

# Cyberbullying and Traditional Bullying: The Experiences of Poly-Victimization Among Diverse Youth

Zachary R. Myers, University of Nebraska – Lincoln, Lincoln, NE, USA

Susan M. Swearer, University of Nebraska – Lincoln, Lincoln, NE, USA

Meredith J. Martin, University of Nebraska – Lincoln, Lincoln, NE, USA

Raul Palacios, University of Nebraska – Lincoln, Lincoln, NE, USA

## ABSTRACT

This study sought to advance the authors' understanding of the relationship between traditional bullying (i.e., verbal and physical) and cyberbullying. Data were collected from 1,182 participants, ages 13 to 25 ( $M = 19.66$ ;  $SD = 3.03$ ) from 75 different countries via an on-line, world-wide survey. Results found that participants experienced both in-person bullying and cyberbullying (i.e., poly-victimization). Additionally, bisexual, pansexual, or queer participants reported more frequent cyberbullying victimization when compared to both heterosexual and gay or lesbian participants. Sexual minority participants also reported victimization through significantly more electronic sources. Specifically, gay and lesbian, bisexual, pansexual, and queer participants reported higher numbers of victimization modalities when compared to heterosexual participants. Results from this study expand the authors' awareness of the poly-victimization experiences of youth and young adults and fill in important gaps in understanding these experiences for diverse sexual orientations and gender identities.

## KEYWORDS

Bullying, Cyberbullying, Electronic Bullying, LGBTQ Youth and Young Adults, Sexual and Gender Minority Youth

## INTRODUCTION

The use and availability of technology has grown exponentially over the past two decades. A recent investigation of adolescent technology use found that 95% of teenagers use the Internet (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013). While this finding likely comes as little surprise to any clinician, parent, or educator, what may be surprising is how frequently technology is being used. In a recent Pew research study, over 90% of youth between the ages of 13 and 17 reported using technology daily, with over half of participants reporting using the Internet several times each day (Lenhart, 2015). In addition, Lenhart (2015) found that over 70% of youth reported using numerous social media sites and applications. This evolving online landscape has drastically altered how youth interact with one another, with many youth reporting creating friendships via their social media accounts (Lenhart, Smith, Anderson, Duggan, & Perrin, 2015). Therefore, this constantly developing online environment provides a digital space for youth to connect and create supportive friendships that can survive both inside and outside the face-to-face world. However, this increase in connectivity has provided outlets for other behaviors, such as cyberbullying.

DOI: 10.4018/IJT.2017070104

Copyright © 2017, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

Currently, there is no one definition of cyberbullying agreed upon by researchers. However, many agree that cyberbullying shares aspects of the definition for traditional bullying developed by Olweus (1997). Traditional conceptualizations have defined bullying as an intentionally aggressive act that occurs more than once where the perpetrator exudes some type of power over the victim, either real or imagined (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014). However, cyberbullying also contains distinctive characteristics that differentiate the modality as a unique form of bullying. The most obvious difference is the method in which individuals perpetrate the bullying behavior. While traditional forms of bullying are perpetrated largely face-to-face, cyberbullying occurs using an electronic source (Smith & Slonje, 2010), allowing for victimization to extend beyond normal school hours (i.e., 24/7) and the in-person settings often associated with traditional bullying. This factor alone has created a unique challenge for cyberbullying researchers due to the ever-changing and expanding list of technology sources. For example, early investigations of cyberbullying indicated that phone text messaging was reported minimally when compared to other electronic resources (Kowalski & Limber, 2007; Patchin & Hinduja, 2006). However, recent research has indicated that these findings may no longer be accurate, with the majority of participants reporting texting as their primary source of cyberbullying (Whittaker & Kowalski, 2015). In addition, social media sites and applications (e.g., Facebook, Twitter, Instagram) have not only grown rapidly in registered members, but also in reported use for cyberbullying (Waasdorp & Bradshaw, 2015; Whittaker & Kowalski, 2015). Thus, given the moving target that is cyberbullying, it is imperative that researchers continue to include topical modalities and locations (i.e., specific social media platforms) in their assessment of cyberbullying so that an accurate representation of the bullying landscape can be gained. Thus, one of the primary goals of this investigation was to provide updated information regarding the most commonly used modalities for cyberbullying, including social media outlets, instant messaging services, and online gaming platforms.

### **Prevalence and Co-Occurrence**

An additional aspect that has varied across studies is the reported prevalence of cyberbullying behaviors. This variability stems from measurement issues that plague the cyberbullying literature, such as the lack of a universally-accepted definition, as well as disagreement regarding whether a definition of cyberbullying should be included in self-report measures. This lack of uniformity across studies has resulted in a plethora of prevalence estimates. For example, Frisén and colleagues' (2013) found in their review of cyberbullying measures that reported cyberbullying victimization varied from less than 1% to 73% of participants. However, recent reviews and meta-analyses of the literature propose that prevalence estimates ranging from 5% to 40% may be more accurate (Kowalski, Giumetti, Schroeder, & Lattanner, 2014; Tokunaga, 2010). A recent international investigation using data from six European countries found similar prevalence estimates, ranging from 13% to 37% (Tsitsika et al., 2015). These findings suggest that reported prevalence estimates of cyberbullying are similar to those found in the traditional bullying literature (e.g., physical, verbal; Kessel Schneider, O'Donnell, Stueve, & Coulter, 2012; Nansel et al., 2001).

However, research has consistently found that cyberbullying occurs less often than traditional bullying victimization (Kowalski, Morgan, & Limber, 2012; Smith et al., 2008; Waasdorp & Bradshaw, 2015). Thus, researchers have questioned the reallocation of attention and resources to be used to address cyberbullying, given that it appears that traditional bullying represents a more significant concern for the majority of youth (Olweus, 2012). Still, these reported prevalence estimates may not accurately capture the current bullying landscape for numerous reasons. For example, a recent assessment of the cyberbullying experiences of 7 to 11-year-old youth in the United Kingdom revealed

that the majority of youth considered cyberbullying as or more upsetting than being victimized through in-person methods (Monks, Robinson, & Worlidge, 2012). In addition, while cyberbullying has been reported as occurring less often when compared to traditional methods, youth often refrain from reporting their cyberbullying victimization experiences to adults due to fearing that their access to social media and technology will be revoked (Mishna, Saini, & Solomon, 2009). Youth may choose to not report their online victimization so that they may protect their primary source of connection with friends and peers. In addition, it is difficult to accurately assess the frequency of cyberbullying given the perpetual increases in technology access for youth. While this increase in availability does not inherently translate to increases in cyberbullying victimization, research suggests that electronic harassment may be on the rise (Jones, Mitchell, & Finkelhor, 2013). Finally, while cyberbullying is often reported as occurring less frequently than traditional methods, numerous investigations have indicated that traditional and cyber victimization likely co-occur, in that the youth are likely to experience both traditional and cyberbullying (Kessel Schneider et al., 2012; Waasdorp & Bradshaw, 2015), often meeting criteria for the same role in both forms of the behavior (Raskauskas & Stoltz, 2007). In fact, a recent investigation of Canadian teenagers' cyberbullying experiences found that 95% of students reporting cyberbullying victimization also reported experiencing one or more forms of traditional bullying (Beran, Mishna, McInroy, & Shariff, 2015). This suggests that many of the individuals who are victimized through cyberbullying are victimized in-person as well. Additional research has suggested that those frequently victimized in-person are also likely victimized frequently electronically (Kowalski et al., 2012). Thus, while cyberbullying may be underreported when compared to traditional methods, cyberbullying should still be recognized as a significant area of need for research and intervention due to the potential for dual victimization. However, findings vary regarding the significance, or existence, of co-occurring bullying modalities, with some investigations finding few "overlapping" cases (Kubiszewski, Fontaine, Potard, & Auzoult, 2015; Ybarra, Diener-West, & Leaf, 2007). These discrepant findings, as well as the extensive variability in prevalence estimates across the cyberbullying literature, underscore the importance for continued research using accurate measures of assessment and representative samples. Only then will the literature base begin to find corroborating evidence regarding the cyberbullying experiences of young people.

