

Cyberbullying and LGBTQ Youth: A Systematic Literature Review and Recommendations for Prevention and Intervention

Roberto L. Abreu¹ · Maureen C. Kenny²

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Abstract Research has demonstrated that cyberbullying has adverse physical and mental health consequences for youths. Unfortunately, most studies have focused on heterosexual and cisgender individuals. The scant available research on sexual minority and gender expansive youth (i.e., LGBTQ) shows that this group is at a higher risk for cyberbullying when compared to their heterosexual counterparts. However, to date no literature review has comprehensively explored the effects of cyberbullying on LGBTQ youth. A systematic review resulted in 27 empirical studies that explore the effects of cyberbullying on LGBTQ youth. Findings revealed that the percentage of cyberbullying among LGBTQ youth ranges between 10.5% and 71.3% across studies. Common negative effects of cyberbullying of LGBTQ youth include psychological and emotional (suicidal ideation and attempt, depression, lower self-esteem), behavioral (physical aggression, body image, isolation), and academic performance (lower GPAs). Recommendations and interventions for students, schools, and parents are discussed.

Keywords cyberbullying · LGBTQ youth · prevalence · correlates · effects · prevention

✉ Roberto L. Abreu
r.abre001@uky.edu

Maureen C. Kenny
kennym@fiu.edu

¹ Department of Educational, School, and Counseling Psychology, College of Education, University of Kentucky, 251 Dickey Hall, Lexington, KY 40506, USA

² Leadership and Professional Studies, College of Arts, Science and Education, Florida International University, Miami, FL, USA

Technology has become a conventional and widely used form of communication among individuals. Youth in particular appear to be drawn to different forms of technology, and use it regularly. According to a 2015 study by the Pew Research Center, 92% of teens go online on a daily basis and 56% access online material several times a day (Lenhart 2015). While the Internet provides many benefits (e.g., connecting with others, vast information), there are risks related to privacy, security, and harassment. Specifically, readily available access to the Internet has opened the door for a new form of bullying among youth, commonly known as cyberbullying (other names include cyber victimization, online victimization, and online aggression). Although different definitions for cyberbullying are found in the literature, researchers have identified this form of aggression as behaviors performed through the use of digital media or technology with the goal of communicating aggression and inflicting harm in an individual or a group of people (e.g., Hinduja and Patchin 2014; Pham and Adesman 2015). Research shows that exposure to cyberbullying has severe consequences for adolescents' and young adults' physical and mental health, including academic problems, substance abuse, and suicide (Flanagan 2014; Pham and Adesman 2015). A current systematic literature review of 25 empirical studies revealed that a significant number of children and adolescents (20% - 40%) report being victims of cyberbullying (Aboujaoude et al. 2015). Cyberbullying among children and adolescents is a serious threat and collective efforts headed by schools, policy-makers, and medical and mental health providers must be put in place in order to protect youth from the hazards associated with an ever dependent digital world (Aboujaoude et al. 2015).

Specific to sexual and gender minority youth, there is a dearth of research on the experiences of LGBTQ youth and cyberbullying. However, extensive research exists on traditional bullying (i.e., face-to-face) of LGBTQ students. This body of

research shows that LGBTQ youth are being bullied, harassed, and victimized in schools at disproportionate rates when compared to their heterosexual and cisgender counterparts (Black et al. 2012; Espelage et al. 2015; Kosciw et al. 2016). As a result, LGBTQ students have lower GPAs, higher rates of depression, lower self-esteem, and more suicidal ideation and suicide attempts (Kosciw et al. 2016; Montoro et al. 2016). In a national study of sexual minority high school students by the Centers for Disease Control and Prevention (CDC), LGB high school students reported higher levels of violence and bullying than their heterosexual counterparts, including forced to have sex (17.8% vs. 5.4%) and experiences of bullying at school (34.5% vs. 18.5%; Kann et al. 2016).

Regarding the experiences of cyberbullying, Aboujaoude et al. (2015) and Zych et al. (2015) found that sexual minorities are among one of the most vulnerable populations. Another systematic literature review of 39 empirical studies on the psychological and health outcomes of sexual minority and gender expansive youth revealed that victimization related to sexual identity is linked to increased depressive symptoms, suicidality, and substance abuse (Collier et al. 2013). Although cyberbullying has been briefly mentioned in reviews that explore the victimization of sexual minority and gender expansive youth and sexual minorities have been mentioned as a population of interest in cyberbullying youth literature reviews, to date no systematic literature review has exclusively explored the correlates of cyberbullying on LGBTQ youth. That is, the authors were not able to locate a single systematic literature that has brought together all of the available empirical research on LGBTQ youth cyberbullying. Therefore, the aim of the present review is to provide a comprehensive and integrative review of cyberbullying among sexual minority and gender expansive youth, including prevalence, correlates, and recommendations for prevention and intervention.

Methods

Search Strategy

The authors conducted a computer-based search of the databases Academic Search Complete, PsycINFO, PubMed, and Web of Science to locate studies. Variations of the term cyberbullying (i.e., cyberbullying, cyber-bullying, online bullying, cyber aggression, cyber violence, and online victimization) were used in combination with keywords related to sexual and/or gender identity (i.e., LGBT, GLBT, LGB, GLB, GLBTQ, gay, homosexuality, male homosexuality, bisexuality, lesbianism, transgender, sexual orientation, sexual identity, and sexual minority). In order to make sure the search led to exhaustive results, keywords related to bullies' potential motives (i.e., homophobia, homophobic, biphobia, and transphobia) were also used in combination with variations

of the term cyberbullying. In addition, a search of victims' characteristics (i.e., gender expression, gender identity, feminine, femininity, masculine, masculinity, gender atypical, gender bending, gender incongruence) was used in combination with variations of the term cyberbullying.

Considering the lack of research in the area of cyberbullying and LGBTQ individuals (Evans and Smokowski 2016), in the initial search, the authors did not narrow their search to a specific country, setting, or developmental age, to intentionally find all studies that captured the experience of cyberbullying among LGBTQ people before creating any inclusion and exclusion criteria. However, all of the studies found were conducted with LGBTQ adolescents, with school settings ranging from middle school to college/university level, with most studies ($n = 22$) including middle and high school students. In addition to the database search, a second method for literature searching included an ancestral approach (White 1994), which entailed reviewing the reference lists of each selected article to identify additional studies for possible inclusion. The search was conducted during the months of August 2016 through March 2017, and no time parameters were used. Duplicate publications were excluded.

