image* 14(1): 54-61.

Gladden, M.R., Vivolo-Kantor, A.M., Hamburger, M.E., and Lumpkin, C.D. 2014. Bullying Surveillance Among Youths: Uniform Definitions for Public Health and

Recommended Data Elements, Version 1.0. Retrieved October 10, 2017.

(http://www.cdc.gov/violenceprevention/pdf/bullying-definitions-final-a.pdf).

Golding, J. M., 1999. "Sexual Assault History and Long-Term Physical Health Problems:

Evidence from Clinical and Population Epidemiology." *Current Directions in*

Psychological Science 8(1):191-194.

Greene, K., Rubin, D. L., Hale, J. L., and Walters, L. H. 1996. "The Utility of

Understanding Adolescent Egocentrism in Designing Health Promotion

Messages. Health Communication. 8, 131–152. Retrieved October 10, 2017.

(http://dx.doi.org/10.1207/s15327027hc0802_2).

Groesz, L. M., Levine, M.P., and Murnen, S. K. 2002. "The Effect of Experimental

Presentation on Thin Media Images on Body Satisfaction: A Meta-Analytic

Review." *International Journal of Eating Disorders* 31(1):1-16.

Halpern, C. T., Oslak, S. G., Young, M. L., Martin, S. L., and Kupper, L. L. 2001.

"Partner Violence among Adolescents in Opposite-sex Romantic Relationships:

Findings from the National Longitudinal Study of Adolescent Health." *American*

Journal of Public Health 91(10):1679-1685.

Harris, E. C. and Barraclough, B. 1998. "Excess Mortality of Mental Disorder. *British*

Journal of Psychiatry 173(1):11-53.

Harris, L., and Associates 1997. *The Commonwealth Fund Survey of the Health of*

Adolescent Girls. New York, NY: The Commonwealth Fund. Retrieved October

10, 2017.

(http://www.commonwealthfund.org/~/media/files/surveys/1996/1997-survey-of-the-health-of-adolescent-girls-and-boys/surveyquestionaire-pdf.pdf).

Hass, N. 2006. "In Your Facebook.com." *New York Times,* January 8. Retrieved October 10, 2017. (http://www.nytimes.com/2006/01/08/education/edlife/in-your-facebookcom.html).

Hawker, D.S., and Boulton, M.J. 2000. "Twenty Years' Research on Peer Victimization and Psychosocial Maladjustment: A Meta-Analytic Review of Cross-Sectional Studies." *Journal of Child Psychology and Psychiatry* 41(4), 441-445.

Haynie, D., Nansel, T., Eitel, P. Crump, A., Saylor, K., Yu, K., and Simons-Morton, B. 2001. "Bullies, Victims, and Bully/Victims: Distinct Groups of At-Risk Youth." *Journal of Early Adolescence* 21(1):29-49.

Henley, J. 2010. "Teenagers and Technology: I'd Rather Give Up My Kidney Than My Phone." *The Guardian*, July 16. Retrieved October 10, 2017. (https://www.theguardian.com/lifeandstyle/2010/jul/16/teenagers-mobiles-facebook-social-networking).

High, B. 2007. *Bullycide in America-Moms Speak Out About the Bullying/ Suicide Connection.* Darlington, MD: JBS-Publishing.

Hinduja, S. and Patchin J.W. 2006. "Bullies Move beyond the Schoolyard: A Preliminary Look at Cyber-bullying." *Youth Violence and Juvenile Justice* 4(2):148-169.

Hinduja, S. and Patchin J.W. 2008. "Cyber-bullying: An Exploratory Analysis of Factors

    Related to Offending and Victimization." *Deviant Behavior* 29(2):1-29.

Hinduja, S. and Patchin J.W. 2009. "Cyber-bullying: Emotional and Psychological

    Consequences." *Cyber-bullying Research Center.* Thousand Oaks, CA: Sage

    Publishing.

Hinduja, S. and Patchin J.W. 2010. *Cyber-bullying by gender.* Cyber-bullying Research

    Center. Retrieved October 10, 2017.

    (http://www.cyberbullying.us/2010_charts/cyberbully-ing_gender_2010.jpg).

Hinduja, S. and Patchin, J.W. 2014. "Bullying, Cyber-bullying, and Suicide." *Archives of*

    Suicide Research 14(3): 206–221.