### **Diversity in Cyberbullying Research**

Due to the potentially co-occurring nature of traditional and cyberbullying, it comes as little surprise that researchers within the field of cyberbullying have undertaken similar investigations to those in the traditional bullying field. For example, studies examining the link between cyberbullying and mental health have begun to uncover similar correlates to those found in the traditional bullying literature (e.g., Bonanno & Hymel, 2013; Patchin & Hinduja, 2010; Tsitsika et al., 2015). This suggests that the consequences of victimization, such as depression and low self-esteem, may be similar whether perpetrated via electronic or cyber modalities. However, although certain areas of scientific inquiry in the cyberbullying literature mirror that of the traditional bullying field, there is a paucity of research regarding the experiences of cyberbullying in the LGBQ community. This gap is made more important by the extensive findings within the traditional bullying literature suggesting that sexual minority youth are at increased risk for victimization compared with heterosexual youth (Fedewa & Ahn, 2011; Kann et al., 2016), as well as mental health concerns due to this homophobic victimization (Poteat & Espelage, 2007).

Not only does the traditional bullying literature point to the need for research on the experiences of cyberbullying for LGBQ youth, what limited cyberbullying research there is with this community similarly suggests that sexual minority youth are at heightened risk for exposure to electronic victimization. Studies have compared the rate of cybervictimization between LGBQ youth and their heterosexual peers have found that sexual minority youth may be as much as five times more likely to experience cyberbullying (Kessel Schneider et al., 2012; Rice et al., 2015). Additionally, youth who reported more frequent use of the internet were at greater risk for experiencing cyberbullying

victimization. Taken together, these findings are concerning, given that many sexual minority youth report using technology as a method for accessing information, coming out, and general support (Varjas, Meyers, Kiperman, & Howard, 2013). These findings suggest a potential impasse for sexual minority youth: engage in self-discovery and support through electronic means or reduce the risk for experiencing bullying and abuse online. However, studies of this nature are extremely sparse within the cyberbullying literature, which is surprising given the well-established traditional bullying experiences of sexual minority youth. Therefore, the current study sought to better inform the cyberbullying literature base by providing a more comprehensive and informative account of sexual and gender minority individuals' cyberbullying experiences.

## Gender Differences

Gender differences have also been of principal interest to bullying researchers. However, studies have often relied on binary assessments of gender and lack the diversity that comprises gender identity. While several qualitative studies have found that transgender students face pervasive harassment and assault because of their gender identities, gender expressions, and their actual or perceived sexual orientations (Grossman & D'Augelli, 2006; Gutierrez, 2004; Sausa, 2005; Wyss, 2004; Greytak, Kosciw, & Boesen, 2013), there remains a dearth of quantitative data on the school experiences of this population (Greytak et al., 2013). A recent investigation from Goldblum and colleagues (2012) found that nearly 50% of transgender adults reported experiencing gender-based victimization during their schooling. Thus, the current lack of data on transgender individuals' victimization experiences may unintentionally narrow the bullying knowledgebase while invalidating the experiences of youth who do not identify in a cisgender manner.

Investigations of gender differences in cyberbullying have also suffered from a lack of diversity and consistency of findings. Findings have suggested that girls may be more likely to experience cyberbullying victimization (Kowalski & Limber, 2007; Waasdorp & Bradshaw, 2015), while boys may be more likely to perpetrate cyberbullying behaviors (Calvete, Orue, Estévez, Villardón, Padilla, 2010; Li, 2006). Other research has called into question the accuracy of these results. For example, a meta-synthesis of the cyberbullying literature concluded that there was no significant difference across the 25 articles regarding how the genders experienced cyberbullying victimization (Tokunaga, 2010). In addition, a recent meta-analysis of cyberbullying research from 22 countries suggested age as a moderator of gender differences with girls initially more likely to perpetrate in early adolescence and males more likely to report perpetration in late adolescence and early adulthood (Barlett & Coyne, 2014). However, the primary limitation within cyberbullying research mirrors that of the traditional bullying literature: gender differences have almost exclusively been examined from a cisgender standpoint. Furthermore, important research regarding safety and mental illness may currently be neglected. Research to date has shown that bullying has been associated with worse school functioning for transgender youth, including increased school absenteeism, lower academic performance, and decreased future educational aspirations (Greytak, Kosciw, & Diaz, 2009; Grossman & D'Augelli, 2006; McGuire, Anderson, Toomey, & Russell, 2010; Reisner, Greytak, Parsons, & Ybarra, 2015). Moreover, the cumulative literature suggests that some transgender youth face significantly more mental health difficulties, such as depression, anxiety, and self-harming behaviors, and engage in more sexual risk-taking than their gender conforming peers (McGuire et al., 2010). Likewise, research indicates that victimized sexual minority youth experience greater substance use, higher levels of depression and suicidal ideation, and more participation in various risky sexual health behaviors than their heterosexually identifying peers (Bontempo, & D'Augelli, 2002; Marshall et al., 2015).

Evolving theories of how individuals experience chronic stressors and strains over the course of their lives have contributed greatly to current understandings of the social determinants of well-being (LeBlanc, Frost, & Wight, 2015). In particular, minority stress, or additional stress that is experienced related to holding a stigmatized identity in this society (Brooks, 1981; Meyer, 1995; 2003), is often named as a cause for mental health disparities among sexual minority youth, including higher levels of

depression and suicidal ideation (Baams, Grossman, & Russell, 2015). Minority stress theory (Brooks, 1981; Meyer, 1995; 2003) posits that distal and proximal stressors, such as perceived experiences of prejudice and discrimination, internalized heterosexism, identity salience, expectation of stigma, and identity concealment, are associated with adverse health outcomes in sexual minority populations. Since its development, research and scholarship with sexual minority populations has yielded robust support for the key principles of minority stress theory (e.g., Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Hatzenbuehler, 2009; Meyer, 2003).

Key tenets of minority stress theory have also been applied to trans populations (e.g., Tebbe & Moradi, 2016), and scholars have suggested the use of minority stress theory as a conceptual framework for understanding mental health concerns in this population (Hendricks & Testa, 2012). In their study with trans individuals, Tebbe and Moradi (2016) found that experiences of prejudice and discrimination, expectations of stigma, and internalized anti-trans attitudes were related to depression and suicide risk, highlighting the need for further research to investigate the impact of minority stress on mental health in this population. Thus, it is crucial that research begins to study and understand the bullying experiences, both in-person and online, of sexual and gender minority youth, given that these events represent significant, and potentially pervasive, distal stressors. Understanding the online experiences of sexual and gender minority youth is of particular importance, seeing as many use technologies for identity exploration and development (Varjas et al., 2013). However, this support may be compromised by online victimization, thus, further increasing the influence of distal stressors on sexual and gender minority individuals' lives.

## Present Study

While the field of cyberbullying research continues to grow and expand in scope, previous research has failed to provide adequate consistency across a host of important foundational topics (e.g., prevalence, modalities). In addition, the current growth and focus of the field has failed to effectively consider the unique experiences of youth who identify as LGBTQ or transgender. This article sought to address these concerns by examining these gaps with a diverse, international sample. First, prevalence and common modalities of cyberbullying were examined to provide an updated account of the current cyberbullying landscape. In addition, the minority stress model and a review of the literature on bullying experiences among diverse sexual orientations and gender identities helped guide the following research questions: (1) Does experiencing traditional bullying victimization predict victimization through cyberbullying? (2) Does self-reported frequency of cyberbullying victimization differ across participants' gender identity or sexual orientation? (3) Does gender identity or sexual orientation moderate the relationship between traditional and cyberbullying victimization experiences?