Inclusion and Exclusion Criteria

Inclusion criteria included studies that were: (a) empirically based; (b) report original research findings (this included school climate surveys); (c) conducted among LGBTQ (or other sexual or gender minorities) youth; (d) explored cyberbullying toward LGBTQ adolescents in any setting; and (e) explored prevalence, correlates, consequences (including physical and psychological), and/or prevention efforts/recommendations in relation to LGBTQ youth cyberbullying. Both authors reviewed the abstracts of all citations produced by the database search and conducted ancestral approach to determine which citations met these criteria. Considering we were not able to locate any previously published literature review specific to LGBTQ youth and cyberbullying, we did not have a criterion for time frame (e.g., publications on and/or after a certain year). It was the authors' intention to capture all of the current available empirical research on the experiences of cyberbullying among LGBTQ youth. Exclusion criteria included articles that: (a) did not assess for cyberbullying (i.e., studies that only reported on traditional bullying, or face-to-face) or (b) did not assess for sexual or gender identity of participants. It is important to note that not all selected studies included exclusive samples of LGBTQ participants. Over half of studies ($n = 14$) included a large sample (i.e., over 70%) of heterosexual participants. We included any study that reported on the experiences of cyberbullying among LGBTQ youth participants, regardless if the study's sample also included heterosexual and/or cisgender participants. For those studies that included a mixed sample of heterosexual and cisgender and LGBTQ participants, we focused on the

results and analysis that, in any way, involved LGBTQ youth. As a result of the inclusion and exclusion criteria, 27 studies were included in the review. After each author was done with their individual review of each article (documented in a table form), tables were exchanged and reviewed for discrepancies. Discrepancies were discussed and reconciled among both authors.

Results of Literature Review

The studies were conducted in the United States ($n = 19$), Canada ($n = 3$), Australia ($n = 3$), Sweden ($n = 1$), and United Kingdom ($n = 1$). Most of the participants were collected from a nationwide sample ($n = 9$), followed by school counties/districts/zones ($n = 6$), single state/province/region ($n = 5$), single university ($n = 4$), and multiple states/provinces/regions ($n = 3$). Most of the reviewed studies were quantitative ($n = 21$), followed by mixed-method ($n = 5$) and qualitative ($n = 1$). Study sample size (all participants) ranged between 18 and 20,406 participants, with the smallest sample coming from the one qualitative study (i.e., Varjas et al. 2013). The range of LGBTQ participants ranged between 3.84% and 100%. For the purpose of this review, we organized the results and findings for each study into three different categories: (a) prevalence ($n = 26$), (b) correlates and impact ($n = 9$), and (c) prevention and intervention strategies ($n = 11$). Only three of the 11 studies that discussed prevention strategies for cyberbullying mentioned LGBTQ-specific prevention strategies (i.e., GLSEN et al. 2013; Hinduja and Patchin 2012; Ramsey et al. 2016). See Table 1 for more details about each study.

Studies and Participants' Diversity

Age and Educational Level The majority of the studies ($n = 20$) reported on the age of participants (range of 11–25 years old), while seven studies only reported the grade or educational level. Most studies ($n = 22$) were conducted with secondary-age school students, including middle and high school or a combination thereof. Nine studies were conducted with only high school students, while nine studies were conducted with middle and high school students combined and only one study (Rice et al. 2015) with middle school students. On the other hand, only five studies included participants from postsecondary institutions, including colleges and universities. Noticeably, the five studies that reported data from private schools (GLSEN et al. 2013; Guasp 2012; Hillier et al. 2010; Kosciw et al. 2012; Kosciw et al. 2016) were all large scale, nationwide climate surveys. In addition, only two studies (Blais et al. 2013; Blumenfeld and Cooper 2010) collected data from both secondary and postsecondary schools combined.

Race and Ethnicity The racial and ethnic diversity varied greatly among studies. More specifically, White participants made up the largest range across studies (3.3% - 92%), followed by Hispanics/Latinas/os (5% - 59.62%), African American/Black (2.8% - 41%), Asian/Pacific Islander (2.4% - 19%), Biracial/Multiracial (1.26% - 16.6%), "Other" (0.8% - 6.4%), and Native American/Indigenous people (0.41% - 6%). In addition, only three studies (Cénat et al. 2015; Kosciw et al. 2012; Kosciw et al. 2016) reported racial and ethnic demographic data on Middle Eastern participants. Furthermore, seven studies (Blais et al. 2013; Hillier et al. 2010; Hinduja and Patchin 2012; Mace et al. 2016; Priebe and Svedin 2012; Robinson and Espelage 2011; Walker 2015) did not report specific data on racial and/or ethnic diversity. Moreover, four studies (Cénat et al. 2015; Guasp 2012; Schneider et al. 2015; Stoll and Block 2015) did not provide a breakdown of the percentage of racial and ethnic diversity in their sample and only reported White vs. non-White participants.

Sexual Identity Although the sexual identity of participants ranged across studies, there are important trends. Most studies ($n = 19$) provided a combined sample of heterosexual and non-heterosexual participants, with the goal of comparing prevalence, correlates, and outcomes between these groups. Fourteen of the 19 studies had a significantly large sample of heterosexual participants (range of 71% - 94.4%) and did not provide a breakdown of the non-heterosexual sample (i.e., participants were identified as only heterosexual or non-heterosexual). In fact, only eight studies (Duong and Bradshaw 2014; GLSEN et al. 2013; Guasp 2012; Hillier et al. 2010; Kosciw et al. 2012; Kosciw et al. 2016; Sterzing et al. 2017; Varjas et al. 2013) had a sample of 100% LGBT participants and only three studies (Blumenfeld and Cooper 2010; Cooper and Blumenfeld 2012; Hillier et al. 2010) had a large sample (over 75%) of LGBT participants. Of the studies that provided a breakdown of sexual identities ($n = 13$), the category of gay participants made up the largest range across studies (0.7% - 82%), followed by lesbian and gay combined (0.65% - 62.9%), bisexual (2.4% - 42%), lesbian (1.4% - 39%), and queer/questioning/unsure (0.09% - 12%). Furthermore, one study (Duong and Bradshaw 2014) did not report the number of LGB identified individuals despite the fact that these participants were part of the results and analysis.

Gender Gender also varied greatly by study. Female participants made up the largest percentage in most studies ($n = 17$), with only five studies (Bouris et al. 2016; Guasp 2012; Kosciw et al. 2016; Rice et al. 2015; Varjas et al. 2013) reporting a higher percentage of males than females. In addition, only 11 studies (Blais et al. 2013; Blumenfeld and Cooper 2010; Cooper and Blumenfeld 2012; GLSEN et al. 2013; Guasp 2012; Hillier et al. 2010; Kosciw et al. 2012;

Table 1 Description of the Studies on LGBTQ Cyberbullying Included in the Systematic Review