Homma, Y., Wang, N., Saewyc, E., and Kishor, N. 2012. "The Relationship between

    Sexual Abuse and Risky Sexual Behavior among Adolescents: A Meta-Analysis."

    Journal Adolescent Health 51(1):18-24.

Howard, D. E. and Wang, M. Q. 2005. "Psychosocial Correlates of U.S. Adolescents

    Who Report a History of Forced Sexual Intercourse." *Journal of Adolescent*

    Health 36(1):372-379.

Hussey, J. M., Chang, J. J., and Kotch, J. B. 2006. "Child Maltreatment in the United

    States: Prevalence, Risk Factors, and Adolescent Health Consequences. *American*

    Academy of Pediatrics 118(1):993-942.

Internet Live Stats. 2017. Retrieved October 10, 2017.

    (http://www.internetlivestats.com/).

Ito, M., Horst, H., Bittani, M., Boyd, D., Herr-Stephenson, B., Lange, P., Pascoe, C.J., and Robinson, L. 2008. "Living and Learning with New Media: Summary Findings from the Digital Youth Project." *The Jon D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning.* Retrieved October 10, 2017.

(http://digitalyouth.ischool.berkeley.edu/files/report/digitalyouthWhitePaper.pdf).

Johnson, N., Roberts, M., and Worell, J. 1999. *Beyond Appearance: A New Look at Adolescent Girls.* Washington, DC: American Psychological Association.

Jones, L., Mitchell, K., and Finkelhor, D. 2013. "Online Harassment in Context: Trends from Three Youth Internet Safety Surveys 2000, 2005 and 2010." *Psychology of Violence.* 3(1):53-69.

Juvonen, J., Gram, S., and Shuster, M. A. 2003. "Bullying Among Adolescents: The Strong, The Weak and The Troubled." *Pediatrics* 112(1): 1231-1237.

Kaltiala-Heino, R.K., Rimpela, M., Rantanen, P., and Rimpela, A. 2000. "Bullying at School-An Indicator of Adolescents at Risk for Mental Disorders." *Journal of Adolescence* 23(1): 661-674.

Katz, J. and Rice, R. 2002. *Social Consequences of Internet Use: Access, Involvement, and Interaction.* Cambridge, MA: MIT Press.

Kershner, R. 1996. "Adolescent Attitudes about Rape." *Journal of Adolescence* 31(121):29-33.

Khazov-Cassia, S. 2017. "Teen Suicide Games Send Shudders Through Russian-
Speaking World." *Radio Free Europe.* Retrieved October 10, 2017
(https://www.rferl.org/a/russia-teen-suicide-blue-whale-internet-social-media-
game/28322884.html).

Kim, Y. S., Leventhal, B. L., Koh, Y. J., and Boyce, W. T. 2009. "Bullying Increased
Suicide Risk." *Archives of Suicide Research* 13(1):15–30.

Klomek, A., Sourander, A., and Gould, M. S. 2010. "The Association of Suicide and
Bullying in Childhood to Young Adulthood: A Review of Cross-Sectional and
Longitudinal Research Findings." *The Canadian Journal of Psychiatry* 55(5):
282-283.

Klomek, A.B., Marracco, F., Kleinman, M., Schonfeld I., and Gould, M. S. 2007.
"Bullying, Depression, and Suicidality in Adolescents." *Journal of the American
Academy of Child and Adolescent Psychiatry* 46(1):40-49.

Koss, M., Leonard, H., Beazley, D., and Oros, C. 1985. "Non-stranger Sexual
Aggression: A Discriminant Analysis of the Psychological Characteristics of
Undetected Offenders." *Sex Roles* 12(10):981-992.

Kowalski, R. and Limber, S. 2007. Electronic Bullying Among Middle School
Students." *Journal of Adolescent Health* 41(1):22-30.

Kowalski, R. and Limber, S., 2013. "Psychological, Physical, and Academic Correlates
of Cyber-bullying and Traditional Bullying." *Journal of Adolescent Health*
53(1):13-20.

Kumpalainen, K. Rasanen, E., and Henttonen, I. 1999. "Children Involved in Bullying: Psychological Disturbance and the Persistence of the Involvement." *Child Abuse and Neglect* 23(1):1253-1262.

Lagerspetz, K.M., Bjorkqvist, K. Berts M., and King, E., 1982. "Group Aggression among School Children in Three Schools." *Journal of Psychology* 23(1):45-52.