## METHOD

### Participants

Data were collected from 1,182 participants ages 13 to 25 ( $M = 19.66$ ;  $SD = 3.03$ ) as part of a larger, international study examining social experiences among young people world-wide. Data were collected from May 2016 through July 2016 via Qualtrics, an online data collection platform. Participant recruitment took place through advocacy groups for creating a better world, including Born This Way Foundation, Mattel Foundation, Life is Good Foundation, and via online platforms including Facebook, Twitter, and Snapchat. Participants in this study were from 75 countries with the majority of responses from the United States (39.2%); Brazil (32.3%); United Kingdom (4.3%); Portugal (2.5%); and Canada (2.4%). Participants were identified primarily as Caucasian (63.6%), male (52.5%), and lesbian or gay (41.8%). Table 1. describes the full demographic analysis for the sample.

**Table 1. Participant Demographic Summary**

Variable		<i>N</i> = 1,182	Percentage
Race	American Indian or Alaska Native	<i>n</i> = 10	.8%
	Asian	<i>n</i> = 47	4.0%
	Black or African American	<i>n</i> = 59	5.0%
	Native Hawaiian or Pacific Islander	<i>n</i> = 3	.3%
	White	<i>n</i> = 752	63.6%
	Multiple (2 or more races)	<i>n</i> = 199	16.8%
	Other	<i>n</i> = 112	9.5%
Gender Identity	Male	<i>n</i> = 621	52.5%
	Female	<i>n</i> = 489	41.4%
	Transgender	<i>n</i> = 25	2.1%
	Pangender/Genderqueer	<i>n</i> = 47	4.0%
Sexual Orientation	Heterosexual	<i>n</i> = 309	26.1%
	Lesbian/Gay	<i>n</i> = 494	41.8%
	Bisexual/Pansexual/Queer	<i>n</i> = 324	27.4%
	Questioning	<i>n</i> = 55	4.7%

## Measures

### *Traditional Bullying*

*The Verbal and Physical Bullying Scale* (VPBS; Swearer, 2001; Swearer, Turner, Givens, & Pollack, 2008) is part of the larger *Bully Survey – Student Version* (BYS-S; Swearer, 2001) that is published in the Centers for Disease Control and Prevention’s Compendium (Hamburger, Basile, & Vivolo, 2001). The VBPS was included in the current data collection and includes an 11-item rating scale used to determine forms of traditional bullying (verbal, relational, and physical). The VBPS has been used in previous research to assess physical bullying ( $\alpha = .83$ ) and verbal bullying ( $\alpha = .82$ ; Werth et al., 2015). For the current study we were interested in the frequency of traditional bullying and used the frequency data from the item, “How often have you been bullied?” Response choices were “never,” “one or more times a month,” “one or more times a week,” and “one or more times a day.”

### *Cyberbullying*

*Cyberbullying Questionnaire* (CQ; Myers, 2016) is a 47-item self-report questionnaire that was adapted with permission from Peter Smith’s Cyberbullying Questionnaire (P. Smith, Personal Communication, April 29, 2015; Smith et al., 2008). The CQ assesses participants’ involvement in cyberbullying as a victim and/or a perpetrator. A definition of cyberbullying from the website stopbullying.gov was provided to participants (U.S. Department of Health & Human Services, n.d.). The adapted version of the CQ includes current platforms, applications, and gaming systems where cyberbullying can occur (i.e., Yik Yak, Kik, Formspring, PS4, Xbox one) in addition to the more widely used social media platform (i.e., Facebook, Twitter, Instagram, etc.). For the current study we were interested in the frequency of cyberbullying over the past year and used the frequency data from the item, “How often have you been cyberbullied?” Responses include “never,” “one or more times a month,” “one or more times a week,” and “one or more times a day.” In addition, number of cyberbullying victimization modalities were assessed. Participants were asked to indicate their victimization experiences to nine unique outlets of cyberbullying (e.g., text messages, social media posts, online gaming). Response options were “never,” “rarely,” “occasionally,” and “a great deal.” Internal consistency for the cyber victimization scale was acceptable ( $\alpha = .73$ ).

## Procedure

The Born Brave Experiences Survey is currently in the third year of data collection and was developed in 2013 as a broad research strategy for Born This Way Foundation, a foundation dedicated to improving the lives of youth and young people world-wide. Currently in phase three of data collection, the current study has recruited a broad demographic through various foundations and organizations dedicated to improving the lives of young people. Potential participants learn about the Born Brave Experiences Survey through various in-person and electronic outlets and are directed to [www.bornthisway.foundation](http://www.bornthisway.foundation) to access the survey. For youth under the age of 18, parents sign electronic consent and then provide an email address where the survey is emailed to their child. For young adults over the age of 18, they are directed to click on the young adult survey and after they consent, they complete the survey. At the completion of the survey, all participants received a coupon code for 15% off Life is Good® merchandise.

## RESULTS

### Data Analysis

Data analysis occurred in two phases. In the first phase, the entire sample of 1,182 participants were included in analyses. ANOVAs were run in order to compare the frequency of self-reported cybervictimization experienced by young people across different gender identities and sexual orientations. A pathmodel was also conducted using Amos 22.0 software (Arbuckle, 2013), to examine the association between the frequency of traditional and cyberbullying victimization across these groups. A second phase of analysis was conducted using only those participants who reported at least one instance of cybervictimization in the past year. These participants completed an additional assessment regarding the sources or modalities from which they were the target of cyberbullying (e.g., texting, social media), resulting in a sample of 259. This second phase of analyses was designed to examine potential differences in the diversity of sources by which participants of different gender identities and sexual orientations experience cyberbullying. Separate ANOVAs were again completed in order to compare the breadth of modalities across these groups.

### Descriptive Statistics

Table 2 provides prevalence and frequency estimates for reported traditional and cyberbullying victimization. Traditional bullying victimization was reported as a more prevalent and frequent behavior when compared to cyberbullying victimization. Furthermore, of those who reported cyberbullying victimization within the last 12 months ( $n = 259$ ), 77% ( $n = 200$ ) also reported co-occurring traditional victimization experiences. Regarding reported cyberbullying modalities (i.e., social media posts, texting, instant messaging), participants reported victimization through an average of 4.49 ( $SD = 2.37$ ) technology sources. Figure 1 portrays the average reported frequency of victimization for the nine cyberbullying modalities. Social media posts were the most frequently reported source of victimization, followed by mean text messages, instant messaging services, and online chatrooms.

### Overlap Between Traditional Victimization and Cybervictimization Frequency

Preliminary analyses indicated that participants' reports of cybervictimization were positively skewed. Therefore, a logarithmic transformation was used in all subsequent analyses. A path model was completed in Amos (Arbuckle, 2013) in order to test whether participants who reported experiencing traditional forms of victimization also reported experiencing cybervictimization. Age, youth (i.e., ages 13-18) versus young adult (i.e., ages 19-25), was also specified as a potential moderator of this link. The results of this model revealed a significant, positive association between frequency of traditional

Figure 1. Average reported frequency for cyberbullying modalities

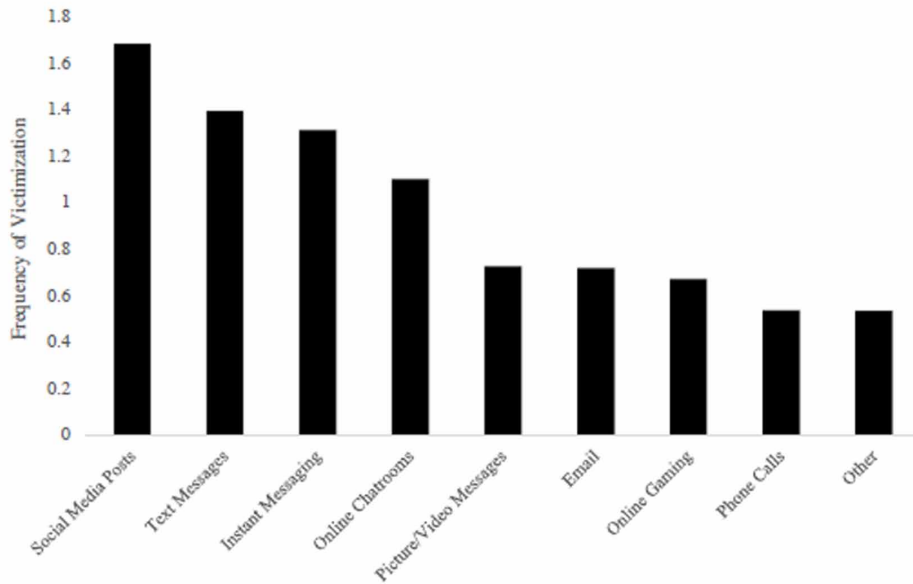


Table 2. Prevalence and frequency estimates of traditional and cyberbullying within the last year