Study	Definition of Cyberbullying	Cut-off-value	Participants	Representative or Ad hoc-sample	Prevalence
Bauman and Baldasare (2015)	Intentional and repeated harm of others through the use of computers, cell phones, and other electronic devices.	Multiple items; Responses from 1 (never) to 6 (every day/almost every day).	$N = 1078$; undergraduate students (freshman through senior).	Ad hoc	1- When compared to their heterosexual and cisgender counterparts, LGBT respondents reported higher rates of unwanted contact online ($t = 3.49$, $df = 91.98$, $p = .001$, $\eta^2 = .01$).
Blais et al. (2013)	Definition not provided.	Single item; Responses coded on dichotomous scale (no/yes). Forms of prejudiced; dichotomous score (never vs. rarely to always).	$N = 8029$; ages 14–22.	Representative	1–28% to 48.95% of the youths of students reported cyberbullying (study does not distinguish between sexual minority youth and others). 2- Sexual orientation rates of prejudice: 1.67–2% for heterosexual participants and 32.02–64.42 for sexual minority youth. 3- Gender non-conformity rates of prejudice: 5.29–6.47% for heterosexual participants and 25.66–60.49 for sexual minority youth.
Blumenfeld and Cooper (2010)	Deliberate, intentional, and repeated aggressive and hostile behaviors through the use of computers, cell phones, and other electronic devices to humiliate, harm, and control another individual or group of individuals with less power. Definition not provided.	Multiple items; Cut off score not provided.	$N = 444$; ages 11–22.	Ad hoc	1- Rates of cyberbullying of LGBT vs. non-LGBT was not measured.
Bouris et al. (2016)		Multiple item; Items recoded so that 0 = no victimization and 1 = one or more victimization experiences.	$N = 1907$; high school students; age mean 15.7 years old.	Ad hoc	1- Cyberbullying based on sexual orientation: 16.81% for sexual minority and 11.03% for heterosexual participants.
Cénat et al. (2015)	An intentional and aggressive behavior or act repeatedly carried out by an individual (or a group) against another person (or group) who cannot easily defend himself (or themselves) using electronic tools such as social networks, emails, cell phones power.	Single item; Response coded on a 4-point-scale: Never (0), 1 to 2 times (1), 3 to 5 times (2) and 6 times and more (3). Dichotomized score: the behavior happened at least 1 to 2 times and more.	$N = 8194$; high schools students (grades 10 to 12); ages 14–20 years old.	Representative	1–28% for gay/lesbian, 32.9% bisexual, and 24% questioning vs. 21.4% for heterosexual participants.
Cooper and Blumentfeld (2012)	Receiving rude, angry or vulgar, intimidating or threatening messages, have someone send or post personal information about a person, been excluded from a group, receiving harmful messages by someone who hid their identity.	Multiple items; Four-point scale: 1 = Never/Rarely and 4 = Frequently.	$N = 310$; middle and high school; ages 11–18 years old.	Ad hoc	1- Rates of “frequently” experiencing cyberbullying for LGBT vs. LGBT allies: 22.7% - 32.8% for LGBT vs. 10% - 28.3% for LGBT allies.
	Bullying occurring through electronic communications, such as e-mail, instant	Single item; Dichotomous responses (yes/no). Categorized into 1 of 4 groups:		Representative (of NYC)	

Table 1 (continued)

Study	Definition of Cyberbullying	Cut-off-value	Participants	Representative or Ad hoc-sample	Prevalence
Duong and Bradshaw (2014)	messages, websites, or text messages; Behavior carried out repeatedly over time, and occurs in interpersonal relationships marked by an imbalance of power.	“not bullied,” “cyber bullied only,” “school bullied only,” or “both.”	<i>N</i> = 951; grades 9 through 12; Only LGBTQ participants, no comparison group.		1–9.7% experienced cyberbullying and 10.1% experienced both cyberbullying and traditional bullying.
GLSEN et al. (2013)	Definition not provided.	Number of items not specified; Bullying ranged from once a day to once or a few times in the last 12 months.	<i>N</i> = 1960; ages 13–18 years old; Only LGBTQ participants, no comparison group.	Ad hoc	<ol style="list-style-type: none"> 1- In the past year: 42% harassed online, 19% cyberbullied via phone call, 27% harassed via text message. 2- One in four (24%) said they had been bullied online because of their sexual orientation or gender expression. 3–30% experienced bullying due to their sexual orientation or gender expression via text message or online while at home. 4–32% said they had been sexually harassed online. 5–25% had been sexually harassed via text message in the past year. 6–30% experienced sexual harassment online. 7–20% experienced sexual harassment via text message.
Guasp (2012)	Definition not provided.	Number of items not specified; Rating for victimization from never to frequently.	<i>N</i> = 1614; ages 11–19 years old; Only LGBTQ participants, no comparison group.	Ad hoc	1–23% experienced cyberbullying.
Hillier et al. (2010)	Definition not provided.	No cut off score provided.	<i>N</i> = 3134; between ages 14 and 21; Only LGBTQ participants, no comparison group.	Ad hoc	1- Approximately 25% males, 18% female, and 27% gender questioning.
Hinduja and Patchin (2012)	Definition not provided.	No cut off score provided.	<i>N</i> = 4400; ages 11–18.	Representative (of the district)	<ol style="list-style-type: none"> 1- LGBTQ students reported experiencing more cyberbullying throughout their life time when compared to their heterosexual counterparts (36.4% vs. 20.1%). 2- LGBTQ students reported being the victim of cyberbullying in the previous 30 days when compared to their heterosexual counterparts (17.3% vs. 6.8%). 3- Non-heterosexual females experience more cyberbullying than their heterosexual counterparts (38.3% vs. 24.6%). 4- Non-heterosexual males experience more cyberbullying than their heterosexual counterparts (30.4% vs. 15.7%).

Table 1 (continued)

Study	Definition of Cyberbullying	Cut-off-value	Participants	Representative or Ad hoc-sample	Prevalence
Kosciw et al. (2012)	Using an electronic medium, including cell phones or Internet communications, to threaten or harm others.	Number of items not specified; Coded: frequently, often, sometimes, rarely.	<i>N</i> = 8584; ages 13–20; Only LGBTQ participants, no comparison group.	Representative	1–55% of LGBTQ youth experienced cyberbullying in the past year.
Kosciw et al. (2016)	Using an electronic medium, such as a mobile phone or Internet communications, to threaten or harm others.	Number of items not specified; Coded: frequently, often, sometimes, rarely.	<i>N</i> = 10,528 students; ages 13 and 21; Only LGBTQ participants, no comparison group.	Representative	1–48.6% of LGBTQ youth experienced cyberbullying at in the past year; 15% experienced it often or frequently.
Mace et al. (2016)	When one person or a group of people repeatedly try to hurt or embarrass another person on purpose using technology, such as computers or mobile phones.	Multiple items; Response coded: less than once a week, once a week, one or two times a week, most days, or every day.	<i>N</i> = 528; ages 18–25 (undergraduate students).	Ad hoc	This study measured perceived social support among heterosexual and non-heterosexual university sample; no information on cyberbullying prevalence was reported.
Priebe and Svedin (2012)	Harassing, threatening, spreading rumors, writing offensive things, and/or disseminating sexual pictures or films electronically or digitally, such as via mobile phone or the Internet.	Multiple items; Response coded: “yes, once,” “yes, several times,” and “no, never.”	<i>N</i> = 3432 high school seniors; ages 16–22.	Representative	1- Non-heterosexual male students reported experiencing more cyberbullying than their heterosexual male counterparts (10.4% to 23.0% vs. 2.0% to 16.8%). 2- Non-heterosexual female students reported experiencing more cyberbullying than their heterosexual female counterparts (3.3% to 23.2% vs. 1.5% to 16.1%).
Ramsey et al. (2016)	Repeated and intentional aggression that is delivered through electronic means.	Multiple items; A single recent cyber victimization score was created from a set of nine items.	<i>N</i> = 634; college students; ages 18–22.	Ad hoc	1- Sexual minority participants reported significantly higher levels of recent cyber victimization compared to heterosexual participants (<i>M</i> = 1.07 vs. <i>M</i> = 1.02).
Rice et al. (2015)	Willful and repeated harm perpetrated against some one else through the use of technology, including computers, cell phones, or other electronic means.	Multiple items; Response coded: never, once or twice, a few times, many times, and every day.	<i>N</i> = 1185 Middle school age (grades 6–8); average age of 12.3 years old.	Representative of the school district (L.A)	1- Sexual-minority students were more likely to report cyberbullying victimization than their heterosexual counterparts.
Robinson and Espelage (2011)	Definition not provided.	Single item; Response coded: never, rarely, sometimes often, very often.	<i>N</i> = 13,213 middle and high school students; median of 13 years old for middle school students and median of 16 years old for high school students.	Ad hoc	1- LGBTQ students reported experiencing more cyberbullying; approximately 14.8% more than heterosexual students. 2- Bisexual students reported higher incidents of cyberbullying than heterosexual and LGTQ students; approximately 25.5% more than heterosexual and 10.7% more than LGTQ students.
Schneider et al. (2015)	Acts of intentional and repeated harm delivered through computers, mobile phones, and other electronic devices.	Single item; Dichotomize responses (yes or no).	<i>N</i> = between 16,385 and 17,089; 9–12 grade students.	Ad hoc	1- Sexual minority youth reported experiencing more cyberbullying than their heterosexual counterparts for 2006 (28.6% vs. 13.6%), 2008 (32.8% vs.

