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Online social support as a buffer against online and offline peer and sexual victimization among U.S. LGBT and non-LGBT youth☆

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ABSTRACT

In today's technology-infused world, we need to better understand relationships youth form with friends online, how they compare to relationships formed in-person, and whether these online relationships confer protective benefits. This is particularly important from the perspective of peer victimization, given that social support in-person appears to reduce the odds of victimization in-person. To address this literature gap, data from a sample of 5,542 U.S. adolescents, collected online between August 2010 and January 2011, were analyzed. The main variables of interest were: online and in-person peer victimization (including generalized and bullying forms) and online and in-person sexual victimization (including generalized and sexual harassment forms). Lesbian, gay, bisexual, and transgender (LGBT) youth were more likely than non-LGBT youth to have online friends and to appraise these friends as better than their in-person friends at providing emotional support. Peer victimization and unwanted sexual experiences were more commonly reported by LGBT than non-LGBT youth. Perceived quality of social support, either online or in-person, did little to attenuate the relative odds of victimization for LGBT youth. For all youth, in-person social support was associated with reduced odds of bully victimization (online and in-person) and sexual harassment (in-person), but was unrelated to the other outcomes of interest. Online social support did not reduce the odds of any type of victimization assessed. Together, these findings suggest that online friends can be an important source of social support, particularly for LGBT youth. Nonetheless, in-person social support appears to be more protective against victimization, suggesting that one is not a replacement for the other.

What's New: In-person social support is more protective against victimization than online social support. Ensuring youth have in-person support and resources is critical. Because LGBT youth have significant social supports online, greater use of online spaces to support LGBT youth is warranted.

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Introduction

Given the ubiquity of the Internet in the lives of youth today (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013), we need to better understand the relationships youth form online, how they compare to relationships formed in-person, and whether these relationships confer protective benefits. This is particularly important from the perspective of peer victimization: Victims of in-person bullying perceive lower levels of social support and have lower social competence than non-victims (Boulton & Underwood, 1992; Haynie et al., 2001; Slee & Rigby, 1993). Further, data suggest that higher perceived in-person peer social support is related to reduced odds of in-person sexual harassment as well as distressing sexual harassment (Mitchell, Ybarra, & Korchamaros 2014). Understanding the role that *online* peer relationships play in potentially buffering youth from online and in-person assaults is important in a world where technology is so integrated into youth culture.

Social support is likely associated with feeling safer in a particular environment. Young people who lack social support in-person may find online relationships to be crucial in supporting their well-being. Consistent with this hypothesis, adults who report challenges with in-person social situations and relationships identify the Internet as a valuable resource for social support (McKenna & Bargh, 2000). An online tether to similar others may be especially important for youth who are lesbian, gay, bisexual, and transgender (LGBT), because they are more likely than non-LGBT youth to face stigma and social marginalization in face-to-face settings (Gay, Lesbian & Straight Education Network Center for Innovative Public Health Research and Crimes against Children Research Center, 2013; Hillier, Mitchell, & Ybarra, 2012; Mustanski, Lyons, & Garcia, 2011a). Indeed, LGBT young people view online spaces as safe places to receive support from friends (Gay, Lesbian & Straight Education Network Center for Innovative Public Health Research and Crimes against Children Research Center, 2013; Hillier, Horsely, & Kurdas, 2004) and say that the Internet is sometimes a safer place for them to socialize than in-person (Hillier & Harrison, 2007).

Bullying is common in adolescence both through in-person (Wang, Iannotti, & Nansel, 2009) and online (Tokunaga, 2010) interactions. Bullying differs from general peer victimization because it occurs repeatedly, over time, by someone who has real or perceived power that is greater than the victim (Olweus, 1993). Emerging data suggest that non-bullying victimization is also associated with increased odds of psychosocial problems, but that bullied youth have even higher odds of psychosocial problems (Ybarra, Espelage, & Mitchell, 2014). Thus, is it important to delineate between bullying and non-bullying peer victimization (Finkelhor, Turner, & Hamby, 2012).