Type of bullying		<i>N</i> = 1,182	Percentage
Traditional Victimization: Prevalence	Yes	<i>n</i> = 548	46.4%
	No	<i>n</i> = 634	53.6%
Cyberbullying Victimization: Prevalence	Yes	<i>n</i> = 265	22.4%
	No	<i>n</i> = 917	77.6%
Traditional Victimization: Frequency	Never	<i>n</i> = 634	53.6%
	One or more times a month	<i>n</i> = 322	27.3%
	One or more times a week	<i>n</i> = 143	12.1%
	One or more times a day	<i>n</i> = 83	7.0%
Cyberbullying Victimization: Frequency	Never	<i>n</i> = 917	77.6%
	One or more times a month	<i>n</i> = 222	18.8%
	One or more times a week	<i>n</i> = 33	2.8%
	One or more times a day	<i>n</i> = 10	.8%

and cyber forms of victimization,  $\beta = .30, p < .001$  (see Figure 2). Neither age nor the interaction term evidenced a unique effect.

We then proceeded to examine the comparability of this path model separately across (a) the four gender identity groups (i.e., male, female, trans, pangender/genderqueer) and (b) the four sexual orientation groups (i.e., heterosexual, gay/lesbian, bisexual/pansexual, questioning). We completed a multigroup invariance test for each set of groups, comparing a model in which all paths were free to vary with a model in which the regression of traditional victimization onto cybervictimization was constrained to be equal across groups (Byrne, 2013). Observing the  $X^2$  difference between nested models (i.e., Kline, 2015), we found that the positive association between frequency of traditional and cybervictimization did not differ across gender identity,  $X^2 diff (df=3) = 6.64, p = .08$ , nor sexual orientation,  $X^2 diff (df=3) = 2.50, p = .48$ .



Figure 2. Path model illustrating the association between the frequency of traditional forms of victimization and cybervictimization.  
 \*\*  $p < .001$

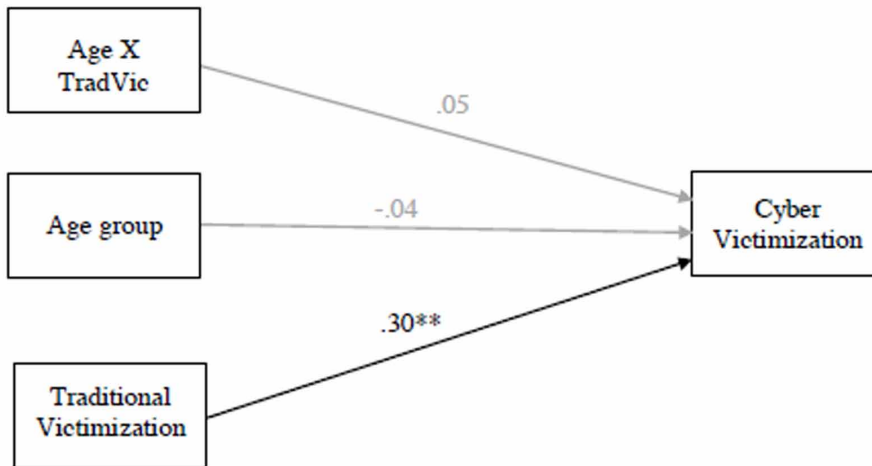


Table 3. Descriptives and correlations between age and youth reports of traditional forms of victimization and cybervictimization

	<i>M</i>	<i>SD</i>	1	2
4. Age Group	---	---	---	
5. Traditional Victimization	.73	.93	-.12**	---
6. Cybervictimization	.27	.55	-.05	.35**

\*\*  $p < .001$

### Frequency of Cyberbullying Across Gender Identity and Sexual Orientation

Next, an analysis of variance (ANOVA) was conducted to examine whether the reported frequency of cybervictimization varied across gender identity. Age category was included as a covariate. The results, presented in Table 3, indicated a statistically significant main effect for gender identity,  $F(3, 1181) = 5.88, p < .001, \eta^2 = .02$ . Neither age nor the interaction of age by gender identity predicted cybervictimization frequency. Pairwise comparisons using a Bonferroni adjustment suggest that transgender participants report being the target of cybervictimization more frequently compared with: (a) Males,  $p < .001, CI [.05, .21]$ ; (b) Females,  $p < .001, CI [.04, .20]$ ; and pangender/genderqueer individuals,  $p < .05, CI [.01, .21]$ . No other differences were found.

A second ANOVA was conducted to examine differences in cybervictimization frequency across sexual orientation (see Table 3). Age was again included as a covariate and potential moderator. The results evidenced a significant main effect for sexual orientation,  $F(3, 1181) = 3.78, p < .01, \eta^2 = .01$ . Again, no age effects were evident. Pairwise comparisons indicated that participants reporting a bisexual or pansexual orientation reported more frequently experiencing cybervictimization compared to: (a) heterosexual participants,  $p < .01, CI [.01, .07]$  and (b) gay or lesbian participants,  $p < .05,$

CI [.01, .06]. Those self-identifying as heterosexual, gay/lesbian, and questioning did not evidence different rates of cybervictimization.

### Modalities of Cyberbullying Experience Across Gender Identity and Sexual Orientation

The final analyses examined differences across gender identity and sexual orientation in the degree to which individuals report being the target of cyberbullying across different modalities (e.g., texting, social media). Two separate ANOVAs were again used, each including age as a covariate and potential moderator. The results of each are displayed in Table 4 and Table 5. A significant main effect for gender identity was found,  $F(3, 258) = 3.96, p < .05, \eta^2 = .05$ . Pairwise comparisons indicate that there is only one group difference. Of the participants who reported experiencing cybervictimization in the past year, males described cyberbullying stemming from a greater number of online sources compared to females,  $p < .01, CI [.19, 1.93]$ . The second ANOVA also evidenced a main effect for sexual orientation on cybervictimization modality,  $F(3, 258) = 3.87, p < .01, \eta^2 = .04$ . Pairwise comparisons indicated two group differences. Gay/lesbian participants reported experiencing cybervictimization across a broader range of modalities than heterosexual participants,  $p < .01, CI [.18, 2.43]$ . Bisexual or pansexual participants also reported being the target of cyberbullying across more modalities than heterosexual participants,  $p < .05, CI [.14, 2.28]$ .