Lamb, S. 2000. *The Secret Lives of Girls: What Good Girls Really Do- Sex, Play, Aggression, and their Guilt.* New York, NY: Free Press.

Lapinski, M.K. 2009. "Starvingforperfect.com: A Theoretically Based Content Analysis of Pro-Eating Disorder Websites." *Health Communications* 20(3):243-251.

Lenhart, A., Purcell, K., Smith, A., and Zickuhr, K. 2011. "Social Media and Young Adults." *Pew Internet and American Life Project.* Retrieved October 10, 2017. (http://www.pewinternet.org/2010/02/03/social-media-and-young-adults/).

Levy, N., Cortesi, S., Gasser, U., Crowley, E., Beaton, M., Casey, J., and Nolan, C. 2012. *Bullying in a Networked Era: A Literature Review.* Cambridge, MA: Berkman Center for Internet and Society. Retrieved October 10, 2017. (http://dmlcentral.net/sites/dmlcentral/files/resource_files/ssrn-id2146877.pdf).

Littleton, H. L., Axsom, D., Rodecki Breitkoph, C., and Berenson, A. 2006. "Rape Acknowledgement and Post-Assault Experiences: How Acknowledgement Status Relates to Disclosure, Coping, Worldview, and Reactions Received from Others." *Violence and Victims* 21(1):761-778.

Litwiller B. and Braush, A. 2013. "Cyber-bullying and Physical Bullying in Adolescent

    Suicide: The Role of Violent Behavior and Substance Use." *Journal of Youth and*

    Adolescence 45(5):675-684.

Louisiana State Legislature. 2014. La. Rev. Stat. 14:40.7 Cyber-bullying.

Macali, N., Ploubidis, G., De Slavola, B., Simonoff, E., and Treasure, J. 2014.

    "Frequency and Patterns of Eating Disorder Symptoms in Early Adolescence."

    Journal of Adolescent Health 54(5):571-581.

Madden, M., Lenhart, A., Duggan, M., Cortesi, S., and Gasser, U. 2013. "Teens and

    Technology." *Pew Research Center*, March 13. Retrieved October 10, 2017

    (http://www.pewinternet.org/2013/03/13/teens-and-technology-2013).

Malik, S., Sorenson, S. B., and Aneshensel, C. S. 1997. "Community and Dating

    Violence among Adolescents: Perpetration and Victimization." *Journal of*

    Adolescent Health 21(5):291-302.

Mann, J.J. 2003. "Neurobiology of Suicidal Behavior." *Nature Reviews* 21(1):761-778.

Mann, T. 2017. "Girl 17, Exposed as being Mastermind Behind Blue Whale Game."

    Metro.co.uk, August 30. Retrieved October 10, 2017

    (http://metro.co.uk/2017/08/30/girl-17-exposed-as-being-mastermind-behind-

    blue-whale-suicide-game-6889363/).

Martin, G., Bergen, H. A., Richardson, A. S., Roeger, L., and Allison, S. 2004. "Sexual

    Abuse and Suicidality: Gender Differences in a Large Community Sample of

    Adolescents." *Child Abuse and Neglect* 28(1):491-503.

Mazerolle, P., Burton, V., Cullen, F., Evans, T.D., and Payne G. 2000. "Strain, Anger, Delinquent Adaptations: Specifying General Strain Theory." *Journal of Criminal Justice* 28(1):89-101.

Mazza, J. J. and Reynolds, W. M. 1998. "A Longitudinal Investigation of Depression, Hopelessness, Social Support, and Major and Minor Life Events and their Relation to Suicidal Ideation in Adolescents." *Suicide and Life-Threatening Behavior* 28(1):358-374.

McCloskey, L. 1997. *The Continuum of Harm: Girls and Women at Risk for Sexual Abuse across the Lifespan.* New York, NY: Rochester University Press.

McCrae, J. S., Chapman, M. A., and Christ, S. L. 2006. "Profile of Children Investigated for Sexual Abuse: Association with Psychopathology Symptoms and Services." *American Journal of Orthopsychiatry* 76(1):468-481.

McGough, J. and Roozendaal, B. 2002. "Role of Adrenal Stress Hormones in Forming Lasting Memories in the Brain." *Current Opinion in Neurobiology* 12(1):205-210.

Mills, C., Guerin, S., Lynch, F., Daly, I., and Fitzpatrick, C. 2004. "The Relationship Between Bullying, Depression and Suicidal Thoughts/Behaviors in Adolescents." *Journal of Psychological Medicine* 21(4):112-116.