Table 1 (continued)

Study	Definition of Cyberbullying	Cut-off-value	Participants	Representative or Ad hoc-sample	Prevalence
Schneider et al. (2012)	Using the Internet, a phone, or other form of electronic communication to bully, tease, or threaten someone.	Single item.	<i>N</i> = 20,406; 9–12 grade.	Ad hoc	14.3%, 2010 (34.6% vs. 18.6%), and 2012 (31.5% vs. 20.3%). 1- Sexual minority youth reported experiencing more cyberbullying than their heterosexual counterparts (33.1% vs. 14.5%). 2- Sexual minority youth reported experiencing more school bullying and cyberbullying combined than their heterosexual counterparts (22.7% vs. 8.5%).
Sinclair et al. (2012)	Cyber harassment through the Internet or text messages.	Single item.	<i>N</i> = 17,366 students; middle and high school students.	Ad hoc	This study reported on the correlates of cyberbullying with academic, substance use, and mental health problems; No prevalence of cyberbullying was provided.
Sterzing et al. (2017)	Definition not provided.	Single item; This never happened to me (0), Once in the past year (1), One or more times a month (2), One or more times a week (3), One or more times a day (5), Not in the past year but it happened (6).	<i>N</i> = 1177; 14–19 years old; Only LGBTQ participants, no comparison group.	Ad hoc	1- Cisgender sexual minority males: 37.2%; Cisgender sexual minority females: 35.6%; Transgender male: 51.4%; Transgender females: 71.3%; Genderqueer- assigned male at birth: 43.8%; Genderqueer- assigned female at birth: 44.8%.
Stoll and Block (2015)	The willful and repeated harm inflicted through electronic mediums.	Multiple items; Responses were dichotomize (never = 0 and experienced cyberbullying and some degree = 1).	<i>N</i> = 752; 9–12 grade students.	Ad hoc	1- Non-heterosexual students experienced more than half an additional instance of cyberbullying than their heterosexual peer.
Taylor et al. 2011	Definition not provided.	Single item; Responses were dichotomized (yes or no).	<i>N</i> = 3607; 91.9% high school students and 8.1% post-secondary institution; average of 17.4 years old.	Ad hoc	1- LGBTQ youth reported experiencing more lies and rumors spread by text messaging and Internet than their non-LGBTQ counterparts (27.7% vs. 5.7%).
Varjas et al. (2013)	Bullying that occurs online or in some other form of cyberspace.	No cut off score given (qualitative study).	<i>N</i> = 18 LGB adolescents; grades 9–12, 15–18 years of age; Only LGBTQ participants, no comparison group.	Ad hoc	Qualitative study; no prevalence reported.
Walker (2015)	Using technology tools (such as social networking sites, cell phones, instant message, or other form of technology) to slander, harass, or send messages that result in the person who receives it.	Multiple items; Response coded: never, one time, two to four times, five to seven times, or more than seven times. Dichotomous score (1 = never and 2 = one or more times).	<i>N</i> = 438 undergraduate students; ages 18–24.	Ad hoc	1- Non-heterosexual participants experienced more cyberbullying than their heterosexual counterparts (22.9% vs. 9.5%). 2- Percentages of specific forms of cyberbullying ranged from .0% to

Table 1 (continued)

Study	Definition of Cyberbullying	Cut-off-value	Participants	Representative or Ad hoc-sample	Prevalence
Wensley and Campbell (2012)	When one person or a group of people try to hurt or embarrass another person, using their computer or mobile phone; the person bullying has some advantage over the person targeted.	Multiple items; One incident of cyber bullying sufficient to qualify as being a victim.	<i>N</i> = 528 undergraduate students; 18–25 years old.	Ad hoc	29.9% for heterosexual participants and 5.7% to 43.2% for non-Heterosexual participants. 1- Non-heterosexual participants experienced more cyberbullying than their heterosexual counterparts (10.8% vs. 15.4%). 2- Non-heterosexual males experienced more cyberbullying than their male heterosexual counterparts (11.1% vs. 35.3%). 3- Non-heterosexual females experienced more cyberbullying than their female heterosexual counterparts (10.5% vs. 11%).

Kosciw et al. 2016; Ramsey et al. 2016; Sterzing et al. 2017; Taylor et al. 2011) reported on transgender participants, with a range between 0.25% and 15.2%. Noticeably, the study by Sterzing et al. (2017) included the largest percentage of genderqueer participants (20.5%). Furthermore, only two studies (Blumenfeld and Cooper 2010; Cooper and Blumenfeld 2012) reported on intersex participants (0.1% and 0.6%). Three studies (Hinduja and Patchin 2012; Robinson and Espelage 2011; Sinclair et al. 2012) did not provide a percentage for gender.

Prevalence

As noted by Aboujaoude et al. (2015) in a review of the literature on cyberbullying (overall, not specific to LGBTQ youth), it is challenging to accurately estimate the prevalence of online victimization. However, across this literature review one finding is clear: sexual minority and gender expansive adolescents are disproportionately more often victims of cyberbullying than their heterosexual and cisgender counterparts. Also, although the percentage of cyberbullying among LGBTQ youth seems to differ from one study to another, the range appears to be between 10.5% and 71.3% across studies. An interesting finding by Schneider et al. (2015) is that cyberbullying among sexual minority youth decreased by 3% between 2006 and 2012 (47% vs. 50%). However, they assert that regardless of this decline and promising trend, sexual minority youth consistently report significantly higher levels of cyberbullying when compared to their heterosexual counterparts (Schneider et al. 2015), and this still translates to almost half of all sexual minority youth as victims of cyberbullying.

