FINAL REPORT JULY 2013

TECHNOLOGY, TEEN DATING VIOLENCE AND ABUSE, AND BULLYING

Janine M. Zweig, Ph.D.
Meredith Dank, Ph.D.
Pamela Lachman
Jennifer Yahner

URBAN INSTITUTE
Justice Policy Center
2100 M St. NW
Washington, DC 20037

URBAN INSTITUTE
Justice Policy Center

URBAN INSTITUTE
Justice Policy Center
2100 M STREET, NW

WASHINGTON, DC 20037
www.urban.org

This project was supported by Award No. 2010-WG-BX-003, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The authors would like to thank: (1) the administrators, faculty, and staff of schools who assisted us in collecting the data documented in this report, (2) CJ Pascoe of Colorado College and Cindy Southworth, Erica Olsen, and Sarah Tucker of the National Network to End Domestic Violence for their input on survey measures, and (3) the National Institute of Justice and Dr. Nancy La Vigne, Director of the Urban Institute's Justice Policy Center, for their careful review of this report. We would also like to thank several Urban Institute staff and temporary employees for their help, including: Jeff Fagan, Adam Lowe, Ella Henley, Ryan Leach, Leah Ouellet, Shebani Rao, Aaron Horvath, Andrea Matthews, and Sarah Trager.

Abstract

The goal of this project was to expand knowledge about the types of violence and abuse experiences youth have via technology (e.g., social networking sites, texting on cell phones), and how the experience of such cyber abuse within teen dating relationships or through bullying relates to other life factors. A total of 5,647 youth from ten middle and high schools in New York, New Jersey, and Pennsylvania participated in the study. Fifty-one percent of the sample was female, 26 percent identified as non-white, and 94 percent identified as heterosexual. The study employed a cross-sectional, survey research design, collecting data via paper-pencil survey. The survey targeted all youth who attended school on a single day and achieved an 84 percent response rate.

The study's findings showed that more than a quarter (26 percent) of youth in a relationship said they experienced some form of cyber dating abuse victimization in the prior year. Females were twice as likely as males to report being a victim of sexual cyber dating abuse in the prior year. More than a tenth (12 percent) of youth in a relationship said they had perpetrated cyber dating abuse in the prior year. Females reported greater levels of non-sexual cyber dating abuse perpetration than males. By contrast, male youth were significantly more likely to report perpetrating sexual cyber dating abuse. Lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth reported significantly higher rates of cyber dating abuse victimization and perpetration than heterosexual youth.

With regard to other forms of teen dating violence and abuse, 84 percent of cyber dating abuse victims also reported psychological dating abuse victimizations, 52 percent reported physical dating violence victimization, and 33 percent reported sexual coercion. Further, 73 percent of cyber dating abuse perpetrators also reported psychological dating abuse perpetration, 55 percent also reported physical dating violence perpetration, and 11 percent reported sexual coercion perpetration. Overall, less than one out of ten victims of dating abuse reported seeking help, with half as many male victims as female victims seeking help.

Notably, cyber dating abuse victims and perpetrators were more than two and three times as likely, respectively, as non-victims and non-perpetrators to also report experiencing and/or perpetrating cyber bullying behaviors against non-intimates. Similarly, cyber bullying victims and perpetrators were almost three and four times as likely, respectively, as non-victims and non-perpetrators to also report experiencing and/or perpetrating cyber dating abuse against romantic partners.

With regard to other findings on bullying experiences, the study showed that one in six youth (17 percent) reported being victims of cyber bullying, with females experiencing significantly higher victimization rates with regard to cyber bullying than males. Fewer than one in ten youth reported perpetrating cyber bullying in the prior year. Female youth reported significantly higher perpetration rates with regard to cyber bullying than males. LGBTQ youth reported significantly higher rates of cyber bullying victimization and perpetration than heterosexual youth. Nine out of ten cyber bullying victims also experienced psychological bullying victimization, and the same portion of cyber bullying perpetrators also perpetrated psychological bullying. There was

also a fairly high degree of overlap between cyber bullying and physical bullying, with two-thirds to three-quarters of cyber bullying victims/perpetrators also reporting physical bullying victimization/perpetration. Despite this overlap, only one out of six bullying victims reported seeking help, with twice as many female victims as male victims seeking help.

Contents

Report Highlights

What Was the Purpose of this Study?

In 2011, the National Institute of Justice funded the Urban Institute's Justice Policy Center to examine the role of youth technology use in teen dating violence and abuse and bullying. The goal of the project was to expand knowledge about the types of violence and abuse experiences youth have, the extent of victimization and perpetration via technology and new media (e.g., social networking sites, texting on cell phones), and how the experience of such cyber abuse within teen dating relationships or through bullying relates to other life factors.

Who Participated in the Study?

A total of 5,647 youth from ten schools in five school districts in three northeastern states (New York, New Jersey, and Pennsylvania) participated in the study. Fifty-one percent of the sample was female and 48 percent was male, with 94 percent identifying themselves as heterosexual. Sixty-seven percent of youth reported living with both parents. Approximately 26 percent of the sample identified as non-white.

How Were the Data Collected?

This study employed a cross-sectional, survey research design, collecting data via paper-pencil survey. The survey targeted all youth who attended school on a single day (the date of survey administration) and achieved an 84 percent response rate overall, with some variation in response rates by school. Surveys were conducted in classrooms and administered by school staff trained by the research team. Survey questions asked youth about their demographic backgrounds; technology use; experiences with dating relationships, including violence and abuse; experiences with bullying; other risky behaviors (e.g., sexual activity, substance use); psychosocial adjustment (e.g., depression, anger/hostility); family relationships; and school experiences.

How Did the Study Measure Teen Dating Violence and Abuse?

Teen dating violence and abuse are experiences that can happen within teen's dating or romantic relationships. We measured these experiences using four categories of violence and abuse.

- **Cyber dating abuse** is abusive behaviors perpetrated by romantic partners via technology/new media (e.g., social networking sites, texting, e-mail), including threats via technology, harassing contacts, and using a partner's social networking page without permission. Cyber dating abuse can be sexual in nature (sexual cyber dating abuse) or more general (non-sexual cyber dating abuse).
- **Physical dating violence** is physically violent behaviors that may be mild (e.g., scratched), moderate (e.g., kicked), or severe (e.g., beat up).
- **Psychological dating abuse** is psychologically abusive behaviors that involve threats, monitoring, personal insults, or emotional manipulation and fear.
- **Sexual coercion** is sexual abuse involving pressure or force to engage in sex or unwanted sexual activity.

What Are the Study's Findings for Teen Dating Violence and Abuse?

- More than a quarter (26 percent) of youth in a relationship and nearly a fifth (18 percent)

of all youth said they experienced some form of cyber dating abuse victimization in the prior year. Youth experienced cyber dating abuse at a rate that was comparable to that of physical dating violence, about half that of psychological dating abuse, and twice that of sexual coercion.

- Females were twice as likely as males to report being a victim of sexual cyber dating abuse and/or sexual coercion in the prior year. Male youth, on the other hand, reported significantly higher rates of all forms of physical dating violence victimization.
- Few victims of any teen dating violence or abuse sought help after such experiences. Less than one out of ten victims reported seeking help, with half as many male victims as female victims seeking help.
- More than a tenth (12 percent) of youth in a relationship and nearly a tenth (8 percent) of all youth said they had perpetrated cyber dating abuse in the prior year. Youth reports of cyber dating abuse perpetration were about half that of physical dating violence and/or psychological dating abuse perpetration, yet four times that of self-reported sexual coercion perpetration.
- Females reported greater levels of non-sexual cyber dating abuse perpetration than males. By contrast, male youth were significantly more likely to report perpetrating sexual cyber dating abuse.
- Lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth reported significantly higher rates of cyber dating abuse victimization and perpetration than heterosexual youth. Thirty-seven percent of LGBTQ youth reported cyber dating abuse victimization and about half that reported perpetrating such violence.
- Cyber dating abuse had the greatest degree of overlap with psychological dating abuse; 84 percent of cyber dating abuse victims also reported psychological dating abuse victimizations, and 73 percent of cyber dating abuse perpetrators also reported psychological dating abuse perpetration. Among cyber dating abuse victims, 52 percent also reported physical dating violence victimization and 33 percent reported sexual coercion victimization. Among cyber dating abuse perpetrators, 55 percent also reported physical dating violence perpetration and 11 percent reported sexual coercion perpetration.
- Cyber dating abuse victims and perpetrators were more than two and three times as likely, respectively, as non-victims and non-perpetrators to also report experiencing and/or perpetrating cyber bullying behaviors against non-intimates.
- The life factors that had the strongest overall correlations to cyber dating abuse victimization, when other factors were statistically controlled (e.g., age, race, school socioeconomic status), included being female, having committed a higher number of delinquent behaviors, previous engagement in sexual activity, reporting a higher level of recent depression, and reporting a higher level of recent anger/hostility.
- The life factors that had the strongest overall correlations to cyber dating abuse perpetration, when other life factors were statistically controlled, included being female, spending a higher number of hours per day on the cell phone, more frequent alcohol and/or serious drug use, having committed a higher number of delinquent behaviors, previously having engaged in sexual activity, reporting a higher level of recent depression, reporting a higher level of recent anger/hostility, and engaging in fewer prosocial activities.

How Did the Study Measure Bullying?

Bullying experiences are abusive experiences that happen outside of teen's dating or romantic relationships with others in their school and/or community. We measured bullying in three categories of experiences involving youth other than romantic partners.

- **Cyber bullying** is abusive behaviors perpetrated via technology/new media (e.g., social networking sites, texting, e-mail), including threats via technology, harassing contacts, and insults.
- **Physical bullying** is physically violent behaviors toward an individual that include kicking, pushing, and damage to personal property.
- **Psychological bullying** is psychologically abusive behaviors that involve threats, teasing, or being purposefully left out of activities with peers.

What are the Study's Findings for Bullying?

- One in six youth (17 percent) reported being victims of cyber bullying in the past year and more than twice that share reported being victims of physical and/or psychological bullying.
- Female youth reported significantly higher victimization rates with regard to cyber bullying and psychological bullying; in particular, girls were twice as likely as boys to report being a victim of cyber bullying in the prior year. By contrast, male youth reported significantly higher rates of physical bullying victimization.
- One out of six bullying victims reported seeking help, with twice as many female victims as male victims seeking help.
- Fewer than one in ten youth reported perpetrating cyber bullying in the prior year, while a quarter to a third of youth said they had perpetrated physical bullying and/or psychological bullying during that time. Slightly less than half of the youth who reported cyber bullying victimization also claimed that they perpetrated cyber bullying.
- Female youth reported significantly higher perpetration rates with regard to cyber bullying, while male youth reported significantly higher rates of physical bullying perpetration.
- LGBTQ youth reported significantly higher rates of cyber bullying victimization and perpetration than heterosexual youth. One-quarter of LGBTQ youth reported being a victim of cyber bullying and half that report perpetrating such violence.
- Nine out of ten cyber bullying victims also experienced psychological bullying victimization, and the same portion of cyber bullying perpetrators also perpetrated psychological bullying. There was also a fairly high degree of overlap between cyber bullying and physical bullying, with two-thirds to three-quarters of cyber bullying victims/perpetrators also reporting physical bullying victimization/perpetration.
- Cyber bullying victims and perpetrators were almost three and four times as likely, respectively, as non-victims and non-perpetrators to also report experiencing and/or perpetrating cyber dating abuse against romantic partners.
- The life factors that had the strongest overall correlations to cyber bullying victimization, when other life factors were statistically controlled (e.g., age, race, school SES) included being female, white, of younger age, spending more hours per day on the cell phone, being less emotionally close to one's parents while having more frequent communication with parents (not necessarily of a positive nature), more frequent alcohol use, having

previously engaged in sexual activity, reporting a higher level of recent depression, and reporting a higher level of recent anger/hostility.

- The life factors that had the strongest overall correlations to cyber bullying perpetration, when other life factors were statistically controlled (e.g., age, race, school SES) included being female, of younger age, being less emotionally close to one's parents yet having more frequent communication with parents (not necessarily of a positive nature), more frequent alcohol use, having committed a higher number of delinquent behaviors previously, having previously engaged in sexual activity, and reporting a higher level of recent anger/hostility.

General Conclusions

Based on the above findings, we draw seven general conclusions related to cyber dating abuse and cyber bullying:

1. Rates of cyber abuse are substantial.
2. Cyber abuse is often combined with other forms of dating violence and abuse or other forms of bullying. Further, cyber dating abuse and cyber bullying experiences also overlap, for both victims and perpetrators.
3. Despite this overlap between cyber abuse and other forms of violence and abuse or bullying, some youth *only* experience cyber abuse, making it and its correlates important to distinguish.
4. Most cyber abuse victims do not perpetrate cyber abuse, but most perpetrators also report victimization.
5. Females are particularly vulnerable to cyber abuse, but are also perpetrators of cyber abuse.
6. LGBTQ youth are particularly vulnerable to all types of teen dating violence/abuse and bullying, including cyber dating abuse and cyber bullying.
7. Few victims of teen dating violence and abuse and/or bullying seek help.

What Are the Study's Implications for Policy and Practice?

The current findings extend our knowledge about teen dating violence and abuse and bullying, particularly around cyber dating abuse and cyber bullying. Further, the findings provide some indication of implications for policy and practice, which are discussed below for both teen dating violence and abuse and bullying.

- Our study's findings on the prevalence of cyber dating abuse and cyber bullying suggest that schools should raise awareness about the harmfulness of perpetrating such acts and educate victims about the importance of reporting and seeking help. These activities should include all members of the school community: principals, teachers, and peer leaders. Schools can refer youth to programs and online resources, such as online forums for safely airing grievances and resolving disputes (see http://www.thatsnotcool.com/CalloutCards.aspx).
- Because victims of teen dating violence and abuse and bullying victims are more likely to go to friends for help or advice, schools might consider creating peer-led groups to build awareness around the issues and create a comfort-level for victims to report.
- In addition, since this research found that many help-seeking victims also reach out to their parents, it may be valuable for schools to help parents form support networks for each other, so that parents of victimized or vulnerable youth can share advice and

resources regarding preventative measures. Likewise, schools could hold seminars and workshops for parents on how to identify and report when their child is being bullied or being abused via technology, and on how to help them cope with and address the issue.

- Given our finding that so few youth victims of teen dating violence and abuse and bullying seek help, schools might create more formalized reporting mechanisms to ensure that such violence and abuse is being addressed effectively and promptly for both males and females. In particular, since less than half of male victims seek help, specific outreach efforts to male victims might be appropriate so that they can receive any needed assistance.
- Because so much of teens' dating violence and abuse and bullying experiences occur at school, faculty and staff should be trained on how to identify signs of both types of acts and how to handle such incidences (e.g., when to report, to whom to report, how to report).
- Our findings on higher cyber bullying victimization rates in schools providing greater access to communications technology suggest that as such access continues to grow, schools will need to train youth on how to use technology to block screen names, apply filters to certain websites, and take other protective measures to prevent bullies and perpetrators of cyber dating abuse from harassing them.
- Schools might also benefit from receiving more support, training, and/or funding for school counselors and psychologists, who can directly help youth address these issues and train school faculty and parents, assisting them in coordinated efforts to reduce the number and impact of teen dating violence and abuse and bullying experiences.
- Because we found a great deal of youth report victimization and perpetration and, in the case of teen dating violence/abuse, the experiences are reciprocal, it is unclear who may be primary perpetrators or primary victims, or if youth might be equally initiating these incidents. Thus, identifying how to deal with these interactions from a criminal justice perspective might be very challenging. Police and prosecutors might benefit from training about the nuances of these relationships.
- While the bulk of this study focuses on how technology makes youth vulnerable to victimization and abuse, such technology may also be an opportunity for prevention and intervention efforts around teen dating violence/abuse and bullying issues, particularly given the number of youth who use it regularly (Lenhart, 2012; Stewart & Kaye, 2012). Thus, new technology and social networking sites can be used to spread awareness about dating violence and abuse and bullying. Further, technology can be used to report incidences of teen dating violence/abuse and bullying—whether directly by the victim, a bystander, or a peer. For example, bystanders and peers could text eyewitness reports anonymously to school officials, similar to how texts can be sent to police anonymously whenever someone witnesses a crime.[1]

What Are the Study's Implications for Research?

The current research findings lead directly to suggestions for future research endeavors. Much remains to be learned about cyber dating abuse and cyber bullying.

- A national, longitudinal, multi-year study to determine the prevalence of teen dating

[1] See http://www.state-journal.com/latest%20headlines/2012/11/02/police-seek-crime-tips-via-text-messages

violence and abuse and bullying, with a particular focus on cyber dating abuse and cyber bullying, in middle schools and high schools across the country would be of great service to the field. Such a study could:

  - Further examine the overlap of cyber dating abuse with other forms of teen dating violence/abuse—including physical violence, other psychological abuse, and sexual coercion.
  - Further examine the overlap of cyber bullying with other forms of bullying—including physical and other psychological bullying.
  - Examine causality related to the risk factors and consequences of experiencing and perpetrating cyber dating abuse and cyber bullying. In addition, such a study would allow us to identify protective factors related to *not* experiencing such violence and abuse.
  - Further examine female perpetration of various forms of teen dating violence and abuse, including cyber dating abuse, and disentangling initiation of abuse from retaliatory or responsive abuse.
  - Further examine the nature of male victimization, particularly related to cyber dating abuse.
  - Further examine the nature of female victimization related to sexual cyber abuse.
  - When it comes to bullying prevalence rates, further examine who is bullying whom. Are males bullying only other males or females as well, and vice versa? When looking at cross-gender versus same-gender bullying, does one gender bully the other using one form of bullying versus another?

- More research is needed regarding the particular vulnerability of LGBTQ youth to teen dating violence/abuse and bullying, as well as the associated risk and protective factors of such youths' victimization and perpetration, and the consequences of such experiences.
- Further research is needed to examine help-seeking behaviors for victims of dating violence and abuse and bullying, particularly related to cyber abuse. Such research should explore reasons why victims of teen dating violence and abuse and cyber bullying choose not to report incidents or seek help in an effort to inform educational efforts to address their needs. Of specific note should be identifying the coping mechanisms of youth who are not seeking help from others.
- Finally, given that prevention and intervention are critical to addressing these issues, the field could benefit from more rigorous impact evaluations of current teen dating violence/abuse and bullying prevention programs, with a particular focus on preventing cyber abuse.[2]

[2] The following websites provide examples of current prevention programs: Austin's Safe Place program, http://www.safeplace.org/Page.aspx?pid=376, and Break the Cycle, http://www.breakthecycle.org/, or http://www.arlingtonva.us/departments/HumanServices/ChildrenFamily/file81972.pdf.

Chapter 1: Introduction

Purpose of the Study and Background of the Issues

In 2011, the National Institute of Justice funded the Urban Institute's Justice Policy Center (JPC) to examine the role of youth technology use in teen dating violence/abuse and bullying. The goal of the project was to expand knowledge about the types of abuse experiences youth have, the extent of victimization and perpetration via technology and new media (e.g., social networking sites, texting on cellular phones), and how experiencing such cyber abuse (within teen dating relationships or through bullying) relates to other life factors. Reaching this goal contributes to the knowledge base on which policy and program developers, school administrators, victim advocates, and criminal justice personnel rely to develop evidence-based policies and strategies to address these problems. Despite growth in the literature over the past two decades on adolescent dating violence and abuse, bullying, and the risks youth face when using technology, critical questions remain unanswered as new technologies have emerged, creating new ways for people to relate to one another socially. It is therefore important to understand *how youth* are using technology and new media to perpetrate dating abuse and bullying, *how many youth* are victims of such cyber abuse, and *how experiencing cyber abuse* relates to other aspects of youth's lives.

To address this need, the Urban Institute launched a multistate study of teen dating violence and abuse and bullying, the main component of which included a survey of youth from ten schools in five school districts in three northeastern states, gathering information from 5,647 youth about their experiences. The survey targeted all youth who attended school on a single day (the date of survey administration) and achieved an 84 percent response rate overall, with some variation in response rates by school. Survey questions asked youth about their demographic backgrounds; technology use; experiences with dating relationships, including violence and abuse; experiences with bullying; other behaviors (e.g., sexual activity, substance use); psychosocial adjustment (e.g., depression, anger/hostility); family relationships; and school experiences. This report documents findings from this large-scale survey effort.

The report begins by highlighting the literature on youth technology use, teen dating violence and abuse, and bullying, and lays out the 16 research questions of the current study (eight related to teen dating violence/abuse and eight related to bullying). Chapter 2 discusses the procedures and methods used to design and implement the survey; describes the study sample; and documents the measures used in the survey. Chapter 3 reports the findings for each of the research questions, first for teen dating violence/abuse and then for bullying. Finally, chapter 4 places the current study's findings in the context of the existing literature and notes where it extends our understanding of dating violence and abuse, and bullying experiences; describes limitations of the current study; and discusses implications of the current findings for policy, practice, and future research.

Youth Technology Use

Youths' daily activities and social worlds revolve around new media practices such as using cell phones, engaging in instant messaging, watching and creating online videos, and connecting to social networking websites (Rideout, Roberts, & Foehr, 2005). Youth spend more time with

technology than any other activity besides sleeping (Roberts & Foehr, 2008). While technology use can be positive and create educational opportunities, increase access to useful information, and increase convenience in other areas (e.g., on-line shopping), it also poses many risks to youth from peers and adult predators (Guan & Subrahmanyam, 2009). The primary focus in this study is the ways in which youth interact with peers and dating partners via technology, including through cell phones and social media.

Based on data from a nationally representative sample of 799 youth, most youth ages 12–17 have cell phones (77 percent; Lenhart, 2012).[3] More youth text by cell phone than talk by cell phone, but those that most frequently text, also talk most frequently. Three-quarters of all teens text, with two-thirds reporting they do so every day. The median number of texts sent by 12- to 17-year-old teens per day is 60 (Lenhart, 2012). Older girls text the most, with a median of 100 texts per day, compared to only 50 for older boys.

For teens in a dating relationship, contact between partners via cell phones happens at all hours of the day and night. Between 10 p.m. to midnight, almost one in three teens report having communicated with their partner by cell phone or texting 10 or more times (Picard, 2007). Between midnight and 5 a.m., 17 percent of teens report having communicated with their partner by texting 10 or more times *per hour*. In terms of chatting on cell phones, about a quarter of youth say they talk daily to friends, which is fewer than was reported in 2009 (38 percent; Lenhart 2012). Notably, only 14 percent say they talk with friends on landlines daily, and 31 percent say they never talk to friends on a landline.

Being online is a source of risk and opportunity for youth. There has been much research about the benefits of Internet use, as well as the risks that are posed to youth perpetrated both by adults and peers (Guan & Subrahmanyam, 2009; Ybarra, Mitchell, & Korchmaros, 2011). Ninety-five percent of youth ages 12–17 are online (Lenhart, Madden, Smith, Purcell, Zickurh, & Rainie, 2011; Rideout, Foehr, & Roberts, 2010; Google & Ipsos MediaCT, 2012). Overall, Internet use does not vary much by region—91 percent of rural teens, 87 percent of urban teens, and 93 percent of suburban teens use the Internet. But, daily Internet use does vary by region—40 percent of urban teens and 39 percent of suburban teens use the Internet several times per day, compared to 25 percent of rural teens (Pew Research Center, 2009). However, growing access to broadband Internet may increase teen media use in rural areas: over 75 percent of families with children recently reported having broadband Internet access at home, up from 50 percent in 2004 (Lenhart, Purcell, Smith, & Zickuhr, 2010; Stewart & Kaye, 2012). This has important implications for rural teen media use because 40 percent of teens who have broadband access at home report using the Internet multiple times a day (compared to 21 percent of teens who live in households with a dial-up connection).

In addition, wireless access impacts teens' Internet use, since more than 25 percent of teens report using their cell phone to go online (Google & Ipsos MediaCT, 2012; Lenhart, et al., 2010). The most recent estimates show that 23 percent of youth ages 12–17 have a smartphone, with no

[3] Most of what we currently know about youth technology use comes from the Pew Research Center's Internet and American Life Project which has administered a series of nationally representative surveys of youth (see, e.g., Lenhart et al., 2010; Lenhart et al., 2011; and Lenhart, 2012). Other notable surveys include those done by Rideout, Foehr, & Roberts (2010); Teenage Research Unlimited (2011); and Google & Ipsos MediaCT (2012).

differences in phone ownership by race/ethnicity or income (Stewart & Kaye, 2012; Lenhart, 2012). In addition, 16 percent of youth report having used a tablet to go online in the 30 days before they were asked about such use.

Social networking is key to teen's media use: 80 percent of youth ages 12–17 report using social networking sites (e.g., Facebook, Myspace), up from 73 percent just two years before, and many report using such sites daily (Lenhart, et al, 2011; Rideout, Foehr, & Roberts, 2010; Teenage Research Unlimited, 2011). Among online teens, older teens (ages 14 to 17) are more likely to use social networking sites than younger teens ages 12 and 13; and in fact, some social networking sites prohibit accounts for those under 14 (Stewart & Kaye, 2012). Though most youth use social networking sites, youth from lower income families (under $30,000) are more likely to use such sites than teens in wealthier households (80 percent vs. 70 percent; Lenhart, et al., 2010).

The majority of youth who use social media (69 percent) report that other youth are mostly kind to one another on social networking sites (Lenhart, et al., 2011). However, and notably for the purposes of this study, another 20 percent of youth who use social media say that their peers are mostly unkind to others via this technology. Further, 88 percent of youth reported having observed other teens being mean or cruel on social networking sites, and 12 percent said they observed this behavior frequently. Fifteen percent reported that they were the victim of cruelty through social media in the 12 months prior to being surveyed (Lenhart, et al. 2011). Further, 25 percent of teens on social media reported having an experience resulting in a face-to-face confrontation with someone, 13 percent reported concern about having to go to school the next day, and 8 percent reported having actually had physical altercations with someone because of something that occurred on a social network site (Lenhart, et al., 2011).

All this suggests that youth use technology frequently and it plays an important role in how they interact with other youth and dating partners. The next section examines the literature on teen dating violence and abuse and on bullying, and how technology plays a role in these two types of interpersonal violence.

Teen Dating Violence and Abuse

The term "teen dating violence" encompasses varying levels and types of abuse that can range from physical and sexual violence to forms of psychological and emotional abuse occurring between teens who are dating/in romantic relationships with one another (Mulford & Giordano, 2008).[4] In this study, we focus on four types of teen dating violence and abuse: cyber abuse, physical violence, psychological abuse, and sexual coercion. Rates of teen dating violence and abuse vary based on the samples included in studies and on how questions are asked. Here we summarize a series of studies on the issue.

Prevalence of Teen Dating Violence and Abuse

Among studies of high school youth, estimates of how many youth are victims of teen dating

[4] The same is true of the terms "domestic violence" and "intimate partner violence," which typically apply to adult relationships. As defined by the U.S. Department of Health and Human Services, "[d]omestic violence is when one person in a relationship purposely hurts another person physically or emotionally" (see http://www.womenshealth.gov/violence-against-women/types-of-violence/domestic-intimate-partner-violence.cfm).

violence range widely. Using one question to assess physical dating violence, asking about ever having been hit, slapped or physically hurt by a partner, the Youth Risk Behavior Surveys of 1999, 2001, 2003, and 2005 indicate that between 9 percent and 20 percent of youth report experiencing physical dating violence in the prior year, with 10 percent of both boys and girls reporting such violence in 2005 (Eaton, Davis, Barrios, Brener, & Noonan, 2007; Howard, Wang, & Fang, 2008; Howard, Wang, & Fang, 2007; Howard & Wang, 2003; Silverman, Raj, & Clements, 2004). Other national studies have included a greater number of questions, albeit still limited, and found higher rates of teen dating violence. Data from the nationally representative Commonwealth Fund Survey of the Health of Adolescent Boys and Girls show that about 17 percent of girls and 9 percent of boys reported dating violence and abuse victimizations, using a limited definition of such acts including having been threatened to be hurt, actually physically hurt, or forced to have sex when they did not want to (Ackard, Neumark-Sztainer, & Hannan, 2003). Data from the National Longitudinal Study of Adolescent Health (Add Health) indicate that 32 percent of adolescents experienced some kind of abuse in their romantic relationships (including being sworn at or threatened by a partner) and 12 percent reported physical violence (Halpern, Oslak, Young, Martin, & Kupper, 2001). Teen dating violence rates for males and females were the same for all items except that females were more likely to report being insulted or treated disrespectfully. In addition, victimization rates were higher for black and Asian/Pacific Islander boys than for white boys, but no differences were found by race for females. Finally, Molidor and colleagues (2000) examined dating violence and abuse using a greater number of questions and found that 31 percent of girls and 33 percent of boys in their high school sample (n=635) reported experiencing some physical violence in their dating relationships. Notably, about 43 percent of the incidents occurred in school buildings or on school grounds.

Less is known about teen dating violence experiences among middle school youth. A recent study conducted by RTI International (2012) found that among nearly 1,500 seventh grade students in eight middle schools, 37 percent reported being a victim of psychological dating abuse in the six months prior to data collection and 15 percent reported being a victim of physical dating violence. Many youth also reported that friends were both victims and perpetrators of physical violence. Nearly one-quarter of students (24 percent) reported having a friend—either male or female—who was physically violent to his or her partner and more than one-fifth (21 percent) reported having a friend—either male or female—whose partner was physically violent toward him or her. Further, nearly half (49 percent) reported having been sexually harassed by a dating partner.

Far fewer youth report perpetrating teen dating violence than having been a victim of it, and the relevant literature also indicates conflicting levels of violence and abuse perpetration by gender. In some studies of adolescents, more boys than girls report sustaining violence and abuse from partners, and more girls than boys report perpetrating these behaviors with partners (Foshee, 1996; Malik, Sorenson, & Aneshensel, 1997; O'Keefe & Treister 1998; O'Leary, Smith Slep, Avery-Leaf, & Cascardi, 2008; West & Rose 2000). However, in many of the same studies, adolescent girls were more likely to report being sexually victimized by partners than boys (Foshee, 1996; O'Keefe & Treister 1998; West & Rose 2000). Young and colleagues (2009) found that 26 percent of high school boys and 53 percent of high school girls were victims of sexual assault; and that only 8 percent of males and 4 percent of females reported perpetrating

such acts. Similarly, a survey of more than 70,000 high school students found that 5 percent of males and 1 percent of females reported sexual violence perpetration (Borowsky, Hogan, & Ireland., 1997). Finally, O'Leary and colleagues (2008) found a similar race pattern for perpetration as was found for victimization in the Add Health data—Asian males reported the least amount of teen dating violence than other groups, with no differences in perpetration by race for females. However, Foshee and colleagues (2008) found that minority youth were more likely to perpetrate moderate and severe physical dating violence than nonminority youth, while Ackard and colleagues (2003) found that nonwhite boys were more likely to report dating violence than white boys.

Several other studies have shown young adult intimate partner violence and adolescent teen dating violence to be reciprocal, meaning that both partners engaged in violence and abuse perpetration toward one another (Fergusson, Boden, & Horwood, 2008; Gray & Foshee, 1997; Hendy, Weiner, Bakerofskie, Eggen, Gustitus, & McLeod, 2003; Lussier, Farrington, & Moffitt, 2009; O'Leary et al., 2008; Renner & Whitney, 2009). Using Add Health data, Whitaker and colleagues (2007) found that 24 percent of young adult intimate relationships could be characterized as physically violent, and half of these involved reciprocal violence. In reciprocally violent relationships, women reported more frequent violence than men. O'Leary and colleagues (2008) found that among their sample of 2,363 youth in seven high schools, if physical violence occurred between dating partners, typically both partners perpetrated it. In terms of severity of violence between partners, some studies show girls experiencing more severe types of physical assaults than boys (Molidor, Tolman & Kober, 2000), while other studies find girls are more likely to report perpetrating all types of physical violence, including severe forms of violence (Foshee, 1996). What is clear from these studies is that many adolescent relationships involve reciprocal violence, and there is conflicting evidence about which gender perpetrates more severe forms of violence toward the other.

Conflicting evidence also exists relating to injuries sustained during teen dating violence episodes. In some studies, girls are more likely to be hurt or require medical attention than boys, while boys report laughing about the violence perpetrated toward them (Foshee, 1996; Molidor, Tolman, & Kober, 2000). Certainly, the adult literature shows that females are much more likely to be killed by intimates—one-third of female homicide victims were killed by intimates in 2004, compared to only 3 percent of male homicide victims (U.S. Department of Justice 2006). Alternatively, a more recent study of adolescents by O'Leary and colleagues (2008) found that injuries were reported at similar rates by males and females, and both groups reported having injured their partner.

While the studies presented above either focus on heterosexual youth or do not distinguish LGBTQ youth in their samples, dating violence and abuse occurs for these youth as well, yet far less is known about it. Using data from Add Health, Halpern and colleagues (2004) studied 117 youth who reported having only same-sex sexual or romantic relationships in the 18 months prior to data collection. Twenty-four percent of these LGBTQ youth reported experiencing either psychological abuse or physical dating violence during that time (13 percent reported psychological abuse only; and 11 percent reported only physical violence). Girls in same-sex relationships were more likely to report experiencing psychological abuse and physical violence than were boys in same-sex relationships. Notably, girls in same-sex relationships were at similar

risk for violence as were girls from the sample in opposite-sex relationships. Alternatively, boys in same-sex relationships reported violence half as much as boys from the sample in opposite-sex relationships.

Further, findings from a community sample of youth attending a lesbian, gay, and bisexual (LGB) rally also indicated violence and abuse among same-sex dating partners (Freedner, Feed, Yang, & Austin, 2002). Of the sample of 521 youth, 35 percent were gay or lesbian, 29 percent were bisexual, and 36 percent were heterosexual. Some differences in dating violence and abuse patterns were found between these different groups of youth. Overall, 41 percent of males and 37 percent of females reported some type of dating violence and abuse. Bisexual males had nearly 4 times the odds of heterosexual males for experiencing some type of abuse (physical, psychological, or sexual) and over 5 times the odds of gay males for being threatened to be outed by a partner. For females, lesbians had over 2 times the odds of heterosexual females for reporting that their partner made them fearful for their safety; bisexual females had 2 times the odds of heterosexual females for reporting sexual abuse by a partner; and bisexual females had over 4 times the odds of lesbians for being threatened to be outed by a partner.

Turning now to geographic variations in teen dating violence, the research base is conflicted regarding rates in rural communities. National Crime Victimization Survey data show higher rates of intimate partner violence in urban areas as compared to rural areas (Rennison & Welchans, 2000) and some studies of urban areas identified similarly higher prevalence (O'Keefe, 1997; Watson, Cascardi, Avery-Leaf, & O'Leary, 2001). However, regionally-focused studies have inconsistent findings regarding differences in urban and rural prevalence. Bergman (1992) found the highest rates of teen dating violence in Midwestern suburban communities, followed by urban and rural areas, while Spencer and Bryant's (2000) research in New York state shows that teens in rural areas are most likely to be victims.

Cyber Abuse within Teen Dating Violence

Little is known about the extent to which teens experience teen dating violence via technology (cyber abuse), but a few studies have examined this issue. Draucker and Martsolf (2010) conducted a qualitative study with 56 participants to examine the role of electronic communications in dating violence and abuse. Their study highlights the myriad ways that youth can use technology to abuse their partners. Specifically, they found eight ways in which partners used electronic communications, the last six of which were related to violence, abuse, or controlling behaviors: (1) establishing a relationship; (2) nonaggressive communication; (3) arguing; (4) monitoring the whereabouts of a partner or controlling their activities; (5) emotional aggression toward a partner; (6) seeking help during a violent episode; (7) distancing a partner's access to self by not responding to calls, texts, and other contacts via technology; and (8) reestablishing contact after a violent episode. Poignant qualitative narrative from this study provided examples of cyber abuse, such as a male hacking into his partner's Facebook account, reading all of the messages she had ever received or posted, and then talking through these with her. Another example involved one partner creating a hate website about their former partner and allowing others to post to it with similarly nasty insults.

There have been a few studies assessing the prevalence of cyber abuse in teen dating relationships. For middle school youth, nearly a third of students (31 percent) reported being a

victim of electronic dating aggression (RTI International, 2012). In another study conducted in 2006, 615 teens age 13 to 18 from around the country participated in a study conducted by Teen Research Unlimited, commissioned by Liz Claiborne, Inc. (Picard, 2007). The findings showed that youth are both victims and perpetrators of abuse through technological devices; however, the details of the findings were only released regarding victimization experiences. More specifically, 25 percent of youth reported having been called names, harassed, or put down by their partner via cell phone and texting; 22 percent reported having been asked by cell phone or the Internet to do something sexual they did not want to do; 19 percent reported that their partner used a cell phone or the Internet to spread rumors about them; 18 percent reported that their partners used a social networking site to harass them or put them down; 11 percent reported that their partner shared private or embarrassing pictures or videos of them; 17 percent reported that they were made to feel afraid of what their partner might do if they did not respond to their partner's cell phone call, e-mail, instant message, or text message; and 10 percent reported being physically threatened by their partner through an e-mail, instant message, or text message.

Understanding Why Girls and Boys Perpetrate Teen Dating Violence and Abuse

Motivating factors for perpetrating teen dating violence vary between girls and boys, with some degree of overlap. Girls are more likely than boys to report defending themselves against violent acts perpetrated by partners and/or fighting back (Foshee, Bauman, Linder, Rice, & Wilcher, 2007; Molidor, Tolman, & Kober, 2000; Mulford & Giordano, 2008; O'Keefe, 1997; O'Keefe & Treister, 1998). Molidor and colleagues (2000) also found that girls were more likely than boys to report that dating violence and abuse occurred while their partners were making sexual advances toward them, and that only 27 percent of boys reported that their dating partners initiated the violence while 70 percent of the girls reported the same. O'Keefe (1997) found a similar pattern of initiation, although the differences between boys and girls initiating were not statistically significant. Thirty-six percent of females reported that their boyfriend usually or always initiated violence, while 24 percent of boys reported the same about their girlfriends. Forty-two percent of females reported that they and their boyfriends were equally responsible for initiating the violence, and 48 percent of the boys reported the same. Finally, 21 percent of females reported that they usually or always initiated the violence, while 28 percent of boys reported the same. Given these gender differences in offensive versus defensive motivations, some reports of violence sustained by adolescent boys (or girls) may in fact be a response to their own acts of violence toward girlfriends (or boyfriends).

O'Keefe and colleagues (O'Keefe, 1997; O'Keefe & Treister, 1998) also asked perpetrators of dating violence why they used violence. The most frequently cited reason for males was anger followed by the desire to control their dating partner. The most frequently cited reason for females was anger followed by self-defense. Jealousy was the third most frequently cited reason for both males and females. Parallel to these findings, Foshee and colleagues (2007) found anger as a primary motivating factor for perpetrating teen dating violence among girls.

Finally, one important element that might contribute to teen dating violence perpetration is related to youth's perceptions of acceptance of physical violence toward romantic partners. Two recent studies indicate widespread acceptance of female physical violence toward dating partners. RTI International (2012) examined this issue among middle school students and found that half of the 1,430 students strongly agreed with the idea that it was okay for a girl to hit her

boyfriend under certain circumstances. However, only 7 percent of those same students reported that it was okay for a boy to hit his girlfriend under certain circumstances. A similar pattern was found among ninth graders (Reeves & Orpinas, 2012). In a group of 624 ninth graders, one out of three reported support for girls hitting boyfriends, while half that amount reported support for boys hitting girlfriends. Further, among girls in general, the belief that it was okay for girls to hit boyfriends was correlated with their likelihood of perpetrating physical dating violence. For boys in general, the belief that it was okay for boys to hit girlfriends was also correlated with their likelihood of perpetrating dating violence.

Factors Related to Teen Dating Violence and Abuse

One of the goals of this study, as noted above, is to examine whether experiencing cyber abuse (within teen dating relationships or through bullying) relates to other life factors. Although the data for this study are cross-sectional in nature and we cannot make claims as to whether other life factors precede or are consequences of experiencing cyber abuse, we do explore how this type of abuse relates to other areas of youth's lives and behaviors. We organize these other life factors using an ecological systems theory (Bronfenbrenner 1979; 1998) framework, which posits that individuals interact with multiple levels of social ecology throughout their development and lives. This theoretical perspective emphasizes the importance of the broader context in which individuals live, and how multiple systems interact to describe one's development and behavior. More specifically, these systems include domains such as family, peer, individual, and school characteristics. For the purposes of this study, we focus on other life factors in the individual (psychosocial and behavioral factors), school, family, and partner relationship domains. Below we review the literature on factors shown to be related to both violence and abuse perpetration and victimization in intimate relationships. The literature is a mix of studies focused on adolescents and young adults; thus, we use the term intimate partner violence to capture information about multiple age groups.

Research related to victimization has primarily focused on the individual and family domain. *In the individual domain*, experiencing dating violence has been linked with psychosocial adjustment, mood, depression, and suicidal ideation (Ackard, Neumark-Sztainer, & Hannan, 2003; Foshee, Benefield, Ennett, Bauman, & Suchindran, 2004; Howard & Wang, 2003; Howard, Wang, & Fang, 2007; Howard, Wang, & Fang, 2008; Lehrer, Buka, Gortmaker, & Shrier, 2006; for a review see Vezina & Hebert, 2007). Girls and boys who experience teen dating violence are also more likely to report alcohol and other drug use (Eaton et al., 2007; Fergusson, Boden, & Horwood, 2008; Foshee et al., 2004; for a review see Vezina & Hebert, 2007) and dieting, eating disorders, and binge/purging behavior (Ackard, Neumark-Sztainer, & Hannan, 2003). Teen dating violence has been linked with early maturation (Foster, Hagan, & Brooks-Gunn, 2004), and sexual activity. Youth who report physical violence with partners are also more likely to report ever having had sexual intercourse, early initiation of sexual behaviors, recent sexual partners, being in a relationship that involves sexual activity, and unprotected sex (Eaton et al., 2007; Howard & Wang; 2003; Howard, Wang, & Fang, 2008; Howard, Wang, & Fang, 2007; Kaestle & Halpern, 2005; Roberts, Auinger, & Klein, 2008; Silverman, Raj, Mucci, & Hathaway, 2001; for a review see Vezina & Hebert, 2007).

In the family domain, both witnessing domestic violence as a child and experiencing abuse as a child predict intimate partner violence in young adulthood and dating violence victimization

(Arriaga & Foshee, 2004; Caetano, Cunradi, Clark, & Schafer, 2000; Chen & White, 2004; Feerick, Haugaard, & Hien, 2002; Fergusson, Boden, & Horwood, 2008; Gover, Kaukinen, & Fox, 2008). Other family characteristics that increase the likelihood of reporting victimization include family adversity and dysfunction (Fergusson, Boden, & Horwood, 2008) and lower parental monitoring (Howard, Qiu, & Boekeloo, 2003). Good relationships with parents are related to decreased likelihood of reporting teen dating violence (for a review see Vezina & Hebert, 2007).

Limited research has been conducted *in the school domain.* However, the research that has been conducted shows that girls who experience teen dating violence have more problems in school but not necessarily problems with academics (see Vezina & Hebert, 2007, for a review of literature). Alternatively, girls who are connected to school and achieve academically are less likely to have experienced teen dating violence. Research has not been conducted to understand teen dating violence and boys' school experiences.

In terms of perpetrating teen dating violence and intimate partner violence, specific factors within *the individual domain* have been shown to relate to such behaviors. For instance, a perpetrator's prior experience with violence more generally has been shown to affect the probability of perpetrating intimate partner violence. Using Add Health data, Herrara and colleagues (2008) found that having general tendencies toward violence, as well as being a target of relationship violence during young adulthood, predicted perpetration. In addition, many researchers have found a relationship between substance use and perpetrating intimate partner violence and dating violence, as well as increased risk for injury during intimate partner violence episodes (Caetano et al., 2000; Fergusson, Boden, & Horwood, 2008; Kantor & Straus 1987; Kyriacou, Anglin, Taliaferro, Stone, Tubb, Linden, Muelleman, Barton, & Kraus, 1999; Stark & Flitcraft 1991). Substance use has also been related to perpetration of sexual violence, although not necessarily in the context of an intimate relationship (Brecklin & Ullman, 2002; Menard, Hall, Nagayama, Ghebrial, Erian, & Martin, 2003; Borowsky et al., 1997). Finally, as noted previously, acceptance of dating violence and holding beliefs supportive of violence between partners has been shown to be related to perpetration of such behaviors (Reeves & Orpinas, 2012; RTI International, 2012).

In the family domain, both witnessing intimate partner violence as a child or adolescent and experiencing abuse as a child predicts later perpetration of intimate partner and sexual violence (Borowsky et al. 1997; Edwards, Desai, Gidycz, & VanWynsberghe, 2009; Fang & Corso 2007, 2008; Feerick et al. 2002; Fergusson, Boden & Horwood, 2008; Foshee, Karriker-Jaffe, Reyes, Ennett, Suchindran, Bauman, & Benefield, 2008; Gover, Kaukinen & Fox, 2008; Hendy et al. 2003; Holtzworth-Munroe & Meehan 2002; Ireland & Smith 2009). Further, two studies that specifically examined gender variation in perpetration found that male (but not female) adolescents who witnessed parental fighting were more likely to perpetrate intimate partner violence (Chen & White, 2004) and sexual violence (Borowsky et al., 1997). Family characteristics beyond the presence of violence are also related to perpetration of intimate partner violence. Magdol and colleagues (1998) found that close family relationships and growing up in a household with both parents were related to a lower risk of perpetrating partner abuse in adulthood. Family relations were more strongly protective against perpetrating intimate partner violence for women than for men.

Within *the partner relationship domain*, less is known about teen dating violence and youth, but there is more literature on young adults and adults. Low marital satisfaction and relationship conflict have been related to an increased likelihood of perpetrating intimate partner violence (Christopher 2001; Hettrich & O'Leary, 2007; Julian, McKenry, Gavazzi, & Law, 1999; National Research Council 1998). Herrara and colleagues (2008) found that women were most likely to be generally violent when in relationships with violent men, but when they were in relationships with nonviolent men, their own violent tendencies did not lead to intimate partner violence. However, men's general violence was not influenced by their partner's use of physical violence.

Relatively less research has been conducted with regard to dating violence and abuse perpetration *in the school domain.* Exceptions to this include the large cross-sectional study of adolescents by Borowsky and colleagues (1997), which found that females with a lower grade point average were more likely to perpetrate sexual aggression than those with better school performance; however, this connection did not exist for boys. Other researchers have found that dropping out of school early was associated with an increased risk of perpetrating intimate partner violence (Magdol, Moffitt, Caspi, & Silva, 1998).

Next, we turn to the literature on bullying and summarize some of the extant findings regarding both traditional and cyber bullying behavior.

Bullying

As with teen dating violence, bullying encompasses varying degrees and types of abuse ranging from physical to psychological, but not within the context of teen's dating relationships. Rather, it occurs among youth in general, in school or within in the community, and it is usually inflicted over a period of time. Noted bullying researcher, Olweus (1993), has defined bullying as being "exposed, repeatedly and over time, to [unwanted] negative actions on the part of one or more other persons, [with a victim who] has difficulty defending himself or herself." Of specific note, Olweus' definition includes intentional infliction of harm by the perpetrator and an imbalance of power between the perpetrator and victim, such that the victim has diminished physical, emotional, or social capability of stopping the perpetrator's behavior.

Cyber bullying is a relatively new term arising out of the digital age that refers to bullying behavior carried out through electronic or digital media and technology (Kowalski, Limber & Agatston, 2008). Like traditional face-to-face bullying, cyber bullying intentionally and repeatedly communicates abusive or distressing messages intended to inflict harm on others (Tokunaga, 2010; Cook, Williams, Guerra & Tuthill, 2007). Unlike face-to-face bullying, cyber bullying perpetrators often enjoy some degree of anonymity, the very essence of which can cause those who might not otherwise perpetrate such behaviors to lose inhibition and engage in cyber bullying (Dooley, Pyzalski & Cross, 2009). In fact, some researchers have argued that the anonymity afforded to cyber bullies is a form of power in itself, thereby overriding the traditional requirement of a power imbalance between perpetrator and victim (see Dooley et al., 2009; Fauman, 2008).

Prevalence of Bullying

Traditional bullying among adolescents has been studied for decades with fairly consistent findings. Bullying appears as early as elementary school and continues through middle and high school. Bullying behaviors consist of those that are physical, verbal (e.g., name calling, threats), and psychological (e.g., rumor spreading, social isolation), with cyber-related behaviors (defined previously) added recently as a fourth category. Researchers have distinguished three groups of relevant adolescents: those who bully, those who are victimized, and those who are "bully-victims" (youth who both bully and are victims of bullying).

Studies that have looked at the prevalence of bullying in the U.S. have found between 10 and 30 percent of youth are involved as either perpetrators or victims of bullying behavior (Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001; Solberg & Olweus, 2003; Cook et al., 2010). Nansel and colleagues (2001) surveyed over 15,500 students in public and private schools (grades 6 through 10) and found that 30 percent reported moderate or frequent involvement in bullying. Specifically, 13 percent of youth reported bullying perpetration, 11 percent reported bullying victimization, and 6 percent reported both. More recently, Wang, Iannotti, and Nansel (2009) surveyed 7,500 adolescents in grades 6 through 10 from 230 schools, as part of the 2005-06 Health Behavior in School-Aged Children (HBSC) study, and found that 13 percent said they had physically bullied others at least once in the prior two months, 37 percent had verbally bullied others during that time, 27 percent had socially bullied others, and 8 percent had electronically bullied others. Wang et al. (2009) also found that 13 percent of youth reported being physically bullied in the prior two months, 36 percent reported being verbally bullied, 41 percent reported being psychologically bullied, and 10 percent said they had been cyber bullied.

With regard to overlap between bullying victimization and perpetration, Wang and colleagues (2009) found that a third or more youth involved in verbal, psychological, or cyber bullying were both victims and perpetrators of such behavior. Specifically, of the youth involved in verbal, psychological, and cyber bullying, 38, 33, and 33 percent, respectively, were bully-victims (compared to 30, 19, and 27 percent who were bullies only and 32, 48, and 40 percent who were victims only). For physical bullying, 26 percent of those involved were bully-victims, compared to 39 percent who were bullies only and 36 percent who were victims only. Prior to Wang and colleagues' (2009) study, researchers Carlyle and Steinman (2007) found a similar degree of overlap between bullying victims and perpetrators in a survey of youth across 16 school districts in a large metropolitan area (n=79,942). Overall, Carlyle and Steinman (2007) found that 7 percent of youth in the sample were bully-victims, 11 percent were bullies only, and 13 percent were victims only.

In recent years, a number of studies have looked specifically at the prevalence of and factors related to *cyber bullying* victimization and perpetration, particularly among middle and high school youth. Prevalence estimates of cyber bullying behaviors range widely, from 6 to 42 percent, with differences in part due to inconsistent definitions and the lack of a standardized cyber bullying assessment tool. In one of the earliest studies, Ybarra and Mitchell (2004) found that 19 percent of a sample of Internet users between the ages of 10 and 17 had either been cyber bullied or perpetrated cyber bullying. By contrast, two studies by Hinduja and Patchin (2006; 2008) identified approximately 30 to 35 percent of youth respondents as being victims of cyber

bullying, and 11 percent as having perpetrated cyber bulling against others. Williams and Guerra (2007) found a similar rate of cyber bullying perpetration among 3,300 students in 5th, 8th and 11th grade: 9 percent of youth reported perpetrating Internet bullying, compared to substantially larger shares who reported perpetrating verbal bullying (71 percent) or physical bullying (40 percent). Notably, all types of bullying perpetration were highest among youth in 8th grade, a year during which many were preparing to transition from middle to high school.