Miotto, P., De Coppi, M., Frezza, M., and Preti, A. 2003. "Eating Disorders and Suicidal Risk Factors in Adolescents." *The Journal of Nervous and Mental Disease* 191(1):437-443.

Mitchell, K., Finkelhor, D. and Becker-Blease, K. 2007. "Linking Youth Internet and

    Conventional Problems: Findings from a Clinical Perspective." *Crimes against*

    Children Research 15(2):39-58.

Moloney, A. 2017. "What is The Blue Whale Challenge?" *Metro.co.uk.* August 31.

    Retrieved October 10, 2017

    (http://metro.co.uk/2017/08/31/what-is-the-blue-whale-challenge-6893410/).

Molnar, B., Berkman, L., and Buka, S. 2001. "Psychopathology, Childhood Sexual

    Abuse and Other Childhood Adversities: Relative Links to Subsequent Suicidal

    Behavior in the United States." *Psychological Medicine* 31(1):965-977.

Mullin, G. 2017. "Chilling Challenge: What is the Blue Whale Suicide Challenge, how

    Many Deaths has the Game Been Linked to and is it in the UK?" *The Sun UK*

    News, September 12. Retrieved October 10, 2017

    (https://www.thesun.co.uk/news/worldnews/3003805/blue-whale-   suicide-

    victims-russia-uk-deaths-latest/).

Nansel, T., Overpeck, M., Pilla, R., Ruan, W. J., Simons-Morton, B., and Scheidt, P.

    2001. "Bullying Behaviors among U.S. Youth: Prevalence and Association with

    Psychosocial   Adjustment." *Journal of the American Medical Association*

    285(16):2094-2100.

National Center for Health Statistics. 2016. *Increase in Suicide in the United States,*

    1999-2014. Centers for Disease Control and Prevention. Retrieved October 14,

    2017 (https://www.cdc.gov/nchs/products/databriefs/db241.htm).

Nelson, D. D., Higginson, G. K., and Grant-Worley, J. A. 1994. "Using the Youth Risk Behavior Survey to Estimate Prevalence of Sexual Abuse among Oregon High School Students." *Journal of School Health* 64(1):413-416.

Neumark-Sztainer, D., Paxton, S. J., Hannan, P. J., Haines, J., and Story, M. 2006. "Does Body-Satisfaction Matter? Five Year Longitudinal Associations Between Body-Satisfaction and Health Behaviors in Adolescent Females and Males." *Journal of Adolescent Health* 39(2):244-251.

Neumark-Sztainer, D., Story, M., Dixon, L. B., and Murry, D. M. 1998. "Adolescents Engaging in Unhealthy Weight Control Behaviors: Are They at Risk for Other Health-Compromising Behaviors?" *American Journal of Public Health* 88(1): 952-955.

New Jersey Legislature Anti-Bullying Bill of Rights Act. 2011. P.L. 2010. Chapter 122.

O'Keefe, M. 1997. "Predictors of Dating Violence among High School Students." *Journal of Interpersonal Violence* 12(1):546-568.

O'Keefe, M. and Treister, L. 1998. "Victims of Dating Violence among High School Students: Are the Predictors Different for Males or Females." *Violence Against Women* 4(2):195-223.

Olshen, E., McVeigh K.H., Wunsch-Hitzig, R.A., and Rickert, V.I. 2007. "Dating Violence, Sexual Assault and Suicide Attempts Among Urban Teenagers." *Archives of Pediatric and Adolescent Medicine* 161(1):539-545.

Olweus, D. 1991. *Bullying/Victimization Problems among Schoolchildren: Basic Facts and Effects of a School Based Intervention Program.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Olweus, D., Limber, S. P., and Mihalic, S. 1999. *The Bullying Prevention Program: Blueprints for Violence Prevention,* Vol. 9. Center for the Study and Prevention and Violence: Boulder, CO.

Orbach, I., Stein, D. Shani-Sela, M., and Har-Even, D. 2004. "Body Attitudes and Body Experiences in Suicidal Adolescents." *Suicide and Life-Threatening Behavior* 31(1):237-249.

Orfanides, E. 2017. "Blue Whale Challenge: 5 Facts You Need to Know." *Heavy Magazine.* Retrieved October 10, 2017 (http://heavy.com/news/2017/07/blue-whale-challenge-game-how-to-play-50-tasks-vkontakte/).