About one in six adolescents are sexually harassed annually in the U.S. (Finkelhor, Turner, Shattuck, & Hamby, 2013), with similar rates in-person and online (Mitchell et al., 2014; Ybarra, Espelage, & Mitchell, 2007). Although youth may be subjected to a wide range of unwanted sexual experiences, sexual harassment is a specific type that results in a hostile environment, in places like work or school (U.S. Equal Employment Opportunity Commission, 2013). Just as with peer victimization, it is important to distinguish between the two types of unwanted sexual experiences.

LGBT youth face particular risk for peer victimization: Eighty-two percent of LGBT youth reported being verbally taunted and 38% reported being physically harassed in the past year because of their sexual identity at school (Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012). Similarly high percentages were noted online. Perhaps accordingly, perceptions of safety are particularly low among LGBT youth (Kosciw et al., 2012). Further explorations of these associations by sexual identity and gender identity are needed to fully understand the potential influence that online friendships and social support may have on reducing the likelihood of peer victimization.

Based upon previous literature, we posit that peer social support will be associated with reduced odds of peer and sexual victimization. We anticipate that online social support may have a stronger influence on online victimization, and in-person social support on in-person victimization. At the same time, because of posited deficits in in-person support among LGBT youth, we anticipate that online peer social support will attenuate the odds of both online and in-person victimization for sexual and gender minority youth. After contextualizing youth's social support online and in-person, we will look at four broad types of victimization, each with two subtypes, to test these hypotheses: online peer victimization (including generalized victimization and bullying victimization), in-person peer victimization (including generalized victimization and bullying victimization), online sexual victimization (including generalized sexual victimization and sexual harassment), and in-person sexual victimization (including generalized sexual victimization and sexual harassment). We examine the types of victimization separately to identify possible differences in how peer social support online and in-person may influence these different victimization experiences differently, particularly within the context of sexual and gender identity. Given that depressive symptomatology may diminish peer support, as well as increase one's likelihood of peer victimization (Stice, Ragan, & Randall, 2004; Toomey, Ryan, Diaz, Card, & Russell, 2010), we will examine the relation between social support and victimization within the context of depressive symptomatology.

Methods

Data were from the cross-sectional Teen Health and Technology (THT) Study, collected online between August 2010 and January 2011 from 5,907 youth, aged 13 to 18 years. The protocol was reviewed and approved by the Chesapeake Institutional Review Board (IRB), the University of New Hampshire IRB, and the Gay, Lesbian & Straight Education Network (GLSEN) Research Ethics Review Committee. A waiver of parental consent was granted to prevent participants' sexual identity or gender identity from being unintentionally disclosed to their caregivers.

Sampling process

Participants were recruited: (a) randomly from the Harris Poll Online (HPOL) opt-in panel (n = 3,989 respondents) and (b) through referrals from GLSEN (n = 1,918 respondents) to obtain an oversample of LGBT youth.

HPOL is an opt-in panel of people who are recruited through a variety of methods, including targeted mailings, word of mouth, and online advertising. Panelists are rewarded for their participation in surveys with points that can be redeemed for "gifts" in a specified product portfolio. THT study respondents recruited through HPOL were randomly identified and subsequently invited through email invitations that referred to a survey about their "online experiences." The survey description was purposefully vague and did not provide a definition for these experiences.

GLSEN is a national non-profit research and advocacy organization focused on ensuring safe schools for all students, including LGBT youth. GLSEN sent notices about the survey to its list of then-current national student contacts, representing students from all 50 states and the District of Columbia. The GLSEN list consisted of thousands of high school students who had either participated in GLSEN's programs and online actions or signed up to receive information about GLSEN's programs and resources. The GLSEN notice referred to the survey as about "health and the Internet" and indicated interest in hearing from LGBT youth.