As part of its Internet & American Life Project, the Pew Research Center conducted a national study of teens' experiences on social network sites and found that 19 percent of the 799 teens surveyed had been bullied in the past year, of which 12 percent were bullied in person, 9 percent were bullied via text message, 8 percent were bullied online (through e-mail, instant messaging, or social networking site), and 7 percent had been bullied through phone calls (Lenhart et al., 2011). As for perpetration behaviors, 88 percent of teens reported witnessing someone else be mean or cruel to another person, 67 percent said they had seen another joining in the harassment they witnessed, and 21 percent of those who witnessed online cruelty (or, 18 percent of teens in the sample) said they participated in such cyber bullying. Juvonen and Gross (2008) used an anonymous web-based survey to collect data from 1,454 youth ages 12 to 17, and found that about three-quarters of respondents said they had experienced at least one incident of online bullying (72 percent) and at least one incident of traditional bullying (77 percent). The researchers also found that heavy Internet use (more than three hours a day) significantly increased the likelihood of cyber bullying, almost sevenfold, while heavy use of webcams (1-2 times per week) and message boards (almost every day) increased the likelihood of repeated cyber bullying. Overall, half of the students said they were cyber bullied by a schoolmate, 43 percent by someone they knew from online, and 20 percent by someone they knew offline but not from school. Most youth (90 percent) reported not telling adults about cyber bullying incidents, mainly because they felt that they should deal with it themselves (50 percent), followed by not wanting their Internet access restricted (31 percent). To address perpetrators, 33 percent of respondents reported blocking their screen name.

With regard to the co-occurrence of cyber bullying and other types of bullying behavior, Wang et al. (2010) specifically examined the issue and found that, among victims of traditional bullying, almost a fifth (18 percent) also reported experience with cyber bullying (male: 20 percent; female: 15 percent). In contrast, among cyber bullying victims, almost all (95 percent) also reported being victims of traditional bullying (male: 96 percent; female: 94 percent). Recent international studies have also found a fairly high degree of overlap between cyber bullying and traditional bullying experiences in non-U.S. samples of youth (see, e.g., Cross, Shaw, Hearn, Epstein, Monks, Lester & Thomas, 2009; Gradinger, Strohmeier & Spiel, 2009).

Gender, Race, Age, and Sexuality

A number of prior U.S. studies have looked at bullying perpetration and victimization by gender, with researchers universally finding that boys are more likely to be targets of direct victimization (e.g. physical bullying), whereas girls are more likely to be targets of indirect victimization (e.g. relational and psychological bullying) (Jeffrey, Miller & Linn, 2001; Nansel, et al., 2001; Bjorkqvist, 1994; Wang et al., 2009; Berthold and Hoover, 2000). As for cyber bullying, boys are more likely to be cyber bullies, and girls are more likely to be cyber bullying victims (Wang et al., 2009; Mouttapa, et al., 2004). In a longitudinal study conducted over the course of three

years by Espelage, Basile and Hamburger (2012), 1,391 students from grades 5 to 8 in 4 Midwestern schools were surveyed about bullying and sexual victimization/perpetration. Researchers found that 12 percent of both males and females were bullying perpetrators, but that 34 percent of males and 20 percent of females engaged in some form of homophobic teasing. With regard to cyber bullying, Hinduja and Patchin (2008) reported that 32 percent of boys and 36 percent of girls were victims of cyber bullying, whereas 18 percent of boys and 16 percent of girls reported perpetrating cyber bullying.

Very little research on bullying has focused on race or ethnicity. However, some studies have found that black students report less victimization than white or Hispanic youth (Nansel et al., 2001; Wang, et al., 2009; Bradshaw, et al., 2009), while other studies report that black middle school youth are more likely to be categorized as bullies and bully-victims than are white students (Juvonen, Graham, & Schuster, 2003; Carlyle & Steinman, 2007; Bradshaw, et al., 2009; Glew, et al., 2005). Native Americans have been reported to have high rates of perpetration in higher grades (Carlyle and Steinman, 2007). Wang et al. (2009) found that Hispanic adolescents were more likely to be physical bullies or cyber bully-victims than white youth.

The age trajectory of bullying—for victims, bullies and bully-victims—appears consistent across studies. Researchers have found that almost all forms of bullying (physical, verbal, social, and cyber) tend to peak in middle school and then decrease once youth enter tenth grade (e.g., Hazler, 1996; Rios-Ellis, Bellamy, & Shoji, 2000, Nansel et al., 2001; Wang, et al., 2009). Notably, reports of bullying are more likely to be higher around middle to high school transition years, or specifically: 8th grade for boys and 9th grade for girls (Peplar, et al., 2006). Carlyle and Steinman (2007) found that when comparing 8th and 12th graders, perpetration among females declined from 18 to 11 percent, while for males the decline was from 27 to 21 percent. In a study of middle school students (4th-6th graders; n=591), Berthold and Hoover (2000) documented that 29 percent of 6th grade students—a transition year—reported perpetrating bullying versus 17 percent of 5th graders.

With regard to location, studies have shown very little difference in the frequency of bullying victimization among youth from urban, suburban, town, and rural areas; however more rural youth report bullying perpetration than youth from suburban and urban areas (Nansel, et al., 2001). Adolescents from more affluent families are more likely to be victims of cyber bullying (Wang, et al., 2009). Less structure and supervision increases the likelihood of student bullying on school grounds—mainly on playgrounds, in lunchrooms, and in hallways (American Association of University Women Educational Foundation, 2001; Craig and Peplar, 1997). In one study, 32 percent of middle school students identified school hours as the time during which they received the most peer abuse (Berthold and Hoover, 2000). Another study reported that the playground was the most likely site for victimization (71 percent), followed by the classroom (46 percent), gym (40 percent), lunchroom (39 percent), halls and stairs (33 percent), and buses (28 percent) (Glew et al., 2005).

Despite increased media attention surrounding the bullying and victimization of lesbian, gay, bisexual, and transgender (LGBT) youth, there has been a paucity of research conducted on the prevalence and risk factors associated with bullying of LGBT youth both on and off school

grounds. In a survey by Kosciw, et al. (2008), 85 percent of LGBT youth reported experiencing some form of bullying or harassment at school, and Rivers (2001) reported that 82 percent of a LGBT student sample reported being targets of name calling and 60 percent reported being assaulted. Birkett, et al. (2009) surveyed 7,376 7th and 8th grade students from a large Midwestern county and found that LGBT youth were more likely to report high levels of bullying and homophobic victimization. Sexually questioning youth reported significantly greater victimization than lesbian, gay, bisexual, or heterosexual students. Sexually questioning students also reported significantly more depression/suicidal feelings, greater use of alcohol/marijuana, more truancy, and the lowest levels of positive school climate. However, one study found that if the school climate is perceived to be positive, it can serve as a buffer against bullying of LGBT youth (Espelage, Aragon, Birkett & Koenig, 2008; Birkett, Espelage & Koenig, 2009).

Factors Related to Bullying

As mentioned previously, one of the goals of this study is to examine whether experiencing cyber abuse—within teen dating relationships or through bullying—relates to other life factors. Although the data for this study are cross-sectional in nature, so we cannot make claims as to whether other life factors precede or are consequences of experiencing cyber abuse, we do explore how bullying relates to other areas of youth's lives and behaviors. Again, following the ecological systems theory (Bronfenbrenner, 1979; 1998) framework, we focus on life factors in the individual domain (e.g., psychosocial and behavioral factors), school domain, family domain, and friendship/relationship domain. Below we review the literature on factors shown to be related to both perpetration and victimization with regards to bullying.

Research on correlates of bullying victimization has primarily focused on the *individual, school, and friendship/relationship domains*. Studies have found that bullying is related to school achievement, prosocial skills, and the psychological well-being of not only the victim but also the perpetrator (Hawker and Boulton, 2008; Roland, 2002). Marini, et al. (2006) looked specifically at the psychosocial risk factors associated with youth involved in bullying and victimization, and found that female bully-victims and victims were more likely to have increased social anxiety due to negative evaluation from their peers. Other studies have shown that the more types of victimization a youth experiences, the poorer physical and psychological distress they may exhibit, particularly for girls (Wang, et al., 2010; Carlyle and Steinman, 2007; Berthold and Hoover, 2007). Female victims are also more likely to take medication for sleeping issues and demonstrate higher levels of depressive symptoms (Wang, et al., 2010). Additional factors that have been linked to increased victimization risk include not fitting in with a peer group (Hoover, Oliver & Thompson, 1993), obesity (Janssen, Cray, Boyce & Pickett, 2004), and developmental disabilities (Little, 2002).

Bullying perpetration research has focused on the same domains. Bullies tend to exhibit more problem behaviors (drinking, smoking, poor school achievement), but are socially competent (Nansel, et al., 2001; Berthold and Hoover, 2007). Some research suggests that bullies demonstrate deficiencies in social problem solving (Slee, 1993; Warden & Mackinnon, 2003), while other research has linked bullying behavior to seemingly positive social competencies, such as higher social intelligence (Kaukiainen et al., 1999). Bullies have also been shown to be considered powerful and popular by their peers (Rodkin, Farmer, Pearl & Van Acker, 2006;

Thunfors & Cornell, 2008; Vaillancourt et al., 2003). Although there has been a number of studies that have shown links between developmental disabilities and victimization (Llewellyn, 2000; Marini et al., 2001; Norwich and Kelly, 2004), other research has indicated that students with disabilities display more bullying and/or aggressive behaviors than students without disabilities (Kaukiainen et al., 2002; Unnever & Cornell, 2003).

With regard specifically to the *school domain*, Berthold and Hoover (2007) found that over 30 percent of bullied students found school difficult and reported getting into trouble at school, while a similar share (32 percent) said they were afraid to go to school and wanted to stay home from fear of getting hurt. Fear of being bullied can ultimately lead victims to drop out of school (Sharp, 1995). In a survey of 3,530 elementary school students, bullying victims were 4 times more likely than non-victims to feel that they did not belong at school (Glew, et al., 2005). Another study found that a higher student-teacher ratio, a higher number of students receiving reduced-cost meals, and a higher mobility rate were associated with a lower likelihood that students would feel safe from bullying and violence (Bradshaw, et al., 2009). Positive school climate could potentially buffer the negative impact of low parental care and few positive peer influences on bullying and victimization (Espelage and Swearer, 2009). Youth have reported that the more connected they feel to schools, the lower their self-reported involvement in verbal, physical, and cyber bullying perpetration (Williams and Guerra, 2007).

In the family domain, Nansel, et al. (2001) found that increased parental involvement in school was related to both being bullied and bully-victims. The authors hypothesized that this might be a result of parents becoming more involved in their child's life because they were being bullied or that heightened parental involvement makes children less independent and thus more vulnerable to bullying. Marini, et al. (2006) found that indirect bully-victims experienced more alienation from their mothers than any other group. Several studies have found that greater bullying and victimization is correlated with fewer positive peer influences and fewer parent-child relationships that were perceived as caring according to the student (Espelage and Swearer, 2009). One study found that approximately 30 percent of youth who reported experiencing bullying believed that they were less able than their parents believed they were (Berthold and Hoover, 2007). However, other studies have shown that positive parental support can reduce the likelihood of a child being bullied and becoming a bully (Wang, et al., 2009; Haynie, et al., 2001; Bowers et al., 1994).

Although there is little to no research on the links between intimate relationships and bullying, research has been conducted on the influence of friendships on bullying. Thus, *in the friendship domain,* peers often reinforce bullying behavior, and such behavior can be seen as acceptable and normative within the peer group (Salmivalli et al., 1996; Salmivalli & Voeten, 2004; Marini, et al., 2006). Having aggressive friends is associated with lower rates of victimization, whereas having non-aggressive friends is associated with higher rates of victimization (Mouttapa, et al., 2004). Additionally, Esplanage, Holt & Henkel (2003) found that for both boys and girls, peer group bullying predicts individual bullying behaviors over time, even after controlling for levels of baseline bullying. Meanwhile bully-victims are more likely to be rejected and isolated by their peers and negatively influenced by the peers that they interact with (Cook, et al., 2010). That being said, several studies have shown that the more friends an adolescent has (even if those friends are non-aggressive) the less likely they will be selected as targets by bullies (Hodges, et

al., 1999; Boulton, et al., 1999; Mouttapa, et al., 2004).

Study Research Questions

The above literature addressing teen dating violence/abuse and bullying indicate that we have learned a great deal in the past two decades about these issues. However, many questions still remain, particularly related to how technology relates to these experiences for youth. The nature of teen dating violence via cyber abuse and the nature of cyber bullying have not yet been fully explored, particularly among U.S. youth. Nor do we know how these experiences may be uniquely related to other factors in individual lives, including psychosocial adjustment and other behaviors (such as substance use and sexual activity). Thus, the present study is guided by a series of research questions to address these gaps in knowledge.

Teen Dating Violence and Abuse

To further understand the role of cyber abuse in teen dating violence and abuse, we posed the following research questions:

RQ 1. **How often do youth experience dating violence and abuse victimization?** Within their dating relationships, to what extent do youth experience violence and abuse? Does the extent to which youth experience abuse via technology differ from the extent to which they experience other psychologically abusive experiences, sexual coercion, and physical violence from dating partners?

RQ 2. **How often do youth perpetrate dating violence and abuse?** Within their dating relationships, to what extent do youth perpetrate violence and abuse? Does the extent to which youth perpetrate abuse via technology differ from the extent to which they perpetrate other psychological abuse, sexual coercion, and physical violence against dating partners?

RQ 3. **Does teen dating violence and abuse vary by gender, and is it reciprocal?** Are there differences in dating violence and abuse victimization and/or perpetration rates based on gender? What proportion of this violence is reciprocal?

RQ 4. **Does teen dating violence and abuse vary by other subgroup status?** Specifically, are there differences in dating violence and abuse victimization and/or perpetration rates based on sexual orientation or middle school/high school status?

RQ 5. **Does teen dating violence and abuse happen at school?** Do dating violence and abuse experiences happen on school grounds and during the school day?

RQ 6. **Do teen dating violence and abuse victims seek help?** Are youth seeking help if they experience dating violence and abuse? To whom do the youth report these experiences (e.g. friends, parents, teachers, other school staff, police, no one)?

RQ 7. **How often does cyber dating abuse co-occur with other types of violence and abuse, including cyber bullying?** To what extent do youth who experience and/or perpetrate dating abuse via technology also experience/perpetrate physical violence, sexual abuse, and/or psychological abuse from partners? Also, do experiences of cyber dating abuse overlap with

those of cyber bullying?

RQ 8. **How does cyber dating abuse relate to other life factors?** How does experiencing dating abuse via technology relate to: psychosocial measures (anxiety, depression, and anger), behavioral measures (substance use, sexual activity, delinquency, and daily activities), school measures (grades and attendance), family measures (parental support and activities with parents), and relationship measures (positive relationship qualities)?

Bullying

To further understand the role of cyber bullying in youth's lives, we posed the following research questions:

RQ 1. **How often do youth experience bullying victimization?** Outside of teen's dating relationships, to what extent do youth experience bullying from others? Does the extent to which youth experience cyber bullying—that is, psychologically abusive contacts via technology (e.g., social networking sites, texting)—differ from the extent to which they experience other psychological bullying and physical bullying?

RQ 2. **How often do youth perpetrate bullying?** Outside of teen's dating relationships, to what extent do youth report perpetrating bullying against others? Does the extent to which youth perpetrate cyber bullying differ from the extent to which they perpetrate other psychological bullying or physical bullying?

RQ 3. **Does bullying vary by gender, and do bullying victims and perpetrators overlap?** Are there differences in cyber bullying and other bullying victimization and/or perpetration rates based on gender? What proportion of youth is both victimized and perpetrating?

RQ 4. **Does bullying vary by other subgroup status?** Specifically, are there differences in bullying victimization and/or perpetration rates based on sexual orientation or middle school/high school status?

RQ 5. **Does bullying happen at school?** Do bullying experiences happen on school grounds and during the school day?

RQ 6. **Do bullying victims seek help?** Are youth seeking help if they experience bullying? To whom do the youth report these experiences (e.g., friends, parents, teachers, other school staff, police, no one)?

RQ 7. **How often does cyber bullying co-occur with other types of violence and abuse, including cyber dating abuse?** To what extent do youth who experience and/or perpetrate cyber bullying also experience/perpetrate physical and/or psychological bullying? Also, do experiences of cyber bullying overlap with those of cyber dating abuse?

RQ 8. **How does cyber bullying relate to other life factors?** How does experiencing cyber bullying relate to: psychosocial measures (anxiety, depression, and anger), behavioral

measures (substance use, sexual activity, delinquency, and daily activities), school measures (grades and attendance), and family measures (parental support and activities with parents)?

Chapter 2: Study Methods

Design

This study employed a cross-sectional survey research design to capture the prevalence of youths' experiences with teen dating violence and abuse and bullying, particularly in regard to cyber abuse; compare those rates across differing subgroups of youth; and examine the correlational associations between such experiences and other life factors. Toward that end, we conducted a large-scale survey of 7th–12th grade youth using a convenience sampling of schools in the northeastern U.S. The sampling goals were (1) to achieve a sample size large enough to examine teen dating violence and abuse and bullying, given that only a portion of any sample would report such experiences; (2) to recruit schools that were willing to allow access to youth on a single school day to conduct a survey about sensitive topics; and (3) to recruit schools with populations diverse enough to yield sizable, racially/ethnically and socioeconomically diverse subgroups of youth.

As is priority with any study involving human populations and sensitive information, we first sought and obtained approval from the Urban Institute's Institutional Review Board (IRB) for procedures to conduct the survey while protecting the anonymity of youth and the confidentiality of schools that participated in the study. Once IRB approval was obtained, we began the process of selecting the final sites for survey administration.

Site Selection

During the site selection process, we encountered a number of challenges. Despite the fact that three school districts had previously offered letters of support for the study, two of these districts were unable to be included in the final study sample. In one district, the superintendent continued to support the study's objectives, but the district's high school principal disagreed and did not see the value of participating. In a second district, which had its own IRB procedure, school administrators requested that we require *active* rather than *passive* consent from youths' parents and reapply for approval with no guarantee such a change would suffice. Since the Urban Institute's own IRB had previously approved use of passive consent for survey administration, and since final IRB approval from this school district was not assured even if such a change was made, we determined that this district's participation in the study was not desirable.

The third school district, in the Capital District of New York, continued to support the study and allowed both a middle school and a high school to participate in the survey. This district also assisted the research team in recruiting two additional districts in the surrounding area for study participation. These additional districts allowed us to meet the sampling goals of achieving a large sample size and identifying schools willing to allow a survey about sensitive topics, yet they did not increase the racial/ethnic diversity of the overall sample sufficiently. Therefore, we independently located two additional school districts willing to participate in the study—one in northeastern Pennsylvania and one in northern New Jersey—which satisfied the last sampling objective of achieving sufficient sizes of racially/ethnically and socioeconomically diverse subgroups of youth. It also allowed us to include schools in small urban, suburban, and rural geographic areas.

Once sites were finalized, but prior to the date of survey administration, we encountered additional challenges specific to middle school student participation. In one of the New York districts and in the Pennsylvania district, a number of parents and some 7th and 8th grade teachers and guidance counselors in the schools expressed concerns about the study. These districts ultimately decided to allow only their high school students (grades 9–12) to take the survey. Additionally, while the New Jersey high school superintendent encouraged all four middle schools in the district to participate in the study, middle school principals were not as supportive of the study, and these efforts were ultimately not successful.

The final study sample included 10 schools across five school districts located in three northeastern states—New York, Pennsylvania, and New Jersey. Table 1 (next page) shows the demographic characteristics of each school, including size, racial/ethnic breakdown, and proportion of students receiving free or reduced school lunch (a measure of school socioeconomic status).[5] Notably, another important characteristic of the participating schools, like many districts throughout the country, is that each had some type of anti-bullying programming in their middle and high schools and some of these programs also had an anti-TDV and abuse component.

Survey Development and Procedure

Survey development occurred simultaneous to the site recruitment process. The first part of the process involved finalizing the key topics, or domains, about which we wanted to ask youth. Once these domains were finalized, we reviewed the relevant literature for preexisting survey measures that could be used or adapted for the current study. We drafted a survey with a target time of 30 minutes for completion. This process was executed in collaboration with two expert consultants who provided review and feedback on the survey content—staff from the National Network to End Domestic Violence who served as dating violence experts and Dr. CJ Pascoe from Colorado College, who served as an expert on the intersection of technology use and abuse among teens.

The survey was piloted by a group of 8th grade (n=11) and 12th grade (n=12) students in one New York district. The 8th grade youth were purposefully chosen for the pilot because they were not attending school in the same district in the following year (when the survey would be administered) and therefore would not be part of the final sample. The 12th grade youth selected for the pilot were chosen because they ranged in scholastic ability level, previous romantic relationship history, and sexual orientation, and would be graduating before survey administration so would not be part of the final sample. For the 8th grade youth, a passive parental consent process was employed using the procedures specified in the Urban Institute's IRB approval (letters informing parents about the survey were sent home and parents were offered a chance to opt their child out of the survey if desired). For the 12th grade youth, all youth who piloted the survey were over 18, so no parental consent process was conducted. For the pilot, students completed both the survey and a feedback form, indicating what survey changes they would recommend and what questions/instructions were unclear. Survey completion ranged from 12 to 36 minutes. Youth in the pilot study seemed to take the process

[5] Data were derived from each district's most recent school report card reported by each state. If specific citation information was provided herein, then schools would be identified, which violates the protections set forth by the Urban Institute's Institutional Review Board for the Protection of Human Subjects.

Table 1. Secondary School Demographic Information	Size	Race						Recipients of free or reduced school lunch
	N	(%)						(%)
		White	Black or African American	Hispanic or Latino	American Indian or Alaska Native	Asian, Native Hawaiian, or other Pacific Islander	Multi-racial	
Capital District, NY								
High school 2 and middle school 1	843	76	13	8	0	1	2	46
High school 1	408	98	2	0	0	0	0	12
High school 3	1,113	97	1	1	0	1	0	10
Middle school 2	573	96	1	1	0	1	1	10
Northeastern PA								
High school 1	607	53	24	20	—	—	—	64
High school 2	598	47	28	22	—	—	—	70
High school 3	1,041	74	11	13	—	—	—	54
Northern NJ								
High school 1	820	87	1	6	0	4	—	2
High school 2	1,232							

very seriously and each provided comments about the survey. There were some concerns expressed about the length of the survey and the duplication of survey topics; and there was some interest in having us include more positive items in the survey.

Based on results of the pilot administration, we finalized the survey instrument and submitted it to the Urban Institute's IRB. See appendix A for a copy of the final survey instrument.

In terms of survey procedure, our IRB approved a two-stage consent process: passive parental consent and informed assent for students. We asked each school to send home a letter[6] authored by the Principal Investigators to all the parents; the letter described the purpose of the study and survey content, noting that the data would be anonymous and not linked to their children's names or other personally identifying information, and informed them of the rights their children had as

[6] In all New York and Pennsylvania schools, this letter was mailed (with letters prestuffed and prepaid postage by the Urban Institute). In New Jersey schools, this letter was e-mailed at the request of the high school superintendent, given that this was the district's primary method of communicating to parents.

participants in the study. For parents who wished to see a copy of the survey, the letter explained that a copy was available at the school (held in the main office or office of the school psychologist or counselor) for their review; however, copies of the survey were not allowed to be distributed to parents to prevent survey distribution among students and maintain the validity of survey protocols. If parents did not want their child to participate in the survey, they were instructed to call a toll-free, 1-800 number and leave a message for researchers stating their name, the name of their child, their school district, the name of their school, and that they did not wish to have their child participate. If parents did not respond to the letter, passive consent was assumed and their children were allowed to take the survey.

To ensure that students were properly consented prior to survey administration, each student was given a form listing their rights as participants in the study (e.g., being able to skip a question if they chose to). Survey administrators reviewed the content of the form with the students before distributing the survey. A student's willingness to start the survey was their implied assent to participation in the study. In this study, using assent procedures was more appropriate than collecting a signed consent form because the main threat to students' anonymous participation was existence of written documentation regarding their participation.

In the days prior to survey administration, the Principal Investigators trained the teachers in each school on survey administration procedures, including the proper protocols that needed to be in place. The training reviewed the purpose of the study, survey administration procedures, and the survey administration script for teachers to read to students. The script informed students that their responses would be kept confidential from school personnel and from other students, and one way in which this confidentiality would be assured was that youth would be taking one of three different versions of the survey (the content of the surveys were identical, but questions were ordered differently in each version). This was intended to discourage youth from looking at their classmates' surveys. The script also instructed students to place their completed surveys into the provided envelopes, seal the envelopes, and write over the seal to ensure the surveys would remain secure prior to being given to the research team.

The survey administration training also discussed the protocols for dealing with distressed respondents. During site selection negotiations with the schools, we determined that each school had adequate onsite staff to respond to distressed students (e.g., school counselors, nurses). The school administrators assured the Principal Investigators that these people would be on-call at the appropriate school buildings during survey administration. If any distressed individuals did not wish to speak to school personnel, the research team would assist them in contacting local victim service providers immediately. Additionally, at the completion of the survey each student was given a business-size card that included contact information for local domestic violence and sexual assault service providers, as well as the national domestic violence, sexual assault, and suicide prevention hotlines.

The paper-pencil survey was administered during one class period at each school. In eight of the ten schools, the survey was administered during first period; thus, all students in the school took the survey simultaneously. In the other two schools, the survey was administered during English class throughout the day. Each class period lasted approximately 45 minutes, which allowed for a 10-minute grace period (assuming it took an average of 5 minutes for the teachers to read

through their script and an average of 30 minutes for the students to complete the survey). If students were unable to finish the survey in the allotted time, some teachers allowed them to stay after class and complete the survey, but others dismissed their class immediately after it was over. Because this practice was not uniform, there are higher proportions of missing data for the measures in the latter portion of the survey. At the completion of each class period, members of the research team went to students' classrooms to collect surveys directly from teachers. The research team securely transported the paper surveys back to the Urban Institute offices, where they remained locked in secure file cabinets.

Data collection occurred at two points in time: the New York and Pennsylvania schools were surveyed in October and November 2011, and the New Jersey schools were surveyed in April 2012. Data entry spanned the two months following data collection in each school (December 2011–January 2012 for New York and Pennsylvania, and May–June 2012 for New Jersey). For data entry purposes, we created an electronic version of the survey in a survey software program called Checkbox for ease of input. From Checkbox, the surveys were then exported into a CSV file and converted into SPSS and SAS files for data cleaning and analysis. Each data entry staff person was assigned one of the three electronic versions of the survey, which matched the three paper versions of the survey, to minimize inaccurate data entry due to changes in question order. Staff were trained to identify surveys that appeared to be taken in jest; examples of surveys not taken seriously were those that had profanity or inappropriate drawings scribbled upon them, few or no questions answered, and questions that were answered in an obviously extreme manner (e.g., "I have 72 brothers;" every violent, abusive, or risky behavior happened 10 or more times). After data entry staff identified a survey that they believed was not taken seriously, they brought the survey to the project director to verify that the survey should not be entered.

Quality control of the data entry process involved close monitoring of data entry staff and random selection of surveys for review. Five percent of the surveys that were entered (N=319) were reviewed for accuracy by staff other than those who had entered the survey, with the electronically entered data compared to the original survey. This process started at the beginning of data entry to identify any potential errors and then continued throughout data entry. Following completion of data entry and the quality control review, the data were cleaned to identify any remaining surveys that should be removed from the final sample. This process involved automatically checking if the respondent answered the most severe frequency option to all abuse (victimization and perpetration) and risk behaviors. Members of the research team reviewed the paper versions of these surveys and made a final determination to either include or remove the survey based on the likelihood that it was taken seriously. As shown in table 2 below, approximately 4 percent of the surveys taken were removed from the final sample after data entry and data cleaning.

Sample Characteristics and Representativeness

Table 2 shows the number of students made available to the research team, the number who were reported absent on the date of survey administration, the number who refused to take the survey, and the number whose parents opted them out of the survey.[7] Also shown in the table are the

[7] With the exception of one school, very few parents opted their children out of the survey. In the one school, a group of parents actively sought to increase the number of parents opting their children out of the survey.

Table 2. School-Specific Sample Sizes	Students made available to survey[a]	Students absent	Students refused	Parental opt out students	Surveys taken	Valid surveys[b]	Response rate[c]
	N						%
New Jersey schools							
High school 1	813	47	19	0	747	728	89.5
High school 2	1,191	33	10	0	1,148	1,038	87.2
New York schools							
High school 1	339	30	10	2	297	279	82.3
High school 2	464	59	46	1	358	350	75.4
Middle school 1	230	20	9	1	200	189	82.2
High school 3	1,070	72	13	4	981	947	88.5
Middle school 2	493	27	11	3	452	463	93.9
Pennsylvania schools							
High school 1	564	92	33	40	399	396	70.2
High school 2	598	97	30	5	466	446	74.6
High school 3	1,003	115	32	12	844	811	80.9
Total	**6,765**	**592**	**213**	**68**	**5,892**	**5,647**	**83.5**
Total high school						**4,995 (88.5%)**	
Total middle school						**652 (11.5%)**	

a. In the New York schools, we were unable to survey students enrolled in the morning session of vocational training, which takes place on another campus. In the Pennsylvania schools, we were able to survey students in morning vocational training. We also conducted surveys on a makeup day later the same week for students absent on the original survey date (although only a few students completed the survey on this makeup date).
b. The valid surveys column excludes respondents who did not take the survey seriously. These were removed from the sample during data entry and data cleaning, as discussed in the Survey Development and Procedure section.
c. The response rate was calculated by dividing the number of students made available to survey by the number of valid surveys.

number of surveys taken and returned by the school to the research team, and the number of valid surveys completed. Response rates were calculated as the number of valid surveys divided by the number of students made available to the research team. Response rates ranged from 70 percent to 94 percent of the school's student population, with an overall response rate of 84 percent and a total of 5,647 completed surveys.

Table 3 presents the sample characteristics of all students who completed a valid survey. Fifty-one percent of the sample is female and 48 percent is male, with 94 percent identifying themselves as heterosexual. Twenty-eight students in the sample identified as transgender.[8]

[8] Throughout the results section, the 28 transgender youth in the sample (0.5 percent) are excluded from the male/female gender breakdown, but are included in the total and all other breakdowns of dating violence and bullying. Analyses comparing the experiences of these transgender youth, when grouped together with lesbian, gay, transsexual, and questioning youth, with those of heterosexual youth are also presented herein.

Sixty-seven percent of youth reported living with both parents. As the table shows, we were able to achieve some degree of geographic, racial/ethnic, and socioeconomic diversity in the sample. All New Jersey schools in the sample were in suburban areas, all New York schools were in rural areas, and all Pennsylvania schools were in small cities. While we had hoped to include some larger urban schools, we were unable to do so. Approximately 26 percent of the sample identified as non-white, and 16 percent reported that neither parent had received a college education. Notably, we had intended to use parental education as a proxy for socioeconomic status, but since a high portion of youth (28 percent) did not know or did not state their parents' highest level of educational attainment, for analyses that follow we omitted this measure and instead relied on a school-level control for socioeconomic status (percentage of students not receiving a free or reduced price lunch). As shown in the table, although a majority of the sample was white and of medium to high income status, sizeable portions of the sample also represented lower-income and minority youth.

Table 3. Sample Characteristics of Students Surveyed (%)	Total (*N*=5,647)	Males (*N*=2,705)	Females (*N*=2,904)
High school	88.5	88.8	88.0
Middle school	11.5	11.2	12.0
State			
New York	39.5	38.3	40.6
Pennsylvania	29.3	29.1	29.3
New Jersey	31.3	32.6	30.1
Race			
Caucasian/White	74.6	74.4	75.4
African American/Black	4.6	5.5	3.7
Hispanic/Latino(a)	7.2	6.9	7.4
Asian	3.3	3.3	3.3
Native American	0.7	0.7	0.6
Mixed race	9.6	9.3	9.6
Sexual orientation			
Heterosexual/straight	94.3	96.2	93.1
Lesbian/gay/bisexual/transgender/ questioning/queer/other	5.7	3.8	6.9
Living situation			
Both parents	67.3	68.7	66.2
One parent	26.3	24.5	28.0
Other relatives (not including grandparent)	2.2	1.8	2.7
Other guardian	0.7	0.5	0.4
Friend(s)/significant other	1.3	1.3	1.3
Parents'' highest education			
College or higher	55.3	55.2	55.6
High school or less	16.3	14.5	17.9
Don't know/missing response	28.3	30.3	26.4

Note: Valid, nonmissing data on measures in this table were present for 98 to 100 percent of respondents, except as noted for parents' highest education.

With regard to sample representativeness: Although the current study relied on a convenience sampling of youth in three northeastern states, the sample was large enough to be generally representative—in several important ways—of school youth nationwide, when compared to findings from the Centers for Disease Control and Prevention's (2012) Youth Risk Behavior Survey (YRBS) results. The YRBS is a nationwide survey conducted among representative samples of high school youth, biennially since 1991, which intentional oversamples of youth from racial/ethnic minority groups yet weights results accordingly.

As shown in table 4 (next page), the current study's sample size (N=5,647) was approximately a third as large as the YRBS (N=15,425), yet achieved a relatively similar response rate (84 percent, compared to 87 percent). Youth in the current study were proportionally similar to youth in the YRBS with regard to gender; current alcohol binge drinking, marijuana, and cocaine use; rates of cyber bullying victimization; and school bullying experiences. By contrast, youth in the current study were proportionally more likely to be Caucasian/white; less likely to be from racial/ethnic minority groups; somewhat less likely to have previously had sex or to have had sex prior to the age of 13; and more likely to have experienced physical dating violence victimization in the prior year. Given that the current study included very detailed questions regarding youths' experiences with physical dating violence (e.g., being scratched, having one's arm twisted, having one's fingers bent), while the YRBS asked a general question about youths' experience being hit, slapped, or physically hurt, the latter finding is not as surprising as it might initially appear. Thus, in sum, key characteristics of youth in the current study were relatively similar to high school youth nationwide, except with regard to racial/ethnic breakdown and prior sexual experiences.

Measures

Teen Dating Violence and Abuse

As a precursor to questions about teen dating violence and abuse, all respondents were asked if they were currently in a romantic relationship or had been in the past year. Romantic relationship was defined as that with "a boyfriend or girlfriend, someone you have dated or are currently dating (e.g. going out or socializing without being supervised), someone who you like or love and spend time with, or a relationship that might involve sex."

Respondents who said they were or had recently been in a romantic relationship were then asked a series of questions about their current or most recent partner, including those regarding four types of teen dating violence and abuse: dating abuse via technology (referred to as "cyber dating abuse"), physical dating violence, psychological[9] dating abuse, and sexual coercion. For each type of violence/abuse, respondents reported whether and how often they experienced a series of items measuring that experience during the prior year. From these items, we created scales to assess the *prevalence* of violence/abuse experiences (respondent answered yes to any item of that violence/abuse type), *frequency* of violence/abuse (average frequency of violence/abuse experiences across all items experienced), and *variety* of violence/abuse (number of different

[9] This generic category of questions did not distinguish between psychological abuse that occurred in person and that which might have occurred via technology. However, when these measures were developed, technology was not as advanced as it is today, so cyber dating abuse was not something to distinguish.

Table 4. Comparison of Current Study with Nationwide Statistics on Youth (%)	Current study (*N*=5,647)	Youth Risk Behavior Survey[a] (*N*=15,425)
Response rate	83.5	87.0
Demographics		
Gender		
Female	51.8	48.4
Male	48.2	51.6
Race		
Caucasian/White	74.6	56.9
African American/Black	4.6	14.2
Hispanic/Latino(a)	7.2	20.0
Other	13.6	9.0
Grade		
7th	5.3	—
8th	6.3	—
9th	22.8	27.6
10th	23.1	25.8
11th	22.8	23.8
12th	19.6	22.6
Risk behaviors		
Prevalence of drug use in last 30 days		
Alcohol use	40.3	38.7
Binge drinking	26.2	21.9
Marijuana use	22.9	23.1
Cocaine use	1.6	3.0
Sexual activity—any in lifetime	37.1	47.4
Had sex before age 13	3.7	6.2
Teen dating violence/abuse and bullying		
Physical dating violence victimization in prior year	21.1	9.4
Cyber bullying victimization in prior year	17.3	16.2
Bullied on school grounds in prior year	24.9	20.1

a. Centers for Disease Control and Prevention, "Youth Risk Behavior Surveillance—United States, 2011," *Morbidity and Mortality Weekly Report* 61, no. 4 (2012): 1–166, http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf.

items of violence/abuse respondents reported).[10] Specific scale items and reliability coefficients (Cronbach's alphas) are presented in the tables that follow.

Cyber Dating Abuse

[10] In the body of this report, we focus primarily on prevalence rates of teen dating violence and bullying, but make information about variety and frequency available in the appendices.

Respondents who reported currently being in a dating relationship or being in a dating relationship within the past year were asked 16 questions relating to cyber dating abuse by their current or most recent partner (see table 5), six of which were adapted from Picard (2007) for

Table 5. Cyber Dating Abuse

Cyber Dating Abuse Victimization (α=0.907)	Cyber Dating Abuse Perpetration (α=0.944)
Sexual cyber abuse (α=0.810)	**Sexual cyber abuse (α=0.885)**
Sent me sexual photos or naked photos of himself/herself that he/she knew I did not want	Sent him/her sexual photos or naked photos of myself that I knew he/she did not want
Threatened me if I did not sent a sexual or naked photo of myself	Threatened him/her if he/she didn't send a sexual or naked photo of himself/herself
Pressured me to send a sexual or naked photo of myself	Pressured him/her to send a sexual or naked photo of himself/herself
Sent me text messages, e-mail, IM, chats, etc., to have sex or engage in sexual acts with him/her when he/she knew I did not want to[a]	Sent him/her text messages, e-mail, IM, chats, etc., to have sex or engage in sexual acts with me that I knew the person did not want to do[a]
Other cyber abuse (α=0.891)	**Other cyber abuse (α=0.923)**
Posted embarrassing photos or other images of me online[a]	Posted embarrassing photos or other images of him/her online[a]
Sent threatening text messages to me	Sent threatening text messages to him/her
Took a video of me and sent it to his/her friends without my permission	Took a video of him/her and sent it to my friends without his/her permission
Used my social networking account without permission	Used his/her social networking account without permission
Sent me instant messages or chats that made me feel scared	Sent him/her instant messages or chats that made him/her feel scared
Wrote nasty things about me on his/her profile page (e.g., on Facebook, Myspace)	Wrote nasty things about him/her on my profile page (e.g., on Facebook, Myspace)
Created a profile page (like Facebook, Myspace, or YouTube) about me knowing it would upset me	Created a profile page (like Facebook, Myspace, or YouTube) about him/her knowing it would upset him/her
Sent me so many messages (like texts, e-mails, chats) that it made me feel unsafe	Sent him/her so many messages (like texts, e-mails, chats) that it made him/her feel unsafe
Spread rumors about me using a cell phone, e-mail, IM, web chat, social networking site, etc.[a]	Spread rumors about him/her using a cell phone, e-mail, IM, web chat, social networking site, etc.[1]
Used information from my social networking site to harass me or put me down[a]	Used information from his/her social networking site to harass him/her or put him/her down[a]
Made me afraid when I did not respond to my cell phone call, text, posting on social networking page, IM, etc.[a]	Made him/her afraid when she/he did not respond to my cell phone call, text, posting on social networking page, IM, etc.[a]
Threatened to harm me physically using a cell phone, text message, social networking page, etc.[a]	Threatened to harm him/her physically using a cell phone, text message, social networking page, etc.[a]

a. Item adapted from Picard (2007).

Teen Research Unlimited and ten of which were created for the purposes of the current study; however, we examined Griezel's (2007) cyber bullying scale (see below for more detail) to guide this process and adapted several items from that work. All 16 questions were asked twice: the first time to capture victimization experiences during the prior year and the second time to capture perpetration behaviors during the same time period. Response options were (0) never, (1) rarely, (2) sometimes, and (3) very often. Two subscales of cyber dating abuse with current and recently former partners were then developed: sexual cyber abuse (4 items) and non-sexual cyber abuse (12 items). As shown in the table, both the full scales and each of the subscales had acceptably high Cronbach's alphas ($\alpha>0.8$), meaning the items showed a strong degree of internal consistency with one another.

Physical Dating Violence

Respondents in a current or recent dating relationship were asked questions about physical dating violence in the prior year using a scale developed and validated by Foshee (1996; see table 6). The scale measured three types of abuse: mild physical violence (3 items), moderate physical violence (5 items), and severe physical violence (6 items). As with cyber dating abuse, all 14 items were asked in two separate series of questions to asses both victimization experiences and perpetration behaviors. Response options for these questions were: (0) never happened, (1) happened 1 to 3 times, (2) happened 4 to 9 times, and (3) happened 10 or more times. As shown in table 6, the Cronbach's alpha internal consistency coefficients of the full scales and each subscale were acceptably high ($\alpha>0.7$).

Table 1. Physical Dating Violence

Physical Dating Violence Victimization (α=0.896)	**Physical Dating Violence Perpetration (α=0.888)**
Mild physical violence (α=0.723)	**Mild physical violence (α=0.745)**
Scratched me	Scratched him/her
Slapped me	Slapped him/her
Pushed, grabbed, or shoved me	Pushed, grabbed, or shoved him/her
Moderate physical violence (α=0.775)	**Moderate physical violence (α=0.753)**
Physically twisted my arm	Physically twisted his/her arm
Slammed me or held me against a wall	Slammed him/her or held him/her against wall
Kicked me	Kicked him/her
Bent my fingers	Bent his/her fingers
Bit me	Bit him/her
Severe physical violence (α=0.854)	**Severe physical violence (α=0.859)**
Tried to choke me	Tried to choke him/her
Burned me	Burned him/her
Hit me with a fist	Hit him/her with a fist
Hit me with something hard besides a fist	Hit him/her with something hard besides a fist
Beat me up	Beat him/her up
Assaulted me with a knife or gun	Assaulted him/her with a knife or gun

Note: Items are adapted from Foshee (1996).

Psychological Dating Abuse

Respondents who were in a current or recent dating relationship were asked generic questions about psychological dating abuse in the prior year, based on measures adapted from the Michigan Department of Community Health's (MCH; 1997) control[11] and fear scales, as well as Foshee's (1996) psychological abuse scales (see table 7). These questions did not distinguish between psychological abuse that had occurred in person and that which might have occurred via technology, though they were originally developed without the technological aspect being a part of youth's lives as it is today. Items from these scales were combined into four psychological dating abuse subscales based on Foshee's (1996) conceptualization of these behaviors: threatening behaviors (4 items), monitoring (6 items), personal insults (4 items), and emotional manipulation and fear (7 items). All 21 items were asked for both victimization experiences and perpetration behaviors. Response options were (0) never, (1) rarely, (2) sometimes, and (3) very often. As shown in table 7, the Cronbach's alpha internal consistency coefficients of the full scales and each subscale were acceptably high ($\alpha>0.7$), with one exception: the 4-item subscale measuring threatening psychological dating abuse perpetration had an alpha of 0.63.

Table 7. Psychological Dating Abuse *(continued on next page)*

Psychological Dating Abuse Victimization (α=0.897)	**Psychological Dating Abuse Perpetration (α=0.897)**
Threatening behaviors (α=0.731)	**Threatening behaviors (α=0.630)**
Damaged something that belonged to me[a]	Damaged something that belonged to him/her[a]
Started to hit me but stopped[a]	Started to hit him/her but stopped[a]
Threatened to hurt me[a]	Threatened to hurt him/her[a]
Harmed or threatened to harm someone close to me[b]	Harmed or threatened to harm someone close to him/her[b]
Monitoring (α=0.885)	**Monitoring (α=0.831)**
Would not let me do things with other people[a]	Would not let him/her do things with other people[a]
Told me I could not talk to a person of the gender I date[a]	Told him/her he/she could not talk to a person of the gender he/she dates[a]
Made me describe where I was every minute of the day[a]	Made him/her describe where he/she was every minute of the day[a]
Insisted on knowing who I am with and where I am at all times[b]	Insisted on knowing who he/she is with and where he/she is at all times[b]
Tried to limit my contact with family[b]	Tried to limit his/her contact with family[b]
Tried to limit my contact with friends[b]	Tried to limit his/her contact with friends[b]
Personal insults (α=0.804)	**Personal insults (α=0.723)**
Insulted me in front of others[a]	Insulted him/her in front of others[a]
Put down my looks[a]	Put down his/her looks[a]
Blamed me for bad things he/she did[a]	Blamed him/her for bad things they did[a]
Called me names to put me down or make me feel bad[b]	Called me names to put me down or make me feel bad[b]

[11] The same items included in the MCH (1997) control measure were used in the Canadian Housing, Family, and Social Statistics Division (1999) study. We cite both measures in this report.

Table 7. Psychological Dating Abuse *(continued)*

Emotional manipulation and fear (α=0.852)	**Emotional manipulation and fear (α=0.760)**
Made me feel unsafe or uneasy when we spend time alone together[c]	Made him/her feel unsafe or uneasy when we spend time together[c]
Said things to hurt my feelings on purpose[a]	Said things to hurt his/her feelings on purpose[a]
Threatened to start dating someone else[a]	Threatened to start dating someone else[a]
Brought up something from the past to hurt me[a]	Brought up something from the past to hurt him/her[a]
Made me feel owned or controlled[c]	Made him/her feel owned or controlled[c]
Threatened to harm himself/herself if I broke up with him/her[d]	Threatened to harm myself if he/she broke up with me[d]
Made me afraid to tell others the truth[c]	Made him/her feel afraid to tell others the truth[c]

a. Items are adapted from Foshee (1996).
b. The control measure is from Michigan Department of Community Health (1997) and the item is adapted from Canadian Housing, Family, and Social Statistics Division (1999).
c. The fear measure is from Michigan Department of Community Health (1997).
d. The item was developed for the current study.

Sexual Coercion and Unwanted Sexual Intercourse

Again focusing on respondents who were in a current or recent dating relationship, we asked questions about experiences of sexual coercion and unwanted sexual intercourse in the prior year. The sexual coercion measure included two items from Foshee's (1996) physical abuse scale, one from Zweig and colleagues' (2002) scale measuring unwanted sexual intercourse, and one additional item from Zweig, Barber, and Eccles (1997) (being pressured to have sex; see table 8). The item from Zweig and colleagues (2002) was only included in the victimization scale; all other items were included in the perpetration measure as well. Response options for Foshee's (1996) items and the item created for this study were: (0) never happened, (1) happened 1 to 3 times, (2) happened 4 to 9 times, and (3) happened 10 or more times. The item from Zweig and colleagues' (2002) scale was a binary measure with yes (1) and no (0) response options. As shown in table 8, both scales had acceptably high internal consistency coefficients (α>0.7).

Table 8. Sexual Coercion

Sexual Coercion Victimization (α=0.737)	**Sexual Coercion Perpetration (α=0.723)**
Pressured me to have sex when he/she knew I didn't want to[a]	Pressured him/her to have sex when I knew he/she didn't want to[a]
Forced me to have sex[b]	Forced him/her to have sex[b]
Forced me to do other sexual things that I did not want to do[2]	Forced him/her to do other sexual things that he/she did not want to do[2]
Had unwanted sexual intercourse[3]	

a. Item adapted from Zweig et al. (1997).
b. Item adapted from Foshee (1996).
c. Victimization measure for item adapted from Zweig et al. (2002).

Additionally, we asked youth who reported experiencing unwanted sexual intercourse with their current partner or their partner in the last year a series of questions regarding what happened to lead to unwanted sexual intercourse in the prior year. We used Zweig and colleagues' (2002) scale (see table 9) which includes measures of unwanted sex because of alcohol and/or drug intoxication (3 items); threat or use of physical violence (4 items); psychological abuse (3 items); and self-inflicted pressure (2 items). Response options were yes (1) or no (0). As shown in table 9, the Cronbach's alphas of the full scales and each subscale were acceptably high (α>0.7).

Table 9. Unwanted Sexual Intercourse (α=0.863)
Threat or use of physical violence (α=0.821)
The other person used physical violence (for instance, slapping or hitting).
The other person held you down or made it so you could not leave.
The other person threatened you with a weapon.
You were afraid the other person would use physical violence (for instance, slapping or hitting).
Psychological manipulation (α=0.757)
The other person threatened to end the relationship.
You were afraid the other person would end the relationship.
The other person made you feel worthless or humiliated until you gave in.
Alcohol/drug-related coercion (α=0.769)
You were so drunk or stoned that you were unaware of what was going on.
You were so drunk or stoned that you could not do anything to stop the other person.
You were so drunk or stoned you did not care.
Self-inflicted pressure (α=0.873)
You wanted to please the other person.
You felt like you had to.

Bullying

All respondents, regardless of their relationship status, were also asked questions about violent and abusive experiences with other individuals with whom they had not been romantically involved. These questions were used to measure three types of bullying victimization and perpetration in the prior year: cyber bullying, physical bullying, and non-cyber psychological bullying (see table 10). The cyber bullying measure (12 items) was adapted from Griezel (2007), with some minor edits to item language (e.g., used the phrase "cell phone" in lieu of "mobile phone"). The physical bullying measure (6 items) and psychological bullying measure (11 items) were adapted from Parada (2000), whose scales were also used in Griezel's (2007) study. Response options were (0) never, (1) sometimes, (2) once or twice a month, (3) once a week, (4) several times a week, and (5) every day. As shown in table 10, the Cronbach's alpha internal consistency coefficients of the full scales and each subscale were acceptably high (α>0.8).

Table 10. Bullying *(continued on next page)*

Bullying Victimization (α=0.929)	Bullying Perpetration (α=0.947)
Cyber bullying[a] (α=0.898)	**Cyber bullying[a] (α=0.974)**
My cell phone account was used without my permission to send a photo or image to other people to get me in trouble.	Used a cell phone to send other students a video of a student I knew would get him/her into trouble.
A student got other students to send a rude video message to my cell phone.	Got other students to send a rude video message to a student's cell phone.
A student forwarded a video to my cell phone he/she knew I wouldn't like.	Used a cell phone to forward a video to a student I knew he/she wouldn't like.
My cell phone was used without my permission to send a video message to other people to get me in trouble.	Sent a video message to other people to get a student into trouble.
A student sent me a nasty e-mail.	Sent a student a nasty e-mail.
A student sent me an e-mail threatening to harm me.	Sent a student an e-mail threatening to harm him/her.
A student sent me an instant message or chat to hurt my feelings.	Sent a student an instant message or chat to hurt his/her feelings.
My instant message account was used without my permission to send a message to other students to get me into trouble.	Used a student's instant message account without his/her permission to send a message that I knew would get him/her into trouble.
A student created a nasty profile page (like Myspace or YouTube) about me.	Created a profile page (like Myspace or YouTube) about a student knowing it would upset him/her.
A student put something on a profile page (like Myspace or YouTube) about me to hurt my feeling.s	Wrote things about a student on a profile page (like Myspace or YouTube) to hurt his/her feelings.
I was called names I didn't like through a text message.	Called a student names he/she didn't like through a text message.
A student sent me a text message to hurt my feelings.	Sent a student a cell phone text message knowing it would hurt his/her feelings.
Physical bullying[b] (α=0.848)	**Physical bullying[b] (α=0.872)**
I was pushed or shoved.	Pushed or shoved a student.
I was hit or kicked hard.	Hit or kicked a student hard.
Students crashed into me on purpose as they walked by.	Crashed into a student on purpose as they walked by.
My property was damaged on purpose.	Damaged a student's property on purpose.
Something was thrown at me to hit me.	Threw something at a student to hit them.
I was threatened to be physically hurt or harmed.	Threatened to physically hurt or harm a student.
Psychological bullying[b] (α=0.915)	**Psychological bullying[b] (α=0.903)**
I was teased by students saying things to me.	Teased a student by saying mean things to him/her.
A student made rude remarks at me.	Made rude remarks at a student.
A student made me feel afraid in school.	Made another student feel afraid in school.
Things were said about my looks I didn't like.	Said things about their looks they didn't like.
I was called names I didn't like.	Made fun of a student by calling them names.