Osofsky, J. 1999. "The Impact of Violence on Children." *The Future of Children* 9(3):33-49.

Owens, L., Shute, R., and Slee, P. 2000. "I'm In and You're Out: Explanations for Teenage Girls Indirect Aggression." *Psychology, Evolution and Gender* 2(1):19-46.

Pachankis, J. E. 2007. "The Psychological Implications of Concealing Stigma: A Cognitive-Affective-Behavioral Model." *Psychological Bulletin* 133(1):328-345.

Park, H. and Twenge, J. M. 2017. "The Decline in Adult Activities among U.S. Adolescents, 1976-2016." *Child Development* 1(1):1-17.

Patchin, J. and Hinduja, S. 2010. "Trends in Online Social Networking: Adolescent Use of Myspace Over Time." *New Media and Society* 12(2):197-216.

Paxton, S.J., Neumark-Sztainer, D., Hannan, P. J., and Eisenberg, M.E. 2006. "Body-dissatisfaction prospectively predicts Depressive Mood and Low Self-esteem in Adolescent Girls and Boys." *Journal of Clinical Child Psychology* 35(4):539-549.

Pereda, N., Guilera, G., Forns, M., and Gomez-Benito, J. 2009. "The Prevalence of Child Sexual Abuse in Community and Student Samples: A Meta-analysis." *Clinical Psychological Review* 29 (4):328-338.

Perloff, R. M. 2014. "Social Media Effects on Young Woman's Body Image Concerns: Theoretical Perspectives and an Agenda for Research." *Sex Roles* 7(1):363-377.

Prensky, M. 2001. "Digital Natives, Digital Immigrants." In *on the Horizon* 9(5):1-2.

Prooday, V. 2017. "The Silent Tragedy Affecting Today's Children." Retrieved October 24, 2017

(https://yourot.com/parenting-club/2017/5/24/what-are-we-doing-to-our-children).

Putnam, F. W. 2003. "Ten-Year Research Update Review: Child Sexual Abuse. *Journal of American Academy of Child and Adolescent Psychiatry* 42(3):269-278.

Raj, A., Silverman, J.G., and Amaro, H. 2000. "The Relationship Between Sexual Abuse and Sexual Risk among High School Students: Findings from the 1997 Massachusetts Youth Risk Behavior Survey." *Maternal and Child Health Journal* 4(2):125-133.

Reifman, A. and Windle, M. 1995. "Adolescent Suicidal Behaviors as a Function of

    Depression, Hopelessness, Alcohol Use, and Social Support: A Longitudinal

    Investigation." *American Journal of Community Psychology.* 23: 329-354.

Resnick, P. A. 1993. "The Psychological Impact of Rape." *Journal of Interpersonal*

    Violence 8(1):223-255.

Resnick, M. D. and Blum, R. W. 1985. "Development and Persona-logical Correlates of

    Adolescent Sexual Behavior and Outcomes." *International Journal of Adolescent*

    Medicine and Health 4(1):293-313.

Rhodes, A. E., Boyle, M. H., Tonmyr, L., Skinner, R., Bethell, J., Carlisle, C., Goodday,

    S., Hottes, T., Newton, A., Bennett, K., Sundar, P., Cheung, A., and Szatmari, P.

    2011. "Sex Differences in Childhood Sexual Abuse and Suicide-related

    Behaviors." *Suicide Life Threat Behaviors* 41(3):235-254.

Richard, J., Schneider, B., and Mallet, P. 2012. "Revisiting the Whole-School Approach

    to Bullying: Really Looking at the Whole School." *School Psychology*

    International 33(1):263-284.

Rierdan, J. and Koff, E. 1997. "Weight and Weight-Related Aspects of Body Image, and

    Depression in Early Adolescent Girls." *Adolescence* 32(1):615-624.

Rierdan, J., Koff, E., and Stubbs, M. L. 1987. "Depressive Symptomatology and Body

    Image in Adolescent Girls." *Journal of Early Adolescence* 7(1):205-216.

Rierdan, J., Koff, E., and Stubbs, M. L. 1988. "Gender, Depression and Body Image in

    Early Adolescence." *Journal of Early Adolescence* 8(1):109-117.

Rigby, K. 2008. *Children and Bullying: How Parents and Educators Can Reduce Bullying at School.* Boston, MA: Wiley Blackwell.