## DISCUSSION

This study provides further support for the need to consider both the traditional and cyberbullying experiences of victimized youth. Consistent with research (Kowalski, Morgan, & Limber, 2012; Smith et al., 2008), cyberbullying was reported less often and less frequently than traditional bullying victimization. In the current study, 46% of participants reported experiencing traditional victimization. Comparatively, nearly a quarter (22%) of participants reported some type of cyberbullying victimization over the past year. This finding is consistent with recent international investigations of cyberbullying (Tsitsika et al., 2015) and falls within the range of reported prevalence estimates analyzed in previous syntheses of the literature (Kowalski et al., 2014; Tokunaga, 2010). Thus, while cyberbullying may not occur as frequently as victimization through traditional means, victimization online remains a

Table 4. ANOVA describing the frequency of reports of cybervictimization across gender identity and sexual orientation

Gender Identity										
	Male		Female		Transgender		Genderqueer/ Pangender		ANOVA	
	(n = 621)		(n = 489)		(n = 25)		(n = 47)		(n = 1182)	
	M	SD	M	SD	M	SD	M	SD	F	p
Cyber Victimization	0.25 <sup>a</sup>	0.55	0.26 <sup>b</sup>	0.52	0.72 <sup>abc</sup>	0.89	0.32 <sup>c</sup>	0.56	5.88	< .001
Sexual Orientation										
	Heterosexual		Gay/Lesbian		Bisexual/ Pansexual		Questioning		ANOVA	
	(n = 309)		(n = 494)		(n = 324)		(n = 55)		(n = 1182)	
	M	SD	M	SD	M	SD	M	SD	F	p
Cyber Victimization	0.21 <sup>a</sup>	0.47	0.27 <sup>b</sup>	0.58	0.33 <sup>ab</sup>	0.58	0.27	0.49	3.78	< .01

Table 5. ANOVA describing the frequency of youth reports of cybervictimization across gender identity and sexual orientation

Gender Identity										
	Male		Female		Transgender		Genderqueer/ Pangender		ANOVA	
	(n = 125)		(n = 108)		(n = 13)		(n = 13)		(n = 259)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Cyber Victimization	5.11 <sup>a</sup>	2.48	3.86 <sup>a</sup>	2.06	4.54	1.61	3.77	2.92	3.96	< .001
Sexual Orientation										
	Heterosexual		Gay/Lesbian		Bisexual/ Pansexual		Questioning		ANOVA	
	(n = 54)		(n = 101)		(n = 90)		(n = 14)		(n = 259)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Cyber Victimization	3.41 <sup>ab</sup>	1.94	4.91 <sup>a</sup>	2.60	4.69 <sup>b</sup>	2.22	4.43	1.95	3.87	< .01

significant concern for a sizeable percentage of youth and young adults. In addition, nearly 80% of participants who reported experiencing cyberbullying victimization reported experiencing in-person victimization as well. This finding is consistent with past literature, which has found high rates of dual victimization experiences (Kessel Schneider et al., 2012). These findings underscore the complexity of cyberbullying experiences. Many youth who are victimized online will likely endure similar aggressions in-person (i.e., poly-victimization). For example, Waasdorp and Bradshaw (2015) reported that the majority of cyberbullying victims reported victimization co-occurring in-person victimization through all three traditional bullying subtypes (i.e., physical, verbal, relational).

### Modalities of Cyberbullying

An additional goal of the current study was to provide an updated account of the most relevant and common modalities of cyberbullying victimization currently being reported by youth and young adults. Youth and young adults reported victimization occurring through an average of four-and-a-half outlets. Negative posts on social media was the most frequently reported modality of cyberbullying victimization, followed by text messages, instant messaging services, and online chatrooms. These findings are consistent with more recent investigations in the cyberbullying literature (Waasdorp & Bradshaw, 2015; Whittaker & Kowalski, 2015), suggesting that the current trend in online victimization is through an individual's social media accounts, while threatening phone calls and emails are no longer current experiences of young people. In addition, instant messaging services (e.g., Facebook Messenger, WhatsApp) may represent a unique risk factor, given that messages sent through these platforms are often private and unable to be observed unless explicitly shared by the victim. Therefore, future research should address the differences in psychosocial functioning across the modalities of cyberbullying victimization, particularly for platforms that include multiple modalities under one service or organization (e.g., Facebook public posts, Facebook Messenger, Live Video, Instagram). Research can begin to compare the separate and combined effects of these modalities of victimization. In addition, given the number of victimization modalities reported by youth, adults must continue to learn and be aware of the multitude of sites, applications, and other technology platforms available to youth and understand how they work. Failure to do so may result in youth being less likely to see trusted adults as technologically informed and, thus, may refrain from reporting the victimization experiences.

## Main Analyses

### *Association of Traditional and Cyber Victimization*

Regarding the relationship between traditional and cyberbullying victimization, it was hypothesized that self-reported victimization through traditional methods would predict more frequent cyberbullying victimization. This hypothesis was supported, indicating that youth who endure regular in-person victimization are also victimized frequently online. Further analysis of this significant path model across gender identity and sexual orientation revealed no significant difference in the strength of the model across the groups, suggesting that this predictive relationship is true for all genders and sexual orientations in this sample. These findings are consistent with previous research that has suggested that in-person victimization experiences predict co-occurring electronic victimization (Hinduja & Patchin, 2008; Raskauskas & Stoltz, 2007). Importantly, the current analyses support previous research suggesting that frequency of victimization also plays a significant role in explaining the relationship between traditional and cyberbullying victimization (Kowalski et al., 2012). These findings also support the belief that cyberbullying must be conceptualized along with the traditional bullying experiences of youth. While there are certainly unique factors that differentiate cyberbullying from in-person methods (e.g., 24/7 access to technology), parents, psychologists, and researchers must also consider the likelihood of co-occurring traditional victimization in the conceptualization of their child's cyberbullying experiences and subsequent psychosocial functioning (Olweus, 2012). Failing to assess and consider these poly-victimization victimization experiences could result in increased negative mental health and social outcomes. Thus, research should continue to assess both traditional and electronic modalities of bullying in tandem to best understand the psychosocial differences among youth involved in bullying.

### *Frequency Across Gender and Sexual Orientation*

A significant strength of the current study was the assessment and inclusion of diverse sexual orientations and gender identities. Analysis of these groups revealed significant differences in cyberbullying victimization frequencies. Participants who self-identified as bisexual, pansexual, or queer reported more frequent cyberbullying victimization when compared to both heterosexual and gay or lesbian participants. Previous research has demonstrated that individuals who identify as bisexual may be less accepted than gay and lesbian individuals (Eliason, 1997) and that monosexist views permeate the social experiences of bisexual and pansexual individuals (Ross, Dobinson, & Eady, 2010). Thus, individuals who identify in a non-monosexual manner may be at-risk for more frequent victimization, particularly through online modalities. These findings are also consistent with previous research that has reported higher prevalence of cyberbullying victimization for sexual minority youth (Kessel Schneider et al., 2012; Rice et al., 2015). However, the current findings add to the literature in several ways. For example, research examining the cyberbullying experiences of sexual minority youth is limited. Studies that have examined this relationship have included dichotomous (i.e., heterosexual vs. sexual minority) analyses only, thus, neglecting the variability across the sexual orientation statuses. Furthermore, these data suggest that bisexual, pansexual, and queer youth and young adults are not only more likely to be victimized, but also that they experience significantly more abusive online behaviors than their heterosexual and lesbian or gay counterparts.

Differences in frequency of cyberbullying victimization also differed across gender. Participants who identified as transgender reported more frequent cyberbullying victimization than males, females, and genderqueer or pangender participants. These findings are consistent with previous research in the extant bullying literature finding that transgender individuals are at-risk for elevated rates of in-person victimization (Goldblum et al., 2012). In addition, these results provide support for applying minority stress theory with transgender individuals. While cyberbullying victimization represents one of the many potential sources of discrimination and abuse likely experienced by transgender individuals, the increased frequency of victimization experienced by transgender individuals relative to cisgender peers suggests that this is an important issue in cyberbullying education and intervention.

However, few quantitative studies of transgender individuals' victimization experiences have been conducted across both the traditional and cyberbullying literature bases. Therefore, it is crucial that future research continues to examine the unique experiences of all gender identities.