Sexual minority and gender expansive youth reported being more exposed to anonymous forms of cyberbullying than their heterosexual counterparts (Bauman and Baldasare 2015; Guasp 2012). In addition, according to Blais et al. (2013), after rejection and humiliation, cyberbullying is consistently ranked among the highest form of prejudice toward sexual minority students, affecting between 28% and 48.95% of these youth. Moreover, when compared to traditional bullying, Duong and Bradshaw (2014) found that LGB students experienced more cyberbullying than traditional bullying (9.7% vs. 8.2%). The following sections will present prevalence of cyberbullying among sexual minority and gender expansive youth, divided by: (a) gender and cyberbullying, (b) reasons for not reporting cyberbullying and help seeking behaviors, and (c) people of color and cyberbullying. Before proceeding with this section it is important to note that only eight of the studies included in this review used a representative sample, with most studies ($n = 19$) using an ad hoc sampling approach. Considering that a prevalence rate is intended to inform about the percentage of victims in a population and only representative samples can yield conclusions about

populations, these prevalence rates should be interpreted with caution.

Gender and LGBTQ Cyberbullying Overall, a review of these studies show that both male and female sexual minority youth report substantially higher levels of cyberbullying than their heterosexual and cisgender counterparts (e.g., Hillier et al. 2010; Schneider et al. 2015; Wensley and Campbell 2012). In addition, Cooper and Blumenfeld (2012) found that 19% of LGBT participants reported being harassed for their biological sex and 41% for their gender identity or expression. The study by GLSEN et al. (2013) took the findings by Cooper and Blumenfeld (2012) a step further and reported that participants who identified as cisgender non-heterosexual females, transgender youth, and youth with “other” genders reported higher levels of cyberbullying than those who identified as cisgender gay and bisexual males. These findings seem to be consistent with Hinduja and Patchin (2012) and Rice et al. (2015), whose findings show that sexual minority females reported greater frequency of cyberbullying than male sexual minority youth. Unfortunately, there seems to be a discrepancy across studies regarding which gender is more often victimized among LGBT students. Specifically, Schneider et al. (2015) report that sexual minority males were more likely to report cyberbullying than both their heterosexual counterparts and sexual minority females.

Furthermore, some studies suggest that bisexual youth might not only be more susceptible to a higher prevalence of cyberbullying than heterosexual youth (Cénat et al. 2015) but also more susceptible than other sexual minority youth (Robinson & Espelage 2011). For example, Taylor et al. (2011) found that bisexual female students were more likely to experience cyberbullying than lesbian participants (38.5% vs. 28.1%). However, the same trend was not found for gay versus bisexual males. That is, gay males were more likely to be bullied than bisexual males (28.2% vs. 18.9%; Taylor et al. 2011). Furthermore, some studies seem to suggest that there is a gender difference in victimization among bisexual youth. For instance, Cénat et al. (2015) found that bisexual and questioning males were more likely than bisexual and questioning females to report cyberbullying.

Reasons for LGBTQ Youth not Reporting Cyberbullying and Support Seeking sexual minority and gender expansive youth often do not report cyberbullying to their parents or school personnel (i.e., counselors, teachers, and administrators). Blumenfeld and Cooper (2010) found that heterosexual participants were more likely to tell their parental figure about being exposed to cyberbullying than their LGBT counterparts (37% vs. 18%). The number one reason for not reporting cyberbullying to parents among LGBT students was fear that parents would restrict their use of technologies, which was significantly higher than their heterosexual counterparts (56%

vs. 37%; Cooper and Blumenfeld 2012). Some other reasons for LGBT students not reporting were the belief that parents could not do anything about the incidents of cyberbullying, lack of understanding and support by parents, getting in trouble with parents, suffering further retaliation by the bully, and fear of being made fun of by others (Blumenfeld and Cooper 2010; Cooper and Blumenfeld 2012). Qualitative data revealed that LGBT participants were fearful of reporting cyberbullying because of their sexual and gender identities and potential exposure of these identities (Blumenfeld and Cooper 2010). Similar to the reasons for not reporting to parents, it appears that sexual minority and gender expansive youth do not report cyberbullying to school personnel due to the belief that the school will not take action to stop it, fear of not being understood by the school, retaliation from the bully, and belief that they had to handle the situation themselves (Cooper and Blumenfeld 2012). However, it is important to note that Priebe and Svedin (2012) found that participants identified parents as a main source of support after being cyberbullied.

This literature review revealed mixed findings regarding support-seeking behaviors from sexual minority and gender expansive youth. Mace et al. (2016) revealed that sexual minority victims of cyberbullying had higher levels of access to perceived social support than their heterosexual peers. Also, sexual minority youth who experienced cyberbullying had similar levels of perceived social support than that of their heterosexual counterparts (Mace et al. 2016). However, the authors point out that these findings are at odds with the findings of Flaspohler et al. (2009) and Holt and Espelage (2007) who found that sexual minority individuals reported fewer social supports, which was associated with greater risk for bullying. Further, Priebe and Svedin (2012) found that although sexual minority youth reported that they had sought more support than their heterosexual counterparts due to incidents of cyberbullying, they did not receive the support that they needed. Some encouragement is provided by Varjas et al. (2013) who report that sexual minority students perceived that school policies are being put in place to reduce cyberbullying. However, these students believe that cyberbullying will still take place without staff awareness or ability to stop it (Varjas et al. 2013).

Although research on the reasons why LGBTQ students do not report or seek support for cyberbullying is scant and provides mixed findings, studies from the general bullying literature might help further explicate this phenomenon. Overall, research shows that the main reasons why students do not report bullying are: (a) concerns that the staff will blame them for the incident (i.e., victim-blaming), (b) beliefs that staff will not accurately handle the issue or will downplay the incident, and (c) feeling powerless, shameful and fearful (e.g., Bjereld 2016; DeLara 2012). A unique reason for LGBTQ students not reporting bullying is distrust that the school personnel will not keep confidentiality about their sexual and/or gender identity and will, instead, out them to other staff and

family members. In addition, another striking and disturbing finding unique to LGBTQ students and traditional bullying is the fact that some of these students identify school personnel as the perpetrators of harassment and bullying (Kosciw et al. 2016) and, therefore, these students feel powerless to report their experiences due to the fact that those whose duty is to protect them are the actual perpetrators.

LGBTQ Youth of Color and Cyberbullying Although limited, some of the data provides information about the intersection of sexual and gender identity and race and ethnicity. Cooper and Blumenfeld (2012) found that in the last 30 days, 14% of LGBT youth reported being harassed based on their race or ethnicity. However, this finding does not seem to be corroborated by other studies in this literature review. Specifically, GLSEN et al. (2013) found that African American and Asian LGBT participants were the least exposed to cyberbullying when compared to their White counterparts. On the other hand, two studies found that there were no differences in overall reporting of cyberbullying by race or ethnicity (Schneider et al. 2012; Stoll and Block 2015).

Correlates and Impact

This literature review revealed nine studies that reported findings on the correlates of cyberbullying for LGBT youth. Overall, there is a higher correlation between being a victim of cyberbullying and negative outcomes for sexual minority and gender expansive youths than for their heterosexual and cisgender counterparts. There is no doubt that when sexual minorities and gender expansive youths feel “outed,” exposed, and harassed due to their sexual and gender identity they are vulnerable to negative mental health outcomes including isolation and psychological distress (Cénat et al. 2015). For the purpose of this review, the authors have classified correlates and impact into three main categories: (a) psychological and emotional, (b) behavioral, and (c) academic.