Rigby, K. and Slee P. 1999. "Suicidal Ideation Among Adolescent School Children, Involvement in Bully-Victim Problems and Perceived Social Support." *Suicide and Life-Threatening Behavior* 29(2):119-130.

Roland, E. 1989. *Bullying in Schools.* London, UK: Trentham.

Romans, D. E., Martin, J. L., Anderson, J. C., Herbison, P. G., and Mullen, P. E. 1995. "Sexual Abuse in Childhood and Deliberate Self-Harm." *American Journal of Psychiatry* 152(1):1336-1342.

Romer, D. 2011. "Adolescent Risk Taking, Impulsivity, and Brain Development: Implications for Prevention." *Developmental Psychobiology* 52(3):263-276.

Rosenberg, H.J., Jankowski, M.K., Sengupta, A., Wolfe, R.S., Wolford, G.L., and Rosenberg, S.D. 2005. "Single and Multiple Suicide Attempts and Associated Health Risk Factors in New Hampshire Adolescents." *Suicide and Life-Threatening Behavior* 35(1):547-557.

Rosenfeld, S. 2000. *Gender and Dimensions of the Self: Implications for Internalizing and Externalizing Behaviors*. Arlington, VA: American Psychiatric Publishing.

Rosenfield, M. 2017. "Schools Warn Against Game Encouraging Suicide in Kids." *NBC News.* Retrieved October 10, 2017 (http://www.nbcbayarea.com/news/national- international/School-Warns-of-Game-Encouraging-Suicide-in-Kids- 433028663.html).

Russell, D. E. and Bolen, R. M. 2000. *The Epidemic of Rape and Child Sexual Abuse in the United States.* Thousand Oaks, CA: Sage.

Santa Mina, E. E. and Gallop, R. M. 1998. "Childhood Sexual and Physical Abuse and Adult Self-Harm and Suicidal Behavior: A Literature Review." *Canadian Journal of Psychiatry* 43(1):793-800.

Saunders, M.N., Saunders, M., Lewis, P., and Thornhill, A. 2011. "Research Methods for Business Students. 5th ed." Essex, England: Pearson Education Limited.

Schilling, E. A., Aseltine, R.H., and Gore, S. 2007. "Young Women's Social and Occupational Development and Mental Health in the Aftermath of Child Sexual Abuse. *American Journal of Community Psychology* 40(1):109-124.

Schneider, S.K., O'Donnell, L., Stueve, A., and Coulter, R.W. 2012. "Cyber-Bullying, School Bullying, and Psychological Distress: A Regional Consensus of High School Students." *American Journal of Public Health* 102(1):171-177.

Seals, D. and Young, J. 2003. "Bullying and Victimization: Prevalence and Relationship to Gender, Grade Level, Ethnicity, Self-Esteem and Depression." *Adolescence* 38(1):735-747.

Shepherd, H. and Ricciardelli, L. A. 1998. "Test of Stice's Dual Pathway Model: Dietary Restraint and Negative Affect as Mediators of Bulimic Behavior." *Behavior Research and Therapy* 36(1): 345-352.

Sherman, R. A., Wells, B. E., and Twenge, J. M. 2017. "Sexual Inactivity during Young Adulthood is More Common among U.S. Millennials and iGen: Age, Period and

Cohort Effects on Having No Sexual Partners after Age 18. *Archives of Sexual Behavior* 46(1):443-440.

Silverman, J. G., Raj, A., Mucci, L. A., and Hathaway, J. E. 2001. "Dating Violence against Adolescent Girls and Associated Substance Abuse, Unhealthy Weight Control, Sexual Risk Behavior, Pregnancy and Suicidality." *Journal of the American Medical Association* 286(5):572-579.

Simmons, R. 2003. *Odd Girl Out.* New York, NY: Harcourt.

Singer, J., Brush, C., and Lublin, S. 1965. "Some Aspects of Deindividuation: Identification and Conformity." *Journal of Experimental Social Psychology* 1(4):356-378.

Snyder, H. and Sickmund, M. 1999. "Juvenile Offenders and Victims: National Report." Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Stagman, S. and Cooper, J. 2010. "Children's Mental Health: What Every Policymaker Should Know. *National Center for Children in Poverty.* Retrieved October 24, 2017 (http://www.nccp.org/publications/pub_929.html).