Table 10. Bullying *(continued)*

A student wouldn't be friends with me because other people didn't like me.	Wouldn't let my friends be friends with a student because I didn't like him/her.
A student got other students not to have anything to do with me.	Got other students to ignore a student.
A student got their friends to turn against me.	Got my friends to turn against a student.
I wasn't invited to a student's place because other people didn't like me.	Didn't invite a student to my place because other people didn't like him/her.
I was left out of activities with other students.	Left a student out of activities or games on purpose.
I had to hide my sexuality from other students.	Made another student hide his/her sexuality from other students.

a. Items adapted from Griezel (2007).

b. Items adapted from Parada (2000). I

Other Variables

Other survey measures covered five separate domains: individual behavior, psychosocial adjustment, family relationship quality, school performance, and partner relationship quality. Each domain is summarized in the section below, and full tables of each measure are included in appendix B. In addition, demographic characteristics and other control variables were captured in survey responses, as described below.

Individual behavior domain

We measured individual behaviors related to other areas of risk for youth, as well as positive behaviors, including substance use, sexual activity, delinquency, and prosocial activities.

- Substance use: We used the Communities that Care (2006)[12] drug use scale (alpha=0.776 for the whole scale), which included alcohol/binge drinking, marijuana use, and serious drug use (including non-prescription drugs) over the last 30 days (alpha=0.887 for the serious drug use items). Response options were (0) never, (2) 1-3 times, (6.5) 4-9 times, and (15) 10 or more times.
- Sexual activity: The survey asked respondents who reported having vaginal intercourse, anal sex, or oral sex a series of questions about their sexual activity. We used 6 items from the Add Health Wave II survey[13] and created 3 items for this study; all items were analyzed separately. Response options varied for each item.
- Delinquency: We included 9 items from the Communities that Care (2006)[14] delinquency scale measuring the variety of delinquent activity youth participated in over the last year (alpha=0.734). For one item (attacked someone with the intent to harm), the survey specified that the respondent should answer about anyone other than a person who the respondent had dated in the last year (so the item measures non-dating violence). Response options were yes (1) or no (0).

[12] http://www.communitiesthatcarecoalition.org/surveys
[13] http://www.cpc.unc.edu/projects/addhealth/codebooks/wave2
[14] http://www.communitiesthatcarecoalition.org/surveys

- Prosocial activities: We used 12 items from the Add Health Wave I[15] Daily Activities section to measure prosocial activities among respondents. We added two items (reading and participating in school groups) to this scale (alpha=0.652). Response options were (0) never, (2) 1-3 times, (6.5) 4-9 times, and (15) 10 or more times.

Psychosocial adjustment domain

Measures of psychosocial adjustment were based on respondents' answers to the depression, anxiety, and anger/hostility subscales of the Symptom Assessment–45 (SA–45) Questionnaire (Strategic Advantage, Inc., 1998), shown to be reliable and valid on both patient and nonpatient adult and adolescent populations (see, e.g., Maruish, 2004; Maruish, Bershadsky, & Goldstein, 1998). All three scales ranged in value from zero to 20, with higher values indicating more depression, anxiety, or anger/hostility. Response options were not at all (0), a little bit (1), moderately (2), quite a bit (3), and extremely (4).

- Depression (alpha=0.892) was measured by five items assessing symptoms of loneliness, hopelessness, worthlessness, disinterest in things, and feeling blue.
- Anxiety (alpha=0.861) was measured by five items assessing symptoms of fearfulness, panic, tension, and restlessness.
- Anger/hostility (alpha=0.839) was measured by five items assessing symptoms such as uncontrollable temper outbursts, getting into frequent arguments, shouting, and feeling urges to harm others or break things.

Family relationship quality domain

Family relationship quality was measured using items adapted from the Add Health Wave II[16] survey that tapped into respondents' involvement in activities with their parents and feelings of closeness to their parents.

- Parental closeness: This measure was the mean of two items taken from the Add Health Wave II Relations with Parents interview, measuring closeness between the respondent and his/her primary parent or guardian. Response options were (0) not at all, (1) a little bit, (2) moderate, (4) quite a bit, and (5) extremely.
- Parental activities frequency: This scale (alpha=0.677) consisted of 5 items taken from the Add Health Wave II Relations with Parents interview and measured the extent to which respondents spent time doing activities with the parent or guardian with whom they spent the most time. Response options were (0) never, (1) rarely, (2) sometimes, and (3) often.
- Parental communication frequency: This scale (alpha=0.624) consisted of 4 items taken from the Add Health Wave II Relations with Parents interview and measured the extent to which respondents spent time talking with their parents about things going on in their lives. Response options were (0) never, (1) rarely, (2) sometimes, and (3) often.

School performance domain

The school domain captured respondents' attendance at school and performance in the classroom.

- School attendance: Respondents were asked how often they attended school. Response

[15] http://www.cpc.unc.edu/projects/addhealth/codebooks/wave1
[16] http://www.cpc.unc.edu/projects/addhealth/codebooks/wave2

options ranged from (3) every weekday, (2) 3–4 days per week, and (1) 1–2 days per week. For analysis purposes, we created a binary measure of attending school every weekday (2) or less than every weekday (1).[17]

- Grades in school: Respondents were asked about the typical grades they earned at school. Response options included (1) mostly As, (2) As and Bs, (3) mostly Bs, (4) Bs and Cs, (5) mostly Cs, (6) Cs and Ds, (7) mostly Ds, (8) Ds and Fs, and (9) mostly Fs. For analysis purposes, we created an ordinal measure grouping students into three categories: (1) As and Bs, (2) Bs and Cs, and (3) Ds and Fs.

Partner relationship quality domain

This domain included one measure of positive relationship qualities: Students who were currently or recently in a relationship were asked 20 questions about the positive qualities of their relationship, such as feeling loved and cared for by a partner, feeling proud to be with that partner, and having a partner who is supportive of their activities and interests. These items were adapted from the MCH (1997) affection measure. Response options were (0) never, (1) rarely, (2) sometimes, and (3) very often. Cronbach's alpha measuring the reliability of this scale was 0.973.

Control measures

In addition to the domains specified above, we also examined teen dating violence and abuse and bullying experiences across several demographic and technology use variables, which we call control measures and included the following:

- Gender (male=1, female=2);
- Age[18];
- Race/ethnicity;
- Sexual orientation;
- General computer use (see appendix B);
- General cell phone use (see appendix B);
- State (two schools in New Jersey, five schools in New York, and three schools in Pennsylvania)[19]; and
- School socioeconomic status (SES; percentage of students who were *not* receiving a free or reduced price lunch).

Analytic Strategy

Given that the research questions regarding teen dating violence and abuse and bullying largely mirror one another, our analytic strategy in responding to each question can be summed jointly as follows: To analyze youths' survey data in response to research questions 1 to 6, we examined

[17] As noted in the design section, by sampling only youth who were present in school on a certain day, we were not able to sample students who were likely to be absent from school on a regular basis. While our overall response rate is 83.5 percent, we believe that the students we were unable to survey are among the more at risk youth in these schools (i.e., the chronically absent and/or truant youth). Thus, our school attendance measure is automatically weighted more heavily to the students who attend school almost every day or every day.

[18] Approximately 3.5 percent of respondents did not enter their age; for these respondents, we imputed the age based on their reported grade level. Missingness for the age variable was then less than 1 percent.

[19] State is used strictly as a statistical control; by no means do we imply that our convenience sampling produced groups of youth representative of the states from which they came.

their self-reported prevalence rates of violence and abuse experiences for the full sample and across subgroups, with particular attention to differences by gender.[20] Where applicable, we tested the statistical significance of subgroup differences using chi-squared calculations for cross-tabulations and/or t-tests for comparisons of continuous variables. As per convention, we used a probability level of .05 or lower as the marker for statistical significance, but also noted in tables chi-squared-/t-values that approached significance at $p<.10$.

For research question 7, we examined the cross-tabulation of cyber-related experiences in dating relationships or peer relationships with those that were physical, psychological, and/or sexual in nature, and reported the corresponding chi-squared statistics. In this case, significant chi-squared values marked the likelihood of youth who reported cyber abuse to have also reported other types of teen dating violence and abuse and bullying experiences.

For research question 8, our analytic strategy involved four steps. First, we compared the prevalence rates and mean scores for cyber abuse victims/perpetrators and non-victims/non-perpetrators across a series of life factors (e.g., behavioral, psychosocial factors). We used either chi-squared or t-test statistics, as applicable, to detect which of these life factors was a statistically significant bivariate correlate to cyber abuse. Second, using a series of logistic regression models predicting the likelihood of cyber abuse victimization/perpetration, we identified which of these bivariate correlates retained significance—when tested by domain—even after controlling for youths' gender, race/ethnicity, age, sexual orientation, general computer use, general cell phone use, state in which the youth lived, and school SES. Third, we estimated one logistic regression model with all significant correlates from the domain-specific regressions, to identify the most significant correlates of cyber abuse in a multivariate model. Lastly, we estimated the same multivariate model on other types of teen dating violence/abuse and bullying, and statistically compared the resulting beta coefficients for each life factor with those in the cyber abuse model using z-score comparisons, as described in Paternoster, Brame, Mazerolle, and Piquero (1998). The purpose of step four was to compare the strength of the relationships between life factors and cyber abuse with the strength of life factors and other types of youth violence and abuse experiences, to explore whether the associations between such life factors and cyber abuse were the same or different than those between life factors and other types of teen dating violence/abuse and bullying.

Prior to implementation of the strategies described above, we examined the extent of missing data among youth surveys and noted that in nearly all cases (except as noted in tables), missingness amounted to 10 percent or less of the sample for any particular measure, including those related to teen dating violence and abuse and bullying experiences.[21] According to Allison (2001), whenever valid, non-missing data is present for at least 90 percent of respondents, deletion of cases with missingness is an entirely acceptable approach to data analysis. For that reason, we did not impute or otherwise correct for missingness in any model and instead report the valid data for each measure exactly as it occurred among youth responses. Notably, for the multivariate models estimated in the last two analytic stages of research question 8, the percentage of respondents with valid data across all included variables dropped to approximately

[20] In appendices D and G, we also report frequency and variety estimates of violence experiences.

[21] There was one exception: for cyber bullying and psychological bullying perpetration, valid data were available for 89 percent of respondents.

three-quarters of the sample. However, in those final analytic stages, our focus was strictly on identifying those correlates of teen dating violence and abuse and bullying that retained significance at each prior stage (e.g., bivariate analysis, domain-specific modeling), when the percentages of valid data were far greater, and in the final multivariate stage; for that reason, we leave the multivariate models unaltered.

In the next section, we present results of all analyses performed in response to the research questions regarding teen dating violence/abuse and bullying.

Chapter 3: Results

In this section, we first describe survey findings primarily among the 3,745 youth in a current or recent relationship, as we focus on answers to the teen dating violence and abuse research questions. Next, we turn to the bullying research questions and examine bullying among the entire sample of 5,647 youth respondents. (As described in the previous section, a high percentage of sampled youth (84 percent) completed a valid survey, yielding a total of 5,647 survey respondents; of these, two out of three youth said they currently were or had recently been in a relationship, yielding 3,745 respondents for whom teen dating violence and abuse was an immediately relevant issue.)[22]

Teen Dating Violence and Abuse

RQ 1. How often do youth experience dating violence and abuse victimization?

Within their dating relationships, to what extent do youth experience violence and abuse? Does the extent to which youth experience abuse via technology differ from the extent to which they experience other psychologically abusive experiences, sexual coercion, and physical violence from dating partners?

Table 11 shows the prevalence of dating violence and abuse victimization among teens in a current or recent[23] relationship and, for comparison purposes, among all surveyed youth.[24] Within their dating relationships, more than one out of four youth reported being victims of cyber dating abuse (26 percent) in the past year, and almost the same share reported experiencing physical dating violence (30 percent). Nearly half said they had experienced some type of psychological dating abuse (47 percent), and 13 percent said they had been a victim of sexual coercion in the prior year.

Table 11. Prevalence of Teen Dating Violence and Abuse Victimization (%)	Teens in a relationship (*N*=3,745)	Total sample (*N*=5,647)
Cyber dating abuse	26.3	18.0
Physical dating violence	29.9	20.7
Psychological dating abuse	47.2	32.6
Sexual coercion	13.0	9.0

Note: Valid, nonmissing data on measures in this table were present for 93 to 99 percent of respondents.

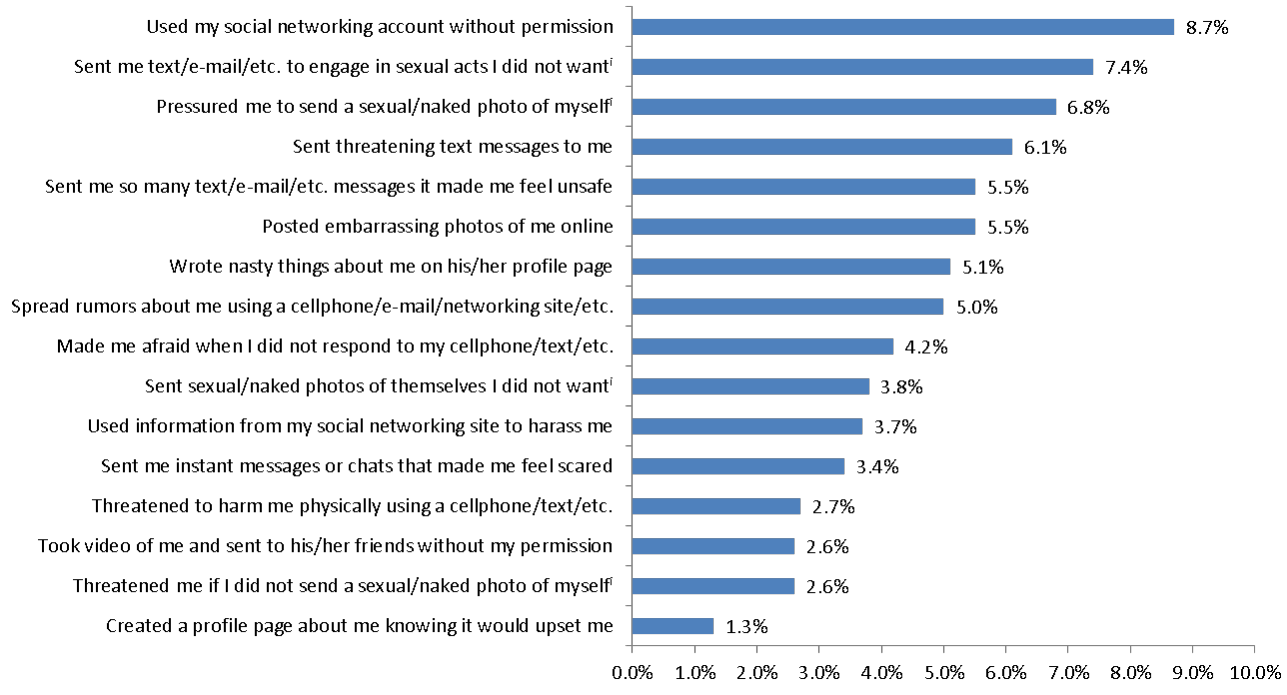
Prevalence rates among the total sample of surveyed youth were necessarily lower, since those not in a relationship were told to skip the dating victimization questions and were coded as not

[22] One-third of the sample was currently in a relationship (34 percent) and another third had been in a relationship within the prior year (32 percent).
[23] Within the prior year.
[24] We show prevalence rates of victimization and, in the next section, perpetration for both groups, but focus other research questions on relationship youth only.

having experienced such victimization. Still, across all surveyed youth, approximately one in five reported experiencing cyber dating abuse (18 percent) in the prior year, and about the same share reported physical dating violence (21 percent). A third reported psychological abuse (33 percent) and 9 percent reported sexual coercion.

To elaborate on the prevalence of cyber dating abuse victimization among youth in a current or recent relationship, figure 1 shows a breakdown of individual item responses (see appendix C for the individual item prevalence of all teen dating violence and abuse victimization measures, by gender). The most frequently reported form of cyber abuse was a romantic partner's use of a youth's social networking account without permission; nearly one out of ten youth (9 percent) in a relationship said this happened in the prior year. The next most frequently reported items were forms of sexual cyber abuse: 7 percent of youth said their partner had sent them texts/emails to engage in sexual acts the respondent did not want, and 7 percent said their partner had pressured them to send a sexual/naked photo of themselves. The fourth and fifth most commonly reported forms of cyber dating abuse, each of which was reported by 6 percent of youth in a relationship, dealt with threatening text messages from youth's partners and an intimidating amount of texts/emails from one's partner that made youth feel unsafe.

Figure 1. Individual Item Prevalence of Cyber Dating Abuse Victimization among Teens in a Relationship (*N*=3,745)



Note: Valid, nonmissing data on all measures in this figure were present for 94 percent of respondents.
i. Sexual cyber dating abuse.

Of the three least common forms of cyber abuse victimization, two involved more extensive effort on the part of the perpetrator: creating a profile page (e.g., Facebook, Myspace) about respondents to upset them (1 percent) and taking a video of respondents and sending it to others without permission (3 percent).[25] The third least commonly reported item was threats from one's partner if the respondent did not send a sexual or naked photo of themselves (3 percent).

RQ 2. How often do youth perpetrate dating violence and abuse?

Within their dating relationships, to what extent do youth perpetrate violence and abuse? Does the extent to which youth perpetrate abuse via technology differ from the extent to which they perpetrate other psychological abuse, sexual coercion, and physical violence against dating partners?

Table 12 shows the prevalence of teen dating violence and abuse perpetration among teens in a current or recent relationship and, for comparison purposes, among all surveyed youth. In contrast to the share who previously reported cyber abuse victimization, half as many youth said they had perpetrated cyber abuse against their romantic partner. As shown, just over one in ten youth in a relationship reported perpetrating cyber dating abuse (12 percent) against a partner in the prior year, and almost twice that share reported perpetrating physical dating violence (21 percent). Further, one in four youth said they had perpetrated psychological dating abuse (26 percent), and a small but meaningful percentage reported perpetrating sexual coercion (3 percent) in the prior year.

Table 12. Prevalence of Teen Dating Violence and Abuse Perpetration (%)	Teens in a Relationship (*N*=3,745)	Total Sample (*N*=5,647)
Cyber dating abuse	11.8	8.1
Physical dating violence	20.5	14.0
Psychological dating abuse	25.7	17.6
Sexual coercion	2.6	1.7

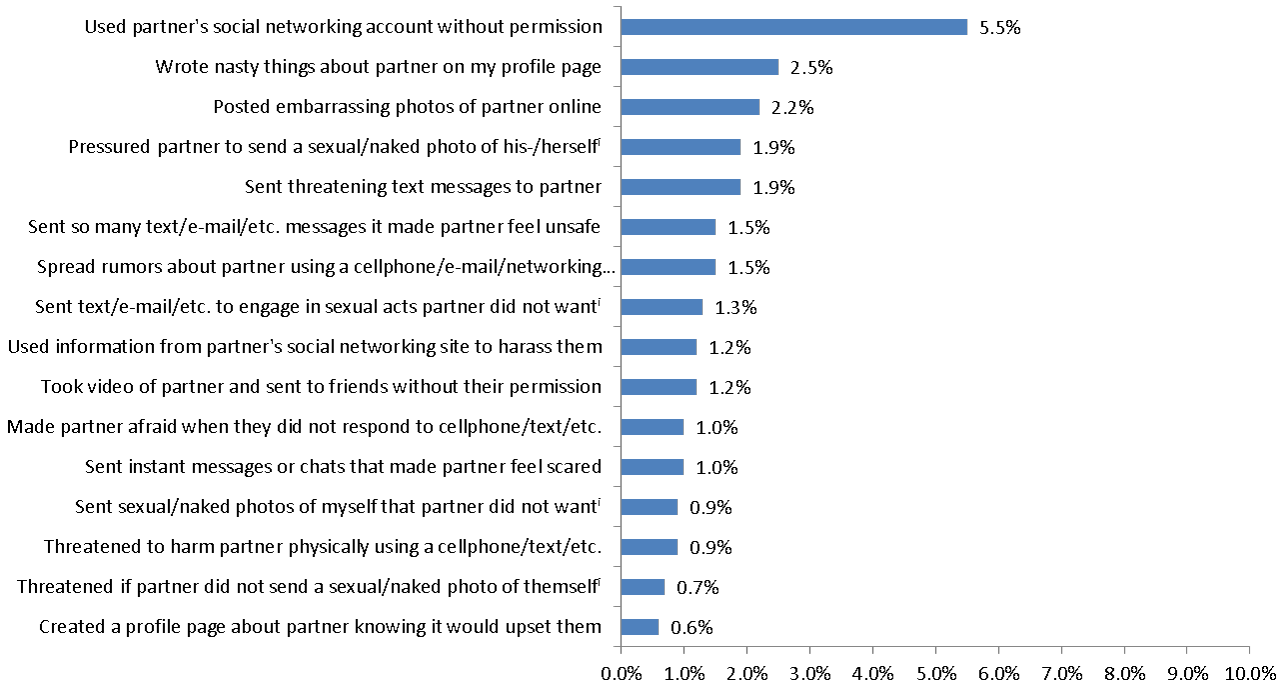
Note: Valid, nonmissing data on measures in this table were present for 92 to 95 percent of respondents.

When looking at the total sample of surveyed youth, 8 percent reported perpetrating cyber dating abuse in the prior year, 13 percent reported perpetrating physical dating violence, 17 percent reported perpetrating psychological dating abuse, and 2 percent reported perpetrating sexual coercion and/or unwanted sexual intercourse.

Figure 2 shows a breakdown of youths' individual item responses regarding cyber dating abuse perpetration (see appendix C for the individual item prevalence of all teen dating violence and abuse perpetration measures, by gender). As with cyber dating victimization, the most frequently reported form of perpetration was use of a romantic partner's social networking account without permission (6 percent). The next most frequently reported items were writing nasty things about one's partner online (3 percent) and posting embarrassing photos of one's partner online (2 percent).[26]

[25] The latter item could have included sexually abusive material, as we did not explicitly clarify it to only include non-sexual cyber abuse.
[26] Ibid.

Figure 2. Individual Item Prevalence of Cyber Dating Abuse Perpetration among Teens in a Relationship (*N*=3,745)



Notes: Valid, nonmissing data on measures in this figure were present for 94 to 95 percent of respondents.
i. Sexual cyber dating abuse.

The least commonly reported forms of cyber abuse perpetration involved threats to one's partner exchanged over the Internet/cell phone to inflict harm (0.9 percent), threats to one's partner inducing them to send a sexual or naked photo (0.7 percent), and creating a profile page (e.g., Facebook, Myspace) about one's partner knowing it would upset them (0.6 percent).

RQ 3. Does teen dating violence and abuse vary by gender, and is it reciprocal?

Are there differences in dating violence and abuse victimization and/or perpetration rates based on gender? What proportion of this violence is reciprocal?

Next, we examine whether and how teen dating violence and abuse experiences varied by gender, and we report the extent to which youth who were victimized also reported perpetrating it against their partner (i.e., reciprocity). Because almost all (98 percent) of the teen relationships youth described involved male-female dyads, we explore dating violence and abuse between male and females in depth—analyzing subtypes of perpetration (e.g., sexual cyber abuse, severe physical violence, threatening behavior) as well as the overarching categories described previously.

Gender Variation in Teen Dating Violence and Abuse Victimization

Of the 3,745 youth who reported being in a current or recent (within the prior year) relationship,

1,768 were male and 1,956 female.[27] For each of these groups, table 13 shows the prevalence[28] rates of dating violence and abuse victimization. In the last column, the statistical significance of gender variation is assessed using the chi-squared statistic (χ^2) and its associated probability (p), which identifies the likelihood of observing such variation if it was in reality zero.[29]

As shown, surveyed female youth reported higher victimization rates for all but one type of teen dating violence/abuse. Specifically, female youth in a current/recent relationship were more likely to report being victims of cyber dating abuse (29 percent, compared to 23 percent for males), psychological dating abuse (50 percent, compared to 44 percent for males), and sexual coercion (16 percent, compared to 9 percent for males) in the prior year. Females were nearly twice as likely as males to experience sexual cyber abuse (15 percent, compared to 7 percent for males), and they were more likely to experience non-sexual cyber abuse (23 percent, compared to 21 percent for males; the difference approached significance at $p<.10$). With regard to psychological dating abuse, females reported significantly higher rates of monitoring behavior victimization (34 percent, compared to 29 percent for males), personal insults (23 percent, compared to 19 percent for males), and emotional manipulation/fear (40 percent, compared to 28 percent for males), but there were no differences in reports of threatening behavior victimization.

Table 13. Prevalence of Dating Violence and Abuse Victimization among Teens in a Relationship (%)	Total (*N*=3,745)	Male (*N*=1,768)	Female (*N*=1,956)	χ^2
Cyber dating abuse	26.3	23.3	28.8	13.646***
Sexual cyber abuse	11.2	7.2	14.8	51.565***
Nonsexual cyber abuse	22.2	20.9	23.2	2.779†
Physical dating violence	29.9	35.9	23.9	63.860***
Severe physical violence	6.9	8.3	5.2	14.130***
Moderate physical violence	23.2	26.2	20.0	20.050***
Mild physical violence	21.6	28.5	15.1	97.210***
Psychological dating abuse	47.2	44.2	49.7	11.255**
Threatening behavior	17.4	17.6	16.9	0.372
Monitoring behavior	31.7	28.7	34.3	13.452***
Personal insults	21.1	18.6	23.1	11.405**
Emotional manipulation/fear	34.2	27.6	39.9	60.830***
Sexual coercion	13.0	8.8	16.4	47.737***

Notes: Valid, nonmissing data on measures in this table were present for 94 to 99 percent of respondents. Subtypes of violence and abuse were not mutually exclusive (for example, youth who experienced both severe and moderate physical violence show up in both prevalence rates). Appendix D presents the same prevalence table, among victims only.
†p<.10; *p<.05; **p<.01; ***p<.001

[27] Another 18 relationship youth (0.5 percent) identified as transgender, and 3 did not report a gender (0.1 percent). These youth are included in the total sample of youth in dating relationships but not in the male/female breakouts.
[28] Appendix D presents tables showing the frequency and variety of teen dating violence by gender, and a more refined analysis of violence prevalence rates, among victims only.
[29] The more asterisks associated with the chi-square value, the lower the probability that the observed difference in male/female prevalence rates is simply a sampling artifact.

Physical dating violence was the only type of teen dating violence/abuse for which male teens reported significantly higher rates of victimization than did females. More than a third of male youth (36 percent) reported physical dating violence victimization, compared to a quarter (24 percent) of female youth. Notably, male youth were more likely to report victimization of all types of physical dating violence, including severe physical violence (8 percent, compared to 5 percent for females) and moderate physical violence (26 percent, compared to 20 percent for females), but the difference was most pronounced for mild physical violence, for which the male victimization rate (29 percent) was nearly twice that reported by females (15 percent).

Gender Variation in Teen Dating Violence and Abuse Perpetration

Table 14 shows the prevalence[30] rates of dating violence and abuse perpetration for all youth in a relationship and for males and females separately, with the last column showing the statistical significance of gender variation. Despite the fact that more female than male youth had reported being *victims* of cyber dating abuse and psychological dating abuse, females were also significantly more likely than males to report *perpetrating* these types of teen dating violence and abuse. Fourteen percent of females reported perpetrating cyber dating abuse, compared to 9 percent of males, while a third (32 percent) of females reported perpetrating psychological abuse, compared to 19 percent of males.

Table 14. Prevalence of Dating Violence and Abuse Perpetration among Teens in a Relationship (%)	Total % (*N*=3,745)	Male (*N*=1,768)	Female (*N*=1,956)	χ^2
Cyber dating abuse	11.8	9.3	13.9	18.011***
Sexual cyber abuse	2.7	3.8	1.6	15.427***
Nonsexual cyber abuse	10.5	7.4	13.0	29.338***
Physical dating violence	20.5	14.4	25.5	67.283***
Severe physical dating violence	4.6	2.5	6.3	30.205***
Moderate physical dating violence	13.5	9.9	16.4	32.005***
Mild physical dating violence	16.4	10.0	21.8	89.627***
Psychological dating abuse	25.7	18.8	31.7	76.045***
Threatening behavior	8.9	6.5	10.9	21.577***
Monitoring behavior	15.0	11.0	18.3	36.423***
Personal insults	10.3	7.0	12.9	33.582***
Emotional manipulation/fear	14.7	9.7	19.0	60.570***
Sexual coercion	2.6	3.9	1.2	26.471***

Notes: Valid, nonmissing data on measures in this table were present for 94 to 95 percent of respondents. Subtypes of violence and abuse are not mutually exclusive (for example, youth who perpetrated both severe and moderate physical violence show up in both prevalence rates). Appendix D presents the same prevalence table, among perpetrators only.
†p<.10; *p<.05; **p<.01; ***p<.001

[30] Appendix D presents tables showing the frequency and variety of teen dating violence and abuse by gender, and a more refined analysis of violence/abuse prevalence rates, among perpetrators only.

Females were also more likely than males to report perpetrating physical dating violence: One out of four (26 percent) females said they had used physical violence against a current or recent romantic partner, compared to 14 percent of males.

Only with regard to sexual coercion did a significantly higher share of male than female youth report perpetration. Four percent of males, compared to one percent of females, said they had perpetrated sexual coercion against a partner in the prior year.

When looking at the subtypes of teen dating violence and abuse shown in table 14, it is clear that females were significantly more likely than males to report perpetrating all types of physical dating violence (severe, moderate, and mild), as well as all types of psychological dating abuse (threatening behavior, monitoring behavior, personal insults, and emotional manipulation/fear). Specifically, female prevalence rates of physical dating violence perpetration were 6 percent for severe violence (compared to 3 percent for males), 16 percent for moderate violence (compared to 10 percent for males), and 22 percent for mild violence (compared to 10 percent for males). Female rates of psychological dating abuse perpetration were 11 percent for threatening behavior (compared to 7 percent for males), 18 percent for monitoring behavior (compared to 11 percent for males), 13 percent for personal insults (compared to 7 percent for males), and 19 percent for emotional manipulation/fear (compared to 10 percent for males).

However, with regard to cyber dating abuse, although females were more likely to report non-sexual cyber abuse (13 percent, compared to 7 percent of males), male youth were significantly more likely to report having perpetrated sexual cyber abuse (4 percent, compared to 2 percent for females).

Reciprocal Violence and Abuse in Teen Dating Relationships

We also examined the extent of reciprocal violence and abuse in teen dating relationships, or reports of both victimization by and perpetration against the same romantic partner within the prior year.[31] In this section, we report reciprocal violence prevalence rates for each type of teen dating violence across all youth in a relationship and for males and females separately. We also show the prevalence of youth who only reported victimization experiences, and those who only reported perpetration experiences. It is important to note that the survey was not designed to disentangle reports of violence and abuse used *defensively* from that used *offensively*, so our focus here is on reciprocity regardless of who the primary perpetrator may have been.

Table 15 and figure 3 show the breakdown of reciprocal teen dating violence and abuse for all youth in a current/recent relationship and for males and females separately, as well as the prevalence of only victimization and only perpetration reports. The last column shows the statistical significance of gender variation across these reciprocal/non-reciprocal types of violence and abuse, using the chi-squared statistic.

On average, for all youth in a relationship, the highest prevalence of reciprocal acts occurred with regard to physical dating violence (16 percent) and psychological dating abuse (23 percent). These shares were comparable to the prevalence of youth who reported only victimization

[31] When the surveyed youth were asked about teen dating violence and abuse, they were specifically instructed to report violence and abuse by and against a single partner (their current or most recent partner).

Table 15. Reciprocal Violence and Abuse among Teens in a Relationship (%)	Total (*N*=3,745)	Male (*N*=1,768)	Female (*N*=1,956)	χ^2
Cyber dating abuse				24.693***
Only victimization	17.6	16.2	18.6	
Only perpetration	3.3	2.3	4.1	
Reciprocal abuse	8.6	7.1	9.8	
Physical dating violence				266.550***
Only victimization	13.6	22.1	6.1	
Only perpetration	4.7	1.1	7.9	
Reciprocal violence	15.8	13.3	17.7	
Psychological dating abuse				80.517***
Only victimization	23.8	27.1	21.0	
Only perpetration	2.7	2.3	3.1	
Reciprocal abuse	23.1	16.5	28.7	
Sexual coercion				85.338***
Only victimization	12.0	7.4	15.8	
Only perpetration	1.4	2.5	0.4	
Reciprocal coercion	1.2	1.5	0.8	

Note: Valid, nonmissing data on measures in this table were present for 92 to 95 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

experiences for physical dating violence (14 percent) and psychological dating abuse (24 percent). Relatively small shares of youth reported only perpetration behavior for these two types of teen dating violence and abuse (5 percent and 3 percent, respectively, for physical violence and psychological abuse).

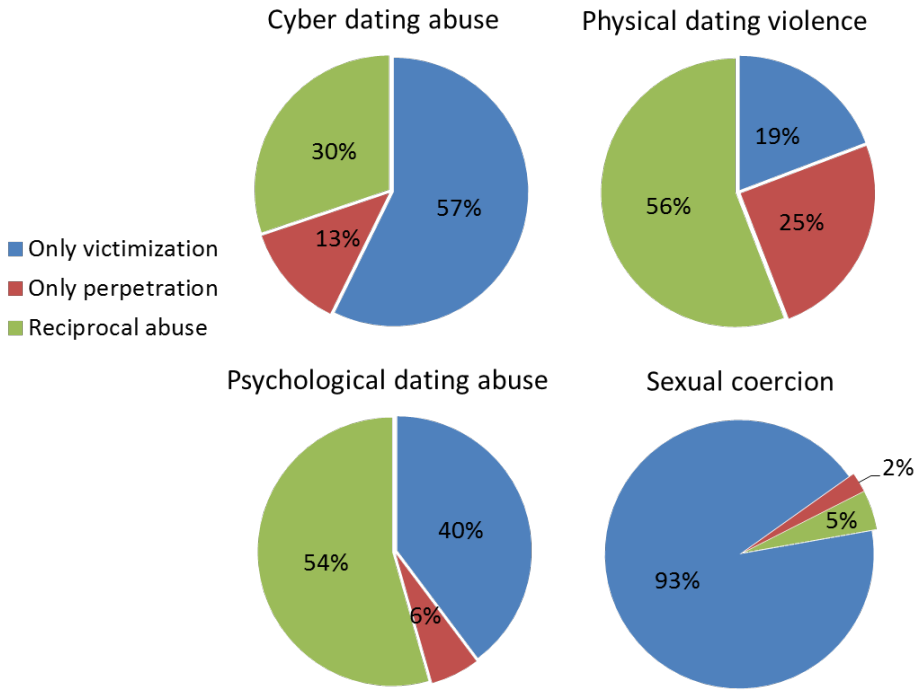
With regard to reciprocal cyber dating abuse, approximately one out of ten youth (8 percent) reported such behavior, while twice that share (18 percent) reported only cyber dating abuse victimizations. A small share of youth reported only cyber dating abuse perpetration (3 percent).

An alternative way of looking at data in the table below is to examine what proportion of TDV and abuse victims also perpetrate violence and abuse, and what proportion of perpetrators are also victimized. For example, dividing the percentage who experienced reciprocal violence/abuse by the total percentage of victims (which equals the sum of reciprocal violence/abuse and only victimization percentages), we can see what portion of victims perpetrated violence/abuse. Performing these calculations across all groups, we note the following findings:

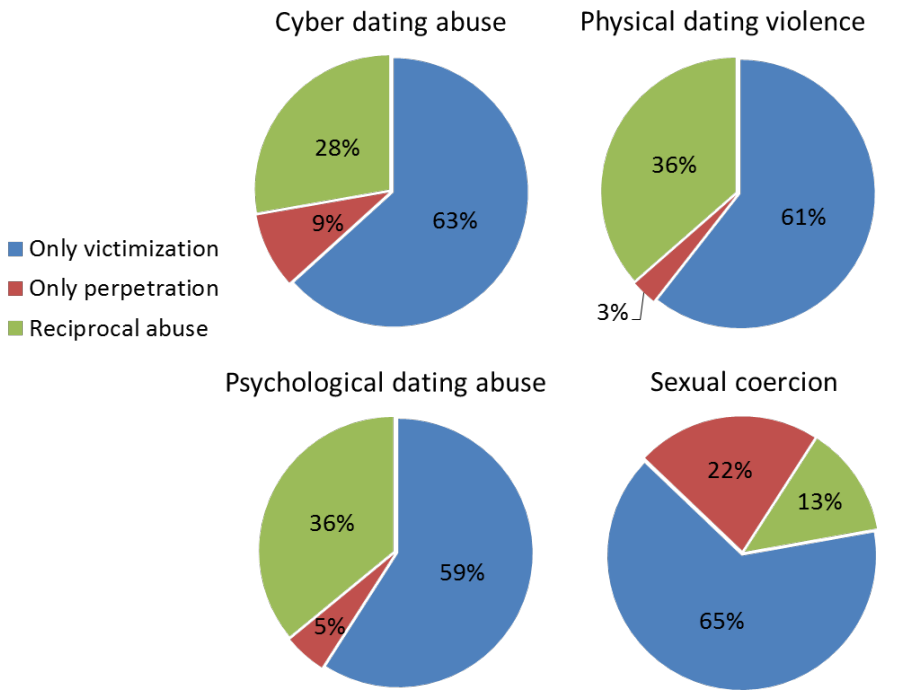
- Most cyber dating abuse victims (67 percent), psychological dating abuse victims (51 percent), and sexual coercion victims (91 percent) did not report perpetrating the same type of teen dating violence/abuse. By contrast, over half of the physical dating violence victims (54 percent) reported perpetrating physical dating violence.
- Most cyber dating abuse perpetrators (72 percent), physical dating violence perpetrators (77 percent), and psychological dating abuse perpetrators (90 percent) reported also being victimized by the same type of teen dating violence/abuse. By contrast, less than half of sexual coercion perpetrators (46 percent) reported sexual coercion victimization.

Figure 3. Reciprocity in Violent and Abusive Teen Relationships

How female youth (*N*=1,956) see it:



How male youth (*N*=1,768) see it:



Note: Valid, nonmissing data on measures in this figure were present for 92 to 95 percent of respondents.

Lastly, looking at gender variation in reciprocal violence/abuse: females in a relationship were significantly more likely than males to report engaging in both reciprocal and only perpetration abuse for all types of violence/abuse, except sexual coercion. Specifically, female youth were more likely to report engaging in reciprocal cyber dating abuse (10 percent, compared to 7 percent for males); only perpetration cyber dating abuse (4 percent, compared to 2 percent for males); reciprocal physical dating violence (18 percent, compared to 13 percent for males); only perpetration physical dating violence (8 percent, compared to 1 percent for males); reciprocal psychological dating abuse (29 percent, compared to 17 percent for males); and only perpetration psychological dating abuse (3 percent, compared to 2 percent for males). Similarly, males were more likely to report violence in which only they were the victim with regard to physical dating violence (22 percent, compared to 6 percent for females) and psychological dating abuse (27 percent, compared to 21 percent for females).

The only types of teen dating violence/abuse for which females were more likely than males to be exclusively victimized was cyber dating abuse (19 percent, compared to 16 percent for males) and sexual coercion (16 percent, compared to 7 percent for males). For sexual coercion, more male than female youth reported only perpetration (3 percent, compared to 0.4 percent for females) and reciprocal behavior (2 percent, compared to 1 percent for females).

RQ 4. Does teen dating violence and abuse vary by other subgroup status?

Specifically, are there differences in dating violence and abuse victimization and/or perpetration rates based on sexual orientation or middle school/high school status?

Next, we investigated whether teen dating violence and abuse varied across other subgroup statuses, specifically sexual orientation and school status (middle/high).

Variation in Teen Dating Violence and Abuse by Sexual Orientation

Of the 3,745 youth in a current/recent relationship, 229 (6 percent) identified as either lesbian, gay, bisexual, transgender, questioning, or other (LGBTQ), while 3,475 (94 percent) identified as heterosexual/straight.[32] Notably, most of the LGBTQ youth were female (69 percent) and two-thirds of the LGBTQ females were currently or most recently involved with male partners (64 percent). Of the LGBTQ youth who were male (26 percent), three-quarters were currently or most recently involved with female partners (77 percent).[33]

Tables 16 and 17 show the prevalence rates of dating violence and abuse victimization and perpetration for youth in a relationship and for LGBTQ and heterosexual youth separately, with a chi-squared statistic indicating significant variation. The takeaway from both tables is quite clear: across all categories of teen dating violence/abuse, LGBTQ youth reported higher rates of both victimization and perpetration than did heterosexual youth. All differences were statistically significant, except that for perpetration of sexual coercion. Specifically, higher shares of LGBTQ youth reported victimization experiences of cyber dating abuse (37 percent, compared to 26 percent of heterosexual youth), physical dating violence (43 percent, compared to 29 percent of

[32] Forty-one youth (1 percent) did not identify their sexual orientation. These youth are included in the total column but omitted from the comparison of LGBTQ and non-LGBTQ youth.
[33] Another 5 percent of LGBTQ youth said they were transgender; these youth were involved with both male and female current/recent partners.

Table 16. Prevalence of Dating Violence and Abuse Victimization among Teens in a Relationship by Sexual Orientation (%)	Total (*N*=3,745)	Heterosexual (*N*=3,475)	LGBTQ (*N*=229)	χ^2
Cyber dating abuse	26.3	25.7	37.2	13.723***
Physical dating violence	29.9	29.0	42.8	22.158***
Psychological dating abuse	47.2	46.4	59.2	13.749***
Sexual coercion	13.0	12.3	23.2	22.579***

Note: Valid, nonmissing data on measures in this table were present for 94 to 99 percent of respondents.
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
†p<.10; *p<.05; **p<.01; ***p<.001

Table 17. Prevalence of Dating Violence and Abuse Perpetration among Teens in a Relationship by Sexual Orientation (%)	Total (*N*=3,745)	Heterosexual (*N*=3,475)	LGBTQ (*N*=229)	χ^2
Cyber dating abuse	11.8	11.5	18.4	9.157**
Physical dating violence	20.5	19.7	33.2	22.739***
Psychological dating abuse	25.7	25.1	36.6	13.855***
Sexual coercion	2.6	2.4	4.1	2.471

Note: Valid, nonmissing data on measures in this table were present for 94 to 95 percent of respondents.
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
†p<.10; *p<.05; **p<.01; ***p<.001

heterosexual youth), psychological dating abuse (59 percent, compared to 46 percent of heterosexual youth), and sexual coercion (23 percent, compared to 12 percent of heterosexual youth). Further, higher shares of LGBTQ youth reported perpetrating cyber dating abuse (18 percent, compared to 12 percent of heterosexual youth), physical dating violence (33 percent, compared to 20 percent of heterosexual youth), and psychological dating abuse (37 percent, compared to 25 percent of heterosexual youth).

Variation in Teen Dating Violence and Abuse by School Status

Most youth in a current/recent relationship were surveyed in high school (3,393, 91 percent of sample), while 352 youth (9 percent) were surveyed in middle school. To assess the degree of variation in teen dating violence/abuse by school status, tables 18 and 19 show victimization and perpetration rates for high school and middle school youth, separately. All differences between high school and middle school youth were statistically significant for all types of teen dating victimization and perpetration. Again, the takeaway was quite straightforward: high school youth reported higher victimization and perpetration rates for all types of teen dating violence/abuse than did middle school youth.

Table 18. Prevalence of Dating Violence and Abuse Victimization among Teens in a Relationship by High School or Middle School Status (%)	Total (*N*=3,745)	High school (*N*=3,393)	Middle school (*N*=352)	χ^2
Cyber dating abuse	26.3	27.5	14.1	28.101***
Physical dating violence	29.9	31.4	15.4	38.983***
Psychological dating abuse	47.2	49.4	25.7	70.359***
Sexual coercion	13.0	13.8	5.1	21.316***

Note: Valid, nonmissing data on measures in this table were present for 94 to 99 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Table 192. Prevalence of Dating Violence and Abuse Perpetration among Teens in a Relationship by High School or Middle School Status (%)	Total (*N*=3,745)	High School (*N*=3,393)	Middle School (*N*=352)	χ^2
Cyber dating abuse	11.8	12.6	4.4	18.768***
Physical dating violence	20.5	22.1	4.9	54.068***
Psychological dating abuse	25.7	27.6	7.1	64.691***
Sexual coercion	2.6	2.7	0.9	3.904*

Note: Valid, nonmissing data on measures in this table were present for 94 to 95 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

RQ 5. Does teen dating violence and abuse happen at school?

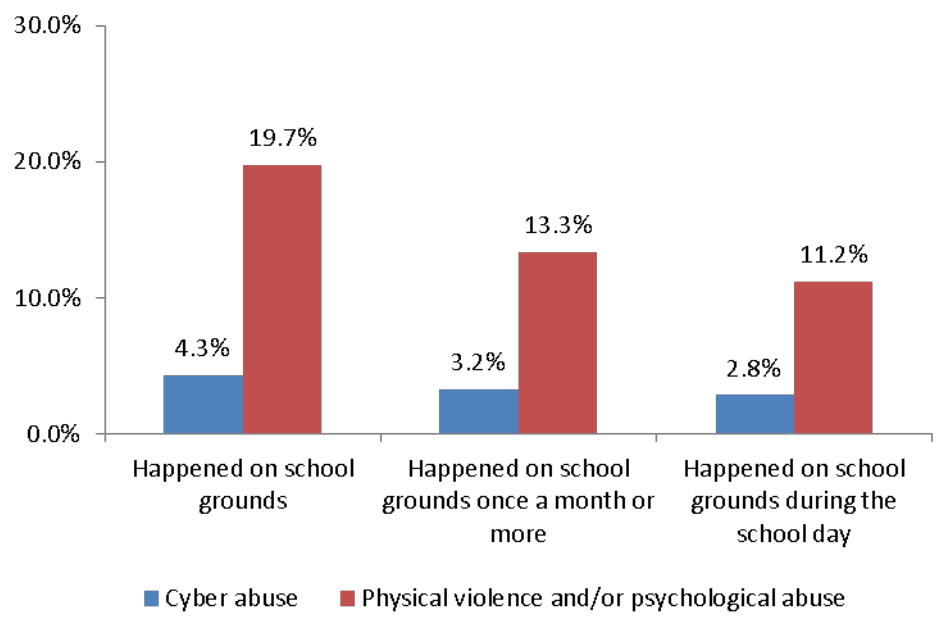
Do dating violence and abuse experiences happen on school grounds and during the school day?

Next, we examined whether teen dating violence and abuse experiences happened on school grounds and during the school day, based on responses from youth in a current or recent relationship.

As shown in figure 4, less than five percent of teens in a relationship reported cyber dating abuse victimization on school grounds and even fewer said it happened on school grounds monthly or more (3 percent) or during the school day (3 percent). Recall from previous sections that 26 percent of youth in a relationship reported cyber dating abuse victimization, meaning only a fifth of these victims said that abuse occurred on school grounds, while four out of five said it always occurred elsewhere. By comparison, fairly high shares of teens in a relationship reported physical and/or psychological dating victimizations on school grounds (20 percent), whether it was once a month or more (13 percent) or during the school day (11 percent).

In summary, compared to cyber dating abuse victimization, a higher prevalence of physical violence and psychological abuse occurred on schools grounds (20 percent, compared to 4 percent for cyber abuse), once a month or more (13 percent, compared to 3 percent for cyber abuse), and during the school day (11 percent, compared to 3 percent for cyber abuse).

Figure 4. Prevalence of Dating Violence and Abuse Victimization on School Grounds among Teens in a Relationship (*N*=3,745)



Note: Valid, nonmissing data on measures in this figure were present for 91 to 95 percent of respondents.

RQ 6. Do teen dating violence and abuse victims seek help?

Are youth seeking help if they experience dating violence and abuse? To whom do the youth report these experiences (e.g., friends, parents, teachers, other school staff, police, no one)?

Of the surveyed youth in a current or recent relationship, 2,173 youth said they were victims of at least one type of teen dating violence/abuse, including 1,016 male victims and 1,139 female victims.[34] Table 20 shows the prevalence of help-seeking behavior among these victims, with chi-squared statistics measuring the significance of the difference between male and female help-seeking.

Overall, less than one out of ten (9 percent) victims reported seeking help, with half as many male victims (6 percent) as female victims (11 percent) seeking help; this difference was significant at p<.001. Further, less than four percent of victims sought help within one day of the incident. Nearly identical shares of teen dating violence victims, both male and female, reported seeking help after the first incident as reported seeking help within one day of the incident.

Table 20. Prevalence of Help-Seeking Behavior among Teen Dating Violence and Abuse Victims (%)	Teen dating violence/ abuse victims (*N*=2,173)	Male victims (*N*=1,016)	Female victims (*N*=1,139)	χ^2
Sought help	8.6	5.7	11.0	17.038***
Sought help within one day of incident	3.6	2.7	4.2	3.283†
Sought help after first incident	3.5	2.0	4.1	6.955**

Note: Valid, nonmissing data on measures in this table were present for 91 to 95 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

In table 21, we show the people to whom help-seeking victims turned to for help with their teen dating violence/abuse experiences. Help-seeking victims most frequently turned to their friends (77 percent), parents (49 percent), and other relatives (28 percent); and this fact was true for both male and female victims. It was least common for help-seeking victims to turn to dating abuse or rape crisis websites (3 percent) or other community-based service providers (2 percent) for assistance.

As for gender differences in help-seeking behavior: help-seeking female victims were more likely than help-seeking males to turn to a friend (82 percent, compared to 69 percent of males) or school counselor (21 percent, compared to 10 percent of males), while male victims who sought help were more likely to turn to a teacher (19 percent, compared to 9 percent of females). These were the only differences that approached statistical significance at p<.10; for all other sources of help, male and female help-seeking victims were equally likely to turn to each person.

[34] Seventeen youth in a current or recent relationship identified as transgender rather than male or female. These youth are included in the teen dating violence victims total but not in the male/female victim breakouts.

Table 21. Persons from Whom Teen Dating Violence/Abuse Victims Sought Help (%)	Help-seeking teen dating violence/ abuse victims (*N*=167)	Male help-seeking victims (*N*=52)	Female help-seeking victims (*N*=111)	χ^2
Friend(s)	77.2	69.2	82.0	3.346†
Parent(s)	48.5	44.2	50.5	0.548
Another relative	27.5	34.6	26.1	1.244
School counselor	16.8	9.6	20.7	3.070†
Teacher	12.6	19.2	9.0	3.437†
Police	9.0	3.8	11.7	2.622
Physician/other health care provider	6.6	5.8	7.2	0.116
School nurse	4.2	3.8	3.6	0.006
Courts for a protective order	4.2	1.9	5.4	1.045
Rape crisis or domestic violence center	4.2	3.8	3.6	0.006
Rape crisis or domestic violence hotline	3.6	3.8	2.7	0.156
Religious clergy	3.6	5.8	2.7	0.939
Dating abuse or rape crisis web sites	3.0	3.8	2.7	0.156
Other community-based service provider	2.4	1.9	2.7	0.090

Note: Valid, nonmissing data on measures in this table were present for 98 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

RQ 7. How often does cyber dating abuse co-occur with other types of violence and abuse, including cyber bullying?

To what extent do youth who experience and/or perpetrate dating abuse via technology also experience/perpetrate physical violence, sexual abuse, and/or psychological abuse from partners? Also, do experiences of cyber dating abuse overlap with those of cyber bullying?

Looking first at the degree to which cyber dating abuse co-occurred with other types of dating violence and abuse, as shown in tables 22 and 23, cyber dating abuse had the greatest degree of overlap with psychological dating abuse; 84 percent of cyber dating abuse victims also reported psychological dating abuse victimization, and 73 percent of cyber dating abuse perpetrators also reported psychological dating abuse perpetration. The relationships between cyber dating abuse and physical dating violence, and cyber dating abuse and sexual coercion were less pronounced. Among cyber dating abuse victims, 52 percent also reported physical dating violence victimization and 33 percent reported sexual coercion victimization; among cyber dating abuse perpetrators, 55 percent also reported physical dating violence perpetration and 11 percent reported sexual coercion perpetration. These relationships are further explored in the section addressing research question 8 below.