### *Modalities of Victimization Across Gender and Sexual Orientation*

Lastly, differences in the number of reported cyberbullying victimization modalities (e.g., social media, texting, instant messaging) were examined across sexual orientation and gender identity. Consistent with current and previous findings, sexual minority individuals reported victimization through significantly more electronic sources. Specifically, gay and lesbian, as well as bisexual, pansexual, and queer youth and young adults reported higher numbers of victimization modalities when compared to heterosexual participants. Taken together, bisexual, pansexual, and queer individuals may be at-risk for more frequent cyberbullying victimization through numerous technology sources. Thus, given the frequency and pervasiveness of abuse non-monosexual identifying individuals face, as well as the lack of acceptance afforded to them (Eliason, 1997), these individuals may be at-risk for significant mental health concerns.

Gender differences were also observed for number of cyberbullying victimization modalities. Males reported victimization through significantly more technology modalities when compared to females. This finding is surprising, given that previous research has tended to suggest that females are more likely to experience cyberbullying victimization (Kowalski & Limber, 2007; Waasdorp & Bradshaw, 2015). However, previous research has suggested that males may be more likely to perpetrate specific types of cyberbullying behaviors, particularly behaviors that include sending images that are aggressive or sexual in nature (Calvete et al., 2010). Thus, these data provide additional information to the current discrepant gender findings by underscoring the complexity likely impacting such undertakings. For example, the cyberbullying literature may benefit most from investigations examining potential gender differences across cyberbullying modalities, as compared to general victimization and perpetration rates, as has been done in the traditional bullying literature. In addition, researchers would be best served by including diverse gender identity responses to account for actual differences in bullying experiences for all youth.

### **Limitations and Future Directions**

As mention above, the majority of the literature that has included aspects of gender identity or sexual orientation have typically condensed their analyses into dichotomous groupings (e.g., heterosexual vs. non-heterosexual). This was the first study to examine and compare cyberbullying experiences across a wide range of unique sexual orientation and gender identity subgroups. However, no study is without limitations. The recruitment through online sources like Twitter, Facebook, and Instagram, using accounts from Lady Gaga, Born This Way Foundation, Mattel, and Life is Good, allowed the authors access to an unprecedented accounting of the experiences of cyberbullying within sexual and gender minority groups. However, this targeted approach may also have inflated reported rates of diverse gender identities and sexual orientations compared to the general public. For example, less than 30% of the current sample identified as heterosexual. Caution should be exercised in generalizing these findings beyond this population. Second, although several analyses suggested that sexual/gender minority youth report experiencing high levels of cybervictimization, our assessment of frequency and modality did not include additional information regarding the content of these messages. For example, research suggests that sexual minority youth experience a disproportional amount of homophobic victimization targeting their sexual orientation (Birkett, Espelage, & Koenig, 2009). Future research should consider the content of bullying as well as the source (i.e., cyber, traditional). In addition, data from the current study was collected concurrently, preventing us from examining whether traditional forms of bullying precede increases in exposure to cybervictimization, as has been found in previous studies (Hemphill, Tollit, Kotevski, & Heerde, 2015). Similarly, although the rates of cybervictimization and the association between traditional and cyber forms of victimization did not differ across age, the cross-sectional nature of the data prevented us from examining individual

trajectories of change in these experiences. Better understanding the interconnections between these two forms of bullying and how each unfolds over time may help to identify clearer targets for early prevention efforts to limit the spread of both forms of victimization. Lastly, future research efforts should continue to strive to inform federal, state, and school-level policy change. In the United States, many states and schools have adopted policy language on cyberbullying. However, states vary regarding what is included in these policy statements (e.g., allowing for sanctions at school, off-campus jurisdiction; Cyberbullying Research Center, n.d.). Additionally, future research must continue to include diverse samples in order to best represent those potentially at-risk for experiencing more frequent bullying and suggest the need for specific policies protecting those individuals.

## CONCLUSION

The rapid growth of technology has allowed individuals to connect with one another in ways that were once the subject of science fiction. Youth can reply to text messages on a watch, video chat through a camera that can fit in one's hand, and message one another instantly from across the room or across the world. Technology has undoubtedly connected lives world-wide. However, as with any social connection, the increasing availability and use of technology has also placed youth at-risk for unique and multiple forms of victimization. This paper sought to address several gaps in the cyberbullying literature.

While cyberbullying occurs less frequently than traditional bullying victimization, the majority of youth victimized through cyberbullying experience in-person victimization as well. Furthermore, the current study suggests that not only are the two forms of victimizations associated, but that youth who experience frequent in-person victimization are more likely to experience high levels of victimization online as well. Thus, some youth may be at-risk for significant psychosocial concerns due to being frequently targeted through a combination of electronic and in-person victimization methods. Future research should continue to investigate the mental health correlates of those experiencing multiple forms of bullying and help young people develop helpful coping strategies for mitigating these negative outcomes.

In addition, given that sexual and gender minority youth reported significantly more frequent cyberbullying victimization, it is important that future research continues to incorporate the diversity of gender and sexual orientation in their assessment and conceptualization of bullying experiences. Future research should also begin to identify protective factors unique to the digital world. Websites that promote diversity and kindness (e.g., Littlemonsters.com, The TrevorSpace.org) can provide safe online experiences that would allow sexual and gender minority youth to better explore and develop personal identities, obtain information on relevant sexual and health topics, and develop supportive online relationships. In addition, safety and reporting features included on social media sites should be lauded and continued to be developed to best provide resources and support to those individuals in need. For example, Facebook has recently released a new safety center to provide youth with resources and support not only for bullying experiences, but other safety concerns related to social media use. While service providers are limited in their ability to identify perpetrators of online abuse due to issues surrounding freedom of speech, developers should continue to incorporate safety and support pages on their sites and applications for victimized and at-risk youth.

In 1999, the American Public Health Association released a resolution on the need for more research on diverse gender identities and sexual orientations. However, research inclusive of diverse populations has not kept pace with this resolution, particularly among young people. The study helps advance our knowledge of poly-victimization across age, gender, and sexual orientation. Understanding the co-occurrence of on-line and off-line victimization will help inform educational and legislative policies around bullying experiences. Effective policies increase public awareness about the detrimental effects of poly-victimization and will lead to education and interventions that will reduce all forms of bullying, ultimately creating a kinder and braver world.

## ACKNOWLEDGMENT

The authors would like to thank Born This Way Foundation for supporting the Born Brave Experiences Study and Dr. Elliot Tebbe for his contributions to the manuscript.