Psychological and Emotional Correlates of Cyberbullying among LGBTQ Youth Psychological and emotional correlates of cyberbullying are perhaps the most well researched correlate for cyberbullying among sexual minority and gender expansive youth. We have classified the different areas of psychological and emotional correlates under the categories of: (a) suicidal ideation and attempt, (b) depression, and (c) lower self-esteem.

This literature review revealed a correlation between suicidal ideation and attempt and cyberbullying alone and a combination of cyberbullying with traditional bullying (Cénat et al. 2015; Cooper and Blumenfeld 2012; Duong and Bradshaw 2014; Schneider et al. 2012; Sinclair et al. 2012), with many participants reporting the need for medical attention after serious suicide attempts (Sinclair et al. 2012).

Cooper and Blumenfeld (2012) found that 35% of LGBT participants reported having suicidal thoughts while 14% reported attempting suicide as a result of being cyberbullied. Also, Duong and Bradshaw (2014) found that LGB participants attempted suicide in the past 12 months at a rate of 3.07 times higher after being cyberbullied. In addition, in the study by Cénat et al. (2015), sexual minority youth who reported being victims of cyberbullying reported higher rates of suicidal ideation than those sexual minority participants who were not victims (55.6% vs. 24.7%). Similarly, Schneider et al. (2012) found that suicide attempt was highest among participants who had been cyberbullied versus those who had experienced face-to-face school bullying (9.4% vs. 4.2%). In addition, gender seems to play a role among sexual minorities who report suicidal ideation and attempts as a result of cyberbullying. Cénat et al. (2015) found that bisexual and questioning girls and bisexual boys were more likely to report suicidal ideations than heterosexual boys, with bisexual girls reporting higher levels than other sexual minority youth.

It is important to note that participants who experienced two forms of bullying (i.e., face-to-face and cyberbullying) reported greater rates of serious suicide attempts than those who only reported being bullied face-to-face (5.03 vs. 4.20 times). Also, those who experienced two forms of bullying reported making serious suicide attempts and engaged in more suicidal behaviors than those who reported only one form of bullying (Duong and Bradshaw 2014). Compared to participants who did not report any form of bullying, the risk of attempted suicide was 4.72 times greater for LGB youth who experienced one form of victimization and 8.30 times greater for students who experienced two forms of victimization (Duong and Bradshaw 2014). Similar findings were reported by Schneider et al. (2012), who found the highest percentage of suicide among those who reported both face-to-face and cyberbullying combined (15.2%).

Sexual minority youth who have been exposed to cyberbullying report higher levels of depression compared to those who have not (GLSEN et al. 2013; Ramsey et al. 2016; Sinclair et al. 2012). Specifically, Cooper and Blumenfeld (2012) found that feelings of depression were the highest ranked emotional response correlated to cyberbullying among LGBT participants. Similarly, Schneider et al. (2012) found that 33.9% of those participants who reported being cyberbullied reported symptoms of depression. On the other hand, similar to findings about suicide ideation and attempt, those who experience both traditional and cyberbullying reported higher symptoms of depression. Cyberbullying has also been associated with lower self-esteem for sexual minorities and gender expansive youth (Cénat et al. 2015; GLSEN et al. 2013; Priebe and Svedin 2012). Furthermore, although not widely explored in this review, bisexual and questioning girls and bisexual boys were more likely to report lower self-esteem, with bisexual girls reporting

lower levels than other sexual minority youth (Cénat et al. 2015).

Behavioral Correlates of Cyberbullying among LGBTQ Youth

While there is no evidence to support that cyberbullying alone leads sexual minorities to engage in more physical fights, being a victim of cyberbullying and traditional bullying exacerbates physical fights among these youth and their peers (Duong and Bradshaw 2014). It is important to note that research shows that when LGBT students stand up for themselves against being bullied and harassed they face harsher consequences than the perpetrator (Golgowki 2014). Other behavioral correlates are poor body image, isolating themselves from friends and family and fear of going to school (Cooper and Blumenfeld 2012).

Academic Correlates of Cyberbullying among LGBTQ Youth

According to GLSEN et al. (2013), LGBT youth who were cyberbullied reported significantly lower GPAs and overall academic success than youth who were less frequently cyberbullied. Participants who were victims of cyberbullying reported lower school performance (e.g., receiving failing academic grades) and lower school attachment (Cooper and Blumenfeld 2012; Schneider et al. 2012).

Prevention and Intervention Recommendations

Despite the rates of cyberbullying in sexual minorities and gender expansive youth, there is an absence of empirically evaluated prevention efforts addressing this problem. As stated by Ramsey et al. (2016), “Few interventions exist that are specifically developed to decrease... cyberbullying, and no interventions of this kind exist for sexual minority populations in particular” (p. 497). Taking into consideration existing research that supports the notion that a one-size fits all does not protect LGBTQ students against bullying (Kull et al. 2015), we propose that cyberbullying prevention and intervention programs be tailored for LGBTQ students. Our recommendations for students, schools and parents are based on anti-cyberbullying interventions discussed in 11 of the identified studies in this literature review and a comprehensive review of two bodies of literature: (a) overall cyberbullying prevention efforts and (b) LGBT bullying prevention strategies.

Student-Focused Interventions

Blumenfeld and Cooper (2010) and Ramsey et al. (2016) recommend raising awareness among students about the effects of LGBTQ cyberbullying by using educational programs that are peer-driven as an important intervention. Although no LGBTQ-specific programs exist, peer-driven interventions have proven to be effective in increasing awareness and reducing incidents of cyberbullying among students. While not

used with LGBTQ students, in evaluating a peer-led approach (i.e., *NoTrap!*) to reduce cyberbullying among high school students, Palladino et al. (2016) found it had long-term effects in reducing cyberbullying for both boys and girls. Putting students in charge of delivering information to other students is an effective way of getting buy-in and increasing awareness and decreasing behaviors that constitute cyberbullying. Applying these findings to LGBTQ students, it is recommended that LGBTQ victims be involved in these awareness and prevention efforts. That is, with the consent of the LGBTQ student and protection of school personnel to make sure further harassment is not perpetrated, LGBTQ students should be active in the content selection, development, and implementation of a peer-led model. This will be crucial as bullying research suggests that when individuals are able to make an emotional connection with what is being presented to them, they are more likely to intervene (Case and Meier 2014).