Regarding the co-occurrence of cyber dating abuse and cyber bullying behaviors, youth in a relationship who were victimized by cyber dating abuse were more than twice as likely to also be victims of non-partner cyber bullying, compared to youth who were not victims of cyber dating

abuse (38 percent of cyber dating abuse victims reported cyber bullying victimization, compared to 15 percent of those not victimized by cyber dating abuse). Similarly, perpetrators of cyber dating abuse were more than three times as likely to perpetrate cyber bullying against non-partners as were non-perpetrators of cyber dating abuse; 24 percent of cyber dating abuse perpetrators also perpetrated cyber bullying, compared to 7 percent of those who had not perpetrated cyber dating abuse. Both of these cross-tabulations were statistically significant at p<.001.

Table 22. Cyber Dating Abuse Victimization among Teens in a Relationship by Other Types of Violence and Abuse Experiences (%)	Cyber dating abuse victimization (*N*=944)	No cyber dating abuse victimization (*N*=2,645)	Total (*N*=3,745)
Physical dating violence victimization (χ^2=294.838***)			
Yes	51.8	22.0	29.9
No	48.2	78.0	70.1
Total	100.0	100.0	100.0
Psychological dating abuse victimization (χ^2=695.165***)			
Yes	84.2	34.2	47.2
No	15.8	65.8	52.8
Total	100.0	100.0	100.0
Sexual coercion victimization (χ^2=416.896***)			
Yes	32.4	6.2	13.0
No	67.6	93.8	87.0
Total	100.0	100.0	100.0
Cyber bullying victimization (χ^2=208.707***)			
Yes	38.2	14.7	20.8
No	61.8	85.3	79.2
Total	100.0	100.0	100.0

Note: Valid, nonmissing data on measures in this table were present for 88 to 96 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Table 23. Cyber Dating Abuse Perpetration among Teens in a Relationship by Other Types of Violence and Abuse Behaviors (%) ***(continued on next page)***	Cyber dating abuse perpetration (*N*=419)	No cyber dating abuse perpetration (*N*=3,121)	Total (*N*=3,745)
Physical dating violence perpetration (χ^2=330.895***)			
Yes	54.2	15.9	20.5
No	45.8	84.1	79.5
Total	100.0	100.0	100.0
Psychological dating abuse perpetration (χ^2=543.756***)			
Yes	72.7	19.5	25.7
No	27.3	80.5	74.3
Total	100.0	100.0	100.0

Table 23. Cyber Dating Abuse Perpetration among Teens in a Relationship by Other Types of Violence and Abuse Behaviors (%) *(continued)*	Cyber dating abuse perpetration (*N*=419)	No cyber dating abuse perpetration (*N*=3,121)	Total (N=3,745)
Sexual coercion perpetration (χ^2=141.959***)			
Yes	11.1	1.4	2.6
No	88.9	98.6	97.4
Total	100.0	100.0	100.0
Cyber bullying perpetration (χ^2=121.031***)			
Yes	24.2	7.1	9.1
No	75.8	92.9	90.9
Total	100.0	100.0	100.0

Note: Valid, nonmissing data on measures in this table were present for 86 to 94 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

RQ 8. How does cyber dating abuse relate to other life factors?

How does experiencing dating abuse via technology relate to: psychosocial measures (anxiety, depression, and anger), behavioral measures (substance use, sexual activity, delinquency, and daily activities), school measures (grades and attendance), family measures (parental support and activities with parents), and relationship measures (positive relationship qualities)?

For this last research question, we focused on identifying the most salient factors in youths' lives that were correlated with experiences of cyber dating abuse victimization and perpetration. Given the cross-sectional nature of the survey, it was not possible to disentangle the causal direction of effects between life factors and cyber dating abuse. However, our goal was simply to identify the factors that appeared most related to cyber dating abuse.

Correlates of Cyber Dating Abuse Victimization

As shown in table 24, we first identified all of the life factors that had statistically significant bivariate relationships (i.e., one on one) to cyber dating abuse victimization. These factors included variables from each of the domains described previously in the measures section: control/demographic variables (e.g., state, female, white race, living with both parents), school

Table 24. Bivariate Relationships of Life Factors and Cyber Dating Abuse Victimization *(continued on next page)*	Total %/Mean (*N*=3,745)	Victim %/Mean(*N*=944)	Nonvictim %/Mean (*N*=2645)	χ^2 or t-value
Control variables				
State				24.029***
New Jersey	39.3%	33.6%	26.5%	
New York	33.0%	33.4%	41.4%	
Pennsylvania	27.7%	33.1%	32.1%	

Table 24. Bivariate Relationships of Life Factors and Cyber Dating Abuse Victimization *(continued)*	Total %/Mean (*N*=3,745)	Victim %/Mean (*N*=944)	Nonvictim %/Mean (*N*=2645)	χ^2 or t-value
Female	52.5%	58.0%	51.0%	13.570***
White	73.7%	71.9%	75.3%	4.131*
Lives with both parents	64.0%	61.3%	65.6%	5.415*
Age	15.53	15.72	15.47	4.524***
LGBTQ	6.1%	8.6%	5.2%	13.725***
School SES	71.9%	72.7%	72.3%	0.446
Hours per day on computer	2.79	3.11	2.69	5.129***
Hours per day on cell phone	5.64	5.96	5.54	4.370***
School performance				
Attend school every day	95.0%	92.9%	95.8%	12.644***
Grades				18.494***
As and Bs in school	60.5%	56.2%	62.2%	
Bs and Cs in school	38.2%	41.3%	36.8%	
Ds and Fs in school	1.4%	2.5%	1.0%	
Parent involvement				
Closeness to primary parent	3.12	2.99	3.17	-4.185***
Frequency of activities with parent	6.52	6.32	6.59	-1.832†
Frequency of communication with parent	6.19	6.33	6.15	1.386
Risk behaviors				
Frequency of drug use in last 30 days				
Alcohol use	2.22	3.10	1.91	7.364***
Binge drinking	1.65	2.40	1.38	6.685***
Marijuana use	2.14	3.03	1.81	6.202***
Any drug use	5.68	8.47	4.64	6.657***
Serious drug use	1.34	2.38	0.94	3.774***
Number of delinquent behaviors in last year	0.76	1.21	0.59	9.736***
Sexual activity—any in lifetime	51.1%	65.5%	45.7%	97.143***
Age of first sexual encounter	14.61	14.44	14.71	-3.324**
Ever exchanged sex for something of value	4.6%	7.0%	3.1%	12.326***
Psychosocial measures (in last seven days)				
Frequency of feelings of depression	3.40	5.24	2.74	12.574***
Frequency of feelings of anger/hostility	2.60	4.20	2.02	12.124***
Frequency of feelings of anxiety	1.99	3.28	1.53	11.142***
Prosocial activities (frequency)	49.48	47.68	50.13	-2.526*
Relationship Quality (mean frequency)	2.47	2.51	2.47	1.602*

Note: Valid, nonmissing data on measures in this table were present for 89 to 100 percent of respondents, except as follows: valid, nonmissing data for parental education, age of first sexual encounter, and exchanged sex for something of value were 72, 59, and 59 percent, respectively; these variables were deemed unreliable and were not used in further analyses.

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other

SES = socioeconomic status

†p<.10; *p<.05; **p<.01; ***p<.001

performance (e.g., attendance, grades), parent involvement (e.g., closeness to primary parent), behaviors (e.g., drug use, delinquency, sexual activity), psychosocial adjustment measures (e.g., anxiety, depression), prosocial activities, and relationship quality.

Given the high number of statistically significant differences shown in Table 24, we identify below those that appeared most substantively important. We note, however, that all differences significant at $p<.05$ or less made it into the domain-specific multivariate modeling whose discussion follows. The most meaningful[35] bivariate correlates of the average cyber dating abuse victim were as follows:

- Female
- LGBTQ
- Higher number of hours per day on computer
- Poorer grades in school
- More frequent drug use
- Higher number of delinquent behaviors in lifetime
- Sexual activity in lifetime
- Depression
- Anger/hostility
- Anxiety

Other factors in the table were statistically significant but less substantively important, given that the observed differences were less than 10 percent from that of the average non-victim.

Next, to further assess the relative importance of the above bivariate correlates to cyber dating abuse victimization, we estimated a series of logistic regression models (each with "cyber dating abuse victimization" as the "yes/no" outcome). The first set of these models tested significant correlates by domain, with control variables (e.g., age, race, school SES) present in each model; results from these domain-specific models are presented in appendix E. From these domain-specific models, we kept all correlates that remained statistically significant and tested them in a final multivariate model, which is presented in table 25 (next page).

From table 25, it is clear that the life factors below have the strongest overall correlations to cyber dating abuse victimization, when other life factors are controlled for (i.e., held constant):

- Female
- Higher number of delinquent behaviors in lifetime
- Sexual activity in lifetime
- Depression
- Anger/hostility

[35] By "meaningful," we refer to differences for whom victim/non-victim prevalence rates differed by 10 percent or more. We intentionally excluded "ever exchanged sex for something of value" from this list due to the high percentage of missing responses (data were valid for only 59 percent of respondents). We also excluded state from this list to avoid implying that our convenience sampling produced groups of youth representative of the states from which they came; rather, state is conceptualized as a statistical control.

Next, we wondered: do the six factors above also predict other types of teen dating violence/abuse victimization? To answer this question, we re-estimated the same model in table 25 using other forms of teen dating violence/abuse victimization (e.g., physical violence, psychological violence, sexual coercion) as the outcomes.

Table 25. Multivariate Model of Most Significant Correlates of Cyber Dating Abuse Victimization	B	SE
Control variables		
State		
New York (reference category)		
New Jersey	0.463**	0.151
Pennsylvania	0.139	0.261
Female	0.344***	0.103
White	-0.053	0.116
Lives with both parents	0.046	0.105
Age	-0.016	0.038
LGBTQ	-0.119	0.196
School SES	0.000	0.005
Hours per day on computer	0.023	0.023
Hours per day on cell phone	0.028	0.019
School performance		
Attend school every day	-0.105	0.221
Grades		
As and Bs in school (reference category)		
Bs and Cs in school	0.373	0.505
Ds and Fs in school	-0.036	0.105
Parent involvement		
Closeness to primary parent	0.050	0.050
Risk behaviors		
Number of delinquent behaviors in last year	0.224***	0.038
Sexual activity—any in lifetime	0.654***	0.107
Psychosocial measures (in last seven days)		
Frequency of feelings of depression	0.068***	0.012
Frequency of feelings of anger/hostility	0.047***	0.014
Prosocial activities (frequency)	-0.002	0.002
CONSTANT	-2.324**	0.810

Notes: Nagelkerke R-squared = 0.161; *N*=2,751 youth with valid, nonmissing data across all measures, which represents 74 percent of respondents in a relationship (see previous note about missing data in Analytic Strategy section).
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Results from these re-estimations are summarized in table 26, where the answers are overwhelmingly "yes." In sum, nearly all of the factors that were correlated with cyber dating abuse victimization also mattered for other types of teen dating violence and abuse victimization.

Table 26. Correlates of Cyber Dating Abuse Victimization to Other Teen Dating Violence and Abuse Victimization

CORRELATE	Physical dating violence victimization	Psychological dating abuse victimization	Sexual coercion victimization
Female	(Male)***	Yes*	Yes***
Higher number of delinquent behaviors	Yes***	Yes***	Yes**
Sexual activity in lifetime	Yes***	Yes***	Yes***
Depression	Yes**	Yes***	Yes***
Anger/hostility	Yes***	Yes***	NS

NS = not a significant correlate in multivariate model
†p<.10; *p<.05; **p<.01; ***p<.001

Lastly, we then wondered: do the strengths of these correlations matter more for cyber abuse victimization than for other types of teen dating violence and abuse? Toward this end, we statistically compared the strength of each life factor's resulting correlation/effect (i.e., its β value) to that in the model for cyber dating abuse.[36] These comparisons revealed the following:

- Female's strength as a correlate for cyber dating abuse victimization differed significantly from that for physical dating violence (where being male mattered) and sexual coercion (where being female mattered more).
- Delinquency's strength as a correlate for cyber dating abuse victimization differed significantly from that for psychological dating abuse (where it mattered less).
- Sexual activity's strength as a correlate for cyber dating abuse victimization differed significantly from that for sexual coercion (where it mattered more).
- Depression's strength as a correlate for cyber dating abuse victimization differed significantly from that for physical dating violence (where it mattered less).

There were no significant differences in the strength of other correlates' relationship to other types of teen dating violence and abuse victimization; specifically:

- Delinquency, sexual activity, and anger/hostility were as strongly correlated to cyber dating abuse victimization, in the multivariate models tested, as they were to physical dating violence victimization.
- Being female, sexual activity, depression, and anger/hostility were as strongly correlated to cyber dating abuse victimization, in the multivariate models tested, as they were to psychological dating abuse victimization.
- Delinquency, depression, and anger/hostility were as strongly correlated to cyber dating abuse victimization, in the multivariate models tested, as they were to sexual coercion victimization.

[36] See appendix E for these comparisons, which were conducted by calculating z-scores of the difference in β values between models, following steps described in Paternoster et al. (1998). The p-value of each z-score was obtained from a z-table.

Correlates of Cyber Dating Abuse Perpetration

Next, we turned to cyber dating abuse perpetration to identify its strongest correlates. As shown in table 27, there were a number of statistically significant differences between perpetrators and non-perpetrators; for that reason, we identify below only the most substantively meaningful[37] bivariate correlates of the average cyber dating abuse perpetrator (yet, we note that everything significant at p<.05 or less made it into the domain-specific multivariate modeling discussed shortly).

- Female
- LGBTQ
- Higher number of hours per day on computer
- Higher number of hours per day on cell phone
- More frequent drug use
- Higher number of delinquent behaviors in lifetime
- Sexual activity in lifetime
- Depression
- Anger/hostility
- Anxiety
- Fewer prosocial activities

Table 27. Bivariate Relationships of Life Factors and Cyber Dating Abuse Perpetration *(continued on next page)*	Total %/Mean (*N*=3,745)	Perpetrator %/Mean (N=419)	Non-perpetrator %/Mean (*N*=3,121)	χ^2 or t-value
Control variables				
State				20.715***
New Jersey	39.3%	33.4%	27.5%	
New York	33.0%	28.9%	40.4%	
Pennsylvania	27.7%	37.7%	32.1%	
Female	52.5%	63.2%	52.1%	18.001***
White	78.1%	72.6%	75.0%	1.153
Live with both parents	64.0%	60.9%	65.1%	2.915†
Age	15.53	15.81	15.50	4.371***
LGBTQ	6.1%	9.4%	5.6%	9.157**
School SES	71.9%	71.0%	72.5%	-1.084
Hours per day on computer	2.79	3.19	2.73	4.039***
Hours per day on cell phone	5.64	6.29	5.56	5.983***

[37] Statistically significant and of meaningful difference; that is, greater than 10 percent difference from non-perpetrators. We intentionally excluded "ever exchanged sex for something of value" from this list due to the high percentage of missing responses; and we excluded state, because it is conceptualized strictly as a statistical control.

Table 27. Bivariate Relationships of Life Factors and Cyber Dating Abuse Perpetration *(continued)*	Total %/Mean (*N*=3,745)	Perpetrator %/Mean (*N*=419)	Non-perpetrator %/Mean (*N*=3,121)	χ^2 or t-value
School Performance				
Attend school every day	95.0%	92.9%	95.5%	5.592*
Grades				5.734†
As and Bs in school	60.5%	58.7%	61.6%	
Bs and Cs in school	38.2%	38.8%	37.3%	
Ds and Fs in school	1.4%	2.5%	1.1%	
Parent involvement				
Closeness to primary parent	3.12	2.99	3.14	-2.632***
Frequency of activities with parent	6.52	6.06	6.59	-2.671**
Frequency of communication with parent	6.19	6.49	6.16	1.876†
Risk behaviors				
Frequency of drug use in last 30 days				
Alcohol use	2.22	3.54	2.01	6.623***
Binge drinking	1.65	2.73	1.47	5.842***
Marijuana use	2.14	3.24	1.91	4.785***
Any drug use	5.68	10.37	4.86	5.496***
Serious drug use	1.34	3.59	0.95	3.655***
Number of delinquent behaviors in last year	0.76	1.34	0.66	7.337***
Sexual activity—any in lifetime	51.1%	71.7%	47.7%	80.372***
Age of first sexual encounter	14.61	14.53	14.66	-1.285
Ever exchanged sex for something of value	4.6%	7.9%	3.5%	10.203**
Psychosocial measures (in last seven days)				
Frequency of feelings of depression	3.40	5.61	3.06	9.407***
Frequency of feelings of anger/hostility	2.60	4.68	2.28	9.380***
Frequency of feelings of anxiety	1.99	3.33	1.78	7.569***
Prosocial activities (frequency)	49.48	43.31	50.32	-5.333***
Relationship quality (mean frequency)	2.47	2.59	2.46	4.996***

Note: Valid, nonmissing data on measures in this table were present for 89 to 100 percent of respondents, except as follows: valid, nonmissing data for parental education, age of first sexual encounter, and exchanged sex for something of value were 72, 59, and 59 percent, respectively; these variables were deemed unreliable and were not used in further analyses.
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Other factors in the table were statistically significant but less substantively important, given that the observed differences for perpetrators were less than 10 percent from that of the average non-perpetrator.

Next, to further assess the relative importance of the above bivariate correlates to cyber dating abuse perpetration, we estimated a series of logistic regression models (each with "cyber dating abuse perpetration" as the "yes/no" outcome). The first set of these models tested significant correlates by domain, with control variables (e.g., age, race, school SES) present in each model; results from these domain-specific models are presented in appendix E. From these domain-specific models, we kept all correlates that remained statistically significant and tested them in a final multivariate model, which is presented in table 28.

Table 28. Multivariate Model of Most Significant Correlates of Cyber Dating Abuse Perpetration	B	SE
Control variables		
State		
New York (reference category)		
New Jersey	0.565**	0.201
Pennsylvania	0.213	0.337
Female	0.307*	0.135
White	0.022	0.150
Lives with both parents	0.120	0.134
Age	-0.045	0.050
LGBTQ	-0.050	0.231
School SES	-0.003	0.007
Hours per day on computer	0.032	0.029
Hours per day on cell phone	0.075**	0.026
Risk behaviors		
Frequency of drug use in last 30 days		
Alcohol use	0.029†	0.016
Serious drug use	0.013*	0.006
Number of delinquent behaviors in last year	0.104*	0.043
Sexual activity—any in lifetime	0.693***	0.147
Psychosocial measures (in last seven days)		
Frequency of feelings of depression	0.044**	0.014
Frequency of feelings of anger/hostility	0.057***	0.016
Prosocial activities (frequency)	-0.009***	0.003
Relationship quality (mean frequency)	0.235†	0.126
CONSTANT	-3.249***	1.020

Notes: Nagelkerke R-squared = 0.149; N=2,941 youth with valid, nonmissing data across all measures, which represents 79 percent of respondents in a relationship (see previous note about missing data in Analytic Strategy section).
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

From table 28, it is clear that the life factors below have the strongest overall correlations to cyber dating abuse perpetration, when other life factors are controlled for (i.e., held constant).

- Female
- Higher number of hours per day on cell phone
- More frequent serious drug use
- Higher number of delinquent behaviors in lifetime
- Sexual activity in lifetime
- Depression
- Anger/hostility
- Fewer prosocial activities

Next, we re-estimated the same model in table 28 using other forms of teen dating violence/abuse perpetration (e.g., physical violence, psychological violence, sexual coercion) as the outcomes, to answer the question: Do the factors above also predict other types of teen dating violence/abuse perpetration?

Results from these re-estimations are summarized in table 29, where most of the answers are "yes" (17 of the 24 cells in the table show "yes"). In sum, more than two-thirds of the factors that were correlated with cyber dating abuse perpetration also mattered for other types of teen dating violence/abuse perpetration.

Table 29. Correlates of Cyber Dating Abuse Perpetration to Other Teen Dating Violence and Abuse Perpetration?

CORRELATE	Physical dating violence perpetration	Psychological dating abuse perpetration	Sexual coercion perpetration
Female	Yes***	Yes***	(Male)***
Hours per day on cell phone	Yes**	Yes†	NS
Serious drug use	NS	NS	Yes**
Higher number of delinquent behaviors	Yes**	Yes*	Yes*
Sexual activity in lifetime	Yes***	Yes***	Yes*
Depression	Yes*	Yes***	NS
Anger/hostility	Yes***	Yes**	NS
Prosocial activities	NS	Yes***	NS

NS = not a significant correlate in multivariate model
†p<.10; *p<.05; **p<.01; ***p<.001

Lastly, we examined whether the strengths of these correlations mattered more for cyber abuse perpetration than for other types of teen dating violence/abuse. We statistically compared[38] the strength of each life factor's resulting correlation/effect (i.e., its β value) to that in the model for cyber dating abuse and found the following:

- Female's strength as a correlate for cyber dating abuse perpetration differed significantly from that for physical dating violence (where it mattered more) and sexual coercion (where being male mattered).

[38] See appendix E for these z-score comparisons.

- Serious drug use's strength as a correlate for cyber dating abuse perpetration differed significantly from that for psychological abuse (where it did not matter).
- Prosocial activities' strength as a correlate for cyber dating abuse perpetration differed significantly from that for physical violence (where it did not matter).

There were no significant differences in the strength of other correlates' relationship to other types of teen dating violence/abuse.

- Cell phone activity, alcohol use, delinquency, sexual activity, depression, and anger/hostility were just as correlated, in the multivariate models tested, with cyber abuse perpetration as they were with physical dating violence, psychological dating abuse, and sexual coercion perpetration.
- Being female and prosocial activities were just as correlated with cyber dating abuse perpetration as they were with psychological dating abuse perpetration.
- Serious drug use was just as correlated with cyber abuse perpetration as it was with physical dating violence and sexual coercion perpetration.
- Prosocial activities were just as correlated with cyber dating abuse perpetration as they were with sexual coercion perpetration.

Bullying

In this section, we describe survey findings with regard to bullying and examine experiences among the entire sample of 5,647 youth respondents.

RQ 1. How often do youth experience bullying victimization?

Outside of teen's dating relationships, to what extent do youth experience bullying from others? Does the extent to which youth experience cyber bullying—that is, psychologically abusive contacts via technology (e.g., social networking sites, texting)—differ from the extent to which they experience other psychological bullying and physical bullying?

Table 30 shows the prevalence of bullying victimization among all surveyed youth (see appendix F for the individual item prevalence of all bullying victimization measures, by gender). Outside of their dating relationships, one in six youth reported being victims of cyber bullying (17 percent) in the past year, while more than twice this share reported being victims of physical bullying (41 percent) and/or psychological bullying (45 percent).

Table 30. Prevalence of Bullying Victimization (%)	Total (*N*=5,647)
Cyber bullying	17.3
Physical bullying	40.7
Psychological bullying	44.8

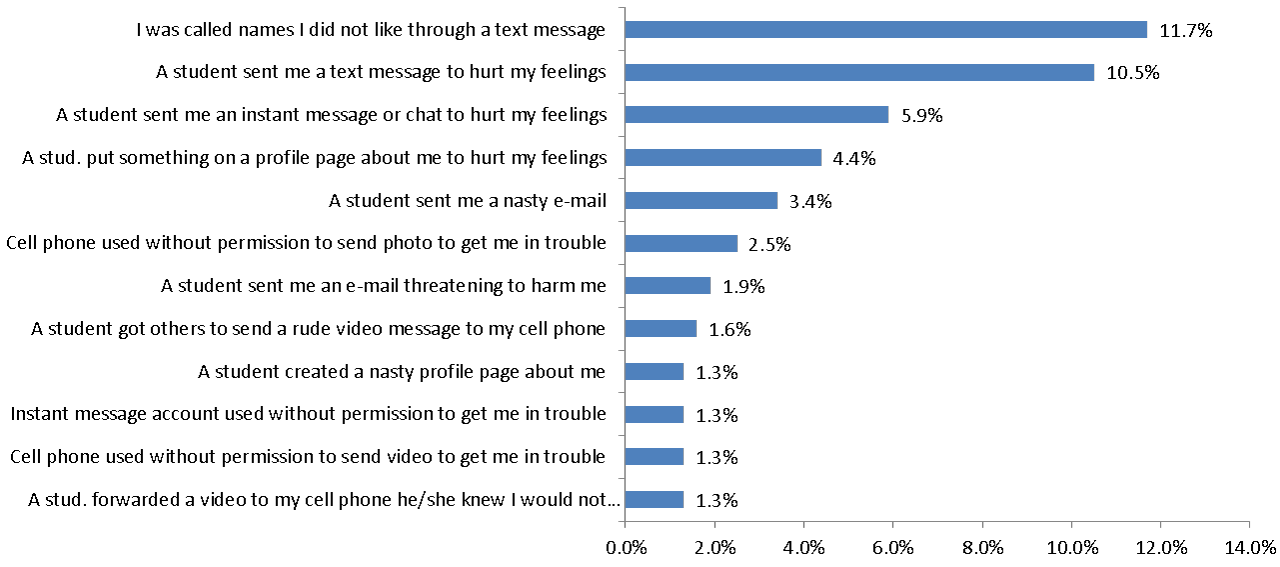
Note: Valid, nonmissing data on measures in this table were present for 91 to 92 percent of respondents.

To elaborate on the prevalence of cyber bullying victimization, figure 5 shows a breakdown of individual item responses.[39] By far, the most frequently reported forms of cyber bullying were being called names youth did not like via text message (12 percent) and receiving a text message from another student intended to hurt youths' feelings (11 percent); one out of ten surveyed youth reported one or both of these types of victimizations. The next most frequently reported items were other students sending an instant message or chat to hurt youths' feelings (6 percent), putting something on a profile page to hurt youths' feelings (4 percent), and receiving a nasty email from another student (3 percent).

The least commonly reported forms of cyber bullying victimization, reported by only one percent of the surveyed teens, were as follows: another student forwarding a video to youths' cell phone, knowing they would not like it; another student using youths' cell phone without permission to send a video to get them in trouble; another student using youths' instant message account without permission to get them in trouble; and another student created a nasty profile page (e.g., Facebook, YouTube) about the youth respondent.

[39] The individual item prevalence of all bullying measures, by gender, is shown in appendix F.

Figure 5. Individual Item Prevalence of Cyber Bullying Victimization among Teens (*N*=5,647)



Note: Valid, nonmissing data on measures in this table were present for 91 to 92 percent of respondents.

RQ 2. How often do youth perpetrate bullying?

Outside of teen's dating relationships, to what extent do youth report perpetrating bullying against others? Does the extent to which youth perpetrate cyber bullying differ from the extent to which they perpetrate other psychological bullying or physical bullying?

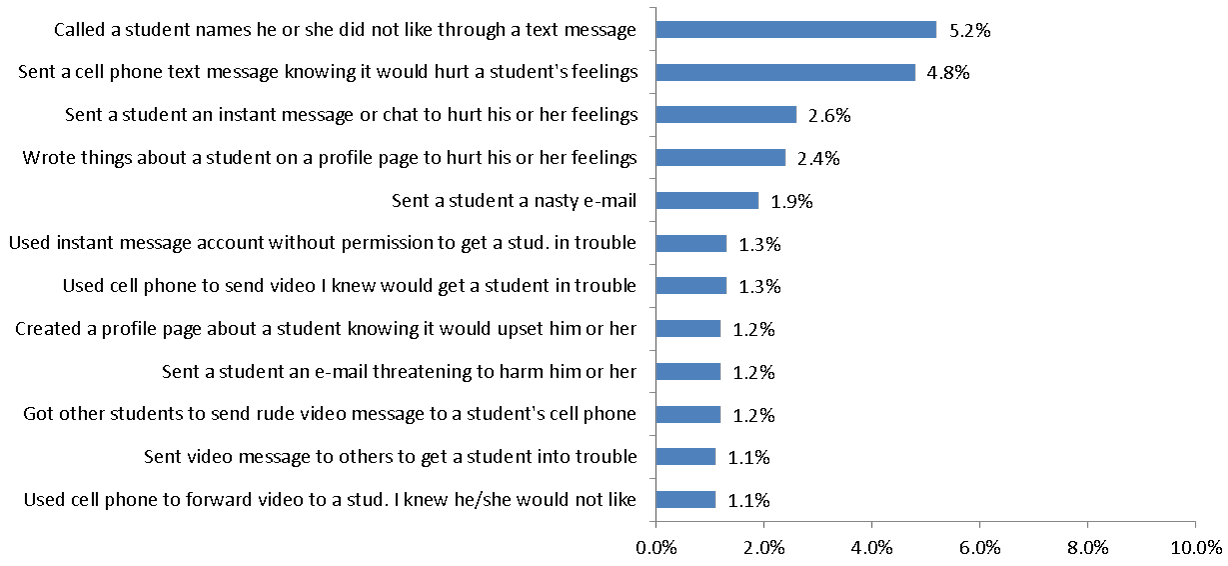
Table 31 shows the prevalence of bullying perpetration among all surveyed youth (see appendix F for the individual item prevalence of all bullying perpetration measures, by gender). Fewer than one in ten youth reported perpetrating cyber bullying (8 percent) in the prior year, while substantially larger shares of youth said they had perpetrated physical bullying (29 percent) and/or psychological bullying (32 percent) during that time.

Table 31. Prevalence of Bullying Perpetration (%)	Total (*N*=5,647)
Cyber bullying	7.6
Physical bullying	28.7
Psychological bullying	32.4

Note: Valid, nonmissing data on measures in this table were present for 89 to 90 percent of respondents.

Figure 6 shows a breakdown of individual item prevalence rates for cyber bullying perpetration.[40] Notably, the most frequently reported forms of cyber bullying perpetration were identical to those reported by youth as the most frequent forms of cyber bullying victimization; the only difference was that they occurred at half the prevalence rate. Specifically, one out of twenty surveyed youth said they had called another student names they did not like via text message (5 percent) and/or sent a text message to another student intended to hurt their feelings (5 percent), while fewer than three percent of youth said they had sent an instant message or chat to hurt another student's feelings (2.6 percent), put something on a student's profile page to hurt their feelings (2.4 percent), and/or sent a nasty email to another student (1.9 percent).

Figure 6. Individual Item Prevalence of Cyber Bullying Perpetration among Teens (*N*=5,647)



Notes: Valid, nonmissing data for the measures in this figure were present for 89 to 90 percent of respondents.

The least commonly reported forms of cyber bullying perpetration, reported by only 1.1 percent of the surveyed teens, were forwarding a video to another student's cell phone that the respondent knew was unwanted and sending a video message to other students to get someone in trouble.

RQ 3. Does bullying vary by gender, and do bullying victims/perpetrators overlap?

Are there differences in cyber bullying and other bullying victimization and/or perpetration rates based on gender? What proportion of youth is both victimized and perpetrating?

In this section, we focus on gender variation and the extent of victimization/perpetration overlap in youths' bullying experiences.

[40] The individual item prevalence of all bullying measures, by gender, is shown in appendix F.

Gender Variation in Bullying Victimization

Table 32 shows the prevalence[41] of bullying victimization for all surveyed youth, and for the 2,705 males and 2,904 females in the sample separately.[42] The last column shows the statistical significance of gender variation using the chi-squared statistic (χ^2) and its associated probability (*p*), which identifies the likelihood of observing such variation if the population difference was zero. Lower probabilities/more asterisks equate to more statistically significant results.

All gender differences were statistically significant and indicated that females were more likely than males to report cyber and psychological bullying victimizations, while males were more likely to report physical bullying experiences. Specifically, females were twice as likely as males to have experienced cyber bullying in the prior year; nearly one out of four females (23 percent) reported cyber bullying victimization, compared to 11 percent of males. Further, half of the female youth said they had experienced psychological bullying in the prior year, compared to 39 percent of male youth. Nearly the reverse was true with regard to physical bullying: Almost half of the male youth (45 percent) said they experienced physical bullying in the prior year, compared to 37 percent of females.

Table 32. Prevalence of Bullying Victimization by Gender (%)	Total (*N*=5,647)	Male (*N*=2,705)	Female (*N*=2,904)	χ^2
Cyber bullying	17.3	11.1	22.8	123.531***
Physical bullying	40.7	44.7	36.8	33.144***
Psychological bullying	44.8	38.5	50.1	70.055***

Note: Valid, nonmissing data on measures in this table were present for 91 to 92 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Gender Variation in Bullying Perpetration

Table 33 shows the prevalence[43] of bullying perpetration for all youth in the sample and for males and females separately, with chi-squared statistics documenting the level of significant differences between male and female youth. Two findings emerged as statistically significant: Females reported a higher prevalence of cyber bullying perpetration than did males (9 percent, compared to 6 percent for males), and males reported almost twice the prevalence of physical bullying perpetration as did females (38 percent, compared to 20 percent for females). There was no gender variation in psychological bullying, which a third of males (33 percent) and females (32 percent) reported perpetrating.

[41] Appendix G presents tables showing the frequency and variety of bullying by gender.
[42] Twenty-eight youth (0.5 percent) identified as transgender and ten did not report their gender (0.2 percent). These youth are included in the total sample of surveyed youth but not in the male/female breakouts.
[43] Appendix G presents tables showing the frequency and variety of bullying by gender.

Table 33. Prevalence of Bullying Perpetration by Gender (%)	Total (*N*=5,647)	Male (*N*=2,705)	Female (*N*=2,904)	χ^2
Cyber bullying	7.6	5.9	9.0	16.846***
Physical bullying	28.7	38.4	19.8	211.499***
Psychological bullying	32.4	32.5	32.1	0.102

Note: Valid, nonmissing data on measures in this table were present for 89 to 90 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Victim/Perpetrator Overlap in Bullying Experiences

Next, we examined the extent of overlap in reports of bullying victimization and perpetration among all youth in the sample, as well as the prevalence of youth who only reported victimization experiences and those who only reported perpetration.[44] As shown in table 34, we also assessed whether these prevalence rates varied between male and female youth; and in fact, they did for each type of bullying (see the significant chi-squared statistics in the last column of the table).

Across all youth, the greatest prevalence of overlap in victimization and perpetration reports occurred with regard to physical bullying (21 percent of youth reported both types of bullying) and psychological bullying (23 percent of youth reported both types of abuse) in the prior year. These rates were similar to the shares of youth who reported *only victimization* experiences for each type of bullying (19 percent and 22 percent, respectively, for physical and psychological bullying victimizations) and more than twice the shares who reported only perpetration (7 percent and 10 percent, respectively, for physical and psychological bullying perpetration).

In contrast, most of youths' experiences with cyber bullying involved only victimization (12 percent), while less than half that share (5 percent) reported both victimization and perpetration, or only perpetration (2 percent). Using data in the table below, we also calculated what proportion of bullying victims also perpetration and what proportion of perpetrators were also victimized. For example, we divided the percentage who both were victimized and perpetrated by the total percentage of victims (which equals the sum of victim-bully overlap and only victimization percentages), to show the portion of victims who also perpetrated. We noted the following findings:

- Most cyber bullying victims (69 percent) did *not* report perpetrating cyber bullying. By contrast, half of the physical bullying (52 percent) and psychological bullying (50 percent) victims also reported perpetrating the same type of bullying; and
- Most cyber bullying (72 percent), physical bullying (75 percent), and psychological bullying (70 percent) perpetrators reported also being victimized by the same type of bullying.

Lastly, we turn to gender variation in overlapping reports of bullying victimization and perpetration, which were statistically significant for all types of bullying. As shown in table 34 and figure 7, for all forms of bullying, female youth were significantly more likely to report *only*

[44] The survey was not designed to disentangle offensive from defensive acts of bullying, so the primary focus here is on the overlap in victimization and perpetration regardless of who the primary "bully" may have been.

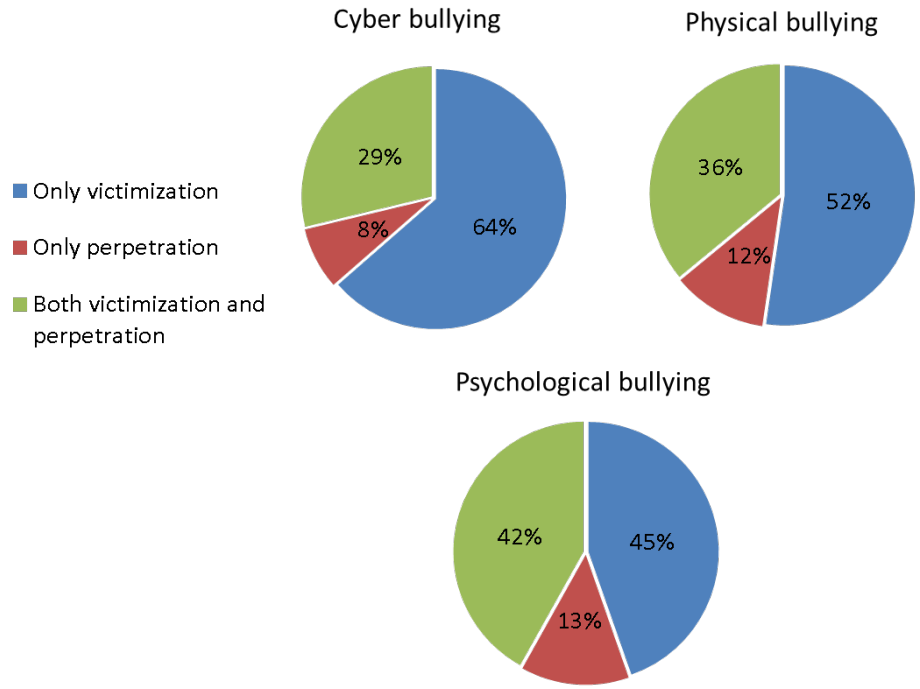
victimization experiences, while males were more likely to report *only perpetration* behavior. With regard to victim/perpetrator overlap in bullying, the most notable differences were that females were twice as likely as males to report overlap behavior with regard to cyber bullying (7 percent, compared to 3 percent for males), while males were twice as likely as females to report overlap behavior with regard to physical bullying (28 percent, compared to 15 percent for females).

Table 34. Bullying Victimization and Perpetration (%)	Total (*N*=5,647)	Male (*N*=2,705)	Female (*N*=2,904)	χ^2
Cyber bullying				119.913***
Only victimization	12.0	7.8	15.7	
Only perpetration	2.1	2.5	1.9	
Both victimization and perpetration	5.3	3.2	7.1	
Physical bullying				200.867***
Only victimization	19.4	16.6	21.8	
Only perpetration	7.2	9.7	4.9	
Both victimization and perpetration	21.4	28.3	15.0	
Psychological bullying				75.862***
Only victimization	22.4	18.4	25.9	
Only perpetration	9.8	12.0	7.8	
Both victimization and perpetration	22.6	20.4	24.3	

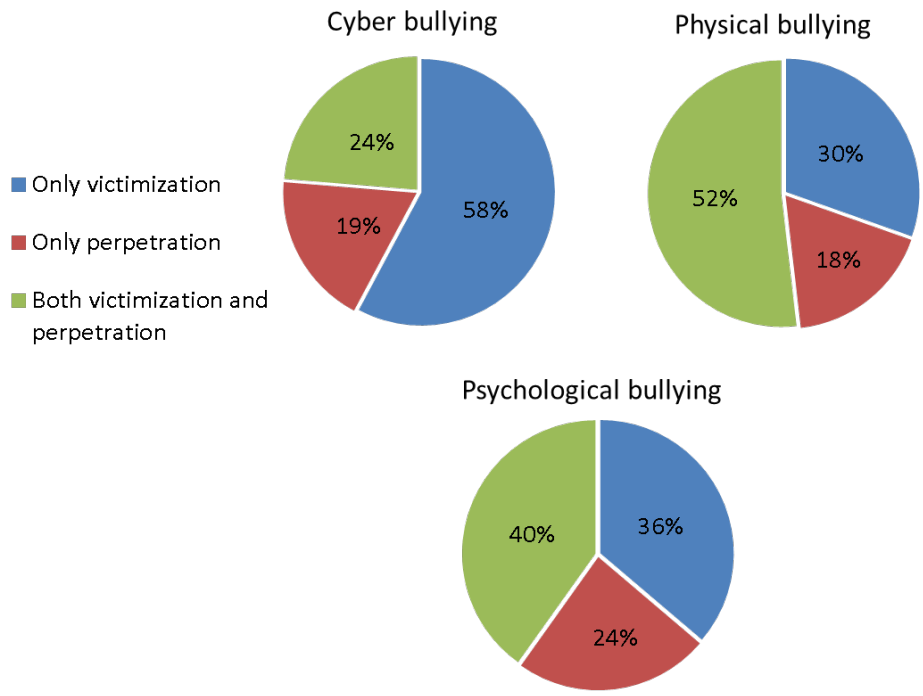
Note: Valid, nonmissing data on measures in this table were present for 88 to 89 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Figure 7. Overlap in Bullying Victimization and Perpetration Experiences

How female youth (*N*=2,904) experience bullying:



How male youth (*N*=2,705) experience bullying:



RQ 4. Does bullying vary by other subgroup status?

Specifically, are there differences in bullying victimization and/or perpetration rates based on sexual orientation or middle school/high school status?

In this section, we examine the extent of variation in youths' bullying experiences by sexual orientation and school status.

Variation in Bullying Experiences by Sexual Orientation

Tables 35 and 36 show the prevalence of bullying victimization and perpetration for youth based on whether they identified as heterosexual/straight (94 percent, 5,218 youth) or as lesbian, gay, bisexual, transgender, or questioning (6 percent, 316 youth), with a chi-squared statistic documenting the level of significance across categories.[45] The takeaway: across all categories of bullying experiences, LGBTQ-identified youth reported significantly higher rates of bullying victimization and perpetration than did heterosexual youth.

Table 35. Prevalence of Bullying Victimization by Sexual Orientation (%)	Total (*N*=5,647)	LGBTQ (*N*=316)	Heterosexual % (*N*=5,218)	χ^2
Cyber bullying	17.3	24.1	17.0	9.363**
Physical bullying	40.7	57.0	39.8	33.220***
Psychological bullying	44.8	63.9	43.7	44.281***

Note: Valid, nonmissing data on measures in this table were present for 91 to 92 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Table 36. Prevalence of Bullying Perpetration by Sexual Orientation (%)	Total (*N*=5,647)	LGBTQ (*N*=316)	Heterosexual (*N*=5,218)	χ^2
Cyber bullying	7.6	12.3	7.3	8.890**
Physical bullying	28.7	34.9	28.4	5.397*
Psychological bullying	32.4	37.3	32.2	3.007†

Note:
Valid, nonmissing data on measures in this table were present for 89 to 90 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Variation in Bullying Experiences by School Status

Tables 37 and 38 show the prevalence rates of bullying victimization and perpetration by high school (89 percent, 4,995 youth) and middle school (11 percent, 652 youth) status, with chi-squared statistics indicating significant differences by school status. Across all categories of bullying, high school students reported significantly higher prevalence rates of bullying victimization and perpetration than did middle school students.[46]

[45] Two percent (n=113) of youth did not identify a sexual orientation, so were not included in the LGBTQ or heterosexual column, but were included in the total column.

[46] We also examined variation in bullying victimization and perpetration rates by the grade level, and found that youth in the two middle school grades (7th and 8th) and youth in 12th grade reported the lowest rates of

Table 37. Prevalence of Bullying Victimization by High School or Middle School Status (%)	Total (*N*=5,647)	High school (*N*=4,995)	Middle school (*N*=652)	χ^2
Cyber bullying	17.3	18.1	10.5	19.673***
Physical bullying	40.7	41.4	35.3	7.424**
Psychological bullying	44.8	45.9	35.8	20.332***

Note: Valid, nonmissing data on measures in this table were present for 91 to 92 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Table 38. Prevalence of Bullying Perpetration by High School or Middle School Status (%)	Total (N=5,647)	High school (N=4,995)	Middle school (N=652)	χ^2
Cyber bullying	7.6	8.1	3.0	16.657***
Physical bullying	28.7	29.4	22.3	11.558**
Psychological bullying	32.4	33.8	19.7	42.116***

Note: Valid, nonmissing data on measures in this table were present for 89 to 90 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

RQ 5. Does bullying happen at school?

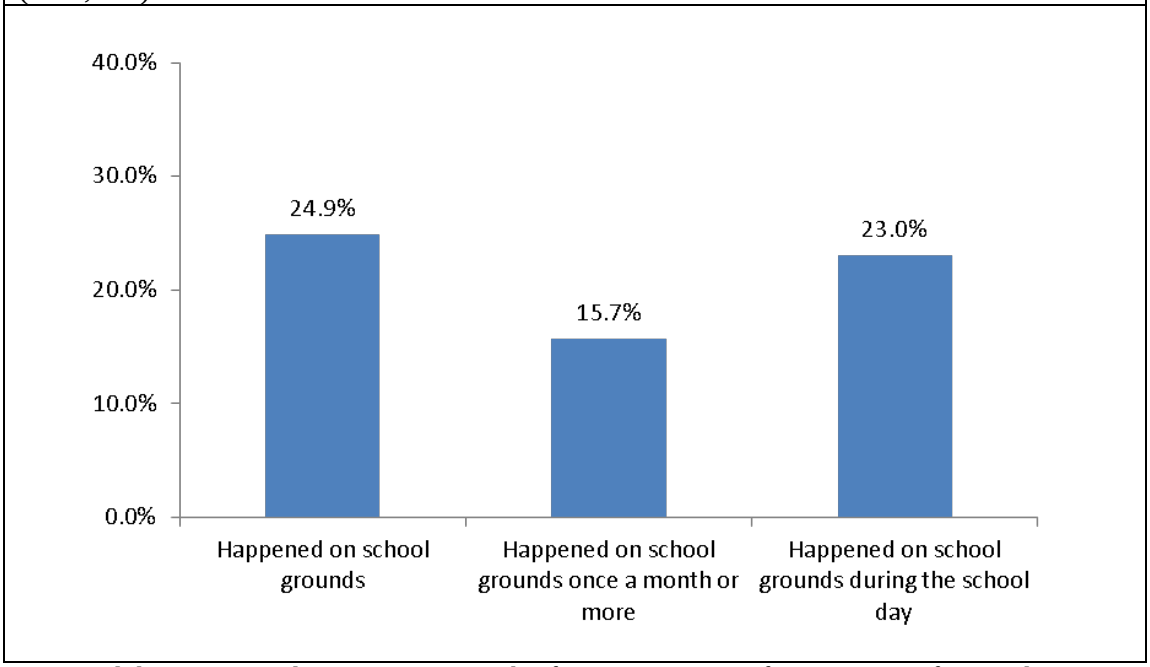
Do bullying experiences happen on school grounds and during the school day?

Surveyed youth were asked, in general, whether any of the bullying victimization experiences they reported had occurred on school grounds, how often they had occurred at school, and whether they had happened during the school day. Figure 8 shows the prevalence rates for each of these questions regarding bullying victimization at school. As shown, one out of four youth said they had experienced bullying on school grounds (25 percent) and nearly the same share said it had happened during the school day (23 percent). Further, fifteen percent of youth said they had experienced at least one type of bullying victimization (cyber, physical, and/or psychological) at school once a month or more during the prior year.

---

victimization and perpetration regarding cyber, physical, and psychological bullying. With regard to victimization rates for all types of bullying, youth in 10th grade reported the highest rate, followed closely by those in 11th grade. With regard to perpetration rates for all types of bullying, youth in 11th grade reported the highest rate, followed closely by those in 10th grade. Youth in 9th grade reported rates in between those of 10th/11th graders (at the high end) and 7th/8th/12th graders (at the low end). Thus, we did not find support for the presence of higher levels of bullying experiences in transitional grade years.

Figure 8. Prevalence of Bullying Victimization on School Grounds among Teens (%) (*N*=5,647)



Note: Valid, nonmissing data on measures in this figure were present for 84 percent of respondents.

RQ 6. Do bullying victims seek help?

Are youth seeking help if they experience bullying? To whom do the youth report these experiences (e.g. friends, parents, teachers, other school staff, police, no one)?

Of the surveyed youth, 2,887 youth said they were victims of at least one type of bullying, including 1,297 male victims and 1,566 female victims.[47] Table 39 shows the percent of bullying victims who sought help after being victimized. Overall, 17 percent of bullying victims sought help after being victimized, 10 percent sought help after one day or less, and 6 percent sought help after the first incident. For each measure of help-seeking behavior, females were about twice as likely as males to have sought help; all differences were statistically significant.

Table 39. Prevalence of Help-Seeking Behavior among Teens (%)	Bullying victims (*N*=2,887)	Male victims (*N*=1,297)	Female victims (*N*=1,566)	χ^2
Sought help	16.6	10.3	22.1	49.940***
Sought help within one day of incident	10.1	6.7	13.0	21.815***
Sought help after first incident	5.5	3.5	7.2	13.450***

Note: Valid, nonmissing data on measures in this table were present for 70 percent of respondents, most likely because this question appeared at the end of the survey when a number of students were pressed for time on survey completion.
†p<.10; *p<.05; **p<.01; ***p<.001

[47] Seventeen youth identified as transgender rather than male or female, and seven youth did not report a gender. These youth are included in the bullying victims total but not in the male/female victim breakouts.

Table 40 shows from whom the help-seekers sought help after their bullying victimization experiences. The most frequent people to whom help-seekers turned were their parents (71 percent), friends (56 percent), school counselors (38 percent), and teachers (35 percent); and this was true for both male and female help-seeking victims (though female youth were somewhat more likely to turn to friends and males more likely to turn to school counselors; differences approached significance at p<.10). The least frequent sources of help to whom fewer than 3 percent of youth turned were school nurses, community-based service providers, and the courts. Notably, male bullying victims who sought help were at least twice as likely as female victims to turn to another relative (27 percent, compared to 14 percent for females), religious clergy (6 percent, compared to 2 percent for females), or community-based service providers (5 percent, compared to 1 percent for females) for help with their victimization; these differences were significant at p<.05 or less.

Table 40. Persons from Whom Bullying Victims Sought Help (%)	Help-seeking bullying victims (*N*=337)	Male help-seeking victims (*N*=95)	Female help-seeking victims (*N*=240)	χ^2
Parent(s)	71.3	72.6	70.8	0.108
Friend(s)	56.4	49.5	59.6	2.834†
School counselor	38.0	45.3	35.0	3.046†
Teacher	35.0	40.0	33.3	1.326
Another relative	17.2	27.4	13.8	8.699**
Physician/other healthcare provider	8.1	7.4	8.3	0.086
Police	7.1	8.4	6.7	0.315
Religious clergy	3.0	6.3	1.7	5.080*
School nurse	2.7	4.2	2.1	1.178
Community-based service provider	2.4	5.3	1.3	4.702*
Courts for a protective order	1.8	2.1	1.7	0.074

Note:
Valid, nonmissing data on measures in this table were present for 99 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

RQ 7. How often does cyber bullying co-occur with other types of violence and abuse, including cyber dating abuse?

To what extent do youth who experience and/or perpetrate cyber bullying also experience/perpetrate physical and psychological bullying? Also, do experiences of cyber bullying overlap with those of cyber dating abuse?

Tables 41 and 42 show the overlap between cyber bullying and physical and psychological bullying. As was the case with cyber dating abuse, cyber bullying had the greatest degree of overlap with psychological bullying; 88 percent of cyber bullying victims also experienced psychological bullying victimization, and 88 percent of cyber bullying perpetrators also

perpetrated psychological bullying. There was also a fairly high degree of overlap between cyber bullying and physical bullying; 72 percent of cyber bullying victims also experienced physical bullying victimization and 65 percent of cyber bullying perpetrators also perpetrated physical bullying. These relationships are further explored in the section addressing research question 8 below.

Regarding the overlap of cyber bullying and cyber dating abuse among all youth in the sample, those who were victimized by cyber bullying were almost three times as likely to also be victims of cyber dating abuse, compared to youth who were not victims of cyber bullying (38 percent of cyber bullying victims reported cyber dating abuse victimization, compared to 13 percent of those not victimized by cyber bullying). Similarly, perpetrators of cyber bullying were almost four times as likely to perpetrate cyber dating abuse against a partner as were non-perpetrators of cyber bullying; 26 percent of cyber bullying perpetrators also perpetrated cyber dating abuse, compared to 7 percent of those who had not perpetrated cyber bullying. Both of these cross-tabulations were statistically significant at p<.001.