Stern, S. 1999. "Adolescent Girls' Expression on Web Home Pages: Spirited, Somber and Self-Conscious Sites." *Convergence* 5(4):22-41.

Stice, E., Hayward, C., Cameron, R. P., Killen, J. D., and Taylor, C. B., 2000. "Body-Image and Eating-Disturbances Predict Onset of Depression among Female Adolescents: A Longitudinal Study." *Journal of Abnormal Psychology* 109(1): 438-444.

Stoltenborgh, M., Van Ijzendoorn, M. H., Euser, E. M., and Bakermans-Kranenburg, M. J. 2011. "A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence around the World." *Child Maltreatment* 16(2):79-101.

Striegel-Moore, R., Dohm, F., Pike, K., Wilfley, D., and Fairburn C., 2002. "Abuse, Bullying, and Discrimination as Risk Factors for Binge Eating Disorder." *The American Journal of Psychiatry* 159(11):1902-1907.

Sugaya, L., Hasin, D. S., Olfson, M., Lin, K. H., Grant, B. F., and Blanco, C. 2012. "Child Physical Abuse and Adult Mental Health: A National Study." *Journal of Trauma and Stress* 25(4):384-392.

Sundar, S.S., Oh, J., Kang, H., and Sreenivasan, A. 2013. "How Does Technology Persuade? Theoretical Mechanisms for Persuasive Technologies." Thousand Oaks, CA: Sage

Takizawa, R., Maughan, B., and Arseneault, L. 2014. "Adult Health Outcomes of Childhood Bullying Victimization: Evidence from a Five-Decade Longitudinal Birth Cohort." *American Journal of Psychiatry* 171(1):777-784.

Talbot, C. 2017. "Social Media Accounts Promote Skeletal Images of Women." Retrieved October 20, 2017.
(http://www.exeter.ac.uk/news/featurednews/title_615327_en.html).

Texas Penal Code 2017. Suicide Sec. 22.08 Aiding Suicide.

The National Center for Educational Statistics 2013. "Student Reports of Bullying and Cyber-bullying: Results from the 2011 School Crime Supplement to the National

Crime Victimization Survey." (http://nces.ed.gov/pubs2013/2013329.pdf);

National Center for Educational Statistics. "Student Reports of Bullying and

Cyber- bullying: From the 2009 School Crime Supplement to the National Crime

Victimization Survey 2011." Retrieved October 10, 2017

 (http://nces.ed.gov/pubs2011/2011336.pdf).

Thompson, J. K., Coovert, M. D., Richards, K. J., Johnson, S., and Cattarin, J. 1995.

"Development of Body-Image, Eating Disturbance and General Psychological

Functioning in Female Adolescence: Covariance Structure Modeling and

Longitudinal Investigations." *International Journal of Eating Disorders* 18(1):

221-236.

Tiggemann, M. 1994. "Gender Differences in Interrelationships between Weight

Dissatisfaction, Restraint and Self-Esteem." *Sex Roles* 30(1): 319-330.

Tiggermann, M. and McGill, B. 2004. "The Role of Social Comparison in the Effect of

Magazine Advertisements on Woman's Mood and Body Dissatisfaction." *Journal

of Sociological Clinical Psychology* 23(1):23-44.

Tiggermann M. and Zarcado, M. 2016. "Strong is the new Skinny: A Content Analysis

of Fitspiration Websites." *Journal of Health Psychology.* 17(1):1-9.

Truman, J. L. and Planty, M. 2012. "National Crime Victimization Survey." *U.S.

Department of Justice.* 12(1):1-19.

Turner, H. A., Finkelhor, D., and Ormrod, R. 2006. "The Effects of Lifetime
    Victimization on the Mental Health of Children and Adolescents." *Social Science
    and Medicine* 62(1):13-27.

Twenge, J. M. 2015. "Time Period and Birth Cohort Differences in Depressive
    Symptoms in the U.S., 1982-2013." *Social Indicators Research* 121(1):437-454.

Twenge, J. M., Joiner, T. E., Rogers, M. L., and Martin, G.N. 2017. "Increases in
    Depressive Symptoms, Suicide-Related Outcomes, and Suicide Rates Among
    U.S. Adolescents After 2010 and Links to Increased New Media Screen Time."
    Clinical Psychological Science 1(1):1-15.

Tyler, K.A. 2002. "Social and Emotional Outcomes of Childhood Sexual Abuse: A
    Review of Recent Research." *Aggression and Violent Behavior.* 7:567-589.