Technology is also being used as an intervention to increase knowledge about what constitutes cyberbullying and its consequences, foster empathy toward victims, reduce the impact (e.g., depression) on victims, and teach coping skills to current and potential victims. Doane et al. (2016) developed and implemented a program, *Theory of Reasoned Action-TRA*, to measure the effectiveness of a video-based intervention with students. Although not focused on LGBT youth, results revealed that compared to students who were not exposed to the intervention (i.e., control group), those who were showed an increase in knowledge of cyberbullying and more empathy toward victims immediately after the intervention and at a one-month follow-up. Although this technology-based program has been successful in reducing cyberbullying and increasing empathy among students, we pose that this and similar programs must incorporate understanding of the needs of sexual minority and gender expansive youth, including how these platforms can be a source of support for LGBTQ youth (Hillier et al. 2010). For example, GLSEN et al. (2013) report that a substantial number of LGBT youth report searching for or reading about sexuality-related information online, thus, making the Internet an appropriate platform where these youth can access different sources of information, including information about cyberbullying, without having to be “outed.” Hillier et al. (2010) suggest that schools create online forums for LGBTQ students to connect safely with others. Similar to face-to-face interventions, online interventions must include specific information and scenarios to bring visibility to the higher prevalence of cyberbullying among sexual minority and gender expansive youth.

Other interventions include empowering youth to serve as “upstanders” and not bystanders. These methods would encourage them to intervene when they witness or become aware of cyberbullying (Blumenfeld and Cooper 2010). Flanagan (2014) proposed using cognitive behavioral techniques to teach individual and group interventions to students

such as how to appropriately address conflict with others, impulse control management, cultivating a positive self-esteem, and fostering self-efficacy.

School-Focused Interventions

The need to have a supportive and safe school environment for sexual minority and gender expansive youth is essential. It is recommended that schools include cyberbullying into their already existing traditional bullying intervention and education programs (Schneider et al. 2012). For example, Bauman and Baldasare (2015) suggest that teachers across grade levels include a statement on their syllabus about what behaviors constitute cyberbullying, available resources for victims, and consequences for perpetrators. Also, researchers agree that schools must create and enforce explicit policies against students who tease, threaten, exclude, or mistreat other students based on sexual orientation or gender identity and/or expression, including cyberbullying (Blumenfeld and Cooper 2010; Hinduja and Patchin 2012). LGBTQ participants in the study by Blumenfeld and Cooper (2010) recommend that schools create online methods for students to anonymously report incidences of cyberbullying or having witnessed someone being cyberbullied, as it could allow for early opportunities to intervene and educate. These online reporting sites need to be accessed regularly and swift action taken by school authorities. These policies not only deliver the message that school personnel are invested in ending cyberbullying against LGBTQ students but are crucial in reducing harassment against this vulnerable population. Guasp (2012) found that sexual minority students were significantly less likely to be bullied in schools that responded quickly to homophobic bullying than in schools that did not respond to these incidents.

Additional training for school personnel would include education about their state’s laws regarding cyberbullying, including states that include sexual minority and gender expansive youth as part of these laws. Although currently all of the United States and the District of Columbia (with the exception of Alaska and Wisconsin) have laws against cyberbullying, only 14 states¹ and the District of Columbia include gender identity/expression. Eighteen states² and the District of Columbia are inclusive of sexual orientation in their anti-cyberbullying laws (Cyberbullying Research Center 2016; Stop Bullying 2015). While these laws exist, the extent to which school personnel alert law enforcement is unknown.

A critical intervention for incidents of LGBTQ bullying and cyberbullying is the identification of “safe” faculty and

¹ Arkansas, California, Connecticut, Delaware, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, New Jersey, North Carolina, Rhode Island, and Vermont

² Arkansas, California, Colorado, Connecticut, Delaware, Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New Mexico, New York, North Carolina, Rhode Island, Vermont and Washington

administrators who students can turn to for help (Duong and Bradshaw 2014). According to Mace et al. (2016) school personnel are crucial in identifying LGBTQ victims of bullying, including cyberbullying, and helping students access support services within the school. School participants in a study by Liboro et al. (2015) were in agreement that the more confident and comfortable the teachers were in supporting LGBT students, the safer they felt. In addition, Duong and Bradshaw (2014) found that having an adult to talk to at school was protective against engaging in physical fights, attempting suicide, and making serious suicide attempts for cyberbullied sexual minority youth. The authors maintain that adults, administrators, teachers, and staff, who are openly supportive of (and knowledgeable about) LGBTQ perspectives and issues, should make themselves available as a resource to students (Hinduja and Patchin 2012). Actions that increase LGBTQ visibility in schools, such as having a Gay-Straight Alliance (GSA) club in school, positive representations of LGBTQ people and events in classroom discussions, LGBTQ-inclusive library materials, sex education, and signage, can potentially reduce incidents of cyberbullying.

Parent-Focused Interventions

Parents need to be aware of the risks associated with the use of technology, including high incidents of cyberbullying (Ramsey et al. 2016). In addition, providing parents education about youth reports on cyberbullying and the reasons for not reporting cyberbullying can help inform educational programs for parents and potentially increase parents' supportive responses in the case of victimization. Youth often do not want to report cyberbullying because they are fearful that their technology devices will be taken away (Blumenfeld and Cooper 2010).

Many parents do not feel competent enough with technology to be involved in their child's technology activities, and believe their children are the experts (Schneider et al. 2015). Therefore, parents should be proactive and seek information about their child's technology use by directly asking the child (Flanagan 2014). Recognizing that it is not feasible for parents to monitor their child's use of technology at all times, scholars recommend that parents discuss, share, and have their child sign a family contract that outlines responsible and healthy ways of using technology (e.g., Scola 2014; for more information and ideas for parent-child media agreements visit <https://mediatechparenting.net/contracts-and-agreements/>). In addition, it is important to recognize that regarding parents and family involvement in LGBTQ-specific cyberbullying there are added layers of concerns that must be considered. For instance, the LGBTQ adolescent being bullied might not be out to their parents. Thus, when discussing family contracts, parents should openly mention information about cyberbullying prevalence and consequences about LGBTQ youth, regardless of their child's sexual and/or gender identity.

This delivers a message of safety and may lead to potentially encouraging the child to disclose and have a conversation regarding LGBTQ-specific bullying instances.

A Collaborative Approach to Cyberbullying Prevention

These authors suggest a comprehensive prevention effort among students, school personnel and parents in order to target cyberbullying, rather than individual, disconnected efforts. Research suggests that when schools work together with students, parents, and community partners and leaders, there is a decrease in cybervictimization among youth (Couvillon and Ilieva 2011; Flanagan 2014). When planning for cyberbullying programming, involving the various stakeholders in youths' lives increases consistency in policy development and enforcement (Couvillon and Ilieva 2011; Flanagan 2014; Simmons and Bynum 2014). For example, attorneys can help schools, teachers, and parents understand the legal ramifications for engaging in cyberbullying and different ways to access already established legal supports for victims of cyberbullying (Flanagan 2014). These authors recommend that schools establish a community-wide LGBTQ-cyberbullying taskforce to assess their school's LGBTQ-bullying climate and develop and implement programs to protect sexual minority and gender expansive students. Schools should build relationships with local community organizations that specifically work with LGBTQ youth in order for them to provide their expertise in addressing LGBTQ cyberbullying.

Discussion

This literature review explored the prevalence and correlates for LGBTQ victims of cyberbullying and provided interventions and recommendations for this vulnerable population. The 27 studies reviewed differed in location, sample size, and methodology, with most studies employing quantitative methods ($n = 21$) and only one qualitative study. LGBTQ youth are disproportionately more likely to experience cyberbullying and suffer negative outcomes (i.e., psychological and emotional, behavioral, academic, and relational) than their heterosexual and cisgender counterparts. In addition, to date no LGBTQ specific cyberbullying interventions exist. This literature review revealed 11 studies that provided recommendations based on the larger literature on cyberbullying prevention efforts. Based on the recommendations presented in this literature review and other studies on cyberbullying and LGBTQ prevention strategies we have provided recommendations tailored specifically to target and hopefully reduce LGBTQ cyberbullying.