Table 41. Cyber Bullying Victimization by Other Types of Violence and Abuse Experiences (%)	Cyber bullying victimization (*N*=893)	No cyber bullying victimization (*N*=4,257)	Total (*N*=5,647)
Physical bullying victimization (χ^2=445.570***)			
Yes	72.3	34.0	40.7
No	27.7	66.0	59.3
Total	100.0	100.0	100.0
Psychological bullying victimization (χ^2=818.284***)			
Yes	88.3	35.8	44.9
No	11.7	64.2	55.1
Total	100.0	100.0	100.0
Cyber dating abuse victimization (χ^2=300.931***)			
Yes	37.7	13.0	17.3
No	62.3	87.0	82.7
Total	100.0	100.0	100.0

Note:
Valid, nonmissing data on measures in this table were present for 86 to 91 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Table 42. Cyber Bullying Perpetration by Other Types of Violence and Abuse Behaviors (%)	Cyber bullying perpetration (*N*=379)	No cyber bullying perpetration (*N*=4,628)	Total (*N*=5,647)
Physical bullying perpetration (χ^2=266.261***)			
Yes	65.2	25.6	28.6
No	34.8	74.4	71.4
Total	100.0	100.0	100.0
Psychological bullying perpetration (χ^2=567.563***)			
Yes	87.8	27.9	32.5
No	12.2	72.1	67.5
Total	100.0	100.0	100.0
Cyber dating abuse perpetration (χ^2=164.036***)			
Yes	25.7	6.7	8.1
No	74.3	93.3	91.9
Total	100.0	100.0	100.0

Note: Valid, nonmissing data on measures in this table were present for 85 to 88 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

RQ 8. How does cyber bullying relate to other life factors?

How does experiencing cyber bullying relate to: psychosocial measures (anxiety, depression, and anger), behavioral measures (substance use, sexual activity, delinquency, and daily activities), school measures (grades and attendance), and family measures (parental support and activities with parents)?

Lastly, we focused on identifying the most important factors in youths' lives that were correlated with experiences of cyber bullying victimization and perpetration. Again, given the cross-sectional nature of the survey, it was not possible to disentangle the causal direction of effects between life factors and cyber bullying. Rather, the goal was to identify factors that appeared most related to cyber bullying.

Correlates of Cyber Bullying Victimization

As shown in table 43, we first identified all of the life factors that had statistically significant bivariate relationships (i.e., one on one) to cyber bullying victimization. These factors included variables from each of the domains described previously in the Measures section: control/demographic variables (e.g., state, female, LGBTQ), school performance (e.g., grades), parent involvement (e.g., closeness to primary parent), behaviors (e.g., drug use, delinquency, sexual activity), and psychosocial adjustment (e.g., anxiety, depression).

Table 43. Bivariate Relationships of Life Factors and Cyber Bullying Victimization	Total %/Mean (*N*=5,647)	Victim of cyber bullying %/Mean (*N*=893)	Non-victim of cyber bullying %/Mean (*N*=4,257)	χ^2 or t-value
Control variables				
State				20.963***
New Jersey	31.3%	37.7%	31.8%	
New York	39.5%	31.7%	39.6%	
Pennsylvania	29.3%	30.6%	28.6%	
Female	51.8%	69.8%	49.3%	123.531***
White	74.6%	77.2%	75.4%	1.308
Live with both parents	67.3%	67.5%	68.9%	0.603
Age	15.41	15.49	15.44	0.920
LGBTQ	5.6%	7.7%	5.1%	9.363**
School SES	74.1%	75.1%	75.1%	0.037
Hours per day on computer	2.84	3.17	2.78	5.101***
Hours per day on cell phone	5.13	5.81	4.97	8.579***
School performance				
Attend school every day	95.8%	95.9%	96.3%	0.332
Grades				6.928*
As and Bs in school	64.9%	66.5%	66.4%	
Bs and Cs in school	34.0%	31.8%	32.8%	
Ds and Fs in school	1.10%	1.7%	0.8%	
Parent involvement				
Closeness to primary parent	3.19	2.97	3.24	-6.642***
Frequency of activities with parent	6.58	6.57	6.59	-0.108
Frequency of communication with parent	5.82	6.54	5.67	7.283***
Risk behaviors				
Frequency of drug use in last 30 days				
Alcohol use	1.8	2.56	1.60	6.822***
Binge drinking	1.3	1.93	1.13	5.922***
Marijuana use	1.66	2.14	1.49	4.010***
Any drug use	4.48	6.21	3.86	5.233***
Serious drug use	1.05	1.53	0.79	2.576***
Number of delinquent behaviors in last year	0.62	0.86	0.54	6.495***
Sexual activity—any in lifetime	37.1%	47.3%	34.2%	51.846***
Age of first sexual encounter	14.59	14.45	14.65	-2.318*
Ever exchanged sex for something of value	5.3%	7.1%	4.3%	4.718*
Psychosocial measures (in last seven days)				
Frequency of feelings of depression	3.27	5.92	2.69	16.924***
Frequency of feelings of anger/hostility	2.37	4.22	1.94	13.299***
Frequency of feelings of anxiety	1.93	3.80	1.52	14.284***
Prosocial activities	48.59	48.07	48.72	-0.707

Note: Valid, nonmissing data on measures in this table were present for 89 to 100 percent of respondents, except for parental education, age at first sexual encounter, and exchanged sex for something of value, which were 72, 47, and 47 percent, respectively (these variables were deemed unreliable and were not used in further analyses).

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other

SES = socioeconomic status

†p<.10; *p<.05; **p<.01; ***p<.001

Given the high number of statistically significant differences shown in table 43, we identify below those that appeared of most substantive import. We note, however, that all differences significant at p<.05 or less made it into the domain-specific multivariate modeling whose discussion follows. The most meaningful[48] bivariate correlates of the average cyber bullying victim were

- Female,
- LGBTQ,
- Higher number of hours per day on computer,
- Higher number of hours per day on cell phone,
- More frequent communication with parent(s),[49]
- More frequent alcohol and drug use,
- Higher number of delinquent behaviors in lifetime,
- Sexual activity in lifetime,
- Depression,
- Anger/hostility, and
- Anxiety.

Other factors in the table were statistically significant but less substantively important, given that the observed differences were less than 10 percent from that of the average non-victim.

Next, to further assess the relative importance of the above bivariate correlates to cyber bullying victimization, we estimated a series of logistic regression models (each with cyber bullying victimization as the yes/no outcome). The first set of these models tested significant correlates by domain, with control variables (e.g., age, race, school SES) present in each model; results from these domain-specific models are presented in appendix H. From these domain-specific models, we kept all correlates that remained statistically significant at p<.05 and tested them in a final multivariate model, which is presented in table 44 (next page).

From table 44, it is clear that the life factors below have the strongest overall correlations to cyber bullying victimization, when other life factors are controlled for (i.e., held constant).

- Female
- Younger age
- More hours per day on cell phone
- Less closeness to parent(s)
- More frequent communication with parent(s)[50]
- More frequent alcohol use
- Sexual activity in lifetime
- Depression
- Anger/hostility

[48] By "meaningful," we refer to differences for whom victim/non-victim prevalence rates differed by 10 percent or more. We intentionally excluded "ever exchanged sex for something of value" from this list due to the high percentage of missing responses (data were valid for only 47 percent of respondents); and we excluded state because it is envisioned strictly as a statistical control.

[49] Although initially conceptualized as a protective factor against bullying, this measure also tapped into the frequency of negative communications between youth and parents (e.g., about ongoing problem behaviors).

[50] Again, this measure also tapped into the frequency of negative communications between youth and parents (e.g., about ongoing problem behaviors).

Table 44. Multivariate Model of Most Significant Correlates of Cyber Bullying Victimization	β	SE
Control variables		
State		
New York (reference category)		
New Jersey	0.423**	0.143
Pennsylvania	0.081	0.245
Female	0.603***	0.101
White	0.240*	0.114
Lives with both parents	0.063	0.102
Age	-0.139***	0.035
LGBTQ	-0.184	0.189
School SES	-0.004	0.005
Hours per day on computer	0.016	0.022
Hours per day on cell phone	0.060***	0.018
School performance		
Grades		
As and Bs in school (reference category)		
Bs and Cs in school	0.081	0.485
Ds and Fs in school	-0.158	0.102
Parent involvement		
Closeness to primary parent	-0.188***	0.051
Frequency of communication with parent	0.097***	0.016
Risk behaviors		
Frequency of alcohol use in last 30 days	0.031*	0.013
Number of delinquent behaviors in last year	0.076†	0.039
Sexual activity—any in lifetime	0.376***	0.105
Psychosocial measures (in last seven days)		
Frequency of feelings of depression	0.074***	0.013
Frequency of feelings of anger/hostility	0.043**	0.014
Frequency of feelings of anxiety	0.028†	0.017
CONSTANT	-0.897	0.686

Notes: Nagelkerke R-squared = 0.176; *N*=4,119 youth valid, nonmissing data across all measures, which represents 73 percent of respondents in the sample (see previous note about missing data in Analytic Strategy section).
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Next, we wondered: Do the twelve factors above also predict other types of bullying victimization? To answer this question, we re-estimated the same model in table 44 using other forms of bullying victimization (e.g., physical bullying, psychological bullying) as the outcomes.

Results from these re-estimations are summarized in table 45, where the answers are overwhelmingly "Yes" (14 of the 18 cells indicate a correlate that was significant or approaching significance in the other bullying model). In sum, many of the factors that were correlated with cyber bulling victimization also mattered for other types of bullying victimization.

Table 45. Correlates of Cyber Bullying Victimization to Other Bullying Victimization

CORRELATE	Physical bullying victimization	Psychological bullying victimization
Female	(Male)***	Yes**
Age	Yes***	Yes***
Hours per day on cell phone	NS	NS
Closeness to primary parent	Yes**	Yes*
Frequency of communication with parent	Yes**	Yes***
Frequency of alcohol use in last 30 days	NS	Yes†
Sexual activity in lifetime	Yes†	NS
Depression	Yes***	Yes***
Anger/hostility	Yes***	Yes**

NS = not a significant correlate in multivariate model.
†p<.10; *p<.05; **p<.01; ***p<.001

Lastly, we then wondered: Do the strengths of these correlations matter more for cyber bullying victimization than for other types of bullying? Toward this end, we statistically compared the strength of each life factor's resulting correlation/effect (i.e., its β value) to that in the model for cyber bullying.[51] These comparisons revealed that

- Female's strength as a correlate for cyber bullying victimization differed significantly from that for physical bullying (where being male mattered) and psychological bullying (where being female mattered less).
- Hours spent on one's cell phone was a significantly stronger correlate for cyber bullying victimization than for physical bullying or psychological bullying victimization.
- Frequent communication with parent(s) was a significantly stronger correlate for cyber bullying than physical bullying victimization.
- Sexual activity was a significantly stronger correlate for cyber bullying than psychological bullying victimization.
- Alcohol use was a significantly stronger correlate for cyber bullying victimization than for physical bullying or psychological bullying victimization.
- Depression was a significantly stronger correlate for psychological bullying than cyber bullying victimization.
- Anger/hostility was a significantly stronger correlate for physical bullying than cyber bullying victimization.

[51] See appendix H for these comparisons, which were conducted by calculating z-scores of the difference in β values between models, following steps described in Paternoster et al. (1998). The p-value of each z-score was obtained from a z-table.

There were no significant differences in the strength of other correlates' relationship to other types of bullying victimization.

- Being of younger age, closer to parent(s), prior sexual activity, and depression were as strongly correlated to cyber bullying victimization, in the multivariate models tested, as they were to physical bullying victimization.
- Being of younger age, closer to parent(s), more frequent communication with parent(s), and anger/hostility were as strongly correlated to cyber bullying victimization, in the multivariate models tested, as they were to psychological bullying victimization.

Correlates of Cyber Bullying Perpetration

Next, we turned to cyber bullying perpetration to identify its strongest correlates. As shown in table 46, there were a number of statistically significant differences between perpetrators and non-perpetrators; for that reason, we identify only the most substantively meaningful[52] bivariate correlates of the average cyber dating abuse perpetrator (yet, we note that everything significant at $p<.05$ or less made it into the domain-specific multivariate modeling which are:

- Female,
- LGBTQ,
- Higher number of hours per day on computer,
- Higher number of hours per day on cell phone,
- Poorer school performance/grades,
- More frequent communication with parents,[53]
- More frequent alcohol and drug use,
- Higher number of delinquent behaviors in lifetime,
- Sexual activity in lifetime,
- Depression,
- Anger/hostility, and
- Anxiety.

Other factors in the table were statistically significant but less substantively important, given that the observed differences were less than 10 percent from that of the average non-perpetrator.

Next, to further assess the relative importance of the above bivariate correlates to cyber bullying perpetration, we estimated a series of logistic regression models (each with cyber bullying perpetration as the yes/no outcome). The first set of these models tested significant correlates by domain, with control variables (e.g., age, race, school SES) present in each model; results from these domain-specific models are presented in appendix H. From these domain-specific models, we kept all correlates that remained statistically significant and tested them in a final multivariate model, which is presented in table 47.

[52] Statistically significant and of meaningful difference; that is, greater than 10 percent difference from non-perpetrators. We intentionally excluded "ever exchanged sex for something of value" from this list due to the high percentage of missing responses (data were valid for only 59 percent of respondents); and we excluded state because it is envisioned strictly as a statistical control.

[53] As stated previously, this measure could have included both positive and negative communications between youth and parents, with no ability to distinguish the two.

Table 46. Bivariate Relationships of Life Factors and Cyber Bullying Perpetration	Total %/Mean (*N*=5,647)	Perpetrator of cyber bullying %/Mean (*N*=379)	Non-perpetrator of cyber bullying %/Mean (*N*=4,628)	χ^2 or t-value
Control variables				
State				11.128**
New Jersey	31.3%	39.1%	33.0%	
New York	39.5%	30.1%	38.5%	
Pennsylvania	29.3%	30.9%	28.5%	
Female	51.8%	63.1%	52.1%	16.846***
White	75.7%	77.0%	75.6%	0.384
Live with both parents	67.3%	66.2%	69.2%	1.456
Age	15.41	15.69	15.44	3.340**
LGBTQ	5.4%	8.8%	5.2%	8.890**
School socioeconomic status	74.1%	75.2%	75.3%	-0.064
Hours per day on computer	2.84	3.21	2.82	3.511***
Hours per day on cell phone	5.13	5.75	5.07	4.841***
School performance				
Attend school every day	95.8%	92.4%	96.5%	15.182***
Grades				
As and Bs in school	64.9%	61.1%	67.6%	14.274**
Bs and Cs in school	34.0%	36.4%	31.6%	
Ds and Fs in school	1.10%	2.5%	0.8%	
Parent involvement				
Closeness to primary parent	3.19	2.95	3.21	-4.431***
Frequency of activities with parent	6.58	6.62	6.58	0.229
Frequency of communication with parent	5.82	6.57	5.76	4.881***
Risk behaviors				
Frequency of drug use in last 30 days				
Alcohol use	1.80	3.35	1.64	7.196***
Binge drinking	1.30	2.51	1.17	5.999***
Marijuana use	1.66	3.04	1.48	5.642***
Any drug use	4.48	8.96	3.88	5.821***
Serious drug use	1.05	2.63	0.77	3.056**
Number of delinquent behaviors in last year	0.62	1.30	0.53	9.113***
Sexual activity—any in lifetime	37.1%	58.2%	34.4%	82.878***
Age of first sexual encounter	14.59	14.33	14.65	-2.834**
Ever exchanged sex for something of value	5.3%	13.5%	3.8%	35.292***
Psychosocial measures (in last seven days)				
Frequency of feelings of depression	3.27	5.75	3.06	9.685***
Frequency of feelings of anger/hostility	2.37	4.97	2.13	10.595***
Frequency of feelings of anxiety	1.93	3.76	1.79	8.398***
Prosocial activities	48.59	46.55	48.74	-1.662†

Note: Valid, nonmissing data on measures in this table were present for 89 to 100 percent of respondents, except as follows: valid, non-missing data for parental education, age at first sexual encounter, and exchanged sex for something of value were 72, 47, and 47 percent, respectively; these variables were deemed unreliable and were not used in further analyses.

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other

†p<.10; *p<.05; **p<.01; ***p<.001

From table 47, it is clear that the life factors below have the strongest overall correlations to cyber dating abuse perpetration, when other life factors are controlled for (i.e., held constant):

- Female;
- Younger age;
- Less closeness to parent(s);
- More frequent communication with parent(s);
- More frequent alcohol use;
- Higher number of delinquent behaviors in lifetime;
- Sexual activity in lifetime; and
- Anger/hostility.

Table 47. Multivariate Model of Most Significant Correlates of Cyber Bullying Perpetration	β	SE
Control variables		
State		
New York (reference category)		
New Jersey	0.237	0.199
Pennsylvania	0.328	0.361
Female	0.414**	0.141
White	0.222	0.160
Live with both parents	0.077	0.142
Age	-0.098*	0.050
LGBTQ	0.004	0.244
School socioeconomic status	0.006	0.007
Hours per day on computer	0.044	0.030
Hours per day on cell phone	0.010	0.025
School performance		
Attend school every day	-0.177	0.280
Grades		
As and Bs in school		
Bs and Cs in school	0.082	0.590
Ds and Fs in school	-0.121	0.142
Parent involvement		
Closeness to primary parent	-0.143*	0.068
Frequency of communication with parent	0.099***	0.022
Risk behaviors		
Frequency of alcohol use in last 30 days	0.039*	0.016
Number of delinquent behaviors in last year	0.203***	0.044
Sexual activity—any in lifetime	0.600***	0.149
Psychosocial measures (in last seven days)		
Frequency of feelings of depression	0.028†	0.015
Frequency of feelings of anger/hostility	0.082***	0.017
CONSTANT	-3.098**	1.029

Notes:
Nagelkerke R-squared = 0.143; *N*=4,083 youth valid, nonmissing data across all measures, which represents 72 percent of respondents in a relationship (see previous note about missing data in Analytic Strategy section).
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
†p<.10; *p<.05; **p<.01; ***p<.001

Next, we re-estimated the same model in table 47 using other forms of bullying perpetration (e.g., physical bullying, psychological bullying) as the outcomes, to answer the question: Do the factors above also predict other types of bullying perpetration? Results from these re-estimations are summarized in table 48, where most of the answers are "yes" (11 of the 16 cells in the table show "yes"). In sum, about two-thirds of the factors that were correlated with cyber bullying perpetration also mattered for other types of bullying perpetration.

Table 48. Correlates of Cyber Bullying Perpetration to Other Bullying Perpetration

CORRELATE	Physical bullying perpetration	Psychological bullying perpetration
Female	(Male)***	NS
Age	Yes*	Yes*
Parent closeness	NS	Yes**
Parent communication	NS	Yes**
Alcohol use	Yes***	Yes***
Higher number of delinquent behaviors	Yes***	Yes***
Sexual activity in lifetime	NS	NS
Anger/hostility	Yes***	Yes***

NS = not a significant correlate in multivariate model.
†p<.10; *p<.05; **p<.01; ***p<.001

Lastly, we examined whether the strengths of these correlations mattered more for cyber bullying perpetration than for other types of bullying. We statistically compared[54] the strength of each life factor's resulting correlation/effect (i.e., its β value) to that in the model for cyber bullying and found that

- Female's strength as a correlate for cyber bullying perpetration differed significantly from that for physical bullying (where being male mattered more) and psychological bullying (where it did not matter).
- Frequent communication with parent(s) and prior sexual activity were significantly stronger correlates for cyber bullying perpetration than for physical or psychological bullying perpetration.
- Alcohol use was a significantly stronger correlate for psychological bullying perpetration than for cyber bullying perpetration.
- Prior delinquency and anger/hostility were significantly stronger correlates for physical bullying than cyber bullying perpetration.

There were no significant differences in the strength of other correlates' relationship to other types of bullying perpetration:

- Younger age, closeness to parent(s), and alcohol use were just as correlated, in the multivariate models tested, with cyber bullying perpetration as they were with physical bullying perpetration; and
- Younger age, closeness to parent(s), delinquency, and anger/hostility were just as correlated with cyber bullying perpetration as they were with psychological bullying perpetration.

[54] See appendix H for these z-score comparison s.

Chapter 4: Discussion

The goal of this study was to expand knowledge about the types of violence and abuse experiences youth have, the extent of victimization and perpetration via technology and new media (e.g., social networking sites, texting on cellular phones), and how experiencing such cyber abuse (within teen dating relationships or through bullying) relates to other life factors. Throughout this discussion, we highlight contributions to the existing research on teen dating violence/abuse and bullying as they relate to cyber abuse, distinguishing this particular type of experience in ways that has not been done in past studies.

What Did We Learn About Teen Dating Violence and Abuse Victimization?

More than a quarter (26 percent) of youth in a relationship and nearly a fifth (18 percent) of all youth said they experienced some form of cyber dating abuse victimization in the prior year. Regardless of which group you look at—the total sample of surveyed youth (N=5,647) or just those in a current/recent relationship (N=3,745)—youth experienced cyber dating abuse at a rate that was comparable to that of physical dating violence, about half that of psychological dating abuse, and twice that of sexual coercion. Rates of cyber abuse within a relationship were similar to the few past studies that exist: Picard (2007) reported that about one-quarter of youth ages 13 to 18 have experienced some forms of cyber abuse, and RTI International (2012) found that about one-third of middle school youth reported the same.

When it comes to specific cyber dating abuse behaviors, the most frequently reported form of cyber abuse was a romantic partner's use of youth's social networking account without permission; nearly one out of ten (9 percent) youth in a relationship said this happened in the prior year. The next most frequently reported items were forms of sexual cyber abuse: 7 percent of youth said their partner had sent them texts/emails to engage in sexual acts the respondent did not want, and 7 percent said their partner had pressured them to send a sexual/naked photo of themselves. Although Picard (2007) found higher rates of cyber abuse than the current study for particular behaviors and found the most commonly reported experience was being called names, harassed, or put down by their partner via cell phone and texting, the two studies are similar in that sexual cyber abuse was among the most commonly reported experiences for youth in both samples. The second and third most commonly reported cyber abuse behaviors for the current study were sexually victimizing behaviors (noted above), and the second most commonly reported cyber abuse experience reported by youth in Picard's (2007) sample was having been asked via cell phone or the Internet to do something sexual they did not want to do. Thus, this study contributes to the knowledge base about cyber dating abuse by finding that the most common type of cyber dating abuse experienced is tampering with someone's social networking page, followed by experiences of sexual cyber abuse.

Gender differences in reports of teen dating violence and abuse victimization are similar in this study to past studies, and findings related to cyber abuse are as one might expect. Specifically, female youth reported significantly higher victimization rates than males with regard to cyber dating abuse, psychological dating abuse, and sexual coercion. Comporting with past research on psychological abuse and sexual victimization (Foshee, 1996; Halpern et al. 2001; Young et al.

2009), females were twice as likely as males to report being a victim of sexual cyber dating abuse and/or sexual coercion in the prior year. Male youth, on the other hand, reported significantly higher rates of all forms of physical dating violence victimization—mild, moderate, and severe (Foshee, 1996; O'Leary et al., 2008). The gender difference was markedly greatest with regard to mild physical violence; almost twice as many males as females reported experiencing mild physical dating violence in the prior year. One important element that might contribute to greater numbers of youth reporting physical violence of female dating partners is the apparent widespread acceptance of female violence toward dating partners. Two recent studies (Reeves & Orpinas, 2012; RTI International, 2012) examined this issue among middle school and ninth grade students and found that many more youth condoned female violence toward male dating partners than condoned male violence toward female dating partners. Therefore, this study furthers our understanding of the dynamics of teen dating violence by confirming that males are particularly vulnerable to physical violence, but females are particularly vulnerable to sexual coercion and psychological abuse. In addition, this study advances the knowledge base by showing females are particularly vulnerable to cyber dating abuse, and sexual cyber abuse in particular. With regard to other subgroup differences, we found that the highest rates of cyber dating abuse victimization were reported by youth who were LGBTQ (as opposed to heterosexual) and youth in high school (as opposed to middle school).

As for the location of teen dating violence and abuse experiences, a previous study by Molidor and colleagues (2000) found that 43 percent of youths' physical dating violence episodes occurred on school grounds or in school buildings. In the current study, we found that cyber dating abuse was less frequently experienced at school than psychological abuse or physical violence. Approximately one out of five cyber dating abuse victims said their victimization occurred on school grounds and during the school day, while four out of five said their victimizations always occurred elsewhere. In contrast, a proportionally higher share of physical dating violence and/or psychological dating abuse occurred on school grounds and during the school day. Physical violence obviously must occur in the presence of one's partner, and school is a major source of contact for teen dating partners. Alternatively, cyber abuse can occur when youth are not actually together and can happen at any time during the day or night. In addition, cyber abuse requires access to a computer or smartphone, which may be restricted or prohibited in some school settings. Thus, it makes intuitive sense that physical violence and non-cyber forms of psychological abuse occur more in school.

Importantly, few victims of teen dating violence and abuse in this study sought help after such experiences. Less than one out of ten victims reported seeking help, with half as many male victims as female victims seeking help. Half of the male victims who sought help did so within one day of the incident and a third did so after the first incident, compared to a third of female victims who sought help within one day and/or after the first incident. Help-seeking victims most frequently turned to their friends, parents, and other relatives; and this fact was true for both male and female victims. Our findings related to help-seeking behavior toward parents (where 49 percent of help-seekers reached out to their parents) are similar to Picard (2007), who found that among teens who experience dating violence/abuse, only a quarter to half tell their parents, depending on the nature of the abuse (physical violence, threats, etc.).

What Did We Learn About Teen Dating Violence and Abuse Perpetration?

As in past research (Malik, Sorenson, & Aneshensel, 1997), far fewer youth in this sample reported perpetrating teen dating violence and abuse than reported having been a victim of it. More than a tenth (12 percent) of youth in a relationship and nearly a tenth (8 percent) of all youth said they perpetrated cyber dating abuse in the prior year. Youth reports of cyber dating abuse perpetration were about half that of physical dating violence and/or psychological dating abuse perpetration yet four times that of self-reported sexual coercion perpetration. As with cyber dating victimization, the most frequently reported form of perpetration was use of a romantic partner's social networking account without permission (6 percent). The next most frequently reported items were writing nasty things about one's partner online (3 percent) and posting embarrassing photos of one's partner online (2 percent).

Also in line with past research (Foshee, 1996; Malik, Sorenson, & Aneshensel, 1997; O'Keefe & Treister, 1998; O'Leary et al, 2008; West & Rose, 2000), female youth reported significantly higher perpetration rates with regard to physical dating violence and psychological dating abuse. Notably, females were twice as likely as males to report perpetrating mild physical dating violence and/or psychological abuse that involved emotional manipulation. The same pattern is clear when it comes to non-sexual cyber dating abuse; females reported greater levels of perpetration than males. By contrast, male youth were significantly more likely to report perpetrating sexual cyber dating abuse, which is similar to findings from past studies regarding sexual coercion perpetration. Young and colleagues (2009) found that males were twice as likely as females to report sexual violence perpetration, and Borowsky and colleagues (1997) found that males were five times as likely to report such behaviors. In the current study, males were twice as likely to report perpetrating sexual cyber dating abuse and three times as likely as females to report perpetrating sexual coercion in the prior year. While this study confirms past research related to sexual coercion perpetration, it also extends the current knowledge base about teen dating violence and abuse by indicating that more males than females perpetrate sexual cyber dating abuse.

What Did We Learn About Reciprocity in Teen Dating Violence and Abuse?

Although the survey was not designed to disentangle offensive from defensive teen dating violence and abuse, we found that when it comes to cyber abuse specifically, two-thirds of cyber dating abuse victims did *not* report perpetrating cyber abuse. By contrast, just over half of physical dating violence victims also reported perpetrating physical dating violence. Interestingly, almost three-quarters of cyber dating abuse perpetrators reported also being victimized by the same type of teen dating violence or abuse, while less than half of sexual coercion perpetrators also reported sexual coercion victimization.

With regard to gender variation in reciprocal violence and abuse: females in a relationship were significantly more likely than males to report engaging in reciprocal or only perpetration abuse for all types of violence and abuse, except sexual coercion, which is similar to past research findings examining reciprocity of violence and abuse in teen dating relationships (Fergussion, Boden, & Horwood, 2008; Gray & Foshee, 1997; Hendy et al., 2003 ; O'Leary et al., 2008;

Reener & Whitney, 2009). For sexual coercion, more male than female youth reported only perpetration or reciprocal behavior. Relatedly, twice the share of female as male youth reported being victimized but not perpetrating sexual coercion.

What Did We Learn About the Co-Occurrence of Cyber Dating Abuse with Other Types of Teen Violence and Abuse, Including Cyber Bullying?

Cyber dating abuse overlapped with other types of dating violence and abuse, although the extent of connection between this type and other forms of dating violence and abuse varied. Cyber dating abuse had the greatest degree of overlap with psychological dating violence; 84 percent of cyber dating abuse victims also reported psychological dating violence victimizations, and 73 percent of cyber dating abuse perpetrators also reported psychological perpetration. This large overlap between cyber dating abuse and other forms of psychological dating abuse indicates that cyber dating abuse may be a subset of psychological abuse tactics and that new technologies have given those who perpetrate such forms of abuse additional tools to harass, stalk, and degrade their partners.

The relationships between cyber dating abuse and physical dating violence, and cyber dating abuse and sexual coercion were less pronounced. Among cyber dating abuse victims, half also reported physical dating violence victimization and a third reported sexual coercion victimization. Among cyber dating abuse perpetrators, just over half also reported physical dating violence perpetration and one in ten reported sexual coercion perpetration. Thus, if one experiences cyber abuse, they are nearly as likely to also experience other forms of psychological abuse; however, they are half has likely to experience physical violence and one-third as likely to experience sexual coercion.

Regarding the overlap with cyber bullying, dating youth who reported cyber dating abuse victimization were more than twice as likely (38 percent, compared to 15 percent of non-victims) to also report cyber bullying victimization by a non-partner. Similarly, perpetrators of cyber dating abuse were more than three times as likely to also report perpetrating cyber bullying (24 percent, compared to 7 percent of non-perpetrators) against a non-partner. As shown by analyses of the life factors most related to cyber dating abuse and cyber bullying, victims and perpetrators of each share some of the same vulnerabilities for abuse (e.g., prior sexual activity, recent depression) and risk factors for perpetration (e.g., frequent alcohol use, prior delinquency, recent anger/hostility).

How Does Cyber Dating Abuse Relate to Other Life Factors?

The life factors that had the strongest overall correlations to cyber dating abuse victimization, when other factors were controlled for (i.e., held constant in regression models) included being female, having committed a higher number of delinquent behaviors, having previously engaged in sexual activity, reporting a higher level of recent depression, and reporting a higher level of recent anger/hostility. Findings about correlates of cyber abuse experiences are similar to those for experiences of physical violence when it comes to psychosocial adjustment (Ackard, Newmark-Sztainer, & Hannan, 2003; Foshee et al., 2004) and sexual behavior (Eaton et al., 2007; Howard & Wang, 2003; Howard, Wang, & Fang, 2008; Silverman et al., 2001).

Given this, as one would expect, nearly all of these life factors were also significantly correlated

with other types of teen dating violence and abuse victimization. However, being female mattered more to sexual coercion than cyber dating abuse victimization, while being male mattered more to physical dating violence. Delinquency mattered more to cyber dating abuse than to psychological dating abuse. Sexual activity mattered more to sexual coercion than cyber dating abuse victimization. And, depression mattered more to cyber dating abuse than physical dating violence victimization. In sum, cyber abuse victimization was more related to youth's depression and delinquency than other kinds of victimization experiences.

The life factors that had the strongest overall correlations to cyber dating abuse perpetration, when other life factors were controlled for in statistical models included being female, spending a higher number of hours per day on the cell phone, more frequent serious drug use, having committed a higher number of delinquent behaviors, previously having engaged in sexual activity, reporting a higher level of recent depression, reporting a higher level of recent anger/hostility, and engaging in fewer prosocial activities. Some of these findings are similar to those found in relation to perpetrating physical violence, particularly related to substance use (Brecklin & Ullman, 2002; Menard et al., 2003; Borowsky et al., 1997) and delinquency or previous violence tendencies (e.g., Herrara et al., 2008). Yet, findings related to cyber dating abuse perpetration seem to show important connections to psychosocial adjustment in terms of an individual's depression and anger/hostility.

Most of the factors that were correlated with cyber dating abuse perpetration also mattered for other types of teen dating violence and abuse perpetration. However, gender's strength as a correlate for cyber dating abuse perpetration differed significantly from that for physical dating violence (where being female mattered more) and sexual coercion (where being male mattered). Serious drug use's strength as a correlate for cyber dating abuse perpetration differed significantly from that for both physical violence and psychological abuse (where it did not matter). And, prosocial activities' strength as a correlate for cyber dating abuse perpetration differed significantly from that for physical violence (where it did not matter). In sum, cyber abuse perpetration was more related to youth's drug use and lack of prosocial activities than other kinds of perpetration behaviors.

What Did We Learn About Bullying Victimization?

One in six youth in this study reported being victims of cyber bullying in the prior year and more than twice that share reported being victims of physical and/or psychological bullying. This finding concurs with past studies which have found traditional bullying is more prevalent among adolescents than cyber bullying (Lenhart et al., 2011; Wang et al., 2009; Williams & Guerra, 2007). Yet, the rate of cyber bullying we found was nearly double that reported three years ago for youth nationwide (Wang et al., 2009) but consistent with that reported recently in the Youth Risk Behavior Survey (Centers for Disease Control and Prevention, 2012). This higher prevalence of cyber bullying among youth in the current study may well reflect an actual increase in cyber bullying victimization over the past three years. Thus, although reports of traditional bullying victimization continue to outnumber those of cyber bullying, as more and more youth gain access to new technology, high-speed Internet, and social networking websites, they may face an increased risk of cyber bullying victimization.

The most frequently reported forms of cyber bullying were being called names youth did not like via text message and receiving a text message from another student intended to hurt youths' feelings; one out of ten surveyed youth reported one or both of these types of victimizations. These findings are akin to the Pew Research Center's recent national study on teens' experiences on social network sites, which found that 9 percent of youth had been bullied via text message (Lenhart, et al., 2011). According to the same survey, 77 percent of teens reported having a cell phone, of which most have text messaging capability. This means that cyber bullying via text message can occur at any point during the day or night, even if the victim and perpetrator are not within close proximity of one another.

Female youth in this study reported significantly higher victimization rates with regard to cyber bullying and psychological bullying; in particular, girls were twice as likely as boys to report being a victim of cyber bullying in the prior year. By contrast, male youth reported significantly higher rates of physical bullying victimization. Both of these findings support the vast majority of past studies on bullying victimization, including more recent research on cyber bullying (Nansel et al., 2001; Bjorkqvist, 1994; Jeffrey, Miller & Linn, 2001; Berthold and Hoover, 2007; Wang et al., 2009; Mouttapa, et al., 2004).

With regard to other subgroup differences, we found that the highest rates of cyber bullying victimization were reported by youth who were LGBTQ (as opposed to heterosexual), and in high school (as opposed to middle school). This finding is consistent with past research on LGBTQ adolescents' experiences with traditional bullying and homophobic victimization (Birkett et al., 2009; Kosciew et al., 2008; Rivers 2001), yet extends those findings of higher victimization rates to cyber bullying experiences as well. Given the paucity of research on LGBTQ cyber bullying victims, this finding is particularly important. As for the age of the bullying victims, because our sample was overwhelmingly high school students, it is unclear if we would have achieved the same results if we had a larger middle school sample. As past research has dictated, students in school transition years (6th, 8th, and 9th grades) are more likely to report higher rates of bullying victimization (Nansel, et al., 2001; Wang et al, 2009; Bellamy & Shoji, 2000; Peplar, et al., 2006); however, since teens in high school are more likely to have access to new technology and certain social media websites, they could be more vulnerable to cyber bullying as opposed to more traditional forms of bullying.

Focusing more generally on bullying as a whole, approximately one out of four surveyed youth said they were bullied on school grounds and during the school day, while one out of six youth said they were bullied at school once a month or more frequently. Since we did not specifically ask what type of bullying was happening on or off school grounds, it is unknown where exactly youths' cyber bullying experiences were occurring. Because traditional bullying is more prevalent than cyber bullying, it is possible that youth who are victims of physical and psychological bullying are more likely to be victimized on school grounds and during the school day, especially since both the victim and perpetrator need to be present for such face-to-face bullying to occur (with the exception of rumor-spreading). Thus, cyber bullying can be considered a more fluid type of bullying that may occur anywhere and at any time.

One out of six bullying victims reported seeking help, with half as many male victims as female victims seeking help. Two-thirds of the male victims and half of the female victims who sought

help did so within one day of the incident; however, only a third of each group sought help after the first bullying victimization. The most frequent people to whom help-seekers turned were their parents and friends, though more than a third also turned to school counselors and teachers. Although these help-seeking findings apply to both traditional and cyber bullying experiences (youth were not asked to separate the two), they are similar to findings documented by Lenhart and colleagues (2011) that more than double the number of girls than boys who witness or experience online bullying seek advice or help subsequently, and that most youth who seek advice reach out to a friend or their parents.

What Did We Learn About Bullying Perpetration?

Similar to bullying victimization, youth in this study reported higher rates of traditional forms of bullying than cyber bullying. Fewer than one in ten youth reported perpetrating cyber bullying in the prior year, while a quarter to a third of youth said they had perpetrated physical bullying and/or psychological bullying during that time. Less than half of the youth who reported cyber bullying victimization also claimed that they perpetrated cyber bullying. These findings are in line with past studies, which have found fewer youth report perpetrating than being victimized by bullying, particularly with regard to cyber bullying experiences (Wang et al., 2009; Hinduja & Patchin, 2006; Hinduja & Patchin, 2008; Williams and Guerra, 2007). These differences are likely a result of youths' unwillingness to self-report perpetration of negative behavior, and the fact that a small number of bullies may be victimizing a proportionally larger number of adolescents.

As with cyber bullying victimization, the most frequently reported forms of perpetration were calling another student names they did not like via text message and sending a text message to another student intended to hurt their feelings.

Female youth reported significantly higher perpetration rates with regard to cyber bullying, while male youth reported significantly higher rates of physical bullying perpetration. There was no gender variation in reports of psychological bullying perpetration. The finding that girls report higher perpetration rates for cyber bullying differs from that of past research, which found that boys are more likely to perpetrate cyber bullying (Wang et al., 2009; Mouttapa, et al., 2004; Hinduja and Patchin, 2008). One reason for this might be that cyber bullying is a form of indirect or anonymous bullying, similar to verbal and psychological bullying, which girls are more likely to perpetrate than boys. Another explanation is that more girls report both cyber bullying victimization and perpetration (bully-victims) than boys.

With regard to other subgroup differences, we again found that the highest rates of cyber bullying perpetration were reported by youth who were LGBTQ (as opposed to heterosexual) and in high school (as opposed to middle school).

What Did We Learn About Bullying Victim/Perpetrator Overlap?

Although the survey was not designed to disentangle offensive from defensive bullying, we examined the degree of overlap between bullying victimization and perpetration reports. We found that two-thirds of cyber bullying victims did not report perpetrating cyber bullying. By contrast, half of the physical and psychological bullying victims reported perpetrating the same type of bullying. We also found that three out of four cyber bullying, physical bullying, and

psychological bullying perpetrators reported also being victimized by the same type of bullying.

With regard to gender variation in bullying victim/perpetrator overlap: girls were significantly more likely than boys to report only victimization abuse for all types of bullying (cyber, physical, and psychological), while boys were more likely to report only perpetration of all bullying types. Girls were also more likely than boys to report overlapping victimization and perpetration of cyber and psychological bullying, while boys were more likely to report such overlap with regard to physical bullying. Because there is very little research looking at gender differences in bully-victim prevalence and risk factors, particularly with regards to cyber bullying, these findings demonstrate that more research needs to be conducted to fully understand bully-victim dynamics.

What Did We Learn About the Co-Occurrence of Cyber Bullying with Other Types of Teen Violence and Abuse, Including Cyber Dating Abuse?

As was the case with youths' cyber dating abuse, cyber bullying had the greatest degree of overlap with psychological bullying: nine out of ten cyber bullying victims also experienced psychological bullying victimization, and the same portion of cyber bullying perpetrators also perpetrated psychological bullying. There was also a fairly high degree of overlap between cyber bullying and physical bullying, with two-thirds to three-quarters of cyber bullying victims/perpetrators also reporting physical bullying victimization/perpetration. Wang and colleagues (2009) also found that almost all of the cyber bullying victims in their sample reported being victims of traditional bullying, though only a fifth of traditional bullying victims reported experience with cyber bullying. Similarly, recent international studies have reported a high degree of overlap between cyber bullying and traditional bullying in non-U.S. samples of youth (Cross, et al., 2009 and Grandinger, et al., 2009).

We also found a fair degree of overlap between cyber bullying and cyber dating abuse. Those victimized by cyber bullying were almost three times as likely to also report cyber dating abuse victimization (38 percent, compared to 13 percent), and those who reported perpetrating cyber bullying were almost four times as likely to also report cyber dating abuse perpetration (26 percent, compared to 7 percent). As shown by analyses of the life factors related to each, victims and perpetrators of cyber bullying and cyber dating abuse appear to share some of the same vulnerabilities (e.g., prior sexual activity, recent depression) and risk factors (e.g., frequent alcohol use, prior delinquency, recent anger/hostility).

How Does Cyber Bullying Relate to Other Life Factors?

There is little research that has looked at specific risk and life factors based on the type of bullying (psychological, physical, verbal, and cyber) similar to that which was explored in the current study. Thus, in looking at different life factors and types of bullying, we have found a number of important differences and similarities to the current literature. Past research has shown that risk factors for bullying include poorer school achievement, lack of prosocial skills and negative psychological wellbeing. Female victims and bully-victims are more likely to have increased social anxiety and higher levels of depressive symptoms (Wang et al., 2010, Carlyle and Steinman, 2007; Berthold and Hoover, 2007). Also, victims are more likely to be truant from school, which can ultimately lead the young person to drop out of school (Berthold and Hoover, 2007; Sharp, 1995). But how does experiencing differences types of bullying, and cyber bullying

in particular, relate to other life factors?

The life factors that had the strongest overall correlations to cyber bullying victimization, when other life factors were statistically controlled, included being female, of younger age, spending more hours per day on the cell phone, being less emotionally close to one's parents yet having more frequent communication with parents (not necessarily positive communication), more frequent alcohol use, having previously engaged in sexual activity, reporting a higher level of recent depression, and reporting a higher level of recent anger/hostility. Most of these life factors were also significantly correlated with other types of bullying victimization. However, being female, spending more hours per day on the cell phone, prior sexual activity, and alcohol use mattered significantly more to cyber bullying than to psychological bullying victimization. Being male (rather than female) mattered to physical bullying victimization. By contrast, depression was a significantly stronger correlate for psychological bullying than cyber bullying, and anger/hostility was a stronger correlate for physical bullying than cyber bullying victimization.

The life factors that had the strongest overall correlations to cyber bullying perpetration, when other life factors were statistically controlled, included being female, of younger age, being less emotionally close to one's parents yet having more frequent communication with parents (not necessarily of a positive nature), more frequent alcohol use, having committed a higher number of delinquent behaviors previously, having previously engaged in sexual activity, and reporting a higher level of recent anger/hostility. Most of the factors that were correlated with cyber bullying perpetration also mattered for other types of bullying perpetration. However, being female, having more frequent communication with parents, and prior sexual activity mattered significantly more for cyber bullying perpetration than for psychological bullying. Being male (rather than female) mattered to physical bullying perpetration. And lastly, alcohol use was a stronger correlate for psychological than cyber bullying perpetration, while prior delinquency and anger/hostility were stronger correlates for physical than cyber bullying perpetration.

In sum, rates of cyber bullying among youth may be increasing as access to technological devices increases, and may be highest among the most vulnerable youth populations (e.g., those who are LGBTQ and those without a close relationship to parents). Although many psychosocial life factors are significantly correlated with cyber bullying victimization and perpetration (e.g., anger/hostility and depression), we are unable to determine if they are a result of the bullying experience(s) or vice versa. In order to make that conclusion, a longitudinal study of the same sample would need to be conducted. That being said, knowing what life factors are associated with cyber bullying helps to better frame the issue and determine how to address it through programming and policies.

Limitations of the Study

As with all research, this study is subject to limitations related to its design, sample, and measurement. First, the design of the study is cross-sectional in nature and thus, we cannot ascertain the exact nature of the relationships between teen dating violence/abuse, bullying, and other life factors. For example, we cannot determine if the correlates to victimization and perpetration occurred before such experiences (and were essentially *risk factors* for teen dating and bullying) or if they occurred after such experiences (and were essentially *consequences* of teen dating violence/abuse and bullying). Second, the sample is limited to those youth who

attend school (which excludes those who have dropped out) and specifically, those who attend schools with administrators supportive of the study, who were willing to allow students to be surveyed about sensitive topics. Thus, the sample may have included youth from potentially forward-thinking schools and excluded some disconnected and/or disadvantaged youth, perhaps skewing the prevalence rates of the violence experiences being measured. In addition, based on the schools that were willing to participate, the sample is largely white and has a lower proportion of middle school youth compared to high school youth.

Finally, the study is subject to limitations related to measurement. The survey measures did not allow us to separate offensive from defensive use of violence and abuse, and with regards to bullying, we were unable to ascertain whether behaviors reported involved an imbalance of power between perpetrators and victims. However, when it comes to cyber bullying, where anonymity gives all perpetrators a potential form of power, this latter limitation may be less relevant. In addition, although we derived our measures from existing literature wherever possible, and the cyber abuse measures created for this study indicated strong internal consistency, the extent of youths' underreporting and/or overreporting of violence and abuse experiences cannot be assessed. The survey methodology relies on youth self-reports, which have been shown to be valid in past studies using certain instruments (see Ebesutani, Bernstein, Martinez, Chorpita & Weisz, 2011; Ridge, Warren, Burlingame, Wells & Tumblin, 2009; Walsh, MacMillan, Trocmé, Jamieson & Boyle, 2008), yet which may overestimate or underestimate accounts of school violence (e.g., issues with recall error, as described in Furlong, Morrison, Cornell & Skiba, 2004, and Rosenblatt & Furlong, 1997).

Implications for Policy and Practice

Despite the study's limitations, the current findings extend our knowledge about teen dating violence/abuse and bullying, particularly around cyber dating abuse and cyber bullying. Further, the findings provide some indication of implications for policy and practice, which are discussed below for both teen dating violence/abuse and bullying.

- Our study's findings on the prevalence of cyber dating abuse and cyber bullying suggest that schools should raise awareness about the harmfulness of perpetrating such acts and educate victims about the importance of reporting incidents and seeking help. These activities should include all members of the school community: principals, teachers, and peer leaders. Schools can refer youth to programs and online resources, such as online forums for safely airing grievances and resolving disputes (see http://www.thatsnotcool.com/CalloutCards.aspx).
- Because victims of teen dating violence/abuse and bullying victims are more likely to go to friends for help or advice, schools might consider creating peer-led groups to build awareness around the issues and create a comfort-level for victims to report.
- In addition, since this research found that many help-seeking victims also reach out to their parents, it may be valuable for schools to help parents form support networks for each other, so that parents of victimized or vulnerable youth can share advice and resources regarding preventative measures. Likewise, schools could hold seminars and workshops for parents on how to identify and report when their child is being bullied or being abused via technology, and on how to help them cope with and address the issue.
- Given our finding that so few youth victims of teen dating violence/abuse and bullying seek help, schools might create more formalized reporting mechanisms to ensure that

such experiences are being addressed effectively and promptly for both males and females. In particular, since less than half of male victims seek help, specific outreach efforts to male victims might be appropriate so that they can receive any needed assistance.

- Because so much of youths' teen dating violence and abuse and bullying experiences occur at school, faculty and staff should be trained on how to identify signs of both types of acts and how to handle such incidences (e.g., when to report, to whom to report, how to report).
- Our findings on higher cyber bullying victimization rates in schools that provide greater access to communications technology suggest that as such access continues to grow, schools will need to train youth on how to use technology to block screen names, apply filters to certain websites, and take other protective measures to prevent bullies and perpetrators of cyber dating abuse from harassing them.
- Schools might also benefit by receiving more support, training, and/or funding for school counselors and psychologists, who can directly help youth address these issues and train school faculty and parents, assisting them in coordinated efforts to reduce the number and impact of teen dating violence/abuse and bullying experiences.
- Because we found a great deal of youth report victimization and perpetration and, in the case of teen dating violence/abuse, the experiences are reciprocal, it is unclear who may be primary perpetrators or primary victims, or if youth might be equally initiating these incidents. Thus, identifying how to deal with these interactions from a criminal justice perspective might be very challenging. Police and prosecutors might benefit from training about the nuances of these relationships.
- While the bulk of this study focuses on how technology makes youth vulnerable to victimization and abuse, such technology may also be an opportunity for prevention and intervention efforts around teen dating and bullying issues, particularly given the number of youth who use it regularly (Lenhart, 2012; Stewart & Kaye, 2012). Thus, new technology and social networking sites can be used to spread awareness about these two types of interpersonal violence and abuse. Further, technology can be used to report incidences of teen dating and bullying—whether directly by the victim, a bystander, or a peer. For example, bystanders and peers could text eyewitness reports anonymously to school officials, similar to how texts can be sent to police anonymously whenever someone witnesses a crime.[55]

Implications for Research

The current research findings lead directly to suggestions for future research endeavors. Much remains to be learned about cyber dating abuse and cyber bullying.

- A national, longitudinal, multi-year study to determine the prevalence of teen dating violence/abuse and bullying, with a particular focus on cyber dating abuse and cyber bullying, in middle schools and high schools across the country would be of great service to the field. Such a study could
    - Further examine the overlap of cyber dating abuse with other forms of teen dating violence/abuse—including physical violence, other psychological abuse, and

[55] See http://www.state-journal.com/latest%20headlines/2012/11/02/police-seek-crime-tips-via-text-messages.

sexual coercion.
    - Further examine the overlap of cyber bullying with other forms of bullying—including physical and other psychological bullying.
    - Further examine the overlap between cyber dating abuse and cyber bullying.
    - Examine causality related to the risk factors and consequences of experiencing and perpetrating cyber dating abuse and cyber bullying. In addition, such a study would allow us to identify protective factors related to *not* experiencing such violence and abuse.
    - Further examine female perpetration of various forms of teen dating violence and abuse, including cyber dating abuse, and disentangling initiation of violence from retaliatory or responsive violence.
    - Further examine the nature of male victimization, particularly related to cyber dating abuse.
    - Further examine the nature of female victimization related to sexual cyber abuse.
    - When it comes to bullying prevalence rates, further examine who is bullying whom. Are males bullying only other males or females as well, and vice versa? When looking at cross-gender versus same-gender bullying, does one gender bully the other using one form of bullying versus another?
- More research is needed regarding the particular vulnerability of LGBTQ youth to teen dating violence/abuse and bullying, as well as the associated risk and protective factors of such youths' victimization and perpetration, and the consequences of such experiences.
- Further research is needed to examine help-seeking behaviors of victims, particularly related to cyber abuse. Such research should explore reasons why victims of teen dating violence/abuse and cyber bullying choose not to report incidents or seek help in an effort to inform educational efforts to address their needs. Of specific note should be identifying the coping mechanisms of youth who are not seeking help from others.
- Finally, given that prevention and intervention are critical to addressing these issues, the field could benefit from more rigorous impact evaluations of current teen dating violence and bullying prevention programs, with a particular focus on preventing cyber abuse.[56]

Conclusion

Technology use—such as social networking, cell phone, and smart phone use—is an integral part of teens' lives and something that will evolve and change but will not cease to exist. Such technology has developed new ways for youth to be in contact with one another, creating both opportunity and risk. Based on this study's results, cyber dating abuse and cyber bullying are common experiences for youth, and given the nature of the technology, youth who are victims of such abuse are vulnerable to it anytime of day or night. People no longer have to actually be together in the same room to fall victim to or perpetrate various forms of dating abuse and bullying. Focusing on such cyber abuse, we draw seven general conclusions from the current study.