Survey invitations to both groups were purposefully non-specific about particular outcomes (e.g., peer victimization) to reduce self-selection bias based upon interest in or experience with particular topics. Although it was theoretically possible that a respondent could have been recruited through both HPOL and GLSEN outreach efforts, the lack of financial incentive reduced the likelihood that the same person would complete the survey more than once. Additionally, IP addresses were collected. Multiple surveys completed from the same IP address (n = 32) were flagged for further scrutiny.

Procedure

The survey questionnaire was self-administered online. Qualified respondents were: (a) U.S. residents; (b) between 13 and 18 years old; (c) in 5th grade or above; and (d) able to provide informed assent. Aside from the internal incentives offered by Harris Interactive to their HPOL members to take surveys, THT respondents were not incentivized to complete the survey.

Given the sensitivity of the questions, patterns of participant progress were monitored closely when the survey was in field. There was no indication, however, that a particular series of questions (e.g., victimization experiences) triggered higher rates of drop off in the survey than other question series. The median survey length was 23 minutes for HPOL respondents and 34 minutes for GLSEN respondents. The survey length was longer for GLSEN participants because additional questions were posed to LGBT youth.

Response rate

Calculated as the number of individuals who started the survey, divided by the number of email invitations sent less any email invitations that were returned as undeliverable, the response rate for the HPOL sample was 7%. The response rate for the GLSEN sample cannot be calculated as the denominator is indeterminable (i.e., we do not know how many people saw the invitation on Facebook). Youth who started but did not complete the survey included 4,759 youth recruited through HPOL and 1,818 youth recruited through GLSEN efforts.

Measures

Peer victimization. Peer victimization was operationalized as varying degrees of physical or verbal aggression. Using a previously validated measure (Ybarra, boyd, Korchmaros, & Oppenheim, 2012; Ybarra et al., 2014), three types were assessed: (a) *generalized peer victimization*: bullying or harassment that was not both repetitive and by someone with more power; (b) *bullying*: bullying or harassment that occurred at least monthly or repetitively, by someone with more power; and (c) non-victims of peer aggression.

After informing participants that "bullying and harassment can happen anywhere, like at school, at home, or other places you hang out," youth were asked: "In the past 12 months, how often were you bullied or harassed by someone about your age. . .?" Five modes were queried: by in-person contact, by telephone, by text message, via online interaction, or through some other way (α = 0.80). Response options ranged from a scale of 1 (never in the past 12 months) to 5 (every day or almost every day).

Youth who reported that they had been victimized through any mode or by any type were asked a follow-up question about differential power: "Thinking just about the past 12 months, were you ever bullied or harassed by someone who had more power or strength than you? This could be because the person was bigger than you, had more friends, was more popular, or had more power than you in another way." These respondents also were asked if the peer victimization occurred repeatedly.

Youth who indicated that they were victimized by someone with more power than them and that it occurred repeatedly (either by endorsing the direct question or noting in the above questions that the experience occurred "monthly" or more frequently) were categorized as victims of *bullying*. Youth who were victimized once or repeatedly; by someone with equal

or more power (but not both repeatedly and by someone with more power than them) were categorized as victims of *generalized peer victimization*. Non-victims responded "never" to all peer victimization questions. Given the focus of the current analysis, examinations were restricted to youth who reported victimization either online and/or in-person.

Sexual victimization. Youth who had unwanted sexual experiences were categorized based upon whether the experiences resulted in a hostile environment. Youth were assigned to one of three groups: (a) *sexually harassed:* Reported unwanted sexual experiences that made the places they go now feel scary; (b) *victims of generalized sexual victimization*: Reported unwanted sexual experiences that did not necessarily result in a hostile environment; or (c) non-victims of sexual victimization.