Gaps and Recommendations

As presented in this paper, perhaps the most important and noticeable limitation is the absence of LGBTQ-specific cyberbullying interventions and prevention research. The authors of this paper propose that in order to decrease the prevalence of cyberbullying among LGBTQ youth, researchers need to be intentional about understanding the needs of this marginalized population and create interventions grounded on specific needs of LGBTQ youth. Currently, not only there are no programs that address LGBTQ cyberbullying, but there are few programs that provide interventions and prevention for traditional bullying of LGBTQ youth as well. An observation across studies was the lack of representation of LGBTQ students of color. That is, although racial, ethnic, sexual, and gender identities were reported by most studies, analyses rarely included a consideration of LGBTQ students of color and their experiences of cyberbullying. Notably, only four studies (i.e., Cooper and Blumenfeld 2012; GLSEN et al. 2013; Schneider et al. 2012; Stoll and Block 2015) included race and ethnicity as part of their analysis and results. Unfortunately, there seems to exist a discrepancy, with two of these studies (i.e., Schneider et al. 2012; Stoll and Block 2015) reporting no differences in overall reporting of cyberbullying by race or ethnicity. Considering that research on traditional bullying and discrimination among LGBTQ students of color suggest that these students might suffer greater victimization than their White peers, we pose that cyberbullying of LGBTQ people of color needs to be further explored and systematically researched. In addition, it is important to note that LGBTQ youth may also have other oppressed intersecting identities that may make them more susceptible to bullying, including race and ethnicity, gender expression (e.g., performing one's gender in a more masculine or feminine way than expected), body type, socioeconomic status, and religious identity. In a school climate study of 2130 LGBTQ students of color, Diaz and Kosciw (2009) found that over 80% of these students were harassed in the past year for their sexual identity and "more than half of African American (51%), Latino/a (55%), Asian/Pacific Islander (55%), and multiracial students (59%) report[ing] being verbally harassed in school for this reason" (p. xi). Also, LGBT students might experience higher rates of cyberbullying for reasons (e.g., depression, lower self-esteem) other than their sexual and gender identity. For example, while bullying has been associated with depression among children and adolescents, studies have revealed that it is also true that depressed children and adolescents tend to be more bullied and victimized than their peers (e.g., Kochel et al. 2012; Schacter and Juvonen 2017). In a longitudinal study of 486 fourth through sixth graders, Kochel et al. (2012) found that higher symptoms of depression among participants indicated higher levels of victimization. Considering that LGBTQ individuals, including

youth, suffer higher prevalence of depression and lower self-esteem (e.g., Institute of Medicine 2011), it would be beneficial to further investigate the relationship between negative consequences and cyberbullying, and vice versa, in order to more accurately capture and understand to what extent cyberbullying affects LGBTQ youth.

Experiences of transgender and other gender expansive individuals are either conflated with sexual identity or outright ignored in most studies. Also, in studies where transgender participants are included, conclusions are drawn from a small sample of participants, with as little as only 0.25% of the sample being comprised of gender expansive students. Future research should thoroughly explore the experiences of cyberbullying of transgender and other gender expansive students. It is possible that the experiences of gender expansive students are as different, and perhaps more pervasive and negative than LGB and heterosexual students and, therefore, different cyberbullying prevention strategies might be needed. Moreover, the studies that have been presented in this literature review specifically capture those who identify with a particular label (LGBTQ). As stated by Kosciw et al. (2012), conclusions cannot be drawn from youth who might engage in same-sex relationships but who do not particularly identify with a label or as a sexual minority or gender expansive youth. Therefore, further research should also assess for cyberbullying among individuals who identify with other sexual identities, or no specific sexual identities, but engage in same-sex relationships.

Methodological Concerns

An important limitation is sampling strategy. That is, most studies recruited participants in school settings or LGBTQ-related organizations. While these are reasonable and understandable recruitment sites, it is plausible to believe that the results and experiences discussed in this paper reflect only those of LGBTQ individuals who have connections to these organizations or who felt safe enough to participate in the study (e.g., Kosciw et al. 2012).

Cyberbullying research lacks theoretical and conceptual clarity, including differences in definition, operationalization, and cut-off values (i.e., the frequency of experiences and/or behaviors a person must experience to be considered cyberbullying; Zych et al. 2016). Specific to this paper, 11 studies used multiple items to assess cyberbullying, nine used a one-item scale, and seven did not specify how many items were used (including the one qualitative study). In addition, some researchers have made the case that research should focus on wide-range experiences of cyber-aggression, and not specifically cyberbullying (e.g., Smith 2016), while other researchers argue that cyberbullying is a specific form of

cyber-aggression that must be studied separately (e.g., Smith et al. 2013). We pose that as researchers further develop and test new ways of defining and assessing for cyberbullying, that the experiences of LGBTQ youth are taken into consideration.

Suggestions for Future Research

Most studies in this review used a cross sectional research design, making it challenging for researchers to accurately understand the long term consequences of cyberbullying and limiting the ability to make causal inferences (Cénat et al. 2015; Duong and Bradshaw 2014). Future research should employ longitudinal research designs to better assess the effects of cyberbullying on LGBTQ youth over time and establish causation (Ramsey et al. 2016). Also, efforts should be made to cast a wider net and try to reach LGBTQ youth who might be isolated or not have LGBTQ-related organizations readily available within their communities (e.g., rural communities, communities with large numbers of LGBTQ people of color). In addition, the lack of uniformity regarding the definitions and evaluation measurements of cyberbullying makes it difficult for researchers to accurately describe and make definitive deductions regarding the prevalence and impact of cyberbullying (e.g., Hamm et al. 2015). Lack of consistency and representative sampling approach makes it challenging for researchers to precisely capture the extent to which cyberbullying affects LGBTQ youth, thus affecting their ability to recommend evidence-based interventions to combat and dismantle LGBTQ cyberbullying.

Conclusion

LGBTQ youth are harassed and cyberbullied at rates higher than their heterosexual and cisgender counterparts, resulting in psychological and behavioral effects. These youth, who are often already experiencing traditional bullying, lack support from their peers, parents, schools and community and frequently do not report cyberbullying. Current cyberbullying interventions do not target these youth in their efforts and notably absent is programming geared toward LGBTQ youth of color. It is recommended that schools work collaboratively with parents, LGBTQ students, and community partners to create policies to protect these students. Parents are encouraged to dialogue openly with their children about the risks of social media and provide supportive responses when youth disclose cyberbullying. Comprehensive school policies that create a climate of awareness for LGBTQ-specific cyberbullying are recommended to begin to combat cyberbullying. There is also a need to create therapeutic communities to assist victims in recovering from this traumatic form of bullying and decrease psychological distress.

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Compliance with Ethical Standards

Conflict of Interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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