Tyler, K.A. Johnson, K.A., and Brownridge, D.A. 2008. "A Longitudinal Study of the
    Effects of Child Maltreatment on Later Outcomes Among High-Risk
    Adolescents." *Journal of Youth Adolescence* 37(4):506-521.

Van der Vegt, E.J.M., Van der Ende, J., Kirschbaum, C., Verhulst F.C., and Henning, T.
    2009. "Early Neglect and Abuse Predict Diurnal Cortisol Patterns in Adults: A
    Study of International Adoptees. *Psycho-neuroendocrinology* 34(3):660-690.

Van der Wal, M.F., de Wit, C., and Hirasing, R.A. 2003. "Psychosocial Health Among
    Young Victims and Offenders of Direct and Indirect Bullying." *Pediatrics* 111(1):
    1312-1317.

Van Voorhees, E. and Scarpa, A. 2004. "The Effects of Child Maltreatment on the

    Hypothalamic pituitary-adrenal Axis." *Trauma, Violence and Abuse* 5(1):333-

    353.

Wade, P. 2013. "Cellphone Companies Say They Don't Save Text Messages."

    Retrieved October 22, 2017 (http://www.news-gazette.com/news/local/2013-08-

    26/cellphone-companies-say-they-dont-save-text-messages.html).

Walker, J. L., Carey, P.D., Mohr, N., Stern, D. J., and Seedat, S. 2004. "Gender

    Differences in the Prevalence of Childhood Sexual Abuse and in the Development

    of Pediatric PTSD." *Archives of Women's Mental Health* 7(2):111-121.

Walsh, K. 2011. "Facebook in the Classroom. Seriously." *EmergingEdTech.* Retrieved

    October 10, 2017. (http://www.emergingedtech.com/2011/03/facebook-in-the-

    classroom-seriously/).

Wardell, S. 2010. "Communications Decency Act Provides No Safe Harbor Against

    Antifraud Liability for Hyperlinks to Third-Party Content Under the Securities

    and Exchange Act." *Washington Journal of Law, Technology, and Arts* 6(1):50-

    66.

Wang, J., Ianotti, R. J., and Nansel, T. R. 2009. "School Bullying among Adolescents in

    the United States: Physical, Verbal, Relational, and Cyber." *Journal of Adolescent

    Health*, 45(2):368–375.

Wiseman, R. 2002. *Queen Bees and Wannabes: Helping Your Daughter to Survive Cliques, Gossip, Boyfriends and Other Realities of Adolescence.* New York, NY: Crown.

Wolak, J., Mitchell K., and Finkelhor, D. 2007. "Does Online Harassment Constitute Bullying? An Exploration of Online Harassment by Known Peers and Online-Only Contacts." *Journal of Adolescent Health* 41(6):51-58.

Worldometers 2017. Current World Population Clock. Retrieved October 10, 2017. (http://www.worldometers.info/world-population/).

Yahoo Lifestyle News. 2017. "Bonespiration is the Scary New Social Media Hashtag that Needs to Stop." Accessed October 18, 2017 (https://uk.style.yahoo.com/bonespiration-scary-new-social-media-hashtag-needs-stop-091326979.html).

Ybarra, M., Diener-West M., and Leaf, P. 2007. "Examining the Overlap in Internet Harassment and School Bullying: Implications for School Intervention." *Journal of Adolescent Health* 41(1):41-50.

Ybarra M. and Mitchell, K. 2004. "Online Aggressors/Targets, Aggressors and Targets: A Comparison of Associated Youth Characteristics." *Journal of Child Psychology* 45(1):1308-1316.

Ybarra M. and Mitchell K. 2007. "Prevalence and Frequency of Internet Harassment Instigation: Implications for Adolescent Health." *Journal of Adolescent Health* 41:189-195.

Ybarra, M., Mitchell, K, Finklehor, D., and Wolak, J. 2007. "Examining Characteristics

and Associated Distress Related to Internet Harassment: Findings from the

Second Youth Internet Safety Survey." *Pediatrics* 118(4):1169-1177.

Zolfagharifard, E. 2017. "#thinspiration Should be Banned: Researchers say Tag Can

Harm Women even if they do not Search for It." Retrieved October 18, 2017

(http://www.dailymail.co.uk/sciencetech/article-3078871/thinspiration-BANNED-

Researchers-say-tag-harm-women-don-t-search-it.html).