## REFERENCES

- Almeida, J., Johnson, R. M., Corliss, H. L., Molnar, B. E., & Azrael, D. (2009). Emotional distress among LGBT youth: The influence of perceived discrimination based on sexual orientation. *Journal of Youth and Adolescence*, 38(7), 1001–1014. doi:10.1007/s10964-009-9397-9 PMID:19636742
- American Public Health Association. (1999). APHA policy statement 9819: The need for public health research on gender identity and sexual orientation. *American Journal of Public Health*, 89, 444–445. Retrieved from <http://ajph.aphapublications.org/>
- Arbuckle, J. L. (2013). *AMOS 22*. Chicago, IL: SPSS.
- Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental Psychology*, 51(5), 699–696. doi:10.1037/a0038994 PMID:25751098
- Barlett, C., & Coyne, S. M. (2014). A meta-analysis of sex differences in cyber-bullying behavior: The moderating role of age. *Aggressive Behavior*, 40(5), 474–488. doi:10.1002/ab.21555 PMID:25098968
- Beran, T., Mishna, F., McInroy, L. B., & Shariff, S. (2015). Childrens experiences of cyberbullying: A Canadian national study. *Children & Schools*, 37(4), 207–214. doi:10.1093/cs/cdv024
- Birkett, M., Espelage, D. L., & Koenig, B. (2009). LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. *Journal of Youth and Adolescence*, 38(7), 989–1000. doi:10.1007/s10964-008-9389-1 PMID:19636741
- Bonanno, R. A., & Hymel, S. (2013). Cyber bullying and internalizing difficulties: Above and beyond the impact of traditional forms of bullying. *Journal of Youth and Adolescence*, 42(5), 685–697. doi:10.1007/s10964-013-9937-1 PMID:23512485
- Bontempo, D. E., & DAugelli, A. R. (2002). Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths health risk behavior. *The Journal of Adolescent Health*, 30(5), 364–374. doi:10.1016/S1054-139X(01)00415-3 PMID:11996785
- Brooks, V. R. (1981). *Minority stress and lesbian women*. Lexington, MA: Lexington Books.
- Byrne, B. M. (2013). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York, NY: Routledge.
- Calvete, E., Orue, I., Estévez, A., Villardón, L., & Padilla, P. (2010). Cyberbullying in adolescents: Modalities and aggressors profile. *Computers in Human Behavior*, 26(5), 1128–1135. doi:10.1016/j.chb.2010.03.017
- Cyberbullying Research Center. (n.d.). *Bullying laws across America*. Retrieved from <http://cyberbullying.org/bullying-laws>
- Eliason, M. J. (1997). The prevalence and nature of biphobia in heterosexual undergraduate students. *Archives of Sexual Behavior*, 26(3), 317–326. doi:10.1023/A:1024527032040 PMID:9146816
- Fedewa, A. L., & Ahn, S. (2011). The effects of bullying and peer victimization on sexual-minority and heterosexual youths: A quantitative meta-analysis of the literature. *Journal of GLBT Family Studies*, 7(4), 398–418. doi:10.1080/1550428X.2011.592968
- Frisén, A., Sofia, B., Schultze-Krumbholz, A., Scheithauer, H., Naruskov, K., Luik, P., & Zukauskienė, R. (2013). Measurement issues: A systematic review of cyberbullying instruments. In P. K. Smith & G. Steffgen (Eds.), *Cyberbullying through the new media: Findings from an international network* (pp. 37–62). New York, NY: Psychology Press.

- Gladden, R. M., Vivolo-Kantor, A. M., Hamburger, M. E., & Lumpkin, C. D. (2014). *Bullying surveillance among youths: Uniform definitions for public health and recommended data elements, version 1.0*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention and U.S. Department of Education.
- Goldblum, P., Testa, R. J., Pflum, S., Hendricks, M. L., Bradford, J., & Bongar, B. (2012). The relationship between gender-based victimization and suicide attempts in transgender people. *Professional Psychology, Research and Practice, 43*(5), 468–475. doi:10.1037/a0029605
- Greytak, E. A., Kosciw, J. G., & Boesen, M. J. (2013). Putting the T in Resource: The benefits of LGBT-related school resources for transgender youth. *Journal of LGBT Youth, 10*(1-2), 45–63. doi:10.1080/19361653.2012.718522
- Greytak, E. A., Kosciw, J. G., & Diaz, R. M. (2009). *Harsh realities: The experiences of transgender youth in our nation's schools*. New York, NY: Gay, Lesbian, and Straight Education Network.
- Grossman, A. H., & D'Augelli, A. R. (2006). Transgender youth: Invisible and vulnerable. *Journal of Homosexuality, 51*(1), 111–128. doi:10.1300/J082v51n01\_06 PMID:16893828
- Gutierrez, N. (2004). Resisting fragmentation, living whole: Four female transgender students of color speak about school. *Journal of Gay & Lesbian Social Services, 16*(3/4), 69–79. doi:10.1300/J041v16n03\_05
- Hamburger, M. E., Basile, K. C., & Vivolo, A. M. (2011). *Measuring bullying victimization, perpetration, and bystander experiences: A compendium of assessment tools*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma get under the skin? A psychological mediation framework. *Psychological Bulletin, 135*(5), 707–730. doi:10.1037/a0016441 PMID:19702379
- Hemphill, S. A., Tollit, M., Kotevski, A., & Heerde, J. A. (2015). Predictors of traditional and cyber-bullying victimization: A longitudinal study of Australian secondary school students. *Journal of Interpersonal Violence, 30*(15), 2567–2590. doi:10.1177/0886260514553636 PMID:25315480
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the minority stress model. *Professional Psychology, Research and Practice, 43*(5), 460–467. doi:10.1037/a0029597
- Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior, 29*(2), 129–156. doi:10.1080/01639620701457816
- Jones, L. M., Mitchell, K. J., & Finkelhor, D. (2013). Online harassment in context: Trends from three Youth Internet Safety Surveys (2000, 2005, 2010). *Psychology of Violence, 3*(1), 53–69. doi:10.1037/a0030309
- Kann, L., Olsen, E. O., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., & Zaza, S. et al. (2016). Sexual identity, sex of sexual contacts, and health-related behaviors among students in grades 9–12 — United States and Selected Sites, 2015. *MMWR. Surveillance Summaries, 65*(9), 1–202. doi:10.15585/mmwr.ss6509a1 PMID:27513843
- Kessel Schneider, S., O'Donnell, L., Stueve, A., & Coulter, R. S. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health, 102*(1), 171–177. doi:10.2105/AJPH.2011.300308 PMID:22095343
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). New York, NY: The Guilford Press.
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin, 140*(4), 1073–1137. doi:10.1037/a0035618 PMID:24512111
- Kowalski, R. M., & Limber, S. P. (2007). Electronic bullying among middle school students. *The Journal of Adolescent Health, 41*(6Suppl), S22–S30. doi:10.1016/j.jadohealth.2007.08.017 PMID:18047942
- Kowalski, R. M., Morgan, C. A., & Limber, S. P. (2012). Traditional bullying as a potential warning sign of cyberbullying. *School Psychology International, 33*(5), 505–519. doi:10.1177/0143034312445244



- Kubiszewski, V., Fontaine, R., Potard, C., & Auzoult, L. (2015). Does cyberbullying overlap with school bullying when taking modality of involvement into account? *Computers in Human Behavior, 43*, 49–57. doi:10.1016/j.chb.2014.10.049
- LeBlanc, A. J., Frost, D. M., & Wight, R. G. (2015). Minority stress and stress proliferation among same-sex and other marginalized couples. *Journal of Marriage and the Family, 77*(1), 40–59. doi:10.1111/jomf.12160 PMID:25663713
- Lenhart, A. (2015). *Teens, social media & technology overview 2015*. Retrieved from Pew Research website: <http://www.pewinternet.org/2015/04/09/teens-social-media-technology-2015/>
- Lenhart, A., Smith, A., Anderson, M., Duggan, M., & Perrin, A. (2015). *Teens, technology & friendships: Video games, social media and mobile phones play an integral role in how teens meet and interact with friend*. Retrieved from: <http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/>
- Li, Q. (2006). Cyberbullying in Schools: A Research of Gender Differences. *School Psychology International, 27*(2), 157–170. doi:10.1177/0143034306064547
- Madden, M., Lenhart, A., Duggan, M., Cortesi, S., & Gasser, U. (2013). *Teens and technology 2013*. Retrieved from: <http://www.pewinternet.org/2013/03/13/teens-and-technology-2013/>
- Marshall, A., Yarber, W. L., Sherwood-Laughlin, C. M., Gray, M. L., & Estell, D. B. (2015). Coping and survival skills: The role school personnel play regarding support for bullied sexual minority-oriented youth. *The Journal of School Health, 85*(5), 334–340. doi:10.1111/josh.12254 PMID:25846313
- McGuire, J. K., Anderson, C. R., Toomey, R. B., & Russell, S. T. (2010). School climate for transgender youth: A mixed method investigation of student experiences and school responses. *Journal of Youth and Adolescence, 39*(10), 1175–1188. doi:10.1007/s10964-010-9540-7 PMID:20428933
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior, 36*(1), 38–56. doi:10.2307/2137286 PMID:7738327
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674–697. doi:10.1037/0033-2909.129.5.674 PMID:12956539
- Mishna, F., Saini, M., & Solomon, S. (2009). Ongoing and online: Children and youths perceptions of cyber bullying. *Children and Youth Services Review, 31*(12), 1222–1228. doi:10.1016/j.childyouth.2009.05.004
- Monks, C. P., Robinson, S., & Worlidge, P. (2012). The emergence of cyberbullying: A survey of primary school pupils perceptions and experiences. *School Psychology International, 33*(5), 477–491. doi:10.1177/0143034312445242
- Myers, Z. R. (2016). *Cyberbullying Questionnaire. Unpublished assessment*. Lincoln, NE: Department of Educational Psychology, University of Nebraska – Lincoln.
- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of the American Medical Association, 285*(16), 2094–2100. doi:10.1001/jama.285.16.2094 PMID:11311098
- Olweus, D. (1997). Bully/victim problems in school: Facts and intervention. *European Journal of Psychology of Education, 12*(4), 495–510. doi:10.1007/BF03172807
- Olweus, D. (2012). Cyberbullying: An overrated phenomenon? *European Journal of Developmental Psychology, 9*(5), 520–538. doi:10.1080/17405629.2012.682358
- Patchin, J. W., & Hinduja, S. (2006). Bullies Move Beyond the Schoolyard: A Preliminary Look at Cyberbullying. *Youth Violence and Juvenile Justice, 4*(2), 148–169. doi:10.1177/1541204006286288
- Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and Self-Esteem. *The Journal of School Health, 80*(12), 614–621. doi:10.1111/j.1746-1561.2010.00548.x PMID:21087257
- Poteat, V. P., & Espelage, D. L. (2007). Predicting psychosocial consequences of homophobic victimization in middle school students. *The Journal of Early Adolescence, 27*(2), 175–191. doi:10.1177/0272431606294839