First, rates of cyber abuse are substantial. Just over a quarter of youth in dating relationships

[56] The following websites provide examples of current prevention programs: Austin's Safe Place programhttp://www.safeplace.org/Page.aspx?pid=376, Break the Cycle http://www.breakthecycle.org/, and http://www.arlingtonva.us/departments/HumanServices/ChildrenFamily/file81972.pdf

report cyber dating abuse and one out of ten youth report perpetrating such abuse. One out of six youth report cyber bullying victimization and half that amount report perpetrating cyber bullying. This rate of cyber bullying victimization is nearly double the reported rate three years ago for youth nationwide, suggesting that cyber bullying experiences may be increasing as technology—and youths' access to that technology—continues to advance.

Second, cyber abuse is often combined with other forms of dating violence and abuse or other forms of bullying. Cyber dating abuse had the greatest degree of overlap with psychological dating abuse, with nearly all cyber dating abuse victims also reporting psychological dating abuse, while only half reported physical dating violence victimization and one-third reported sexual coercion. Likewise, nearly all cyber bullying victims also experienced psychological bullying victimization, and nearly three-quarters of cyber bullying victims also reported physical bullying victimization. Given the great degree of overlap between cyber abuse and psychological abuse experiences (for both teen dating violence/abuse and bullying), cyber abuse is likely one of many forms of psychological abuse experienced by youth. Further, cyber dating abuse and cyber bullying experiences also overlap, for both victims and perpetrators.

Third, while cyber abuse might overlap with other forms of dating violence/abuse or other forms of bullying, it does not always: some youth only experience cyber abuse. Because it can be uniquely experienced by victims, it is important to distinguish it from other forms of teen dating violence/abuse and bullying. For example, we found that not all cyber abuse victims experienced physical and sexual violence, and that cyber dating abuse and cyber bullying relate to other life factors (such as psychosocial adjustment and substance use) in ways that are meaningfully and distinctly different than the relationships of those life factors to other kinds of violence and abuse experiences.

Fourth, most cyber abuse victims do not perpetrate cyber abuse, but most perpetrators also report victimization. This suggests the existence of two groups of youth who may require help: nonaggressive victims who suffer victimization but do not inflict abuse; and perpetrators who suffer abuse and victimize others (who may themselves be abusing innocent others as well).

Fifth, females are particularly vulnerable to cyber abuse, but are also perpetrators of cyber abuse. Females are more vulnerable to cyber dating abuse in general, but particularly to sexual cyber abuse. Twice as many females than males reported sexual cyber abuse victimization and twice as many males than females reported sexual cyber abuse perpetration. In addition, in this and in previous studies, female youth report both more cyber bullying victimization and perpetration than males.

Sixth, LGBTQ youth are particularly vulnerable to all types of teen dating violence/abuse and bullying, including cyber dating abuse and cyber bullying. Thirty-seven percent of LGBTQ youth reported cyber dating abuse victimization and about half that reported perpetrating such violence. One-quarter of LGBTQ youth reported being a victim of cyber bullying and half that report perpetrating such violence.

Seventh, few victims of violence and abuse seek help. Less than one out of ten victims of teen dating violence/abuse and one out of six bullying victims reported seeking help. In both cases,

half as many male victims as female victims sought help.

Given these findings, a greater focus on cyber abuse is warranted for prevention and intervention programming, as well as future research. The better we understand how youth might be negatively affected by technology, the better we will be able to use it—along with other methods of intervention—to address the needs of youth who experience cyber abuse and prevent future victimization.

References

Ackard, D. M., Neumark-Sztainer, D., & Hannan, P. (2003). Dating violence among a nationally representative sample of adolescent girls and boys: Associations with behavioral and mental health. *Journal of Gender Specific Medicine, 6*(3) 39-48.

Allison, P. (2001). *Missing Data*. Thousand Oaks, CA: Sage Publications.

American Association of University Women Educational Foundation. (2001). *Hostile hallways: Sexual harassment and bullying in schools.* Washington, DC: Harris/Scholastic Research.

Arriaga, X.B. & Foshee, V.A. (2004). Adolescent dating violence: Do adolescent follow in their friends', or their parents', footsteps? *Journal of Interpersonal Violence, 19,* 162-184.

Bergman, L. (1992). Dating violence among high school students. Social Work, 37:1, 21-27.

Berthold, K. & Hoover, J. (2000). Correlates of bullying and victimization among intermediate students in Midwestern USA. *School Psychology International, 21,* 65-79.

Birkett, M., Espelage, D.L., & Koenig, B. (2009). LGBT and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth Adolescence, 38,* 989-1000.

Bjorkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. Sex Roles, 30, 177-188.

Borowsky, I.W., Hogan, M., & Ireland, M. (1997). Adolescent sexual aggression: Risk and protective factors. *Pediatrics, 100(6),* e7.

Boulton, M.J., Trueman, M., Chau, C., Whitehand, C., & Amatya, K. (1999). Concurrent and longitudinal links between friendship and peer victimization: Implications for befriending interventions. *Journal of Adolescence, 22*(4), 461-466.

Bowers, L., Smith, P.K., & Binney, V. (1994). Perceived family relationships of bullies, victims, and bully/victims in middle childhood. *Journal of Social Personal Relationships, 11*(2), 215-232.

Bradshaw, C.P., Sawyer, A.L., & O'Brennan, L.M. (2009). A social disorganization perspective on bullying-related attitudes and behaviors: The influence of school context. *American Journal of Community Psychology, 43*(3-4), 204-220.

Brecklin, L.R. & Ullman, S.E. (2002). The roles of victim and offender alcohol use in sexual assaults: Results from the National Violence against Women Survey. *Journal of Studies on Alcohol, 63(1),* 57-64.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. & Morris, P.A. (1998). The ecology of human developmental processes. In: Damon, W. & Eisenberg, N. (Eds.), *The handbook of child psychology, Third Edition* (993-1027). New York: John Wiley & Sons.

Caetano, P., Cunradi, C. B., Clark, C. L., & Schafer, J. (2000). Intimate partner violence and drinking patterns among white, black, and Hispanic couples in the U.S. *Journal of Substance abuse, 11(2),* 123-138.

Canadian Housing, Family, and Social Statistics Division (1999). *General social survey.* Ottawa, ON: Statistics Canada.

Carlyle, K.E. & Steinman, K.J. (2007). Demographic differences in the prevalence, co-occurrence and correlates of adolescent bullying at school. *Journal of School Health, 77*(6), 623-629.

Centers for Disease Control and Prevention. (2012). Youth risk behavior surveillance – United States, 2011. *Morbidity and Mortality Weekly Report, 61*(4):1-166. Washington, DC: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf

Chen, P.H. & White H. R. (2004). Gender differences in adolescent and young adult predictors of later intimate partner violence. *Violence Against Women, 10(11),* 1281-1301.

Christopher, F. S. (2001). *To dance the dance: A symbolic interactional exploration of premarital sexuality*. Mahwah, NJ: Lawrence Erlbaum.

Cook, C.R., Williams, K.R., Guerra, N.G. & Tuthill L. (2007). Cyberbullying: What it is and what we can do about it? *NASP Communique, 36*(1).

Cook, C.R., Williams, K.R., Guerra, N.G., Kim, T.E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic Investigation. *School Psychology Quarterly, 25*(2), 65-83.

Craig, W. & Pepler, D. (1997). Observations of bullying and victimization in the schoolyard. *Canadian Journal of School Psychology, 2*, 41-60.

Cross, D., Shaw, T., Hearn, L., Epstein, M., Monks, H., Lester, L. & Thomas, L. (2009). *Australian Covert Bullying Prevalence Study (ACBPS).* Perth, Child Health Promotion Research Centre, Edith Cowan University.

Dooley, J.J., Pyżalski, J. & Cross, D. (2009). Cyberbullying versus face-to-face bullying: A theoretical and conceptual review. *Journal of Psychology, 217(4),* 182-188.

Draucker, C.B. & Martsolf, D.S. (2010). The role of electronic communication technology in adolescent dating violence. *Journal of Child and Adolescent Psychiatric Nursing, 23(3),* 133-142.

Eaton, D.K., Davis, K.S., Barrios, L., Brener, N.D., & Noonan, R.K. (2007). Associations of dating violence victimization with lifetime participation, oc-occurrence, and early initiation of risk behaviors among U.S. high school students. *Journal of Interpersonal Violence, 22,* 585-602.

Ebesutani, C., Bernstein, A., Martinez, J.I., Chorpita, B.F. & Weisz, J.R. (2011). The Youth Self Report: Applicability and validity across younger and older youths. *Journal of Clinical Child & Adolescent Psychology, 40(2),* 338-346.

Edwards, K.M., Desai, A.D. Gidycz, C.A. & VanWynsberghe, A. (2009). College women's aggression in relationships: The role of childhood and adolescent victimization. *Psychology of Women Quarterly, 33(3),* 255-265.

Espelage, D. L., & Swearer, S. M. (2009). Contributions of three social theories to understanding bullying perpetration and victimization among school-aged youth. In M. J. Harris (ed.), *Bullying, rejection, and peer victimization: A social cognitive neuroscience perspective.* New York: Springer.

Espelage, D. L., Basile, K. C., & Hamburger, M.E. (2012). Bullying experiences and co-occurring sexual violence perpetration among middle school students: Shared and unique risk factors. *Journal of Adolescent Health, 50,* 60-65.

Espelage, D. L., Holt, M. K., & Henkel, R. R. (2003). Examination of peer-group contextual effects on aggression during early adolescence. *Child Development* 74: 205–220.

Espelage, D.L., Aragon, S.R., Birkett, M., & Koenig, B.W. (2008). Homophobic teasing, psychological outcomes, and sexual orientation among high school students: What influence do parents and schools have? *School Psychology Review, 37,* 202-216.

Fang, X., & Corso, P. S. (2007). Child maltreatment, youth violence, and intimate partner violence. *American Journal of Preventive Medicine* 33(4): 281–90.

———. (2008). Gender differences in the connections between violence experienced as a child and perpetration of intimate partner violence in young adulthood. *Journal of Family Violence* (23):303–13.

Fauman, M.A. (2008). Cyber bullying: Bullying in the digital age (book review). *American Journal of Psychiatry, 165,* 780–781.

Feerick, M.M., Haugaard, J.J., & Hien, D.A. (2002). Child maltreatmenat and adulthood violence: The contribution of attachment and drug abuse. *Child Maltreatment, 7,* 226-240.

Fergusson, D.M., Boden, J.M., & Horwood, L.J. (2008). Developmental antecedents of interpartner violence in a New Zealand birth cohort. *Journal of Family Violence, 23*, 737-753.

Foshee, V.A. (1996). Gender differences in adolescent dating abuse prevalence, types and injuries. *Health Education Research, Theory & Practice, 11*:3, 275-286.

Foshee, V.A., Bauman, K.E., Linder, R., Rice, J., & Wilcher, R. (2007). Typologies of adolescent dating violence: Identifying typologies of adolescent dating violence perpetration. *Journal of Interpersonal Violence, 22(5)*, 498-519.

Foshee, V. A., Benefield, T., Ennett, S., Bauman, K. E., & Suchindran, C. (2004). Longitudinal predictors of serious physical and sexual dating violence victimization during adolescence. *Preventive Medicine, 39*, 1007-1016.

Foshee, V.A., Karriker-Jaffe, K.J., Reyes, H.L.M., Ennett, S.T., Suchindran, C., Bauman, K.E., & Benefield, T.S. (2008). What accounts for demographic differences in trajectories of adolescent dating violence? An examination of Intrapersonal and contextual mediators. *Journal of Adolescent Health, 42*, 596-604.

Foster, H., Hagan, J., & Brooks-Gunn, J. (2004). Age, puberty, and exposure to intimate partner violence in adolescence. *Annals of the New York Academy of Sciences, 1036*(1), 151-166.

Freedner, N., Freed, L.H., Yang, W. & Austin, S.B. (2002). Dating violence among gay, lesbian, and bisexual adolescents: Results from a community survey. *Journal of Adolescent Health, 31*, 469-474.

Furlong, M.J., Morrison, G.M., Cornell, D.G. & Skiba, R. (2004). Methodological and measurement issues in school violence research: Moving beyond the social problem era. *Journal of School Violence, 3*(2/3), 5-12.

Glew, G.M., Fan, M.Y., Katon, W., Rivara, F.P., & Kernic, M.A. (2005). Bulling psychosocial adjustment and academic performance in elementary school. *Archives of Pediatric Adolescent Medicine, 159*(11), 1026-1031.

Google & Ipsos MediaCT (2012). *Media habits of teens and twenty-somethings 2012*. http://www.thinkwithgoogle.com/insights/library/studies/2012-teens-and-young-adults/ (accessed 2/6/2013).

Gover, A. R., Kaukinen, C., & Fox, K. A. (2008). The relationship between violence in the family of origin and dating violence among college students. *Journal of Interpersonal Violence* 23(12): 1667–93.

Gradinger, P., Strohmeier, D. & Spiel, C. (2009). Traditional bullying and cyberbullying: Identification of risk groups for adjustment problems. *Journal of Psychology, 217*, 205-213.

Gray, H., & Foshee, V. A. (1997). Adolescent dating violence: Differences between one-sided and mutually violent profiles. *Journal of Interpersonal Violence, 12*(1), 126-141.

Griezel, L. (2007). *Out of the schoolyard and into cyber space: Elucidating the nature and psychosocial consequences of traditional and cyber bullying for Australian secondary students.* Unpublished honours thesis, University of Western Sydney, Sydney.

Guan, S.S. & Subrahmanyam, K. (2009). Youth Internet use: Risks and opportunities. *Current Opinion in Psychiatry, 22(4),* 351-356.

Halpern, C. T., Oslak, S. G., Young, M. L., Martin, S. L., & 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): 1679–85.

Halpern, C.T., Young, M.L., Waller, M.W., Martin, S.L. & Kupper, L.L. (2004). Prevalence of partner violence in same-sex romantic and sexual relationships in a national sample of adolescents. *Journal of Adolescent Health, 35,* 124-131.

Hawker, D.S.J. & 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 and Allied Disciplines, 41*, 441-455.

Haynie, D.L., Nansel, T., Eitel, P., Crump, A.D., Saylor, K., Yu, K. (2001). Bullies, victims, and bully/victims: Distinct groups of at-risk youth. *Journal of Early Adolescence, 21*(1), 29-49.

Hazler, R. (1996). *Breaking the cycle of violence: Interventions for bullying and victimization.* Washington, DC: Accelerated Development.

Hendy, H.M., Weiner, K., Bakerofskie, J., Eggen, D., Gustitus, C., & McLeod, K.D. (2003). Comparison of six models for violent romantic relationships in college men and women. *Journal of Interpersonal violence, 18(6),* 645-665.

Herrara, V.M, Wiesrma, J.D., & Cleveland, H.H. (2008). The influence of individual and partner characteristics on the perpetration of intimate partner violence in young adult relationships. *Journal of Youth and Adolescence, 37,* 284-296.

Hettrich, E.L. & O'Leary, K.D. (2007). Females' reasons for their physical aggression in dating relationships. *Journal of Interpersonal Violence, 22(9),* 1131-1143.

Hodges, E.V., Boivin, M., Vitaro, F., & Bukowski, W.M. (1999). The power of friendship: Protection against escalating cycle of peer victimization. *Developmental Psychology, 35*, 94-101.

Holtzworth-Munroe, A. & Meehan, J. C. (2002). *Typologies of maritally violent men: A summary of current knowledge and suggestions for future research.* Paper presented at National Research Council, Committee on Law and Justice, Violence Against Women Workshop, January 3-4, 2002, Washington, DC.

Hoover, J.H., Oliver, R.L., & Thomson, K.A. (1993). Perceived victimization by school bullies: New research and future direction. *Journal of Humanistic Education and Development, 32*, 76-84.

Howard, D., & Wang, M. Q. (2003). Psychosocial factors associated with adolescent boys' reports of dating violence. *Adolescence 38*:519–33.

Howard, D., Qiu, Y., & Boekeloo, B. (2003). Personal and social contextual correlates of adolescent dating violence. *Journal of Adolescent Health, 33*(1), 9-17.

Howard, D. E., Wang, M. Q., & Fang, Y. (2007). Psychosocial factors associated with reports of physical dating violence victimization among U.S. adolescent females. *Adolescence* 42(166): 311–24.

———. (2008). Psychosocial factors associated with reports of physical dating violence victimization among U.S. adolescent males. *Adolescence* 43(171): 449–60.

Ireland, T.O. & Smith, C.A. (2009). Living in partner-violent families: Developmental links to antisocial behavior and relationship violence. *Journal of Youth and Adolescence, 38,* 323-339.

Janssen, I., Craig, W.M., Boyce, W.F., & Pickett, W. (2004). Associations between overweight and obesity with bullying behaviors in school-aged children. *Pediatrics, 113,* 1187-1194.

Jeffrey, L., Miller, D., & Linn, M. (2001). Middles school bullying as a context for the development of passive observers to the victimization of others. *Journal of Emotional Abuse, 2*(2/3), 143-156.

Julian, T. W., McKenry, P. C., Gavazzi, S. M., & Law, J. C. (1999). Test of family of origin structural models of male verbal and physical aggression. *Journal of Family Issues, 20*(3), 397–423.

Juvonen, J. & Gross, E.F. (2008). Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health, 78*(8), 496-505.

Juvonen, J., Graham, S., & Schuster, M. (2003). Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics, 112*, 1231-1237.

Kaestle, C.E. & Halpern, C.T. (2005). Sexual intercourse precedes partner violence in adolescent romantic relationships. *Journal of Adolescent Health, 36*(5), 386-392.

Kantor, G., & Straus, M. A. (1987). The "drunken bum" theory of wife beating. *Social Problems, 34*(3), 213□230.

Kaukiainen, A., Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., & Rothberg, S. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior* 25:81–89.

Kaukiainen, A., Salmivalli, C., Lagerspetz, K., Tamminen, M., Vauras, M., & Maki, H. (2002). Learning difficulties, social intelligence, and self-concept: Connections to bully-victim problems. *Scandinavian Journal of Psychology, 43,* 269-278.

Kosciw, J.G., Diaz, E.M., & Greytak, E.A. (2008). *The 2007 national school climate survey: The experience of lesbian, gay, bisexual, and transgender youth in our nation's schools.* New York: GLSEN.

Kowalski, R.M., Limber, S.P. & Agatston, P.W. (2008). Cyber bullying: bullying in the digital age. Malden, MA: Blackwell Publishing.

Kyriacou, D. N., Anglin, D., Taliaferro, E., Stone, S., Tubb, T., Linden, J. A., Muelleman, R., Barton, E., & Kraus, J. F. (1999). Risk factors for injury to women from domestic violence. *The New England Journal of Medicine, 341*(25), 1892□1898.

Lehrer, J.A., Buka, S., Gortmaker, S., & Shrier, L.A. (2006). Depressive symptomatology as a predictor of exposure to intimate partner violence among US female adolescents and young adults. *Archives of Pediatrics & Adolescent Medicine, 160*(3), 270-276.

Lenhart, A. (2012). *Teens, Smartphones, and Texting.* Washington, DC: Pew Research Center's Internet & American Life Project

Lenhart, A., Purcell, K, Smith, A., & Zickuhr, K. (2010). *2010 social media and young adults*. Washington, D.C.: Pew Internet and American Life Project.

Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickurh, K., & Rainie, L. (2011). *Teens, Kindness and Cruelty on Social Network Sites.* Washington, DC: Pew Research Center's Internet & American Life Project.

Little, L. (2002). Middle-class mothers' perceptions of peer and sibling victimization among children with Asperger's syndrome and nonverbal learning disorders. *Issues in Comprehensive Pediatric Nursing, 25,* 43-57.

Llewellyn, A. (2000). Perceptions of mainstreaming: A systems approach. *Developmental Medicine and Child Neurology, 42,* 106-115.

Lussier, P., Farrington, D. P., & Moffitt, T.E. (2009). Is the antisocial child father of the abusive man? A 40-year prospective longitudinal study of the developmental antecedents of intimate partner violence. *Criminology, 47(3),* 741-771.

Magdol, L., Moffitt, T. E., Caspi, A., & Silva, P. A. (1998). Developmental antecedents of partner abuse: A prospective-longitudinal study. *Journal of Abnormal Psychology, 107*(3), 375–389.

Malik, S., Sorenson, S. B., & Aneshensel, C. S. (1997). Community and dating violence among adolescents: Perpetration and victimization. *Journal of Adolescent Health, 21*, 291-302.

Marini, Z.A., Dane, A.V., Bosacki, S.L., & YLC-CURA (2006). Direct and indirect bully-victims: Differential psychosocial risk factors associated with adolescents involved in bullying and victimization. *Aggressive Behavior, 32*, 551-569.

Marini, Z., Fairbairn, L., & Zuber, R. (2001). Peer harassment in individuals with developmental disabilities: Towards the development of a multidimensional bullying identification model. *Developmental Disabilities Bulletin, 29*, 170-195.

Maruish, M.E. (2002). *Psychological testing in the age of managed behavioral health care*. Mahwah, NJ: Lawrence Erlbaum.

———. (2004). *The use of psychological testing for treatment planning and outcomes assessment: instruments for adults, vol. 3*. Mahwah, NJ: Lawrence Erlbaum.

Maruish, M.E., Bershadsky, B. & Goldstein, L. (1998). Reliability and validity of the SA-45: Further evidence from a primary care setting. *Assessment, 5(4)*, 407-419.

Menard, K.S., Hall, G.C. Phung, A.H., Ghebrial, M.F & Martin, L. (2003). Gender differences in sexual harassment and sexual coercion in college students. *Journal of Interpersonal Violence, 18(10)*, 1222-1240.

Michigan Department of Community Health (1997). *Survey of Violence Against Women in Michigan.* Poster presented at: American Public Health Association annual meeting; Indianapolis, IN.

Molidor, C., Tolman, R. M., & Kober, J. (2000). Gender and contextual factors in adolescent dating violence. *The Prevention Researcher, 7*:1, 1-4.

Mouttapa, M., Valente, T., Gallaher, P., Rohrbach, L.A., & Unger, J.B. (2004). Social network predictors of bullying and victimization. *Adolescence, 39*(154), 315-35.

Mulford, C. & Giordano, P.M. (2008). Teen dating violence: A closer look at adolescent romantic relationships. *National Institute of Justice Journal*, 261.

Nansel, TR., Overpeck, M., Pilla, RS., Ruan, WJ, Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *JAMA, 285*(16), 2094-2100.

National Research Council. (1998). *Violence in families: Assessing prevention and treatment programs.* Washington, DC: National Academy Press.

Norwich, B., & Kelly, N. (2004). Pupils' views on inclusion: Moderate learning difficulties and bullying in mainstream and special schools. *British Educational Research Journal, 30,* 43-65.

O'Keefe, M. (1997). Predictors of dating violence among high school students. *Journal of Interpersonal Violence, 12*:4, 546-568.

O'Keefe, M. & Treister, L. (1998). Victims of dating violence among high school students: Are the predictors different for males and females? *Violence Against Women, 4(2),* 195-223.

O'Leary, K.D., Smith Slep, A.M., Avery-Leaf, S., & Cascardi, M. (2008). Gender differences in dating aggression among multiethnic high school students. *Journal of Adolescent Health, 42,* 473-479.

Olweus, D. (1993). *Bullying at school: What we know and what we can do.* Cambridge, MA: Blackwell.

Parada, R. (2000). *Adolescent peer relations instrument: A theoretical and empirical basis for the measurement of participant roles in bullying and victimisation of adolescence—An interim test manual and a research monograph: A test manual.* Publication Unit, Self-concept Enhancement and Learning Facilitation (SELF) Research Centre, University of Western Sydney.

Patchin, J. W., & Hinduja, S. (2006). Bullies move beyond the schoolyard: A preliminary look at cyberbullying. *Youth Violence and Juvenile Justice 4*(2): 148–69.

———. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior* 29:129–56.

Paternoster, R., Brame, R., Mazerolle, P. & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology, 36(4),* 859-866.

Pepler, D.J., Craig, W.M., Connolly, J.A., Yuile, A., McMaster, L., & Jiang, D. (2006). A developmental perspective on bullying. *Aggressive Behavior, 32,* 376-384.

Pew Internet and American Life Project. (2009). *Teens and mobile phones, 2009 dataset.* Washington, D.C.: Pew Internet and American Life Project.

Picard, P. (2007). *Tech abuse in teen relationships.* Chicago, IL: Teen Research Unlimited. http://www.loveisrespect.org/wp-content/uploads/2009/03/liz-claiborne-2007-tech-relationship-abuse.pdf (Accessed 3/24/11).

Reeves, P.M. & Orpinas, P. (2012). Dating norms and dating violence among ninth graders in Northeast Georgia: Reports from student surveys and focus groups. *Journal of Interpersonal Violence, 27(9),* 1677-1698.

Renner L.M. & Whitney, S.D. (2010). Examining symmetry in intimate partner violence among young adults using socio-demographic characteristics. *Journal of Family Violence, 25,* 91-106.

Rennison, C.M., & Welchans, S. (2000). *Intimate Partner Violence*. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Rideout, V.J., Foehr, U.G. & Roberts, D.F. (2010). *Generation M2: Media in the lives of 8- to 18-year-olds*. Menlo Park, CA: Kaiser Family Foundation. http://www.kff.org/entmedia/8010.cfm. (Accessed 2/6/13.)

Rideout, V., Roberts, D., & Foehr, U. (2005). *Generation M: Media in the lives of 8- to 18-year-olds*. Menlo Park, CA: Kaiser Family Foundation.

Ridge, N.W., Warren, J.S., Burlingame, G.M., Wells, M.G. & Tumblin, K.M. (2009). Reliability and validity of the youth outcome questionnaire self-report. *Journal of Clinical Psychology, 65(10),* 1115-1126.

Rios-Ellis, B., Bellamy, L., & Shoji, J. (2000). An examination of specific types of ijime and their prevalence within Japanese schools. *School Psychology International, 21*(3), 227-241.

Rivers, L. (2001). The bullying of sexual minorities at school: Its nature and long-term correlates. *Educational and Child Psychology, 18*, 32-46.

Roberts, D. F., & Foehr, U. G. (2008). Trends in media use. *Future of Children* 18:1.

Roberts, T.A., Auinger, P. & Klein, J.D. (2006). Predictors of partner abuse in a nationally representative sample of adolescents involved in heterosexual dating relationships. *Violence & Victims, 21*(1), 81-89.

Rodkin, P.C., Farmer, T.W., Pearl, R., & Van Acker, R. (2006). They're cool: Ethnic and peer group supports for aggressive boys and girls. *Social Development, 36,* 14-24.

Roland, E. (2002). Bullying, depressive symptoms and suicidal thoughts. *Educational Research, 44*, 55-67.

Rosenblatt, J.A. & Furlong, M.J. (1997). Assessing the reliability and validity of student self-reports of campus violence. *Journal of Youth and Adolescence, 26(2),* 187-202.

RTI International. (2012). *Prevention in middle school matters: A summary of findings on teen dating violence behaviors and associated risk factors among 7th-grade students.* Research Triangle, NC: RTI International.

Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms and behavior associated with bullying in schools. *International Journal of Behavioral Development, 28*, 246-258.

Salmivalli, C., Lagerspetz, K., Bjorkqvist, K., & Kaukiainen, A. (1996). Bullying as a group process; Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*, 1-15.

Sharp, S. (1995). How much does bullying hurt? The effects of bullying on the personal well-being and educational progress of secondary aged students. *Educational and Child Psychology, 12*, 81-88.

Silverman, J.G., Raj, A. & Clements, K. (2004). Dating violence and associated sexual risk and pregnancy among adolescent girls in the United States. *Pediatrics, 114*:2, 220-225.

Silverman J.G., Raj A., Mucci L.A., & Hathaway J.E. (2001). Dating violence against adolescent girls and associated substance use, unhealthy weight control, sexual risk behavior, pregnancy, and suicidality. *JAMA, 286*, 572-579.

Slee, P.T. (1993). Bullying: A preliminary investigation of the nature and effects on social cognition. *Early Child Development and Care, 87,* 47-57.

Spencer, G. A., & Bryant, S. A. (2000). Dating violence: a comparison of rural, suburban, and urban teens. *Journal of Adolescent Health, 27:*5, 302-305.

Solberg, ME & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus bully/victim questionnaire. *Aggressive Behavior, 29*, 239-268.

Stark, E., & Flitcraft, A. H. (1991). In M. L. Rosenberg & M. A. Fenley (Eds.), *Violence in America: A public health approach* (pp. 123 □157). New Yo

Stewart, A., & Kaye, K. (2012). *Freeze frame 2012: A snapshot of America's teens*. Washington, DC: National Campaign to Prevent Teen and Unplanned Pregnancy.

Strategic Advantage, Inc. (1998). *Symptom Assessment-45 questionnaire (SA-45) technical manual*. Toronto, ON: Multi-Health Systems.

Teenage Research Unlimited. (2011). *The TRU study 2012: The U.S. teens and twenty-somethings edition*. Available at www.truportal.com.

Thunfors, P., & Cornell, D. (2008). The popularity of middle school bullies. *Journal of School Violence, 7*, 65-82.

Tokunaga, R.S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior, 26,* 277-287.

U.S. Department of Justice. (2006). *Homicide trends in the U.S.: Intimate partner homicide, 2006.* Washington, DC: Bureau of Justice Statistics, U.S. Department of Justice.

Unnever, J.D., & Cornell, D.G. (2003). Bullying, self-control, and ADHD. *Journal of Interpersonal Violence, 18*, 129-147.

Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying is power: Implications for school-based intervention strategies. *Journal of Applied School Pscyhology, 19*, 157-176.

Vezina, J., & Hebert, M. (2007). Risk factors for victimization in romantic relationships of young women: A review of empirical studies and implications for prevention. *Trauma, Violence, & Abuse, 8*(1), 33-66.

Walsh, C.A., MacMillan, H.L., Trocmé, N., Jamieson, E. & Boyle, M.H. (2008). Measurement of victimization in adolescence: Development and validation of the Childhood Experiences of Violence Questionnaire. *Child Abuse & Neglect, 32(11),* 1037-1057.

Wang, J., Iannotti, R.J., & Nansel, T.R. (2009). School bullying among U.S. adolescents: Physical, verbal, relational and cyber. *Journal of Adolescent Health, 45*(4), 368-375.

Warden, D., & Mackinoon, S. (2003). Prosocial children, bullies and victims: An investigation of their sociometric status, empathy and social problem-solving strategies. *British Journal of Developmental Psychology, 21*, 367-385.

Watson, J. M., Cascardi, M., Avery-Leaf, S., & O'Leary,K.D. (2001). High school students' responses to dating aggression. *Violence and Victims*, *16*:3, 339-348.

West, C.M. & Rose, S. (2000). Dating aggression among low income African American youth: An examination of gender differences and antagonistic beliefs. *Violence Against Women, 6(5)*, 470-494.

Whitaker, D. J., Halleyesus, T, Swahn, M. & Saltzman, L.S. (2007). Diffferences in frequency of violence and reported injury between relationships with reciprocal and nonreciprocal intimate partner violence. *American Journal of Public Health, 97(5)*, 941-947.

Williams, K.R., & Guerra, N.G. (2007). Prevalence and predictors of Internet bullying. *Journal of Adolescent Health, 41*, s14-s21.

Ybarra, M. L., & Mitchell, K. J. (2004). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry 45*:1308–16.

Ybarra, M.L., Mitchell, K.J. & Korchmaros, J.D. (2011). National trends in exposure to and experiences of violence on the Internet among children. *Pediatrics, 128(6)*, 1376-1386.

Young, A.M., Grey, M., & Boyd, C.J. (2009). Adolescents' experiences of sexual assault by peers: Prevalence and nature of victimization occurring within and outside of school. *Journal of Youth and Adolescence, 38,* 1072-1083.

Young, A.M., King, L., Abbey, A. & Boyd, C.J. (2009). Adolescent peer-on-peer sexual aggression: Characteristics of aggressors of alcohol and non-alcohol related assault. *Journal of Studies on Alcohol and Drugs, 70(5),* 700-703.

Zweig, J. M., Barber, B. L., & Eccles, J. S. (1997). Sexual coercion and well-being in young adulthood: Comparisons by gender and college status. *Journal of Interpersonal Violence, 12(2),* 291-308.

Zweig, J. M., Sayer, A., Crockett, L. J., & Vicary, J. R. (2002). Adolescent risk factors for sexual victimization: A longitudinal analysis of rural women. *Journal of Adolescent Research, 17(6),* 586-603.

Appendix A: Survey Instrument

New Media and Teen Experiences Study

Please complete the following questions about yourself.

Section 1

1. What is your gender?
   - ☐ Male
   - ☐ Female
   - ☐ Transgender/Gender-queer

2. What is your birth month and year?
   _____ Month _____Year

3. What is your race/ethnicity? ***(please check all the answers that apply to you):***
   - ☐ African American/Black
   - ☐ Asian
   - ☐ Caucasian/White
   - ☐ Hispanic or Latino(a)
   - ☐ Native American
   - ☐ Mixed race

4. Of the following, which do you **primarily** identify as?
   - ☐ Heterosexual/straight
   - ☐ Lesbian
   - ☐ Gay
   - ☐ Bisexual
   - ☐ Questioning
   - ☐ Queer
   - ☐ Other

5. Who do you currently live with? ***(please check all the people you live with):***
   - ☐ Both biological or adoptive parents
   - ☐ One biological or adoptive parent
   - ☐ Step father
   - ☐ Step mother
   - ☐ Other guardian (foster family)
   - ☐ Brother/sisters
   - ☐ Grandparent/s
   - ☐ Other relatives
   - ☐ Boyfriend or girlfriend
   - ☐ Friend(s)
   - ☐ Other (please specify)

6. Including yourself, how many people live in the house you live in?
   - ☐ 1-2
   - ☐ 3-4
   - ☐ 5-6
   - ☐ More than 6 (how many?)_____

7. Do you have any siblings?
   - ☐ Yes
   - ☐ No **[IF "no" SKIP TO QUESTION 10]**

8. How many **older** siblings do you have?
   - ☐ 0
   - ☐ 1
   - ☐ 2
   - ☐ 3
   - ☐ 4 or more

9. How many **younger** siblings do you have?
   - ☐ 0
   - ☐ 1
   - ☐ 2
   - ☐ 3
   - ☐ 4 or more

10. For your primary parent or guardian, what is the highest level of education he or she completed?
    - ☐ Elementary/middle school
    - ☐ High school
    - ☐ College
    - ☐ Master's degree
    - ☐ M.D./J.D./Ph.D.
    - ☐ Don't know

11. For your other parent or guardian, what is the highest level of education he or she completed?
    - ☐ Elementary/middle school
    - ☐ High school
    - ☐ College
    - ☐ Master's degree
    - ☐ M.D./J.D./Ph.D.
    - ☐ Don't know
    - ☐ I only have one parent or guardian

12. What is your religious affiliation?
    - ☐ Christian (e.g., Catholic, Presbyterian, Mormon)
    - ☐ Jewish
    - ☐ Buddhist
    - ☐ Muslim
    - ☐ Jehovah's Witness
    - ☐ Other
    - ☐ None

13. In the **past year**, how often have you attended religious services?
    - ☐ At least once a week
    - ☐ Almost every week
    - ☐ About once a month
    - ☐ A couple of times a year
    - ☐ Never

14. What grade or year are you currently in?
    - ☐ 7th grade
    - ☐ 8th grade
    - ☐ 9th grade
    - ☐ 10th grade
    - ☐ 11th grade
    - ☐ 12th grade

15. How often do you attend school?
    - ☐ Every weekday
    - ☐ 3-4 days per week
    - ☐ 1-2 days per week

16. In general, what grades do you get in school?
    - ☐ Mostly A's
    - ☐ A's and B's
    - ☐ Mostly B's
    - ☐ B's and C's
    - ☐ Mostly C's
    - ☐ C's and D's
    - ☐ Mostly D's
    - ☐ D's and F's
    - ☐ Mostly F's

Section 2

17. How many times **per week** do you do the following activities? Please choose only one answer for each type of activity:

	Never	1-3 times	4-9 times	10 or more times
Work around the house (cleaning, cooking, laundry, yard work, caring for a pet)	❍	❍	❍	❍
Watch TV or DVDs (either on TV or on the computer)	❍	❍	❍	❍
Play video games	❍	❍	❍	❍
Play active sports (baseball, softball, basketball, football, swimming, etc.)	❍	❍	❍	❍
Exercise (jogging, walking, karate, jumping rope, gymnastics, dancing, etc.)	❍	❍	❍	❍
Other activity (roller-skating/blading, skate-boarding, or bicycling)	❍	❍	❍	❍

Section 3

18. Do you have a computer at home?
    - ☐ Yes
    - ☐ No

19. Do your parents or guardians restrict the amount of time you can spend on the computer?
    - ☐ Yes
    - ☐ No

    If yes, how many hours a day are you allowed to spend on the computer? ____

20. How do your parents or guardians restrict what websites you look at?
    - ☐ Filtering software (e.g. Net Nanny)
    - ☐ Computer has to be in public/open family space
    - ☐ I'm told not to visit certain sites
    - ☐ My parents/guardians don't restrict my internet use

21. How much time **per day** do you spend on the computer? For this question we do not want you to include time you might spend on the internet through your cell phone.
    - ☐ None **[If "none" SKIP TO QUESTION 27 ON PAGE 5]**
    - ☐ 1 hour
    - ☐ 2-4 hours
    - ☐ 5-6 hours
    - ☐ More than 6 hours

22. Where do you use the computer? ***Please check all the places you use the computer***.
    - ☐ Bedroom
    - ☐ Other room in household
    - ☐ School
    - ☐ Friend's house
    - ☐ Other relative's house

23. Where do you use the computer **the most?** ***Please only pick one answer.***
    - ☐ Bedroom
    - ☐ Other room in household
    - ☐ School
    - ☐ Friend's house
    - ☐ Other relative's house

24. At what times of day do you use the computer? ***Please check all the times during the day and night that you use the computer***.
    - ☐ Before school
    - ☐ During school
    - ☐ After school in the evening [6 to 10 p.m.]
    - ☐ Late at night [10 p.m. to midnight]
    - ☐ In the middle of the night [midnight to 5 a.m.]

25. At what time of day do you use the computer **the most**? ***Please only pick one answer.***
    - ☐ Before school
    - ☐ During school
    - ☐ After school in the evening [6 to 10 p.m.]
    - ☐ Late at night [10 p.m. to midnight]
    - ☐ In the middle of the night [midnight to 5 a.m.]

26. How much time **per day** do you spend doing the following activities on the computer? Please choose only one answer for each type of activity:

	No time	1 hour	2-4 hours	5-6 hours	More than 6 hours
Using social networking sites (e.g., Facebook, Myspace, etc.)	❍	❍	❍	❍	❍
Reading or researching on the internet	❍	❍	❍	❍	❍
Visiting websites with user-generated content (e.g., Wikipedia)	❍	❍	❍	❍	❍
Writing or posting on blogs/microblogs (e.g., tumblr, twitter, livejournal, etc.)	❍	❍	❍	❍	❍
Instant messaging or chatting	❍	❍	❍	❍	❍
Using e-mail	❍	❍	❍	❍	❍

27. Do you have a cell phone or do you use someone else's cell phone regularly?
    - ☐ Yes
    - ☐ No **[IF "no" SKIP TO SECTION 4, QUESTION 36 ON PAGE 6]**

28. Do your parents restrict the amount of time you can spend on the cell phone?
    - ☐ Yes
    - ☐ No

      If yes, how many minutes **per month** are you allowed to spend on the cell phone? ____

29. Approximately how many minutes **per month** do you spend on using a cell phone?
    - ☐ None **[If "none" SKIP TO SECTION 4, QUESTION 36 ON PAGE 6]**
    - ☐ 1 hour
    - ☐ 2-4 hours
    - ☐ 5-7 hours
    - ☐ More than 7 hours

30. Where do you use your cell phone? ***Please check all the places you use your cell phone***.
    - ☐ Bedroom
    - ☐ Other room in household
    - ☐ School
    - ☐ Friend's house
    - ☐ Other relative's house
    - ☐ Other (outside of school, private residences – mall, around town, while driving)

31. Where do you use your cell phone **the most?** ***Please only pick one answer.***
    - ☐ Bedroom
    - ☐ Other room in household
    - ☐ School
    - ☐ Friend's house
    - ☐ Other relative's house
    - ☐ Other (outside of school, private residences – mall, around town, while driving)

32. What times of day do you use your cell phone? ***Please check all the times during the day and night that you use your cell phone***.
    - ☐ Before school
    - ☐ During school
    - ☐ After school in the evening [6 to 10 p.m.]
    - ☐ Late at night [10 p.m. to midnight]
    - ☐ In the middle of the night [midnight to 5 a.m.]

33. At what time of day do you use the cell phone **the most**? ***Please only pick one answer.***
    - ☐ Before school
    - ☐ During school
    - ☐ After school in the evening [6 to 10 p.m.]
    - ☐ Late at night [10 p.m. to midnight]
    - ☐ In the middle of the night [midnight to 5 a.m.]

34. How many text messages do you send **per day**?
    a. Less than 5
    b. 5-40
    c. 41-70
    d. 71-100
    e. 101-150
    f. 151-200
    g. More than 200

35. How much time **per day** do you spend doing the following things on a cell phone? Please choose only one answer for each type of activity:

	No time	Less than 1 hour	1 hour	2-4 hours	5-7 hours	More than 7 hours
Talking	❍	❍	❍	❍	❍	❍
Sending instant messages or participating in chats	❍	❍	❍	❍	❍	❍
Texting	❍	❍	❍	❍	❍	❍
Using social networking sites (e.g., Facebook, Myspace, etc.)	❍	❍	❍	❍	❍	❍
Using other websites	❍	❍	❍	❍	❍	❍
E-mailing	❍	❍	❍	❍	❍	❍

Section 4

The following questions ask about your romantic relationships. This definition of "relationship" would include a boyfriend or girlfriend, someone you have dated or are currently dating (e.g. going out or socializing without being supervised), someone who you like or love **and** spend time with, or a relationship that might involve sex.

36. Have you **ever** been in a relationship as described above with another person?
    - ☐ Yes
    - ☐ No **[IF NO, SKIP TO SECTION 11, QUESTION 66 ON PAGE 16]**

37. Are you **currently** in a relationship?
    - ☐ Yes
    - ☐ No **[IF NO, SKIP TO QUESTION 40]**

38. How old is the person you are currently involved with?
    - ☐ The same age as I am
    - ☐ At least one year older than me
    - ☐ At least one year younger than me

39. What gender is the person you are currently involved with?
    - ☐ Male
    - ☐ Female
    - ☐ Transgender/Gender-queer

40. How many relationships have you had in the **past year**?
    - ☐ None **[IF NONE, SKIP TO SECTION 10, QUESTION 64 ON PAGE 15]**
    - ☐ 1 **[IF YOU ANSWERED YES TO QUESTION 37, YOUR ANSWER SHOULD BE AT LEAST 1]**
    - ☐ 2-4
    - ☐ 5-6
    - ☐ More than 7

41. **IF YOU ARE NOT CURRENTLY IN A RELATIONSHIP BUT HAVE BEEN IN THE PAST YEAR**, How old was the person you were most recently involved with?
    - ☐ The same age as I am
    - ☐ At least one year older than me
    - ☐ At least one year younger than me

42. What gender is the person you were most recently involved with?
    - ☐ Male
    - ☐ Female
    - ☐ Transgender/Gender-queer

Section 5

The following questions will ask you about the person you are currently dating or if you are not currently in a relationship, about the person you most recently broke up with in the past year.

43. In the **past year**, how many times has the person that you currently are dating, or if you are not currently dating, the person you most recently dated **done the following things to you**? Only include when that person did it to you first. In other words, don't count it if they did it to you in self-defense.

	Never happened	Happened 1 to 3 times	Happened 4 to 9 times	Happened 10 or more times
Scratched me	❍	❍	❍	❍
Slapped me	❍	❍	❍	❍
Physically twisted my arm	❍	❍	❍	❍
Slammed me or held me against a wall	❍	❍	❍	❍
Kicked me	❍	❍	❍	❍
Bent my fingers	❍	❍	❍	❍
Bit me	❍	❍	❍	❍
Tried to choke me	❍	❍	❍	❍
Pushed, grabbed or shoved me	❍	❍	❍	❍
Dumped me out of the car	❍	❍	❍	❍
Threw something at me that hit me	❍	❍	❍	❍
Pressured me to have sex when he or she knew I didn't want to	❍	❍	❍	❍
Forced me to have sex	❍	❍	❍	❍
Forced me to do other sexual things that I did not want to do	❍	❍	❍	❍
Burned me	❍	❍	❍	❍
Hit me with a fist	❍	❍	❍	❍
Hit me with something hard besides a fist	❍	❍	❍	❍
Beat me up	❍	❍	❍	❍
Assaulted me with a knife or gun	❍	❍	❍	❍

44. In the **past year**, how often has the person that you currently are dating, or if you are not currently dating, the person you most recently dated **done the following things to you?** Only include when that person did it to you first. In other words, don't count it if they did it to you in self-defense.

	Never	Rarely	Sometimes	Very often
Damaged something that belonged to me	❍	❍	❍	❍
Started to hit me but stopped	❍	❍	❍	❍
Threatened to hurt me	❍	❍	❍	❍
Would not let me do things with other people	❍	❍	❍	❍
Made me feel unsafe or uneasy when we spend time together	❍	❍	❍	❍
Told me I could not talk to a person of the gender I date	❍	❍	❍	❍
Made me describe where I was every minute of the day	❍	❍	❍	❍
Insulted me in front of others	❍	❍	❍	❍
Put down my looks	❍	❍	❍	❍
Blamed me for bad things (s)he did	❍	❍	❍	❍
Said things to hurt my feelings on purpose	❍	❍	❍	❍
Threatened to start dating someone else	❍	❍	❍	❍
Did something just to make me jealous	❍	❍	❍	❍
Brought up something from the past to hurt me	❍	❍	❍	❍
Threatened to harm himself/herself if I broke up with him/her	❍	❍	❍	❍
Made me afraid to tell others the truth	❍	❍	❍	❍
Showed jealousy	❍	❍	❍	❍
Tried to limit my contact with family	❍	❍	❍	❍
Tried to limit my contact with friends	❍	❍	❍	❍
Insisted on knowing who I am with and where I am at all times	❍	❍	❍	❍
Made me feel owned or controlled	❍	❍	❍	❍
Harmed or threatened to harm someone close to me	❍	❍	❍	❍
Called me names to put me down or make me feel bad	❍	❍	❍	❍

45. Has the person you dated in the past year done any of the things listed in ***QUESTION 43 or QUESTION 44*** **on school grounds**?
    - ☐ Yes
    - ☐ No **[IF NO, SKIP TO QUESTION 48]**

46. Over the past year, how often has the person you dated done any of the things listed in ***QUESTION 43 or QUESTION 44*** **on school grounds**?
    - ☐ Every day
    - ☐ About once a week
    - ☐ About once a month
    - ☐ Once every six months or so
    - ☐ Once a year

47. If the person you dated did any of the things listed above **on school grounds**, was it during **the school day**?
    - ☐ Yes
    - ☐ No

48. In the **past year**, how often has the person that you currently are dating, or if you are not currently dating, the person you most recently dated done any of the following things **to you**? Only include when that person did it to you first. In other words, don't count it if they did it to you in self-defense.

	Never	Rarely	Sometimes	Very often
Posted embarrassing photos or other images of me online	❍	❍	❍	❍
Sent threatening text messages to me	❍	❍	❍	❍
Shouted at me over the phone	❍	❍	❍	❍
Taken a video of me and sent it to his/her friends without my permission	❍	❍	❍	❍
Used my social networking account without permission	❍	❍	❍	❍
Sent me instant messages or chats that made me feel scared	❍	❍	❍	❍
Wrote nasty things about me on his/her profile page (e.g., on Facebook, MySpace, etc.)	❍	❍	❍	❍
Created a profile page (like Facebook, MySpace or YouTube) about me knowing it would upset me	❍	❍	❍	❍
Sent me so many messages (like texts, e-mails, chats) that it made me feel unsafe	❍	❍	❍	❍
Sent me text messages on my cell phone to check up on me (where are you, what are you doing, who are you with)	❍	❍	❍	❍
Sent me text messages, email, IM, chats, etc., to have sex or engage in sexual acts with him/her when he/she knew I did not want to	❍	❍	❍	❍
Spread rumors about me using a cell phone, email, IM, web chat, social networking site, etc.	❍	❍	❍	❍
Used information from my social networking site to harass me or put me down	❍	❍	❍	❍
Made me afraid when I did not respond to my cell phone call, text, posting on social networking page, IM, etc.	❍	❍	❍	❍
Threatened to harm me physically through a cell phone, text message, social networking page, etc.	❍	❍	❍	❍
Sent me sexual photos or naked photos of himself/herself that he/she knew I did not want	❍	❍	❍	❍
Sent me sexually suggestive messages that he/she thought I would want	❍	❍	❍	❍
Threatened me if I didn't send a sexual or naked photo of myself	❍	❍	❍	❍
Pressured me to send a sexual or naked photo of myself	❍	❍	❍	❍

49. Has the person you dated in the past year done any of the things listed in ***QUESTION 48*** **on school grounds**?
    - ☐ Yes
    - ☐ No **[IF NO, SKIP TO QUESTION 52]**

50. Over the past year, how often has the person you dated done any of the things listed in ***QUESTION 48*** **on school grounds**?
    - ☐ Every day
    - ☐ About once a week
    - ☐ About once a month
    - ☐ Once every six months or so
    - ☐ Once a year

51. If the person you dated did any of the things listed above **on school grounds**, was it during **the school day**?
    - ☐ Yes
    - ☐ No

Section 6

52. After the person you dated did any of the things listed in ***QUESTIONS 43, 44 OR 48***, did you seek help from anyone?
    - ☐ Yes
    - ☐ No **[If NO, skip to QUESTION 58]**

53. About how long after the person you dated did any of those things did you seek help?
    - ☐ 1 day
    - ☐ 1 week
    - ☐ 1 month
    - ☐ 6 months
    - ☐ 1 year

54. When you sought help, how many incidents had occurred?
    - ☐ First time
    - ☐ 2-3 times
    - ☐ 4-6 times
    - ☐ More than 6 times

55. From whom did you seek help (***please check all the people you sought help from***):
    - ☐ Your parent(s)
    - ☐ Another relative
    - ☐ Your friend(s)
    - ☐ A teacher
    - ☐ School counselor
    - ☐ School nurse
    - ☐ Physician/other healthcare provider
    - ☐ The police
    - ☐ The courts for a protective order
    - ☐ Rape crisis or domestic violence center
    - ☐ Rape crisis or domestic violence hotline
    - ☐ Dating abuse or rape crisis websites
    - ☐ Other community-based service provider
    - ☐ Religious clergy
    - ☐ Other (please list): _____

56. What kinds of help did you receive (***please check all the kinds of help you received***):
    - ☐ Medical treatment
    - ☐ Advice
    - ☐ Counseling
    - ☐ Referrals to other service providers
    - ☐ Police response
    - ☐ A court-ordered protective order
    - ☐ School intervention
    - ☐ Other (please specify) _____
    - ☐ None of the above

57. What kinds of help did you want **but not get** (***please check all the kinds of help you wanted but did not get***):
    - ☐ Medical treatment
    - ☐ Advice
    - ☐ Counseling
    - ☐ Referrals to other service providers
    - ☐ Police response
    - ☐ A court-ordered protective order
    - ☐ School intervention
    - ☐ Other (please specify): _____
    - ☐ None of the above

Section 7

58. Have you ever had sexual intercourse when you **didn't** want to with the person that you currently are dating, or if you are not currently dating, the person you most recently dated?
    - ☐ No **[SKIP TO QUESTION 60]**
    - ☐ Yes

59. Have you ever had sexual intercourse with the person that you currently are dating, or if you are not currently dating, the person you most recently dated when you **didn't** want to **because of the following reasons**? (***Check all the reasons you had sex when you did not want to.***)

You were so drunk or stoned that you were unaware of what was going on?	
You were so drunk or stoned that you couldn't do anything to stop the other person?	
You were so drunk or stoned that you didn't care?	
The other person used physical violence (for instance, slapping, hitting)?	
The other person held you down or made it so you couldn't leave?	
The other person threatened you with a weapon?	
You were afraid the other person would use physical violence (for instance, slapping, hitting)?	
The other person threatened to end the relationship?	
The other person made you feel worthless or humiliated until you gave in?	
You felt like you had to.	
You were afraid the other person would end the relationship.	
You wanted to please the other person.	