- Raskauskas, J., & Stoltz, A. D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology, 43*(3), 564–575. doi:10.1037/0012-1649.43.3.564 PMID:17484571
- Reisner, S. L., Greytak, E. A., Parsons, J. T., & Ybarra, M. L. (2015). Gender minority social stress in adolescence: Disparities in adolescent bullying and substance use by gender identity. *Journal of Sex Research, 52*(3), 243–256. doi:10.1080/00224499.2014.886321 PMID:24742006
- Rice, E., Petering, R., Rhoades, H., Winetrobe, H., Goldbach, J., Plant, A., & Kordic, T. et al. (2015). Cyberbullying perpetration and victimization among middle-school students. *American Journal of Public Health, 105*(3), e66–e72. doi:10.2105/AJPH.2014.302393 PMID:25602905
- Ross, L. E., Dobinson, C., & Eady, A. (2010). Perceived determinants of mental health for bisexual people: A qualitative examination. *American Journal of Public Health, 100*, 496–502. doi:10.2105/AJPH.2008.156307
- Sausa, L. A. (2005). Translating research into practice: Trans youth recommendations for improving school systems. *Journal of Gay & Lesbian Issues in Education, 3*(1), 15–28. doi:10.1300/J367v03n01\_04
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 49*(4), 376–385. doi:10.1111/j.1469-7610.2007.01846.x PMID:18363945
- Smith, P. K., & Slonje, R. (2010). Cyberbullying: The nature and extent of a new kid of bullying, in and out of school. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 249–262). New York: Routledge Publishing.
- Swearer, S. M. (2001). *The Bully Survey*. Unpublished manuscript. Department of Educational Psychology, The University of Nebraska – Lincoln, Lincoln, NE.
- Swearer, S. M., Turner, R. K., Givens, J. E., & Pollack, W. S. (2008). “You’re so gay!”: Do different forms of bullying matter for adolescent males? *School Psychology Review, 37*, 160–173.
- Tebbe, E. A., & Moradi, B. (2016). Suicide risk in trans populations: An application of minority stress theory. *Journal of Counseling Psychology, 63*(5), 520–533. doi:10.1037/cou0000152 PMID:27089059
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior, 26*(3), 277–287. doi:10.1016/j.chb.2009.11.014
- Tsitsika, A., Janikian, M., Wójcik, S., Makaruk, K., Tzavela, E., Tzavara, C., ... Richardson, C. (2015). Cyberbullying victimization prevalence and associations with internalizing and externalizing problems among adolescents in six European countries. *Computers in Human Behavior, 51*(Pt A), 1–7. doi:10.1016/j.chb.2015.04.048
- U.S. Department of Health & Human Services. (n.d.). *What is cyberbullying?* Retrieved from <http://www.stopbullying.gov/cyberbullying/what-is-it/index.html>
- Varjas, K., Meyers, J., Kiperman, S., & Howard, A. (2013). Technology hurts? Lesbian, gay, and bisexual youth perspectives of technology and cyberbullying. *Journal of School Violence, 12*(1), 27–44. doi:10.1080/15388220.2012.731665
- Waasdorp, T. E., & Bradshaw, C. P. (2015). The overlap between cyberbullying and traditional bullying. *The Journal of Adolescent Health, 56*(5), 483–488. doi:10.1016/j.jadohealth.2014.12.002 PMID:25631040
- Werth, J. M., Nickerson, A. B., Aloe, A. M., & Swearer, S. M. (2015). Bullying victimization and the social and emotional maladjustment of bystanders: A propensity score analysis. *Journal of School Psychology, 53*(4), 295–308. doi:10.1016/j.jsp.2015.05.004 PMID:26270274
- Whittaker, E., & Kowalski, R. M. (2015). Cyberbullying via social media. *Journal of School Violence, 14*(1), 11–29. doi:10.1080/15388220.2014.949377
- Wyss, S. (2004). This was my hell: The violence experienced by gender nonconforming youth in US high schools. *International Journal of Qualitative Studies in Education, 17*(5), 709–730. doi:10.1080/0951839042000253676
- Ybarra, M. L., Diener-West, M., & Leaf, P. J. (2007). Examining the overlap in Internet harassment and school bullying: Implications for school intervention. *The Journal of Adolescent Health, 41*(6Suppl), S42–S50. doi:10.1016/j.jadohealth.2007.09.004 PMID:18047944

*Zachary R. Myers is a doctoral student in the School Psychology Program at the University of Nebraska-Lincoln. His research interests include the co-occurrence of traditional and cyberbullying behaviors, as well as cyberbullying through new social media sites, applications, and online gaming platforms. In addition, he is interested in the accompanying psychosocial correlates of co-occurring victimization modalities and the coping strategies used by youth to mitigate these negative outcomes.*

*Susan M. Swearer is the Willa Cather Professor of Educational Psychology at the University of Nebraska – Lincoln (UNL). She co-directs the Bullying Research Network (<http://brnet.unl.edu>), directs the Empowerment Initiative (<http://empowerment.unl.edu>), and is coauthor/coeditor of the books: *Bullying Prevention and Intervention: Realistic Strategies for Schools*, *Handbook of Bullying in Schools*, and *Bullying in North American Schools*. Dr. Swearer has authored over 100 chapters and articles on bullying, depression, and anxiety and is a licensed psychologist in the Child and Adolescent Therapy Clinic at UNL. Her career has been devoted to the intersection of research and practice and she is the Chair of the Research Advisory Board for the Born This Way Foundation ([www.bornthisway.foundation](http://www.bornthisway.foundation)).*

*Meredith J. Martin received her PhD in Developmental Psychology from the University of Rochester in 2014. She is currently an assistant professor in the Department of Educational Psychology at the University of Nebraska – Lincoln. Dr. Martin integrates developmental psychopathology and evolutionary frameworks in the study of socioemotional development across family and school contexts. Her research is focused on individual differences in children's coping with interpersonal threat, with a particular interest in peer victimization and bullying.*

*Raul Palacios is a doctoral student in the School Psychology Program at the University of Nebraska-Lincoln. He earned his EdS in School Psychology from Seattle University. His research interests include bullying intervention and prevention, social justice, and the implementation of restorative practices in schools. Additionally, Raul would like to acknowledge Born This Way Foundation for their research support and to Dr. Susan Swearer, Dr. Meredith Martin, and Zach Myers for their collaboration on this manuscript.*