Section 8

60. In the **past year**, how many times have you ever **done the following things to** the person that you currently are dating, or if you are not currently dating, the person you most recently dated? Only include when you did it to him/her first. In other words, don't count it if you did it in self-defense.

	Never happened	Happened 1 to 3 times	Happened 4 to 9 times	Happened 10 or more times
Scratched him/her	❍	❍	❍	❍
Slapped him/her	❍	❍	❍	❍
Physically twisted his/her arm	❍	❍	❍	❍
Slammed him/her or held him/her against a wall	❍	❍	❍	❍
Kicked him/her	❍	❍	❍	❍
Bent his/her fingers	❍	❍	❍	❍
Bit him/her	❍	❍	❍	❍
Tried to choke him/her	❍	❍	❍	❍
Pushed, grabbed or shoved him/her	❍	❍	❍	❍
Dumped him/her out of the car	❍	❍	❍	❍
Threw something at him/her that hit him/her	❍	❍	❍	❍
Pressured him/her to have sex when I knew (s)he didn't want to	❍	❍	❍	❍
Forced him/her to have sex				
Forced him/her to do other sexual things that he/she did not want to do	❍	❍	❍	❍
Burned him/her	❍	❍	❍	❍
Hit him/her with a fist	❍	❍	❍	❍
Hit him/her with something hard besides a fist	❍	❍	❍	❍
Beat him/her up	❍	❍	❍	❍
Assaulted him/her with a knife or gun	❍	❍	❍	❍

61. In the **past year**, how often have you **done the following things to** the person that you currently are dating, or if you are not currently dating, the person you most recently dated? Only include when you did it to him/her first. In other words, don't count it if you did it in self-defense.

	Never	Rarely	Sometimes	Very often
Damaged something that belonged to him/her	❍	❍	❍	❍
Started to hit him/her but stopped	❍	❍	❍	❍
Threatened to hurt him/her	❍	❍	❍	❍
Would not let him/her do things with other people	❍	❍	❍	❍
Made him/her feel unsafe or uneasy when we spend time together	❍	❍	❍	❍
Told him/her he/she could not talk to a person of the gender that he/she dates	❍	❍	❍	❍
Made him/her describe where he/she was every minute of the day	❍	❍	❍	❍
Insulted him/her in front of others	❍	❍	❍	❍
Put down his/her looks	❍	❍	❍	❍
Blamed him/her for bad things they did	❍	❍	❍	❍
Said things to hurt his/her feelings on purpose	❍	❍	❍	❍
Threatened to start dating someone else	❍	❍	❍	❍
Did something just to make him/her jealous	❍	❍	❍	❍
Brought up something from the past to hurt him/her	❍	❍	❍	❍
Threatened to harm myself if he/she broke up with me	❍	❍	❍	❍
Made him/her feel afraid to tell others the truth	❍	❍	❍	❍
Showed jealousy	❍	❍	❍	❍
Tried to limit his/her contact with family	❍	❍	❍	❍
Tried to limit his/her contact with friends	❍	❍	❍	❍
Insisted on knowing who he/she is with and where he/she is at all times	❍	❍	❍	❍
Made him/her feel owned or controlled	❍	❍	❍	❍
Harmed or threatened to harm someone close to him/her	❍	❍	❍	❍
Called him/her names to put him/her down or make him/her feel bad	❍	❍	❍	❍

62. In the **past year**, how often have **you done** any of the following things to the person that you currently are dating, or if you are not currently dating, the person you most recently dated? Only include when you did it to him/her first. In other words, don't count it if you did it in self-defense.

	Never	Rarely	Sometimes	Very often
Posted embarrassing photos or other images of him/her online	❍	❍	❍	❍
Sent threatening text messages to him/her	❍	❍	❍	❍
Shouted at him/her over the phone	❍	❍	❍	❍
Taken a video of him/her and sent it to my friends without his/her permission	❍	❍	❍	❍
Used his/her social networking account without permission	❍	❍	❍	❍
Sent him/her instant messages or chats that made him/her feel scared	❍	❍	❍	❍
Wrote nasty things about him/her on my profile page (e.g., on Facebook, MySpace)	❍	❍	❍	❍
Created a profile page (like Facebook, MySpace or YouTube) about him/her knowing it would upset him/her	❍	❍	❍	❍
Sent him/her so many messages (like texts, e-mails, chats) that it made him/her feel unsafe	❍	❍	❍	❍
Sent him/her text messages on my cell phone to check up on him/her (where are you, what are you doing, who are you with)	❍	❍	❍	❍
Sent him/her text messages, email, IM, chats, etc., to have sex or engage in sexual acts with me that I knew the person did not want to do	❍	❍	❍	❍
Spread rumors about him/her using a cell phone, email, IM, web chat, social networking site, etc.	❍	❍	❍	❍
Used information from his/her social networking site to harass him/her or put him/her down	❍	❍	❍	❍
Made him/her afraid when she/he did not respond to my cell phone call, text, posting on social networking page, IM, etc.	❍	❍	❍	❍
Threatened to harm him/her physically using a cell phone, text message, social networking page, etc.	❍	❍	❍	❍
Sent him/her sexual photos or naked photos of myself that I knew he/she did not want	❍	❍	❍	❍
Sent him/her sexually suggestive messages that I thought he/she would want	❍	❍	❍	❍
Threatened him/her if he/she didn't send a sexual or naked photo of himself/herself	❍	❍	❍	❍
Pressured him/her to send a sexual or naked photo of himself/herself	❍	❍	❍	❍

Section 9

63. In the **past year**, how often have **you and the person that you currently are dating**, or if you are not currently dating, the person you most recently dated **done the following things?**

	Never	Rarely	Sometimes	Very often
He/she made me feel close to him/her	❍	❍	❍	❍
I made him/her feel close to me	❍	❍	❍	❍
He/she showed affection toward me	❍	❍	❍	❍
I showed affection toward him/her	❍	❍	❍	❍
He/she got my advice before making an important decision	❍	❍	❍	❍
I got his/her advice before making an important decision	❍	❍	❍	❍
He/she made me laugh	❍	❍	❍	❍
I made her/him laugh	❍	❍	❍	❍
He/she made me feel good about myself because I am with him/her	❍	❍	❍	❍
I made her/him feel good about herself/himself because (s)he is with me	❍	❍	❍	❍
He/she made me feel proud to be dating him/her	❍	❍	❍	❍
I made her/him feel proud to be dating me	❍	❍	❍	❍
He/she told me (s)he cared about me or loved me	❍	❍	❍	❍
I told her/him I care about him/her or loved him/her	❍	❍	❍	❍
He/she encouraged me to do things with my friends	❍	❍	❍	❍
I encouraged him/her to do things with his/her friends	❍	❍	❍	❍
He/she supported me in my school and afterschool activities such as sports	❍	❍	❍	❍
I supported him/her in school and afterschool activities such as sports	❍	❍	❍	❍
He/she said my feelings were important to him/her	❍	❍	❍	❍
I said his/her feelings were important to me	❍	❍	❍	❍

IF YOU ARE CURRENTLY IN A RELATIONSHIP OR HAVE BEEN IN ONE DURING THE PAST YEAR, YOU SHOULD HAVE ANSWERED QUESTIONS 40 - 63. THANK YOU AND PLEASE CONTINUE.

Section 10

64. In your whole life, has anyone you dated been physically violent toward you? Only answer yes when that person did it to you first. In other words, don't count it if they did it to you in self-defense.
    - ☐ Yes
    - ☐ No

    If yes, how many different dating partners have done this to you? ___

65. In your whole life, have you been physically violent toward anyone you have dated? Only answer yes if you did it to that person first. In other words, don't count it if you did it in self-defense.
    - ☐ Yes
    - ☐ No

    If yes, how many different dating partners have you done this to? ___

THESE QUESTIONS ARE FOR EVERYONE:

Section 11

66. Please answer the following questions about things you might have done in the past year. In the past year, have you:

	Yes	No
Attacked someone with the intent to hurt him/her (other than a person you may have dated in the past year, whom we already asked you about)	❍	❍
Attempted to steal a vehicle	❍	❍
Been arrested	❍	❍
Been drunk or high at school	❍	❍
Carried a handgun	❍	❍
Gotten suspended	❍	❍
Sold drugs	❍	❍
Taken a handgun to school	❍	❍
Damaged or destroyed property that did not belong to you	❍	❍

67. How many times in **the last 30 days** have you:

	Never	1-3 times	4-9 times	10 or more times
Drank alcoholic beverages (beer, wine, and hard liquor)	❍	❍	❍	❍
Drank four or more alcoholic beverages at one time	❍	❍	❍	❍
Used marijuana/hashish ("grass," "pot," "hash")	❍	❍	❍	❍
Used hallucinogens ("LSD," “Ecstasy,” "Mescaline," "Peyote," "Acid")	❍	❍	❍	❍
Used inhalants (e.g., spray paints, glue, lighter gases)	❍	❍	❍	❍
Used amphetamines ("Uppers," "Speed," "Whites")	❍	❍	❍	❍
Taken pain relievers not prescribed for a medical condition (e.g., Percocet, Vicodin, Codeine)	❍	❍	❍	❍
Taken tranquilizers not prescribed for a medical condition (e.g., Valium, Xanax)	❍	❍	❍	❍
Used barbiturates ("Downers," "Reds")	❍	❍	❍	❍
Used heroin ("Horse," "Smack")	❍	❍	❍	❍
Used cocaine ("Coke," "crack")	❍	❍	❍	❍

Section 12

68. During the **past 7 days** how much have you been bothered by:

	Not at all	A little bit	Moderately	Quite a bit	Extremely
Feeling lonely?	❍	❍	❍	❍	❍
Having urges to break or smash things?	❍	❍	❍	❍	❍
Being suddenly scared for no reason?	❍	❍	❍	❍	❍
Feelings of worthlessness?	❍	❍	❍	❍	❍
Having urges to beat, injure, or harm someone?	❍	❍	❍	❍	❍
Feeling blue?	❍	❍	❍	❍	❍
Spells of terror or panic?	❍	❍	❍	❍	❍
Feeling so restless you couldn't sit still?	❍	❍	❍	❍	❍
Feeling hopeless about the future?	❍	❍	❍	❍	❍
Temper outbursts that you could not control?	❍	❍	❍	❍	❍
Shouting or throwing things?	❍	❍	❍	❍	❍
Feeling fearful?	❍	❍	❍	❍	❍
Feeling tense or keyed up?	❍	❍	❍	❍	❍
Getting into frequent arguments?	❍	❍	❍	❍	❍
Feeling no interest in things?	❍	❍	❍	❍	❍

Section 13

The following questions are about **other youth** in your life **other than a person with whom you might be currently in a relationship or might have been in a relationship recently**. Please **do not** include experiences you have already reported about that person if you answered those questions.

69. In the past year, how often has someone done the following things **to you**:

	Never	Sometimes	Once or twice a month	Once a week	Several times a week	Everyday
I was pushed or shoved.	❍	❍	❍	❍	❍	❍
I was hit or kicked hard.	❍	❍	❍	❍	❍	❍
Students crashed into me on purpose as they walked by.	❍	❍	❍	❍	❍	❍
My property was damaged on purpose.	❍	❍	❍	❍	❍	❍
Something was thrown at me to hit me.	❍	❍	❍	❍	❍	❍
I was threatened to be physically hurt or harmed.	❍	❍	❍	❍	❍	❍
I was teased by students saying things to me.	❍	❍	❍	❍	❍	❍
A student made rude remarks at me.	❍	❍	❍	❍	❍	❍
A student made me feel afraid in school.	❍	❍	❍	❍	❍	❍
Things were said about my looks I didn't like.	❍	❍	❍	❍	❍	❍
I was called names I didn't like.	❍	❍	❍	❍	❍	❍
A student wouldn't be friends with me because other people didn't like me.	❍	❍	❍	❍	❍	❍
A student got other students not to have anything to do with me.	❍	❍	❍	❍	❍	❍
A student got their friends to turn against me.	❍	❍	❍	❍	❍	❍
I wasn't invited to a student's place because other people didn't like me.	❍	❍	❍	❍	❍	❍
I was left out of activities with other students.	❍	❍	❍	❍	❍	❍
I had to hide my sexual orientation from other students.	❍	❍	❍	❍	❍	❍

	Never	Sometimes	Once or twice a month	Once a week	Several times a week	Everyday
My cell phone account was used without my permission to send a photo or image to other people to get me in trouble.	❍	❍	❍	❍	❍	❍
A student got other students to send a rude video message to my cell phone.	❍	❍	❍	❍	❍	❍
A student forwarded a video to my cell phone s/he knew I wouldn't like.	❍	❍	❍	❍	❍	❍
My cell phone was used without my permission to send a video message to other people to get me in trouble.	❍	❍	❍	❍	❍	❍
A student sent me a nasty email.	❍	❍	❍	❍	❍	❍
A student sent me an email threatening to harm me.	❍	❍	❍	❍	❍	❍
A student sent me an instant message or chat to hurt my feelings.	❍	❍	❍	❍	❍	❍
My instant message account was used without my permission to send a message to other students to get me into trouble.	❍	❍	❍	❍	❍	❍
A student created a nasty profile page (like MySpace or YouTube) about me.	❍	❍	❍	❍	❍	❍
A student put something on a profile page (like MySpace or YouTube) about me to hurt my feelings.	❍	❍	❍	❍	❍	❍
I was called names I didn't like through a text message.	❍	❍	❍	❍	❍	❍
A student sent me a text message to hurt my feelings.	❍	❍	❍	❍	❍	❍

If you answered "Never" to all of the previous items in QUESTION 69 (on pages 19 and 20), skip to Section 15, QUESTION 79.

70. In the past year, have any of the things listed in ***QUESTION 69*** happened **on school grounds**?
    - ☐ Yes
    - ☐ No **[IF NO, skip to SECTION 14, QUESTION 73]**

71. Over the past year, how often did any of those things happen **on school grounds**?
    - ☐ Every day
    - ☐ About once a week
    - ☐ About once a month
    - ☐ Once every six months or so
    - ☐ Once a year

72. When those things happened **on school grounds**, was it during **the school day**?
    - ☐ Yes
    - ☐ No

Section 14

73. After you had the experiences you reported in ***QUESTION 69***, did you seek help from anyone?
    - ☐ Yes
    - ☐ No [**If NO, skip to QUESTION 79**]

74. How long after these experiences did you seek help?
    - ☐ 1 day
    - ☐ 1 week
    - ☐ 1 month
    - ☐ 6 months
    - ☐ 1 year

75. When you sought help, how many incidents had occurred?
    - ☐ First time
    - ☐ 2-3 times
    - ☐ 4-6 times
    - ☐ More than 6 times

76. From whom did you seek help (***please check all that the people from you sought help***)?
    - ☐ Your parent(s)
    - ☐ Another relative
    - ☐ Your friend(s)
    - ☐ A teacher
    - ☐ School counselor
    - ☐ School nurse
    - ☐ Physician/other healthcare provider
    - ☐ The police
    - ☐ The courts for a protective order
    - ☐ Religious clergy
    - ☐ Community-based organization
    - ☐ Other (please list)

77. What kinds of help did you receive (***please check all the kinds of help you received***):
    - ☐ Medical treatment
    - ☐ Advice
    - ☐ Counseling
    - ☐ Referrals to other service providers
    - ☐ Police response
    - ☐ School intervention
    - ☐ Restraining order
    - ☐ Other (please specify)
    - ☐ None of the above

78. What kinds of help did you want and **but not get** (***please check all the kinds of help you wanted but did not get***):
    - ☐ Medical treatment
    - ☐ Advice
    - ☐ Counseling
    - ☐ Referrals to other service providers
    - ☐ Police response
    - ☐ School intervention
    - ☐ Restraining order
    - ☐ Other (please specify)
    - ☐ None of the above

THE FOLLOWING QUESTIONS ARE FOR EVERYONE:

Section 15

The following questions are about **other youth** in your life **other than a person with whom you might be currently in a relationship or might have been in a relationship recently**. Please **do not** include experiences you have already reported about that person if you answered those questions.

79. In the past year, how often have **you** done the following things:

	Never	Sometimes	Once or twice a month	Once a week	Several times a week	Everyday
Pushed or shoved a student.	❍	❍	❍	❍	❍	❍
Hit or kicked a student hard.	❍	❍	❍	❍	❍	❍
Crashed into a student on purpose as they walked by.	❍	❍	❍	❍	❍	❍
Damaged a student's property on purpose.	❍	❍	❍	❍	❍	❍
Threw something at a student to hit them.	❍	❍	❍	❍	❍	❍
Threatened to physically hurt or harm a student.	❍	❍	❍	❍	❍	❍
Teased a student by saying mean things to him/her.	❍	❍	❍	❍	❍	❍
Made rude remarks at a student.	❍	❍	❍	❍	❍	❍
Made another student feel afraid in school.	❍	❍	❍	❍	❍	❍
Said things about a student's looks he or she didn't like.	❍	❍	❍	❍	❍	❍
Made fun of a student by calling him or her names.	❍	❍	❍	❍	❍	❍
Wouldn't let my friends be friends with a student because I didn't like him or her.	❍	❍	❍	❍	❍	❍
Got other students to ignore a student.	❍	❍	❍	❍	❍	❍
Got my friends to turn against a student.	❍	❍	❍	❍	❍	❍

	Never	Sometimes	Once or twice a month	Once a week	Several times a week	Everyday
Didn't invite a student to my place because other people didn't like him or her.	❍	❍	❍	❍	❍	❍
Left a student out of activities or games on purpose.	❍	❍	❍	❍	❍	❍
Made another student hide his/her sexual orientation from other students.	❍	❍	❍	❍	❍	❍
Used a cell phone to send other students a video of a student I knew would get him/her into trouble.	❍	❍	❍	❍	❍	❍
Got other students to send a rude video message to a student's cell phone.	❍	❍	❍	❍	❍	❍
Used a cell phone to forward a video to a student I knew s/he wouldn't like.	❍	❍	❍	❍	❍	❍
Sent a video message to other people to get a student into trouble.	❍	❍	❍	❍	❍	❍
Sent a student a nasty email	❍	❍	❍	❍	❍	❍
Sent a student an email threatening to harm him/her.	❍	❍	❍	❍	❍	❍
Sent a student an instant message or chat to hurt his/her feelings.	❍	❍	❍	❍	❍	❍
Used a student's instant message account without their permission to send a message that I knew would get them into trouble.	❍	❍	❍	❍	❍	❍
Created a profile page (like MySpace or YouTube) about a student knowing it would upset him/her.	❍	❍	❍	❍	❍	❍
Wrote things about a student on a profile page (like MySpace or YouTube) to hurt his/her feelings.	❍	❍	❍	❍	❍	❍
Called a student names he/she didn't like through a text message.	❍	❍	❍	❍	❍	❍
Sent a student a cell phone text message knowing it would hurt his/her feelings.	❍	❍	❍	❍	❍	❍

Section 16

Questions 80-87 ask about your sexual activity **that you wanted to have** over the past year. These questions include **ANY** of the following in the definition of sex: sexual intercourse, giving or receiving oral sex, or anal sex.

80. Have you ever had sex?
    - ☐ No
    - ☐ Yes **[IF "no" SKIP TO QUESTION 90]**

81. How old were you when you had sex for the first time?
    - ☐ 11 years old or younger
    - ☐ 12 years old
    - ☐ 13 years old
    - ☐ 14 years old
    - ☐ 15 years old
    - ☐ 16 years old
    - ☐ 17 years old or older

82. During your life, with how many people have you had sex?
    - ☐ 1 person
    - ☐ 2 people
    - ☐ 3 people
    - ☐ 4 people
    - ☐ 5 people
    - ☐ 6 or more people

83. During the **past three months**, with how many people have you had sex?
    - ☐ I have had sex, but not during the past 3 months
    - ☐ 1 person
    - ☐ 2 people
    - ☐ 3 people
    - ☐ 4 people
    - ☐ 5 people
    - ☐ 6 or more people

84. Did you drink alcohol or use drugs before you had sex the **last time**?
    - ☐ Yes
    - ☐ No

85. The **last time** you had sex, did you or your partner use a condom to prevent sexually transmitted infections?
    - ☐ Yes
    - ☐ No

86. The **last time** you had sexual intercourse, what method(s) did you or your partner use to **prevent pregnancy *(check all that apply)***:
    - ☐ No method was used to prevent pregnancy
    - ☐ Birth control pills
    - ☐ Condoms
    - ☐ Depo-Provera (or any injectable birth control), Nuva Ring (or any birth control ring), Implanon (or any implant), or any IUD
    - ☐ Withdrawal
    - ☐ Some other method
    - ☐ I have not had vaginal sexual intercourse.
    - ☐ Not sure

87. Have you ever received a payment (either money or gifts) for having sex with someone?
    - ☐ Yes
    - ☐ No

88. Have you ever had sex with someone on the internet (i.e., cybersex)?
    - ☐ Yes
    - ☐ No

89. Have you ever had sex with someone over the phone?
    - ☐ Yes
    - ☐ No

THESE QUESTIONS ARE FOR EVERYONE:

Section 17

90. During the **past month**, which of the following things have you done with the **parent or guardian** you spend the most time with or live with most?

	Never	Rarely	Sometimes	Often
Gone shopping	❍	❍	❍	❍
Played a sport	❍	❍	❍	❍
Gone to a religious service or church-related event	❍	❍	❍	❍
Talked about someone you're dating	❍	❍	❍	❍
Gone to a movie, play, museum, concert, or sports event	❍	❍	❍	❍
Had a talk about a personal problem you were having	❍	❍	❍	❍
Had a serious argument about your behavior	❍	❍	❍	❍
Talked about your school work or grades	❍	❍	❍	❍
Worked on a project for school	❍	❍	❍	❍
Talked about other things you're doing in school	❍	❍	❍	❍

91. How close do you feel to the **parent or guardian** you spend the most time with or live with most?
    - ☐ Not a lot
    - ☐ A little bit
    - ☐ Moderate
    - ☐ Quite a bit
    - ☐ Extremely

92. How much do you think the **parent or guardian** you spend the most time with or live with most cares for you?
    - ☐ Not a lot
    - ☐ A little bit
    - ☐ Moderate
    - ☐ Quite a bit
    - ☐ Extremely

THESE QUESTIONS ARE FOR EVERYONE:

Section 18

The following questions ask about your general activities.

93. How many times **per week** do you do the following things:

	Never	1–3 times	4–9 times	10 or more times
Hang out with friends	❍	❍	❍	❍
Other hobbies (collecting baseball cards, playing a musical instrument, shopping, doing arts and crafts)	❍	❍	❍	❍
Reading	❍	❍	❍	❍
Homework/schoolwork	❍	❍	❍	❍
Volunteer work	❍	❍	❍	❍
Community groups/activities (Boys and Girls lub, the Y, etc.)	❍	❍	❍	❍
Afterschool programs	❍	❍	❍	❍
School groups (dance, theater, clubs, etc.)	❍	❍	❍	❍

Thank you for completing this survey.

Appendix B: Detailed Description of Other Variables

Other survey measures covered five separate domains: (1) individual behavior, (2) psychosocial adjustment, (3) family relationship quality, (4) school performance, and (5) partner relationship quality. Full tables of each measure are included in this appendix.

Individual Behavior Domain

- Substance use: We used the Communities That Care (2006)[57] drug use scale (alpha=0.776), which included alcohol/binge drinking, marijuana use, and serious drug use (including nonprescription drugs) over the last 30 days (alpha=0.887). Response options were (0) never, (2) 1–3 times, (6.5) 4–9 times, and (15) 10 or more times.

Drug Use, last 30 days (Communities That Care 2006) (α=0.776)
Drank alcoholic beverages (beer, wine, and hard liquor)
Used marijuana/hashish (grass, pot, hash)
Serious Drug Use, last 30 days (α=0.887)
Used hallucinogens (LSD, ecstasy, mescaline, peyote, acid)
Used inhalants (e.g., spray paints, glue, lighter gases)
Used amphetamines (uppers, speed, whites)
Taken pain relievers not prescribed for a medical condition (e.g., Percocet, Vicodin, Codeine)
Taken tranquilizers not prescribed for a medical condition (e.g., Valium, Xanax)
Used barbiturates (downers, reds)
Used heroin (horse, smack)
Used cocaine (coke, crack)

- Sexual activity: The survey asked respondents who reported having vaginal intercourse, anal sex, or oral sex a series of questions about their sexual activity. We used six items from the Add Health Wave II survey[58] and created three items for this study; all items were analyzed separately. Response options varied for each item.
- Delinquency: We included nine items from the Communities that Care (2006)[59] delinquency scale measuring the variety of delinquent activity youth participated in over the last year (alpha=0.734). For one item (attacked someone with the intent to harm), the survey specified that the respondent should answer about anyone other than a person who the respondent had dated in the last year (so the item measures nondating violence). Response options were yes (1) or no (0).

Delinquency (Communities That Care 2006) (α=0.734) *(continued on next page)*
Attacked someone with the intent to hurt him/her (other than a person you may have dated in the past year, whom we already asked you about)
Attempted to steal a vehicle
Been arrested
Been drunk or high at school

[57] http://www.communitiesthatcarecoalition.org/surveys
[58] http://www.cpc.unc.edu/projects/addhealth/codebooks/wave2
[59] http://www.communitiesthatcarecoalition.org/surveys

Delinquency (Communities That Care 2006) *(continued)*
Carried a handgun
Gotten suspended
Sold drugs
Taken a handgun to school
Damaged or destroyed property that did not belong to you

- Prosocial activities: We used 12 items from the Add Health Wave I[60] Daily Activities section to measure prosocial activities among respondents. We added two items (reading and participating in school groups) to this scale (alpha=0.652). Response options were (0) never, (2) 1–3 times, (6.5) 4–9 times, and (15) 10 or more times.

Prosocial Activities (α=0.652) (Add Health Wave I)
Work around the house (cleaning, cooking, laundry, yard work, caring for a pet)
Play active sports (baseball, softball, basketball, football, swimming, etc.)
Exercise (jogging, walking, karate, jumping rope, gymnastics, dancing, etc.)
Other activity (roller-skating/blading, skateboarding, or bicycling)
Hang out with friends
Other hobbies (collecting baseball cards, playing a musical instrument, shopping, arts and crafts)
Reading[a]
Homework/schoolwork
Volunteer work
Community groups/activities (Boys and Girls Clubs, the Y, etc.)
After-school programs
School groups (dance, theater, clubs, etc.)[a]

a. Item added for this study.

Psychosocial Adjustment Domain

Measures of psychosocial adjustment were based on respondents' answers to the depression, anxiety, and anger/hostility subscales of the Symptom Assessment-45 (SA-45) Questionnaire (Strategic Advantage Inc., 1998), shown to be reliable and valid on both patient and nonpatient adult and adolescent populations (see, e.g., Maruish, 2004; Maruish, Bershadsky, & Goldstein, 1998). All three scales ranged in value from 0 to 20, with higher values indicating more depression, anxiety, or anger/hostility. Response options were not at all (0), a little bit (1), moderately (2), quite a bit (3), and extremely (4).

- Depression (alpha=0.892) was measured by five items assessing symptoms of loneliness, hopelessness, worthlessness, disinterest in things, and feeling blue.
- Anxiety (alpha=0.861) was measured by five items assessing symptoms of fearfulness, panic, tension, and restlessness.

[60] http://www.cpc.unc.edu/projects/addhealth/codebooks/wave1

- Anger/hostility (alpha=0.839) was measured by five items assessing symptoms such as uncontrollable temper outbursts, getting into frequent arguments, shouting, and feeling urges to harm others or break things.

Psychosocial Measures, past seven days (Symptom Assessment-45) (α=0.928)
Depression (α=0.892)
Feeling lonely
Feeling of worthlessness
Feeling blue
Feeling hopeless about the future
Feeling no interest in things
Anger/hostility (α=0.861)
Having urges to break or smash things
Having urges to beat, injure or harm someone
Temper outbursts that you could not control
Shouting or throwing things
Getting into frequent arguments
Anxiety (α=0.839)
Being suddenly scared for no reason
Spells of terror or panic
Feeling so restless you could not sit still
Feeling fearful
Feeling tense or keyed up

Family Relationship Quality Domain

Family relationship quality was measured using items adapted from the Add Health Wave II[61] survey that tapped into respondents' involvement in activities with their parents and feelings of closeness to their parents.

- Parental closeness: This measure was the mean of two items taken from the Add Health Wave II Relations with Parents interview, measuring closeness between the respondent and his/her primary parent or guardian. Response options were (0) not at all, (1) a little bit, (2) moderate, (4) quite a bit, and (5) extremely.

Parent Closeness (Add Health Wave II)
How close do you feel to the parent or guardian you spend the most time with or live with the most?
How much do you think the parent or guardian you spend the most time with or live with the most cares for you?

- Parental activities frequency: This scale (alpha=0.677) consisted of five items taken from the Add Health Wave II Relations with Parents interview and measured the extent to

[61] http://www.cpc.unc.edu/projects/addhealth/codebooks/wave2

which respondents spent time doing activities with the parent or guardian with whom they spent the most time. Response options were (0) never, (1) rarely, (2) sometimes, and (3) often.

Parent Activities (Add Health Wave II) (α=0.677)
Gone shopping
Played a sport
Gone to a religious service or church-related event
Gone to a movie, play, museum, concert, or sports event
Worked on a project for school

- Parental communication frequency: This scale (alpha=0.624) consisted of four items taken from the Add Health Wave II Relations with Parents interview and measured the extent to which respondents spent time talking with their parents about things going on in their lives. Response options were (0) never, (1) rarely, (2) sometimes, and (3) often.

Parent Communication (Add Health Wave II) (α=0.624)
Talked about someone you're dating
Had a talk about a personal problem you were having
Talked about your school work or grades
Talked about other things you're doing in school

School Performance Domain

- School attendance: Respondents were asked how often they attended school. Response options ranged from (3) every weekday, (2) 3–4 days per week, and (1) 1–2 days per week. For analysis purposes, we created a binary measure of attending school every weekday (2) or less than every weekday (1).
- Grades in school: Respondents were asked about the typical grades they earned at school. Response options included (1) mostly As, (2) As and Bs, (3) mostly Bs, (4) Bs and Cs, (5) mostly Cs, (6) Cs and Ds, (7) mostly Ds, (8) Ds and Fs, and (9) mostly Fs. For analysis purposes, we created an ordinal measure grouping students into three categories: (1) As and Bs, (2) Bs and Cs, and (3) Ds and Fs.

Partner Relationship Quality Domain

This domain included one measure of positive relationship qualities: Students who were currently or recently in a relationship were asked 20 questions about the positive qualities of their relationship, such as feeling loved and cared for by a partner, feeling proud to be with that partner, and having a partner who is supportive of their activities and interests. These items were adapted from the MCH (1997) affection measure. Response options were (0) never, (1) rarely, (2) sometimes, and (3) very often. Cronbach's alpha measuring the reliability of this scale was 0.973.

Positive Relationship Qualities (α=0.973)
I made him/her feel close to me.
I showed affection toward him/her.[a]
I got his/her advice before making an important decision.[a]
I made her/him laugh.
I made her/him feel good about herself/himself because he/she is with me.
I made her/him feel proud to be dating me.
I told her/him I care about him/her or loved him/her.
I encouraged him/her to do things with his/her friends.[a]
I supported him/her in school and after-school activities, such as sports.[a]
I said his/her feelings were important to me.
He/she made me feel close to him/her.
He/she showed affection toward me.[a]
He/she got my advice before making an important decision.[a]
He/she made me laugh.
He/she made me feel good about myself because I am with him/her.
He/she made me feel proud to be dating him/her.
He/she told me he/she cared about me or loved me.
He/she encouraged me to do things with my friends.[a]
He/she supported me in my school and after-school activities, such as sports.[a]
He/she said my feelings were important to him/her.

a. Item adapted from Michigan Department of Community Health (1997) affection measure.

Control Measures

In addition to the domains specified above, we also examined teen dating violence and bullying experiences across several demographic and technology use variables, which we call control measures, and included the following:

- Gender (male=1, female=2);
- Age;[62]
- Race/ethnicity;
- Sexual orientation;
- General computer use (see below);
- General cell phone use (see below);
- State (two schools in New Jersey, five schools in New York, and three schools in Pennsylvania); and
- School socioeconomic status (SES; percentage of students who were *not* receiving a free or reduced price lunch).

[62] Approximately 3.5 percent of respondents did not enter their age; for these respondents, we imputed the age based on their reported grade level. Missingness for the age variable was then less than 1 percent.

Computer Activities (α=0.658)
Using a computer to access social networking sites (e.g., Facebook)
Reading or researching on the internet
Visiting web sites with user-generated content (e.g., Wikipedia)
Writing or posting on blogs/microblogs (Tumblr, Twitter, LiveJournal, etc.)
Using a computer for instant messaging or online chatting
Using a computer for e-mail

Cell phone activities (α=0.773)
Using a cell phone for instant messages or online chatting
Using a cell phone for talking to others
Using a cell phone for texting others
Using a cell phone to access social networking sites (e.g., Facebook)
Using other web sites
Using a cell phone for e-mail

Appendix C: Teen Dating Violence and Abuse Individual Item Prevalence Rates

Teen Dating Violence and Abuse Victimization

In Table C1 below, we report the individual item prevalence rates for teen dating violence and abuse victimization measures, for the sample of teens in a current or recent (within the prior year) relationship, as well as breakouts for male and female youth. We also report the statistical significance of the difference between male and female prevalence rates across each item, using the chi-squared statistic.

Table C1. Prevalence of Dating Violence and Abuse Victimization among Teens in a Relationship (%) *(continued on next page)*	Total (N=3,745)	Male (N=1,768)	Female (N=1,956)	χ^2
Cyber dating abuse				
Sexual cyber abuse				
Sent me sexual photos or naked photos of himself/herself that he/she knew I did not want	3.8	4.0	3.5	0.851
Threatened me If I did not sent a sexual or naked photo of myself	2.6	2.1	2.9	2.584
Pressured me to send a sexual or naked photo of myself	6.8	3.4	9.7	54.956***
Sent me text messages, e-mail, IM, chats, etc., to have sex or engage in sexual acts with him/her when he/she knew I did not want to	7.4	4.5	9.8	36.935***
Nonsexual cyber abuse				
Posted embarrassing photos or other images of me online	5.5	6.9	4.3	11.266***
Sent threatening text messages to me	6.1	5.0	7.0	6.824**
Took a video of me and sent it to his/her friends without my permission	2.6	3.2	2.0	5.478*
Used my social networking account without permission	8.7	8.4	8.8	0.168
Sent me instant messages or chats that made me feel scared	3.4	2.7	3.8	3.071†
Wrote nasty things about me on his/her profile page (on Facebook, Myspace, etc.)	5.1	4.6	5.3	1.023
Created a profile page (like Facebook, Myspace, or YouTube) about me knowing it would upset me	1.3	1.5	0.9	3.033†
Sent me so many messages (like texts, e-mails, chats) that it made me feel unsafe	5.5	4.5	6.2	4.758*
Spread rumors about me using a cell phone, e-mail, IM, web chat, social networking site, etc.	5.0	4.0	5.8	5.817*

Table C1. Prevalence of Dating Violence and Abuse Victimization among Teens in a Relationship (%) *(continued on next page)*	Total (N=3,745)	Male (N=1,768)	Female (N=1,956)	χ^2
Used information from my social networking site to harass me or put me down	3.7	2.7	4.5	8.183**
Made me afraid when I did not respond to my cell phone call, text, posting on social networking page, IM, etc.	4.2	3.2	4.9	6.385*
Threatened to harm me physically using a cell phone, text message, social networking page, etc.	2.7	2.1	3.1	3.524†
Physical dating violence				
Severe physical violence				
Tried to choke me	2.9	2.8	2.8	0.003
Burned me	1.5	1.7	1.0	2.785†
Hit me with a fist	4.2	6.0	2.2	34.328***
Hit me with something hard besides a fist	2.7	3.4	1.7	9.916**
Beat me up	1.2	1.5	0.8	4.287*
Assaulted me with a knife or gun	0.9	1.3	0.4	8.195**
Moderate physical violence				
Physically twisted my arm	4.6	3.7	5.0	3.480†
Slammed me or held me against a wall	5.8	4.6	6.5	6.301*
Kicked me	7.3	11.8	2.8	112.120***
Bent my fingers	6.7	7.4	5.7	4.568*
Bit me	17.0	19.7	14.1	20.594***
Mild physical violence				
Scratched me	10.8	15.7	6.1	89.273***
Slapped me	11.9	18.4	5.7	142.695***
Pushed, grabbed or shoved me	11.4	11.8	10.8	0.827
Psychological dating abuse				
Threatening behavior				
Damaged something that belonged to me	10.9	10.0	11.3	1.496
Started to hit me but stopped	6.7	8.1	5.0	14.814***
Threatened to hurt me	7.3	7.5	6.9	0.566
Harmed or threatened to harm someone close to me	2.9	1.7	3.8	15.656***
Monitoring behavior				
Would not let me do things with other people	20.2	17.8	22.0	9.901**

Table C1. Prevalence of Dating Violence and Abuse Victimization among Teens in a Relationship (%) *(continued)*	Total (N=3,745)	Male (N=1,768)	Female (N=1,956)	χ^2
Told me I could not talk to a person of the gender I date	18.7	15.1	21.7	26.212***
Made me describe where I was every minute of the day	13.4	10.8	15.5	18.040***
Insisted on knowing who I am with and where I am at all times	14.2	10.7	17.1	30.850***
Tried to limit my contact with family	3.6	3.2	3.8	0.827
Tried to limit my contact with friends	13.4	11.0	15.4	15.373***
Personal insults				
Insulted me in front of others	11.6	10.3	12.6	4.927*
Put down my looks	7.4	4.9	9.4	27.262***
Blamed me for bad things he/she did	11.3	10.5	12.0	2.223
Called me names to put me down or make me feel bad	9.0	5.3	12.1	52.295***
Emotional manipulation/fear				
Made me feel unsafe or uneasy when we spent time alone together	5.9	3.7	7.7	26.587***
Said things to hurt my feelings on purpose	14.3	9.8	18.2	53.409***
Threatened to start dating someone else	10.6	7.5	13.2	31.189***
Brought up something from the past to hurt me	22.6	16.6	27.7	63.653***
Made me feel owned or controlled	11.4	7.7	14.4	41.414***
Threatened to harm himself/herself if I broke up with him/her	11.4	8.8	13.5	19.789***
Made me afraid to tell others the truth	6.7	4.8	8.2	17.775***
Sexual coercion				
Pressured me to have sex when he/ she knew I didn't want to	6.6	3.1	9.4	60.450***
Forced me to have sex	2.5	2.9	1.7	5.616*
Forced me to do other sexual things that I did not want to do	4.3	2.4	5.8	25.899***
Had unwanted sexual intercourse *(only for victimization measure)*	8.2	6.3	9.5	11.466***

Note: Valid, nonmissing data on measures in this table were present for 92 to 99 percent of the respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Teen Dating Violence and Abuse Perpetration

In table C2, we report the individual item prevalence rates for teen dating violence and abuse perpetration measures, for the sample of teens in a current or recent (within the prior year)

relationship, as well as breakouts for male and female youth. We also report the statistical significance of the difference between male and female prevalence rates across each item, using the chi-squared statistic.

Table C2. Prevalence of Dating Violence and Abuse Perpetration among Teens in a Relationship (%) *(continued on next page)*	Total (N=3,745)	Male (N=1,768)	Female (N=1,956)	χ^2
Cyber dating abuse				
Sexual cyber abuse				
Sent him/her sexual photos or naked photos of myself that I knew he/she did not want	0.9	1.0	0.6	1.701
Threatened him/her if he/she didn't send a sexual or naked photo of himself/herself	0.7	1.1	0.3	7.829**
Pressured him/her to send a sexual or naked photo of himself/herself	1.9	2.9	1.0	17.600***
Sent him/her text messages, e-mail, IM, chats, etc., to have sex or engage in sexual acts with me that I knew the person did not want to do	1.3	2.0	0.6	12.204***
Nonsexual cyber abuse				
Posted embarrassing photos or other images of him/her online	2.2	2.1	2.3	0.190
Sent threatening text messages to him/her	1.9	1.3	2.3	4.965*
Took a video of him/her and sent it to my friends without his/her permission	1.2	1.4	0.8	2.974†
Used his/her social networking account without permission	5.5	3.0	7.5	33.824***
Sent him/her instant messages or chats that made him/her feel scared	1.0	1.0	0.9	0.160
Wrote nasty things about him/her on my profile page (e.g., on Facebook, Myspace)	2.5	1.8	3.1	6.313*
Created a profile page (like Facebook, Myspace or YouTube) about him/her knowing it would upset him/her	0.6	0.7	0.4	0.981
Sent him/her so many messages (like texts, e-mails, chats) that it made him/her feel unsafe	1.5	1.4	1.4	0.007
Spread rumors about him/her using a cell phone, e-mail, IM, web chat, social networking site, etc.	1.5	1.6	1.4	0.247

Table C2. Prevalence of Dating Violence and Abuse Perpetration among Teens in a Relationship (%) *(continued on next page)*	Total (N=3,745)	Male (N=1,768)	Female (N=1,956)	χ^2
Used information from his/her social networking site to harass him/her or put him/her down	1.2	1.2	1.0	0.339
Made him/her afraid when he/she did not respond to my cell phone call, text, posting on social networking page, IM, etc.	1.0	1.0	0.9	0.151
Threatened to harm him/her physically using a cell phone, text message, social networking page, etc.	0.9	0.8	0.9	0.128
Physical dating violence				
Severe physical violence				
Tried to choke him/her	1.4	1.1	1.6	1.716
Burned him/her	0.7	0.7	0.6	0.264
Hit him/her with a fist	3.4	1.2	5.2	43.173***
Hit him/her with something hard besides a fist	1.9	1.2	2.3	5.886*
Beat him/her up	0.8	0.5	1.1	3.771†
Assaulted him/her with a knife or gun	0.4	0.6	0.3	2.383
Moderate physical violence				
Physically twisted his/her arm	2.1	1.4	2.5	4.581*
Slammed him/her or held him/her against a wall	2.8	2.7	2.9	0.159
Kicked him/her	4.0	2.3	5.3	21.575***
Bent his/her fingers	3.8	2.0	5.2	25.658***
Bit him/her	10.4	7.9	12.5	20.349***
Mild physical violence				
Scratched him/her	7.0	4.8	8.8	22.097***
Slapped him/her	10.5	4.1	16.0	132.252***
Pushed, grabbed, or shoved him/her	8.2	5.5	10.5	29.777***
Psychological dating abuse				
Threatening behavior				
Damaged something that belonged to him/her	5.1	4.6	5.5	1.359
Started to hit him/her but stopped	4.2	1.7	6.2	44.952***
Threatened to hurt him/her	2.5	1.3	3.5	16.624***
Harmed or threatened to harm someone close to him/her	0.5	0.5	0.3	1.752

Table C2. Prevalence of Dating Violence and Abuse Perpetration among Teens in a Relationship (%) *(continued)*	Total (N=3,745)	Male (N=1,768)	Female (N=1,956)	χ^2
Monitoring behavior				
Would not let him/her do things with other people	7.4	5.4	9.1	17.419***
Told him/her he/she could not talk to a person of the gender he/she dates	9.4	6.2	12.0	35.056***
Made him/her describe where he/she was every minute of the day	5.3	3.6	6.7	16.301***
Insisted on knowing who he/she is with and where he/she is at all times	6.1	4.0	7.9	23.358***
Tried to limit his/her contact with family	0.6	0.6	0.4	0.574
Tried to limit his/her contact with friends	3.3	2.4	4.0	7.302**
Personal insults				
Insulted him/her in front of others	4.3	2.8	5.4	14.312***
Put down his/her looks	2.4	1.5	2.9	8.622**
Blamed him/her for bad things they did	6.3	3.8	8.4	31.302***
Called him/her names to put him/her down or make him/her feel bad	3.2	1.8	4.3	18.164***
Emotional manipulation/fear				
Made him/her feel unsafe or uneasy when they spent time together	1.0	1.3	0.5	5.546*
Said things to hurt his/her feelings on purpose	6.2	3.6	8.4	35.363***
Threatened to start dating someone else	4.7	3.0	6.1	18.694***
Brought up something from the past to hurt him/her	9.2	5.5	12.3	48.812***
Made him/her feel owned or controlled	3.0	2.2	3.5	4.938*
Threatened to harm him-/herself if he/she broke up with me	3.0	2.0	3.7	8.655**
Made him/her feel afraid to tell others the truth	1.0	1.0	1.0	0.003
Sexual coercion				
Pressured him/her to have sex when I knew he/she didn't want to	2.0	3.0	1.0	17.692***
Forced him/her to have sex	0.8	1.1	0.4	5.342*
Forced him/her to do other sexual things that he/she did not want to do	1.1	1.8	0.4	17.673***

Note:
Valid, nonmissing data on measures in this table were present for 94 to 95 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Appendix D: Teen Dating Violence and Abuse Variety and Frequency by Gender

This appendix presents tables showing the variety and frequency of teen dating violence and abuse by gender, as well as a more refined analysis of prevalence rates among victims and perpetrators only.

Teen Dating Violence and Abuse Victimization

Table D1 shows the average variety of dating violence victimization reported across the subsample of youth in a relationship, and male and female students in a relationship, with the *t* statistic showing the level of significant difference between the mean scores for males and females. The values shown in the table are averages of all youth in each category (total, male, and female), including those who did not report any victimization (and whose value was zero). A negative *t* value indicates that female students reported greater variety of victimization, while a positive *t* value indicates that male students reported greater variety.

As discussed in chapter 2 in the Measures section, variety was calculated based on the number of items to which the respondent answered "yes" within the relevant category of victimization. The patterns in this table match the prevalence reports shown previously; female students reported more victimization variety across all types of cyber dating abuse, sexual coercion, and psychological dating abuse (with the exception of threatening behavior), while male students reported more victimization variety across all types of physical dating violence.

Table D1. Average Variety of Dating Violence and Abuse Victimization Experiences among Teens in a Relationship (Mean)	Total (N=3,745)	Male (N=1,768)	Female (N=1,956)	*t* value
Cyber dating abuse[a]	0.74	0.62	0.82	-3.025**
Sexual cyber abuse	0.36	0.27	0.43	-3.602***
Nonsexual cyber abuse	0.53	0.48	0.56	-1.523
Physical dating violence[b]	0.88	1.09	0.65	6.929***
Severe physical dating violence	0.13	0.16	0.09	3.918***
Moderate physical dating violence	0.41	0.47	0.34	4.341***
Mild physical dating violence	0.34	0.46	0.23	9.666***
Psychological dating abuse[c]	2.32	1.85	2.70	-6.694***
Threatening behavior	0.28	0.27	0.27	0.133
Monitoring behavior	0.83	0.68	0.95	-5.430***
Personal insults	0.39	0.31	0.46	-5.262***
Emotional manipulation/fear	0.82	0.58	1.02	-9.238***
Sexual coercion[d]	0.21	0.14	0.26	-5.869***

a. The maximum possible variety counts for each cyber dating abuse subscale were as follows: sexual cyber abuse=4 and nonsexual cyber abuse=12.
b. The maximum possible variety counts for each physical dating violence subscale were as follows: severe physical violence=6, moderate physical violence=5, and mild physical violence=3.
c. The maximum possible variety counts for each psychological abuse subscale were as follows: threatening behavior=4, monitoring behavior=6, personal insults=4, and emotional manipulation/fear=7.
d. The maximum possible variety count for sexual coercion was 4.
†p<.10; *p<.05; **p<.01; ***p<.001

Table D2 shows the average frequency of dating violence and abuse for all victims, male victims, and female victims, with a *t* value showing the level of significant difference between males and females. The average frequency was only calculated across the youth's nonzero responses (i.e., responses of rarely (1), sometimes (2), or very often (3), or responses of happened 1–3 times (1), 4–9 times (2), or 10 or more times (3)). Thus, the response values for each category range from 1 to 3, with the sample size varying for each category of violence (as documented in notes 2, 3, and 4). Male victims reported significantly higher victimization frequency of sexual cyber dating abuse and overall, severe, and moderate physical dating violence compared to female students. Female students reported significantly higher victimization frequency of overall psychological dating abuse, personal insults, and emotional manipulation/fear compared to male students. All other differences were not statistically significant (i.e., did not vary between male and female victims).

Table D2. Among Teens Who Report Dating Violence and Abuse, Average Frequency of Victimization Experiences[a] (Mean)	Teen dating violence and abuse victims	Male victims	Female victims	*t* value
Cyber dating abuse[b]	1.44	1.45	1.42	0.787
Sexual cyber abuse	1.63	1.75	1.56	2.426*
Nonsexual cyber abuse	1.41	1.42	1.39	0.535
Physical dating violence[c]	1.26	1.29	1.20	2.872**
Severe physical dating violence	1.38	1.42	1.27	1.936†
Moderate physical dating violence	1.32	1.37	1.24	3.395**
Mild physical dating violence	1.28	1.30	1.25	1.180
Psychological dating abuse[d]	1.41	1.38	1.43	-2.380*
Threatening behavior	1.33	1.32	1.32	-0.112
Monitoring behavior	1.52	1.48	1.54	-1.528
Personal insults	1.48	1.43	1.52	-2.096*
Emotional manipulation/fear	1.68	1.59	1.73	-2.637**

a. The response scale for items measuring cyber abuse and psychological abuse was (0) never, (1) rarely, (2) sometimes, and (3) very often. The response scale for items measuring physical violence was (0) never happened, (1) happened 1 to 3 times, (2) happened 4 to 9 times, and (3) happened 10 or more times.
b. The sample sizes for cyber dating abuse were n=973 (total), n=396 (male), and n=547 (female). The number of victims of sexual cyber dating abuse were n=415 (total), n=122 (male), and n=280 (female). The number of victims of nonsexual cyber dating abuse were n=822 (total), n=354 (male), and n=442 (female).
c. The sample sizes for physical dating violence were n=1,141 (total), n=632 (male), and n=466 (female). The sample sizes for severe physical dating violence were n=216 (total), n=147 (male), and n=102 (female). The sample sizes for moderate physical dating violence were n=885 (total), n=461 (male), and n=390 (female). The sample sizes for mild physical dating violence were n=828 (total), n=500 (male), and n=295 (female).
d. The sample sizes for psychological dating abuse were n=1,792 (total), n=771 (male), and n=964 (female). The sample sizes for threatening behavior were n=667 (total), n=309 (male), and n=327 (female). The sample sizes for monitoring behavior wer: n=1,199 (total), n=500 (male), and n=663 (female). The sample sizes for personal insults were n=800 (total), n=323 (male), and n=447 (female). The sample sizes for emotional manipulation were n=656 (total), n=234 (male) and n=398 (female).
†p<.10; *p<.05; **p<.01; ***p<.001

Table D3 shows the prevalence of each nonexclusive subcategory of victimization among victims of the larger category of cyber dating abuse, physical dating violence, and psychological dating abuse. The table shows these prevalence rates for all youth who report victimization, as well as males and females who report victimization, with a chi-squared statistic showing the level of significant difference between males and females. Within cyber dating abuse, significantly more male victims report nonsexual cyber dating abuse than female victims, while significantly more female victims report sexual cyber dating abuse than male victims. Within physical dating violence, significantly more male victims report mild physical dating violence than female victims, while significantly more female victims report moderate physical dating violence than male victims. The difference in reports of severe physical dating violence among male and female physical dating violence victims is not significant. Within psychological dating abuse, significantly more male victims report experiencing threatening behavior than female victims, while significantly more female victims report experiencing monitoring behavior, personal insults, and emotional manipulation/fear than male victims.

Table D3. Among Teens Who Report Dating Violence and Abuse, Prevalence of Types of Victimization (Mean)	Teen dating violence and abuse victims	Male victims	Female victims	χ^2
Cyber dating abuse	% (N=973)	% (N=396)	% (N=547)	
Sexual cyber abuse	42.6	30.5	51.4	40.475***
Nonsexual cyber abuse	84.4	89.6	80.6	13.818***
Physical dating violence	% (N=1,141)	% (N=632)	% (N=466)	
Severe physical dating violence	23.0	23.1	21.9	0.216
Moderate physical dating violence	77.6	73.0	83.6	17.240***
Mild physical dating violence	72.3	79.0	63.2	33.098***
Psychological dating abuse	% (N=1,792)	% (N=771)	% (N=964)	
Threatening behavior	36.7	39.8	33.8	6.691*
Monitoring behavior	67.1	64.8	68.9	3.171†
Personal insults	44.6	42.0	46.5	3.386†
Emotional manipulation/fear	72.5	62.6	80.2	65.837***

†p<.10; *p<.05; **p<.01; ***p<.001

Teen Dating Violence and Abuse Perpetration

Table D4 shows the average variety of dating violence and abuse perpetration reported across the total sample of youth in a relationship, as well as male and female students in a relationship, with a *t* statistic showing the level of significant difference between males and females. The values shown in the table are averages of all youth in each category (total, male, and female), including

those who did not report any perpetration (and whose value was zero). A negative *t* value indicates that female students reported greater variety of perpetration, while a positive *t* value indicates that male students reported greater variety. As was the case with regard to victimization variety, perpetration variety was calculated based on the number of items to which the respondent answered "yes" within the relevant category of perpetration. Male students reported greater variety of sexual cyber dating violence perpetration and sexual coercion perpetration. Female students reported greater variety of all other types of dating violence/abuse perpetration (with the exception of overall cyber dating abuse, which was not significant).

Table D4. Average Variety of Dating Violence and Abuse Perpetration Behaviors among Teens in a Relationship	Total Mean (N=3,745)	Male Mean (N=1,768)	Female Mean (N=1,956)	*t* value
Cyber dating abuse[a]	0.26	0.24	0.25	-0.426
Sexual cyber abuse	0.05	0.07	0.03	3.833***
Nonsexual cyber abuse	0.21	0.17	0.23	-1.908†
Physical dating violence[b]	0.57	0.36	0.74	-7.648***
Severe physical dating violence	0.09	0.05	0.11	-3.647***
Moderate physical dating violence	0.23	0.16	0.28	-5.258***
Mild physical dating violence	0.26	0.14	0.35	-9.968***
Psychological dating abuse[c]	0.89	0.59	1.12	-7.394***
Threatening behavior	0.12	0.08	0.15	-5.032***
Monitoring behavior	0.32	0.22	0.40	-5.912***
Personal insults	0.16	0.10	0.21	-6.220***
Emotional manipulation/fear	0.28	0.19	0.35	-6.347***
Sexual coercion[d]	0.04	0.06	0.02	4.571***

a. The maximum possible variety counts for each cyber dating abuse subscale were as follows: sexual cyber abuse=4 and nonsexual cyber abuse=12.
b. The maximum possible variety counts for each physical dating violence subscale were as follows: severe physical violence=6, moderate physical violence=5, and mild physical violence=3.
c. The maximum possible variety counts for each psychological abuse subscale were as follows: threatening behavior=4, monitoring behavior=6, personal insults=4, and emotional manipulation/fear=7.
d. The maximum possible variety count for sexual coercion was 4.
†p<.10; *p<.05; **p<.01; ***p<.001

Table D5 shows the average frequency of dating violence/abuse for all perpetrators, as well as male and female perpetrators, with a *t* statistic showing the level of significant difference between males and females. As was the case with the victimization table, the average frequency was only calculated across the youth's nonzero responses (i.e., responses of rarely (1), sometimes, (2) or very often (3), or responses of happened 1–3 times (1), 4–9 times (2), or 10 or more times (3)). Thus, the response values for each category range from 1 to 3, with the sample size varying for each category of violence/abuse (as documented in notes 2, 3, and 4). The only significant differences between males and females relate to physical dating violence perpetration, where males report higher mean frequencies for all types of physical dating violence perpetration.

Table D5. Among Teens Who Report Dating Violence and Abuse Perpetration, Average Frequency of Perpetration Experiences[a]	Teen dating violence and abuse perpetrators Mean	Male perpetrators Mean	Female perpetrators Mean	*t* value
Cyber dating abuse[b]	1.34	1.35	1.33	0.386
Sexual cyber abuse	1.52	1.53	1.45	0.532
Nonsexual cyber abuse	1.34	1.32	1.34	-0.283
Physical dating violence[c]	1.21	1.29	1.17	3.044**
Severe physical dating violence	1.30	1.55	1.21	2.520*
Moderate physical dating violence	1.31	1.43	1.24	3.168**
Mild physical dating violence	1.20	1.27	1.17	2.162*
Psychological dating abuse[d]	1.28	1.25	1.29	-1.311
Threatening behavior	1.20	1.16	1.22	-1.122
Monitoring behavior	1.36	1.32	1.37	-0.927
Personal insults	1.37	1.37	1.37	0.130
Emotional manipulation/fear	1.45	1.44	1.46	-0.180

a. The response scale for items measuring cyber abuse and psychological abuse was (0) never, (1) rarely, (2) sometimes, and (3) very often. The response scale for items measuring physical violence was (0) never happened, (1) happened 1 to 3 times, (2) happened 4 to 9 times, and (3) happened 10 or more times.
b. The sample sizes for cyber dating abuse were n=424 (total), n=155 (male), and n=263 (female). The sample sizes for sexual cyber dating abuse were n=97 (total), n=63 (male), and n=31 (female). The sample sizes for nonsexual cyber dating abuse were n=377 (total), n=124 (male), and n=247 (female).
c. The sample sizes for physical dating violence were n=736 (total), n=241 (male), and n=483 (female). The sample sizes for severe physical dating violence were n=164 (total), n=41 (male), and n=119 (female). The sample sizes for moderate physical dating violence were n=485 (total), n=165 (male), and n=312 (female). The sample sizes for mild physical dating violence were n=584 (total), n=167 (male), and n=411 (female).
d. The sample sizes for psychological dating abuse were n=914 (total), n=310 (male), and n=597 (female). The sample sizes for threatening behavior were n=318 (total), n=107 (male), and n=207 (female). The sample sizes for monitoring behavior were n=532 (total), n=182 (male), and n=345 (female). The sample sizes for personal insults were n=365 (total), n=116 (male), and n=244 (female). The sample sizes for emotional manipulation were n=259 (total), n=81 (male), and n=173 (female).
†p<.10; *p<.05; **p<.01; ***p<.001

Table D6 shows the prevalence of each nonexclusive subcategory of perpetration among perpetrators of the larger category of cyber dating abuse, physical dating violence, and psychological dating abuse. The table shows these prevalence rates for all youth who report perpetration, as well as males and females who report perpetration, with a chi-squared statistic showing the level of significant difference between males and females. Among perpetrators of cyber dating abuse, males report significantly higher prevalence of sexual cyber dating abuse perpetration, while females report significantly higher prevalence of nonsexual cyber dating abuse perpetration. Among perpetrators of physical dating violence, females report significantly higher prevalence of severe and mild physical violence perpetration (male perpetrators report a higher prevalence of moderate physical violence perpetration, but this difference is not

significant). Among psychological dating abuse perpetrators, the only significant difference relates to emotional manipulation/fear, which has higher prevalence among female perpetrators.

Table D6. Among Teens Who Report Dating Violence and Abuse Perpetration, Prevalence of Types of Perpetration (Mean)	Teen dating violence and abuse perpetrators	Male perpetrators	Female perpetrators	*t* value
Cyber dating abuse	% (N=424)	% (N=155)	% (N=263)	
Sexual cyber violence	22.7	40.1	11.9	44.008***
Non-sexual cyber violence	88.9	80.3	93.9	17.968***
Physical dating violence	% (N=736)	% (N=241)	% (N=483)	
Severe physical dating violence	22.5	17.2	24.7	5.315*
Moderate physical dating violence	66.0	68.2	64.6	0.896
Mild physical dating violence	79.7	69.5	85.2	24.858***
Psychological dating abuse	% (N=914)	% (N=310)	% (N=597)	
Threatening behavior	34.7	34.5	34.6	0.000
Monitoring behavior	58.2	58.7	57.8	0.071
Personal insults	39.9	37.4	40.9	1.016
Emotional manipulation/fear	57.2	51.6	60.0	5.813*

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Appendix E: Teen Dating Violence and Abuse Domain-Specific Models and Z-Score Comparisons

In this appendix, we show tables of results from the domain-specific regression models analyzing correlations between teen dating violence/abuse and other life factors, as described in response to research question 8 in the Results section of chapter 3. We also show z-scores comparing the significance of the difference between coefficients in the final multivariate models predicting teen dating violence and abuse victimization/perpetration, with those in models predicting other forms of teen dating violence and abuse victimization/perpetration (see, e.g., Paternoster et al., 1998).

Teen Dating Violence and Abuse Victimization

Table E1 shows results from domain-specific logistic regression models predicting the likelihood of cyber dating abuse victimization, among teens in a relationship. Table E2 shows the z-score comparisons of coefficients in the final, multivariate regression model predicting cyber dating abuse victimization, among teens in a relationship, with those in models predicting other types of teen dating violence victimization.

Teen Dating Violence and Abuse Perpetration

Table E3 shows results from domain-specific logistic regression models predicting the likelihood of cyber dating abuse perpetration among teens in a relationship. Table E4 shows the z-score comparisons of coefficients in the final multivariate regression model predicting cyber dating abuse perpetration among teens in a relationship, with those in models predicting other types of teen dating violence and abuse perpetration.

Table E1. Domain-Specific Logistic Regression Models Predicting the Likelihood of Cyber Dating Abuse Victimization among Teens in a Relationship	Controls only			School domain			Parent domain			Risk behavior domain			Psychosocial domain			Prosocial activities domain			Relationship domain		
	β	S.E.		β	S.E.		β	S.E.		β	S.E.		β	S.E.		β	S.E.		β	S.E.	
Female	0.247	0.083	**	0.299	0.085	***	0.252	0.088	**	0.509	0.096	***	0.128	0.091		0.231	0.085	**	0.221	0.085	**
Pennsylvania	0.150	0.206		0.145	0.210		0.153	0.236		0.199	0.246		0.220	0.231		0.108	0.214		0.143	0.215	
New Jersey	0.306	0.129	*	0.338	0.131	**	0.362	0.137	**	0.417	0.145	**	0.292	0.137	*	0.349	0.133	**	0.314	0.131	*
White	-0.091	0.099		-0.090	0.101		-0.090	0.106		-0.016	0.110		-0.118	0.106		-0.125	0.101		-0.087	0.102	
Live with both parents	-0.167	0.088	†	-0.104	0.090		-0.121	0.094		-0.037	0.100		-0.112	0.094		-0.148	0.090		-0.167	0.090	†
Age	0.081	0.029	**	0.079	0.030	**	0.076	0.032	*	-0.018	0.036		0.083	0.032	**	0.062	0.031	*	0.079	0.030	**
LGBTQ	0.282	0.163	†	0.186	0.169		0.339	0.173	*	0.097	0.180		-0.068	0.179		0.294	0.167	†	0.257	0.166	
School SES	0.001	0.004		0.001	0.004		0.000	0.005		0.002	0.005		0.002	0.005		0.000	0.004		0.000	0.004	
Computer time daily	0.059	0.020	**	0.050	0.020	*	0.055	0.021	**	0.065	0.022	**	0.024	0.022		0.050	0.021	*	0.065	0.020	**
Cell phone time daily	0.057	0.016	***	0.054	0.017	***	0.055	0.017	***	0.018	0.018		0.050	0.017	**	0.058	0.017	***	0.057	0.017	***
Daily school attendance				-0.490	0.183	**															
Bs and Cs				0.860	0.360	*															
Ds and Fs				0.227	0.088	**															
Parent closeness							-0.147	0.042	***												
Sex (ever)										0.685	0.104	***									
Alcohol use frequency										0.020	0.013										
Marijuana use frequency										-0.016	0.012										
Serious drug use frequency										0.005	0.006										
Delinquency										0.273	0.039	***									
Depression frequency													0.059	0.013	***						
Anger frequency													0.068	0.013	***						
Anxiety frequency													0.019	0.018							
Prosocial activities																-0.004	0.002	*			
Positive relationship																			0.012	0.068	
CONSTANT	-2.953	0.572	***	-2.640	0.621	***	-2.458	0.658	***	-2.245	0.691	***	-3.387	0.647	***	-2.411	0.619	***	-2.914	0.599	***
Nagelkerke R-squared	0.035			0.044			0.041			0.116			0.113			0.037			0.035		

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Table E2. Z-Score Comparisons of Final Multivariate Regression Model Predicting Cyber Dating Abuse Victimization, among Teens in a Relationship, with Models Predicting Other Types of Teen Dating Violence and Abuse Victimization	Model 1 Cyber abuse		Model 2 Physical violence		Model 3 Psychological abuse		Model 4 Sexual coercion		Z-score Model 1 versus 2	Z-score Model 1 versus 3	Z-score Model 1 versus 4
	β	S.E.	β	S.E.	β	S.E.	β	S.E.	z	z	z
Female	0.344	0.103 ***	-0.667	0.098 ***	0.189	0.088 *	0.832	0.140 ***	7.111 ***	1.400	-3.972 **
Pennsylvania	0.139	0.261	0.062	0.238	-0.245	0.220	0.269	0.337	0.218	-0.051	-0.663
New Jersey	0.463	0.151 **	0.079	0.147	0.397	0.130 **	0.531	0.197 **	1.822 †	1.450	-0.505
White	-0.053	0.116	-0.264	0.110 *	0.055	0.103	0.017	0.150	1.320	-0.606	-0.533
Live with both parents	0.046	0.105	0.089	0.101	0.006	0.092	0.118	0.135	-0.295	0.486	-0.602
Age	-0.016	0.038	0.026	0.037	0.016	0.032	0.034	0.050	-0.792	-0.897	-1.235
LGBTQ	-0.119	0.196	0.126	0.186	0.038	0.184	0.057	0.225	-0.907	-0.670	-0.714
School SES	0.000	0.005	-0.004	0.005	-0.009	0.005 *	0.001	0.007	0.566		
Computer time daily	0.023	0.023	-0.047	0.024 *	-0.032	0.021	-0.008	0.030	2.106 *	2.346 †	1.297
Cell phone time daily	0.028	0.019	0.051	0.018 **	0.036	0.016 *	-0.018	0.025	-0.879	-0.415	2.344
Daily school attendance	-0.105	0.221	-0.231	0.207	0.133	0.214	-0.049	0.268	0.416	-0.892	-0.191
Bs and Cs	0.373	0.505	-0.060	0.467	-0.211	0.490	0.377	0.538	0.630	0.729	-0.004
Ds and Fs	-0.036	0.105	-0.061	0.100	0.033	0.092	-0.186	0.136	0.172	-0.775	1.233
Parent closeness	0.050	0.050	-0.110	0.046 *	-0.052	0.044	-0.146	0.059 *	2.355 *	2.120	3.754 *
Sex (ever)	0.654	0.107 ***	0.794	0.104 ***	0.648	0.092 ***	1.084	0.147 ***	-0.938	0.035	-3.336 *
Delinquency	0.224	0.038 ***	0.150	0.035 ***	0.133	0.036 ***	0.131	0.043 **	1.432	2.367 †	2.334
Depression frequency	0.068	0.012 ***	0.035	0.012 **	0.073	0.012 ***	0.072	0.014 ***	1.945 †	-0.329	-0.328
Anger frequency	0.047	0.014 ***	0.053	0.014 ***	0.058	0.014 ***	0.027	0.017	-0.303	-0.845	1.400
Prosocial activities	-0.002	0.002	-0.001	0.002	-0.004	0.002 *	0.007	0.002 **	-0.354	0.998	-4.491 **
CONSTANT	-2.324	0.810 **	-0.992	0.759	-0.618	0.693	-4.226	1.055 ***	-1.200	-0.928	1.296
Nagelkerke R-squared	0.161		0.171		0.158		0.169				

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Table E3. Domain-specific Logistic Regression Models Predicting the Likelihood of Cyber Dating Abuse Perpetration among Teens in a Relationship	Controls only			School domain			Parent domain			Risk behavior domain			Psychosocial domain			Prosocial activities domain			Relationship domain		
	β	S.E.		β	S.E.		β	S.E.		β	S.E.		β	S.E.		β	S.E.		β	S.E.	
Female	0.345	0.115	**	0.334	0.116	**	0.339	0.120	**	0.526	0.127	***	0.233	0.122	†	0.311	0.118	**	0.312	0.116	**
Pennsylvania	0.270	0.292		0.202	0.295		0.154	0.315		0.243	0.324		0.331	0.306		0.142	0.302		0.249	0.294	
New Jersey	0.381	0.181	*	0.421	0.182	*	0.535	0.190	**	0.562	0.196	**	0.406	0.187	*	0.446	0.185	*	0.391	0.182	*
White	0.022	0.136		0.025	0.138		0.051	0.143		0.084	0.146		-0.006	0.141		0.006	0.138		0.034	0.137	
Live with both parents	-0.105	0.120		-0.084	0.122		-0.051	0.128		0.022	0.131		-0.042	0.124		-0.059	0.123		-0.097	0.121	
Age	0.083	0.041	*	0.085	0.041	*	0.048	0.044		-0.032	0.047		0.079	0.043	†	0.051	0.042		0.071	0.041	†
LGBTQ	0.412	0.204	*	0.416	0.207	*	0.461	0.210	*	0.168	0.216		0.072	0.219		0.414	0.208	*	0.395	0.204	†
School SES	-0.002	0.006		-0.002	0.006		-0.005	0.007		-0.002	0.007		0.000	0.006		-0.004	0.006		-0.002	0.006	
Computer time daily	0.069	0.026	**	0.066	0.027	*	0.058	0.027	*	0.059	0.028	*	0.023	0.028		0.063	0.027	*	0.063	0.026	*
Cell phone time daily	0.111	0.024	***	0.107	0.024	***	0.113	0.025	***	0.079	0.025	**	0.111	0.025	***	0.110	0.024	***	0.109	0.024	***
Daily school attendance				-0.380	0.234																
Parent closeness							-0.074	0.059													
Parent activities							-0.029	0.017													
Sex (ever)										0.822	0.142	***									
Alcohol use frequency										0.031	0.016	*									
Marijuana use frequency										-0.019	0.015										
Serious drug use frequency										0.015	0.006	*									
Delinquency										0.194	0.041	***									
Depression frequency													0.056	0.016	***						
Anger frequency													0.079	0.016	***						
Anxiety frequency													-0.023	0.022							
Prosocial activities																-0.011	0.003	***			
Positive relationship																			0.213	0.103	*
CONSTANT	-4.424	0.811	***	-4.018	0.847	***	-3.251	0.902	***	-3.309	0.921	***	-4.698	0.872	***	-3.210	0.867	***	-4.663	0.832	***
Nagelkerke R-squared	0.046			0.047			0.050			0.112			0.097			0.058			0.048		

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Table E4. Z-Score Comparisons of Final, Multivariate Regression Model Predicting Cyber Dating Abuse Perpetration among Teens in a Relationship, with Models Predicting Other Types of Teen Dating Violence Perpetration	Model 1 Cyber abuse			Model 2 Physical violence			Model 3 Psychological abuse			Model 4 Sexual coercion			Z-score Model 1 versus 2		Z-score Model 1 versus 3		Z-score Model 1 versus 4	
	β	S.E.		β	S.E.		B	S.E.		β	S.E.		z		z		z	
Female	0.307	0.135	*	0.672	0.113	***	0.537	0.102	***	-1.126	0.322	***	-2.071	*	-1.358		4.104	***
Pennsylvania	0.213	0.337		-0.136	0.257		-0.200	0.245		0.471	0.751		0.823		0.991		-0.313	
New Jersey	0.565	0.201	**	-0.109	0.169		0.381	0.153	*	0.235	0.465		2.567	*	0.728		0.651	
White	0.022	0.150		-0.310	0.123	*	-0.181	0.114		-0.220	0.329		1.711	†	1.077		0.669	
Live with both parents	0.120	0.134		0.120	0.109		-0.068	0.102		0.622	0.325	†	0.000		1.118		-1.428	
Age	-0.045	0.050		0.093	0.042	*	0.094	0.038	*	-0.056	0.111		-2.123	*	-2.209	*	0.089	
LGBTQ	-0.050	0.231		-0.032	0.197		0.022	0.190		-0.197	0.531		-0.061		-0.242		0.253	
School SES	-0.003	0.007		-0.008	0.005		-0.010	0.005	†	-0.002	0.016		0.581		0.814		-0.057	
Computer time daily	0.032	0.029		-0.001	0.026		-0.047	0.024	†	0.117	0.061	†	0.849		2.088	*	-1.259	
Cell phone time daily	0.075	0.026	**	0.059	0.021	**	0.036	0.019	†	0.035	0.058		0.484		1.210		0.639	
Sex (ever)	0.693	0.147	***	0.804	0.121	***	0.612	0.108	***	0.797	0.369	*	-0.583		0.444		-0.263	
Alcohol use frequency	0.029	0.016	†	0.036	0.014	**	0.023	0.013	†	0.078	0.028	**	-0.351		0.289		-1.545	
Serious drug use frequency	0.013	0.006	*	0.000	0.006		-0.012	0.008		0.022	0.007	**	1.468		2.571	*	-0.946	
Delinquency	0.104	0.043	*	0.112	0.039	**	0.084	0.037	*	0.190	0.075	*	-0.147		0.346		-1.008	
Depression frequency	0.044	0.014	**	0.029	0.013	*	0.073	0.012	***	0.032	0.031		0.759		-1.552		0.351	
Anger frequency	0.057	0.016	***	0.056	0.015	***	0.043	0.014	**	0.046	0.032		0.061	†	0.669		0.308	
Prosocial activities	-0.009	0.003	***	-0.003	0.002		-0.007	0.002	***	-0.002	0.006		-1.827		-0.577		-1.139	
Positive relationship	0.235	0.126	†	0.224	0.100	*	0.264	0.093	**	0.197	0.261		0.068		-0.185		0.132	
CONSTANT	-3.249	1.020	***	-4.007	0.825	***	-3.244	0.765	***	-5.206	2.230	*	0.578		-0.004		0.798	
Nagelkerke R-squared	0.149			0.189			0.184			0.208								

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Appendix F: Bullying Individual Item Prevalence Rates

Bullying Victimization

In table F1, we report the individual item prevalence rates for bullying victimization measures for the total sample of teens, as well as breakouts by male/female youth. We also report the statistical significance of the difference between male and female prevalence rates across each item, using the chi-squared statistic.

Table F1. Prevalence of Bullying Victimization among Teens (%) *(continued on next page)*	Total (N=5,647)	Males (N=2,705)	Females (N=2,904)	χ^2
Cyber bullying				
My cell phone account was used without my permission to send a photo or image to other people to get me in trouble	2.5	3.1	2.0	6.443*
A student got other students to send a rude video message to my cell phone	1.6	1.9	1.4	2.293
A student forwarded a video to my cell phone he/she knew I wouldn't like	1.3	1.5	1.1	2.111
My cell phone was used without my permission to send a video message to other people to get me in trouble	1.3	1.5	1.0	3.403†
A student sent me a nasty e-mail	3.4	2.3	4.4	16.213***
A student sent me an e-mail threatening to harm me	1.9	1.5	2.3	3.995*
A student sent me an instant message or chat to hurt my feelings	5.9	3.1	8.3	60.907***
My instant message account was used without my permission to send a message to other students to get me into trouble	1.3	1.4	1.3	0.117
A student created a nasty profile page (like Myspace or YouTube) about me	1.3	1.4	1.0	2.149
A student put something on a profile page (like Myspace or YouTube) about me to hurt my feelings	4.4	2.7	5.8	29.519***
I was called names I didn't like through a text message	11.7	6.3	16.3	124.011***
A student sent me a text message to hurt my feelings	10.5	5.0	15.4	147.628***
Physical bullying				
I was pushed or shoved	31.0	36.1	26.1	60.901***
I was hit or kicked hard	16.1	20.7	11.9	74.461***
Students crashed into me on purpose as they walked by	16.4	18.0	14.7	10.380***

Table F1. Prevalence of Bullying Victimization among Teens (%) *(continued)*	Total (N=5,647)	Males (N=2,705)	Females (N=2,904)	χ^2
My property was damaged on purpose	7.1	8.3	5.9	11.057***
Something was thrown at me to hit me	17.7	19.9	15.6	16.291***
I was threatened to be physically hurt or harmed	11.3	12.7	10.0	8.971**
Psychological bullying				
I was teased by students saying things to me	23.9	23.6	24.0	0.086
A student made rude remarks at me	29.7	26.8	32.2	17.967***
A student made me feel afraid in school	6.9	5.3	8.2	16.432***
Things were said about my looks I didn't like	23.0	16.8	28.3	95.067***
I was called names I didn't like	26.3	22.7	29.3	29.624***
A student wouldn't be friends with me because other people didn't like me	11.6	8.6	14.0	36.927***
A student got other students not to have anything to do with me	11.9	8.6	14.7	44.962***
A student got their friends to turn against me	13.4	8.8	17.5	83.424***
I wasn't invited to a student's place because other people didn't like me	12.1	9.6	14.0	23.337***
I was left out of activities with other students	17.7	13.7	21.1	49.080***
I had to hide my sexuality from other students	3.7	3.2	3.8	1.091

Note: Valid, nonmissing data on measures in this table were present for 91 to 92 percent of the respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Bullying Perpetration

In table F2, we report the individual item prevalence rates for bullying perpetration measures for the total sample of teens, as well as breakouts by male/female youth. We also report the statistical significance of the difference between male and female prevalence rates across each item, using the chi-squared statistic.

Table F2. Prevalence of Bullying Perpetration among Teens (%) *(continued on next page)*	Total (N=5,647)	Males (N=2,705)	Females (N=2,904)	χ^2
Cyber bullying				
Used a cell phone to send other students a video of a student I knew would get him/her into trouble	1.3	2.2	0.5	28.671***

Table F2. Prevalence of Bullying Perpetration among Teens *(continued on next page)*	Total % (N=5,647)	Males % (N=2,705)	Females % (N=2,904)	χ^2
Got other students to send a rude video message to a student's cell phone	1.2	1.9	0.6	18.094***
Used a cell phone to forward a video to a stud. I knew he/she wouldn't like	1.1	1.9	0.3	29.722***
Sent a video message to other people to get a student into trouble	1.1	1.9	0.3	31.777***
Sent a student a nasty e-mail	1.9	2.5	1.4	8.745**
Sent a student an e-mail threatening to harm him/her	1.2	2.1	0.4	29.184***
Sent a student an instant message or chat to hurt his/her feelings	2.6	2.6	2.5	0.157
Used a student's instant message account without his/her permission to send a message that I knew would get him/her into trouble	1.3	2.1	0.6	21.202***
Created a profile page (like Myspace or YouTube) about a student knowing it would upset him/her	1.2	2.0	0.4	30.008***
Wrote things about a student on a profile page (like Myspace or YouTube) to hurt his/her feelings	2.4	2.3	2.4	0.040
Called a student names he/she didn't like through a text message	5.2	4.1	6.0	9.568**
Sent a student a cell phone text message knowing it would hurt his/her feelings	4.8	3.2	6.1	21.930***
Physical bullying				
Pushed or shoved a student	21.7	32.1	12.3	287.811***
Hit or kicked a student hard	10.4	15.9	5.4	149.311***
Crashed into a student on purpose as they walked by	14.0	19.0	9.3	97.551***
Damaged a student's property on purpose	4.1	6.4	1.8	67.516***
Threw something at a student to hit them	11.7	16.1	7.4	93.442***
Threatened to physically hurt or harm a student	8.2	12.3	4.4	104.919***
Psychological bullying				
Teased a student by saying mean things to him/her	12.7	15.8	9.8	40.244***
Made rude remarks at a student	17.4	18.5	16.4	3.662†
Made another student feel afraid in school	3.8	4.9	2.8	16.113***
Said things about their looks they didn't like	9.1	9.2	8.9	0.143

Table F2. Prevalence of Bullying Perpetration among Teens *(continued)*	Total % (N=5,647)	Males % (N=2,705)	Females % (N=2,904)	χ^2
Made fun of a student by calling them names	13.6	15.6	11.6	16.812***
Wouldn't let my friends be friends with a student because I didn't like him/her	3.8	4.1	3.4	1.632
Got other students to ignore a student	4.6	4.7	4.3	0.496
Got my friends to turn against a student	4.6	4.3	4.7	0.637
Didn't invite a student to my place because other people didn't like him/her	15.0	13.1	16.5	11.136***
Left a student out of activities or games on purpose	10.2	10.2	9.9	0.127
Made another student hide his/her sexuality from other students	1.8	2.6	1.0	19.700***

Note: Valid, nonmissing data on measures in this table were present for 89 percent of respondents.
†p<.10; *p<.05; **p<.01; ***p<.001

Appendix G: Bullying Variety and Frequency by Gender

This appendix presents tables showing the variety and frequency of teen bullying by gender.

Bullying Victimization

Table G1 shows the average variety of bullying victimization reported for all youth in the sample, males, and females, with a *t* statistic showing the level of significant difference by gender. The values shown in the table are averages of all youth in each category (total, male, and female), including those who did not report any victimization and whose value was zero. A negative *t* value indicates that female students reported greater variety of victimization, while a positive *t* value indicates that male students reported greater variety. As discussed in the Measures section in chapter 2, variety was calculated based on the number of items to which the respondent answered "yes" within the relevant category of victimization. The average variety reports match the prevalence reports shown in the previous tables; female students report greater variety of cyber bullying victimization and psychological bullying victimization, while male students report greater variety of physical bullying victimization. Both male and female students report the most variety of psychological bullying victimization compared to other forms of bullying.

Table G1. Average Variety of Bullying Victimization among Teens[a](Mean)	Total (N=5,647)	Males (N=2,705)	Females (N=2,904)	*t* value
Cyber bullying	0.47	0.32	0.60	-7.466***
Physical bullying	0.99	1.15	0.84	7.387***
Psychological bullying	1.79	1.47	2.07	-7.949***

Note: Valid, nonmissing data on measures in this table were present for 91 to 92 percent of respondents.
a. The maximum possible variety values for each scale were as follows: cyber bullying=12, physical bullying=6, psychological bullying=11.
†p<.10; *p<.05; **p<.01; ***p<.001

Table G2 shows the mean frequency of victimization among all victims of each category of bullying, as well as the breakdown between male victims and female victims, with a *t* value showing the level of significant difference between males and females. Across the total sample of victims, the mean frequency is highest for psychological bullying, followed by cyber bullying and physical bullying. Male victims report greater mean frequencies for each category of bullying victimization than female victims.

Table G2. Among Teens Who Report Bullying Victimization, Average Frequency of Types of Victimization[a] (Mean)	Total victims	Male victims	Female victims	*t* value
Cyber bullying	N=897 1.38	N=268 1.46	N=620 1.34	1.935†
Physical bullying	N=2,132 1.37	N=1,098 1.41	N=1,009 1.33	2.662***
Psychological bullying	N=2,340 1.56	N=947 1.62	N=1,369 1.50	3.055***

a. The response scale for items measuring bullying was (0) never, (1) sometimes, (2) once or twice a month, (3) once a week, (4) several times a week, and (5) every day. The frequency values range from 1 to 5 (the mean frequency was calculated based on all nonzero responses to each item).
†p<.10; *p<.05; **p<.01; ***p<.001

Bullying Perpetration

Table G3 shows the average variety of bullying perpetration reported for all youth in our sample, male students and female students, with a *t* value showing the level of significant difference between males and females. The values shown in the table are averages of all youth in each category (total, male, and female), including those who did not report any perpetration (and whose value was zero). A negative *t* value indicates that female students reported greater variety of perpetration, while a positive *t* value indicates that male students reported greater variety. As was the case with the bullying victimization section, variety was calculated based on the number of items to which the respondent answered "yes" within the relevant category of perpetration. Across the entire sample, youth reported the greatest variety of psychological bullying perpetration, followed by physical bullying and cyber bullying perpetration. Male students reported the greatest variety of all types of bullying perpetration.

Table G3. Average Variety of Bullying Perpetration Among Teens[a] (Mean)	Total (N=5,647)	Males (N=2,705)	Females (N=2,904)	*t* value
Cyber bullying	0.25	0.29	0.21	2.034*
Physical bullying	0.70	1.01	0.41	15.920***
Psychological bullying	0.96	1.02	0.89	2.396*

Note: Valid, nonmissing data on measures in this table were present for 89 to 90 percent of respondents.
a. The response scale for items measuring bullying was (0) never, (1) sometimes, (2) once or twice a month, (3) once a week, (4) several times a week, and (5) every day. The maximum possible variety values for each scale were as follows: cyber bullying=12, physical bullying=6, psychological bullying=11.
†p<.10; *p<.05; **p<.01; ***p<.001

Table G4 shows the mean frequency of victimization among all perpetrators of each category of bullying, as well as the breakdown between male victims and female perpetrators, with a *t* value showing the level of significant difference between males and females. Unlike variety, cyber bullying perpetration has the highest mean frequency across the entire sample, followed by physical bullying and psychological bullying. Male perpetrators report higher average frequency for all types of bullying perpetration compared to female perpetrators.

Table G4. Among Teens Who Report Bullying Perpetration, Average Frequency of Types of Perpetration[a]	Total	Male	Female	*t* value
Cyber bullying	N=380 1.43	N=139 1.83	N=236 1.19	5.359***
Physical bullying	N=1455 1.36	N=910 1.44	N=528 1.21	5.975***
Psychological bullying	N=1644 1.35	N=775 1.48	N=853 1.23	6.063***

a. The response scale for items measuring bullying was (0) never, (1) sometimes, (2) once or twice a month, (3) once a week, (4) several times a week, and (5) every day. The frequency values range from 1 to 5 (the mean frequency was calculated based on all nonzero responses to each item).
†p<.10; *p<.05; **p<.01; ***p<.001

Appendix H: Bullying Domain-Specific Models and Z-Score Comparisons

In this appendix, we show tables of results from the domain-specific regression models analyzing correlations between bullying and other life factors, as described in response to research question 8 in the Results section of chapter 3. We also show z-scores comparing the significance of the difference between coefficients in the final multivariate models predicting bullying victimization/perpetration, with those in models predicting other forms of bullying victimization/perpetration (see, e.g., Paternoster et al. 1998).

Bullying Victimization

Table H1 shows results from domain-specific logistic regression models predicting the likelihood of cyber bullying victimization among teens. Table H2 shows the z-score comparisons of coefficients in the final multivariate regression model predicting cyber bullying victimization among teens, with those in models predicting other types of bullying victimization.

Bullying Perpetration

Table H3 shows results from domain-specific logistic regression models predicting the likelihood of cyber bullying perpetration among teens. Table H4 shows the z-score comparisons of coefficients in the final multivariate regression model predicting cyber bullying perpetration among teens, with those in models predicting other types of bullying perpetration.

Table H1. Domain-Specific Logistic Regression Models Predicting the Likelihood of Cyber Bullying Victimization among Teens	Controls only			School domain			Parent domain			Risk behavior domain			Psychosocial domain		
	B	S.E.		β	S.E.		β	S.E.		β	S.E.		B	S.E.	
Female	0.746	0.084	***	0.764	0.087	***	0.660	0.089	***	0.903	0.092	***	0.598	0.089	***
Pennsylvania	0.201	0.215		0.197	0.219		0.211	0.226		0.174	0.227		0.225	0.227	
New Jersey	0.416	0.128	***	0.390	0.129	**	0.429	0.132	***	0.481	0.136	***	0.395	0.133	**
White	0.209	0.102	*	0.198	0.104	†	0.237	0.105	*	0.236	0.108	*	0.284	0.107	**
Live with both parents	-0.078	0.089		-0.061	0.091		-0.032	0.093		0.007	0.095		0.022	0.094	
Age	-0.056	0.029	†	-0.049	0.029	†	-0.075	0.030	*	-0.126	0.032	***	-0.065	0.030	*
LGBTQ	0.285	0.162	†	0.237	0.166		0.249	0.169		0.159	0.170		-0.178	0.181	
School SES	-0.003	0.004		-0.002	0.005		-0.002	0.005		-0.002	0.005		-0.002	0.005	
Computer time daily	0.054	0.019	**	0.049	0.019	*	0.054	0.020	**	0.053	0.020	**	0.010	0.020	
Cell phone time daily	0.096	0.015	***	0.092	0.016	***	0.082	0.016	***	0.066	0.016	***	0.093	0.016	***
Bs and Cs				0.996	0.367	**									
Ds and Fs				0.055	0.089										
Parent closeness							-0.394	0.044	***						
Parent communication							0.106	0.015	***						
Sex (ever)										0.498	0.099	***			
Alcohol use frequency										0.039	0.013	**			
Marijuana use frequency										-0.018	0.013				
Serious drug use frequency										0.002	0.006				
Delinquency										0.153	0.036	***			
Depression frequency													0.078	0.012	***
Anger frequency													0.057	0.013	***
Anxiety frequency													0.036	0.016	*
CONSTANT	-1.897	0.573	***	-2.033	0.586	***	-0.993	0.612		-1.224	0.622	*	-2.209	0.604	***
Nagelkerke R-squared	0.066			0.066			0.100			0.098			0.155		

Note: There is no Prosocial Activities domain model, because bivariate analyses showed no significant relationship between prosocial activities and cyber bullying victimization.
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Table H2. Z-Score Comparisons of Final Multivariate Regression Model Predicting Cyber Bullying Victimization among Teens, with Models Predicting Other Bullying Victimization	Model 1 Cyber bullying			Model 2 Physical bullying			Model 3 Psychological bullying			Z-score Model 1 versus 2		Z-score Model 1 versus 3	
	B	S.E.		β	S.E.		β	S.E.		z		z	
Female	0.603	0.101	***	-0.566	0.075	***	0.218	0.075	**	9.301	***	3.075	**
New Jersey	0.423	0.143	**	0.201	0.110	†	0.579	0.111	***	1.231		-0.862	
Pennsylvania	0.081	0.245		-0.122	0.189		0.129	0.192		0.656		-0.154	
White	0.240	0.114	*	0.260	0.089	**	0.236	0.090	**	-0.138		0.028	
Live with both parents	0.063	0.102		0.004	0.080		-0.042	0.081		0.455		0.808	
Age	-0.139	0.035	***	-0.142	0.027	***	-0.140	0.027	***	0.067		0.027	
LGBTQ	-0.184	0.189		0.245	0.160		0.507	0.168	**	-1.735	†	-2.740	**
School SES	-0.004	0.005		-0.002	0.004		0.001	0.004		-0.312		-0.781	
Computer time daily	0.016	0.022		0.022	0.018		0.048	0.018	**	-0.204		-1.150	
Cell phone time daily	0.060	0.018	***	0.007	0.013		-0.016	0.013		2.409	*	3.461	***
Bs and Cs	0.081	0.485		-0.303	0.442		-0.527	0.480		0.585		0.891	
Ds and Fs	-0.158	0.102		-0.073	0.079		-0.116	0.080		-0.659		-0.324	
Parent closeness	-0.188	0.051	***	-0.127	0.041	**	-0.109	0.043	*	-0.933		-1.199	
Parent communication	0.097	0.016	***	0.033	0.013	**	0.076	0.013	***	3.095	**	1.016	
Sex (ever)	0.376	0.105	***	0.162	0.084	†	0.099	0.084		1.585		2.045	*
Alcohol use frequency	0.031	0.013	*	-0.004	0.012		-0.021	0.012	†	2.004	*	2.988	**
Delinquency	0.076	0.039	†	0.168	0.035	***	0.100	0.035	**	-1.750	†	-0.456	
Depression frequency	0.074	0.013	***	0.073	0.012	***	0.132	0.012	***	0.036		-3.294	***
Anger frequency	0.043	0.014	**	0.093	0.014	***	0.041	0.014	**	-2.567	*	0.123	
Anxiety frequency	0.028	0.017	†	0.031	0.016	†	0.044	0.018	*	-0.120		-0.622	
CONSTANT	-0.897	0.686		1.497	0.526	**	0.648	0.531		-2.769	**	-1.781	†
Nagelkerke R-squared	0.176			0.167			0.209						

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Table H3. Domain-Specific Logistic Regression Models Predicting the Likelihood of Cyber Bullying Perpetration among Teens	Controls only			School domain			Parent domain			Risk behavior domain			Psychosocial domain		
	B	S.E.		β	S.E.		β	S.E.		β	S.E.		β	S.E.	
Female	0.379	0.117	***	0.408	0.121	***	0.271	0.122	*	0.661	0.130	***	0.328	0.124	**
Pennsylvania	0.257	0.317		0.363	0.332		0.213	0.323		0.300	0.339		0.313	0.326	
New Jersey	0.225	0.180		0.231	0.183	*	0.221	0.183		0.285	0.192		0.245	0.184	*
White	0.168	0.144		0.169	0.148		0.203	0.147		0.190	0.153		0.276	0.150	†
Live with both parents	-0.177	0.125		-0.088	0.129		-0.168	0.128		0.037	0.135		-0.082	0.129	
Age	0.032	0.041		0.034	0.042		0.022	0.042		-0.091	0.047	*	0.030	0.043	
LGBTQ	0.442	0.216	*	0.395	0.223	†	0.382	0.222	†	0.163	0.228		0.071	0.232	
School SES	0.002	0.007		0.005	0.007		0.002	0.007		0.004	0.007		0.004	0.007	
Computer time daily	0.051	0.027	†	0.038	0.027		0.055	0.027	*	0.062	0.028	*	0.021	0.028	
Cell phone time daily	0.078	0.022	***	0.070	0.022	**	0.058	0.022	**	0.032	0.024		0.059	0.023	**
Daily school attendance				-0.618	0.244	*									
Bs and Cs				1.063	0.462	*									
Ds and Fs				0.259	0.125	*									
Parent closeness							-0.380	0.058	***						
Parent communication							0.117	0.021	***						
Sex (ever)										0.773	0.141	***			
Alcohol use frequency										0.047	0.016	**			
Marijuana use frequency										-0.018	0.016				
Serious drug use frequency										0.002	0.007				
Delinquency										0.262	0.041	***			
Depression frequency													0.033	0.016	*
Anger frequency													0.113	0.015	***
Anxiety frequency													-0.005	0.021	
CONSTANT	-4.064	0.834	***	-3.900	0.907	***	-3.305	0.865	***	-3.112	0.910	***	-4.612	0.870	***
Nagelkerke R-squared	0.026			0.034			0.054			0.098			0.093		

Note: There is no prosocial activities domain model, because bivariate analyses showed no significant relationship between prosocial activities and cyber bullying perpetration.
LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Table H4. Z-Score Comparisons of Final Multivariate Regression Model Predicting Cyber Bullying Perpetration among Teens, with Models Predicting Other Types of Bullying Perpetration	Model 1 Cyber bullying		Model 2 Physical bullying		Model 3 Psychological bullying		Z-core Model 1 versus 2	Z-score Model 1 versus 3
	B	S.E.	β	S.E.	β	S.E.	z	z
Female	0.414	0.141 **	-0.973	0.085 ***	-0.074	0.079	8.425 ***	3.029 **
Pennsylvania	0.328	0.361	-0.422	0.205 *	0.291	0.207	1.807 †	0.089
New Jersey	0.237	0.199	0.116	0.123	0.376	0.115 ***	0.517	-0.605
White	0.222	0.160	-0.178	0.097 †	-0.064	0.091	2.138 *	1.554
Live with both parents	0.077	0.142	0.011	0.090	0.140	0.085 †	0.393	-0.381
Age	-0.098	0.050 *	-0.068	0.030 *	-0.059	0.028 *	-0.513	-0.680
LGBTQ	0.004	0.244	-0.038	0.175	-0.085	0.165	0.140	0.301
School SES	0.006	0.007	-0.006	0.004	0.006	0.004	1.488	0.000
Computer time daily	0.044	0.030	0.032	0.020	0.038	0.018 *	0.326	0.164
Cell phone time daily	0.010	0.025	0.016	0.015	0.031	0.014 *	-0.189	-0.719
Daily school attendance	-0.177	0.280	0.088	0.212	-0.062	0.204	-0.754	-0.332
Bs and Cs	0.082	0.590	-0.678	0.491	-0.153	0.472	0.990	0.311
Ds and Fs	-0.121	0.142	0.060	0.087	-0.098	0.084	-1.088	-0.139
Parent closeness	-0.143	0.068 *	-0.054	0.045	-0.117	0.043 **	-1.093	-0.325
Parent communication	0.099	0.022 ***	0.008	0.014	0.041	0.013 **	3.434 ***	2.230 *
Sex (ever)	0.600	0.149 ***	0.069	0.094	-0.065	0.087	3.024 **	3.858 ***
Alcohol use frequency	0.039	0.016 *	0.039	0.012 ***	0.076	0.012 ***	-0.015	-1.877 †
Delinquency	0.203	0.044 ***	0.338	0.038 ***	0.272	0.036 ***	-2.305 *	-1.207
Depression frequency	0.028	0.015 †	-0.016	0.011	0.039	0.010 ***	2.389 *	-0.601
Anger frequency	0.082	0.017 ***	0.150	0.014 ***	0.069	0.012 ***	-3.135 **	0.610
CONSTANT	-3.098	1.029 **	0.485	0.622	-1.087	0.596 †	-2.980 **	-1.691 †
Nagelkerke R-squared	0.143		0.228		0.153			

LGBTQ = lesbian, gay, bisexual, transgender, questioning, or other
SES = socioeconomic status
†p<.10; *p<.05; **p<.01; ***p<.001

Appendix I: Dissemination of Project Findings to Date

Project Products to Date

Conference Presentations

Dank, M., Zweig, J.M., Yahner, J, & Lachman, P. (2012). *Prevalence of Teen Dating Abuse Victimization and Perpetration in Five School Districts in NY, PA, & NJ.* Paper Presented at the Amereican Society of Criminology, 64th Annual Meeting: November 14-17; Chicago, IL.

Lachman, P., Dank, M., Zweig, J.M., & Yahner, J. (2012). *Help-Seeking Behavior Among Youth Victims of Dating Abuse.* Paper Presented at the Amereican Society of Criminology, 64th Annual Meeting: November 14-17; Chicago, IL.

Research Briefs

Zweig., J.M. & Dank, M. (2013). *Teen Dating Abuse and Harassment in a Digital World: Implications for Prevention and Intervention.* Washington, DC: Urban Institute.

Dank, M., & Zweig, J.M (in preparation). *Interpersonal Violence Experiences of LGBTQ Youth.*

Peer-reviewed Journal Articles

Zweig, J.M., Dank, M., Yahner, J., and Lachman, P. (2013). The Rate of Cyber Dating Abuse Among Teens and How it Relates to Other Forms of Teen Dating Violence. *Journal of Youth and Adolescence, in press paper version, on-line* DOI 10.1007/s 10964-013-9922-8.

Dank, M., Lachman, P., Zweig, J.M. & Yahner, J. Dating Violence Experiences of Lesbian, Gay, Bisexual, and Transgender Youth. *In Press: Journal of Youth and Adolescence.*

Zweig, J.M., Lachman, P., Yahner, J., & Dank, M. Cyber Dating Abuse Victimization Among Teens: How it Relates to Other Aspects of Youth's Lives. *Revise & Resubmit.*

Zweig, J.M., Yahner, J. Dank, M., & Lachman, P. Can Johnson's Typology of Adult Partner Violence Apply to Teen Dating Violence? *Revise & Resubmit.*

Yahner, J., Dank, M., Zweig, J.M., & Lachman, P. The Co-Occurrence of Physical and Cyber Dating Violence and Bullying Among Teens. *Revise & Resubmit.*

Lachman, P., Zweig, J.M., Dank, M., & Yahner, J. Help Seeking Behavior Among Victims of Teen Dating Violence and Abuse. *Under Review.*

Commentaries

Zweig, J.M. (2013). One in Four Dating Teens Feel Abuse and Harassed through Digital Technology. *Huffington Post; 2/27/2013.*

Zweig, J.M. (2013). 1 in 4 Dating Teens Feel Abuse and Harassed through Digital Technology. *Urban Institute Metro Trends Blog; 2/20/2013.*

Media Coverage to Date

Print (and print on-line)

Orlando Sentinel (FL): February 20, 2013
Sun Sentinel (FL): February 21, 2013
Washington Post (DC): February 21, 3013
Seattle Times (WA): February 21, 2013
The Daily Progress (VA): February 21, 2013
Lake County Record-Bee (CA): February 21, 2013
Ukiah Daily Journal (CA): February 21, 2013
Mendocino Beacon (CA): February 21, 2013
Daily Democrat (CA): February 21, 2013
Los Angeles Daily News (CA): February 21, 2013
San Bernardino County Sun (CA): February 21, 2013
Redlands Daily Facts (CA): February 21, 2013
ContraCostaTimes.com (CA): February 21, 2013
The Daily Breeze (CA): February 21, 2013
Daily Bulletin (CA): February 21, 2013
SGVTribune (CA): February 21, 2013
Inside Bay Area (CA): February 21, 2013
Whittier Daily News: (CA): February 21, 2013
Press Telegram (CA): February 21, 2013
Chico Enterprise Record (CA): February 21, 2013
Times-Standard (CA): February 21, 2013
Vallejo Times Herald (CA): February 21, 2013
Monterey Herald (CA): February 21, 2013
Paradise Post (CA): February 21, 2013
San Jose Mercury News (CA): February 21, 2013
Pasadena Star-News (CA): February 21, 2013
Marin Independent Journal (CA): February 21, 2013
Oroville-Mercury Register (CA): February 22, 2013
The Mercury (PA): February 22, 2013
San Gabriel Valley (CA): February 22, 2013
The Reporter (PA): February 22, 2013
WebIndia123: February 22, 2013
SentinalandEnterprise.com (MA): February 24, 2013
Lowell Sun (MA): February 24, 2013
Deseret News (UT): March 1, 2013
LancMoms, Lancaster (PA): March 1, 2013
Albany Democrat-Herald (OR): March 3, 2013
Corvallis Gazette-Times (OR): March 3, 2013
Journal Gazette (IN): March 3, 2013
Washington Post (DC): March 4, 2013

RocketNews.com (top headlines around the globe): March 5, 2013
Newsday Westchester (NY): March 5, 2013
Newsday (LI and NYC): March 5, 2013
Madision.com (WI): March 6, 2013
Middletown Press (CT): March 6, 2013
Brattleboro Reformer (VT): March 9, 2013
Youth Today: March 12, 2013
Crosswalk.com: March 26, 2013
Christian Science Monitor: April 12, 2013
Salem News Net (OH): May 20, 2013

Radio

Q102 Philadelphia: March 8, 2013, Zweig Interview

Television

FOX News Channel 25 Boston: February 27, 2013, Zweig Interview

On-line Blogs

Education Week: February 20, 2013
Daily Me: February 21, 2013
Mashable: February 21, 2013
Gurl.com: February 22, 2013
TruthDive: February 22, 2013
SmashHits.com: February 22, 2013
EssentionalMums.co.nz: February 23, 2013
Her Campus, Barnard: March 7, 2013