Youth were first provided a definition of sexual harassment: "Unwelcomed sexual advances, unwanted requests for sexual favors, or someone saying something or doing something sexual when you do not want them to do so." They were reminded that sexual harassment could happen anywhere (e.g., school, home, or other places where they frequent) and then asked: "In the past 12 months, how often have you been sexually harassed?" Five modes were queried: by in-person contact, by telephone, by text messaging, via online interaction, or other type of interaction ($\alpha = 0.81$). Youth who reported harassment were then asked: "Thinking about the places where you were sexually harassed in the past 12 months, do any of these places now feel scary, unfriendly or uncomfortable?" Response options were "yes" or "no." Those who responded affirmatively were coded as sexually harassed; youth who responded negatively were coded as victims of generalized sexual victimization. Again, given the focus of the current analysis, examinations were restricted to youth who reported unwanted sexual experiences either online or in-person.

Social support. Perceived quality of social support from friends was measured with four modified items from the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet, & Farley, 1988), which has strong internal validity and factor structure across different populations (e.g., urban U.S. adolescents Canty-Mitchell & Zimet, 2000), European adolescents (Zimet, Powell, Farley, Werkman, & Berkoff, 1990). An example item is: "I can talk about my problems with these friends". Youth were asked to think about "friends who you first met in-person (not online)" in answering the four-item scale. Next, they were asked whether they had any friends whom they "first met online (such as through a social networking site or chat room)." Those who answered affirmatively were asked to think about these friends while answering parallel social support questions about friends first met in-person versus online. Comparisons were based upon where the friend was first met, irrespective of whether the friend was subsequently known in the other space (e.g., an online friend who also became a friend in-person, or vice versa). Acceptable scale reliability was observed for in-person ($\alpha = 0.94$) and online ($\alpha = 0.94$) support.

Youth also were asked about the number of close friends (i.e., "that you can tell your biggest secrets to, or will help you if you have a problem") whom they first met in-person and whom they first met online. Youth who reported having at least one close friend online and in-person were asked to compare the quality of these relationships in four ways (e.g., better at listening when the respondent had a problem). Comparisons were based upon where the friend was first met, irrespective of whether the friend was subsequently known in the other space (e.g., an online friend who also became a friend in-person, or vice versa).

Sexual and gender identity. Sexual identity refers to an individual's pattern of physical and emotional arousal and attraction toward other people (Frankowski & Committee on Adolescence, 2004). Lesbian and gay people are attracted to people of the same gender while bisexual people are attracted to male and female genders. Gender identity is the felt sense of oneself as being male or female. Transgender people feel themselves to be of a gender different from their assigned sex at birth. These individuals can identify as any sexual orientation, including gay or lesbian, heterosexual, or bisexual. Some youth are ambiguous about or non-binary in their gender identity. While they may feel that their gender is not the same as their assigned sex at birth, they may also feel that the label "transgender" does not apply to them either. These youth might describe themselves as "genderqueer" or identify as a gender that is different from their sex (e.g., male and female, respectively) but not endorse the "transgender" response option. Transgender and other gender nonconforming youth are collectively described here as "gender minority youth."

To determine sexual identity, youth were asked: "How would you describe your sexuality or sexual orientation?" Response options were: gay, lesbian, bisexual, straight/heterosexual, questioning, queer, other, or not sure. Sex was asked by: "What is your biological sex?" Response options were: male, female, or do not want to answer. Gender identity was queried: "What is your gender? Your gender is how you feel inside and can be the same or different than the answer you gave above." Multiple responses were accepted: male, female, transgender, other (with the option to write-in a response), and do not want to answer. Youth who reported a biological sex that was different from their gender identity, but did not choose "transgender" or "do not want to answer," were asked a follow-up question: "Are you of transgender experience?" Response options were: yes, no, and do not want to answer.

Sexual identity responses were categorized based upon a hierarchy that gave deference to labels that reflected a stronger identity on the homoaffiliative continuum in this order: lesbian/gay, bisexual, queer, questioning, and straight/heterosexual. Thus, as an example, if an individual identified as "gay" and "queer," they were categorized as "Gay/Lesbian." If an individual identified as "bisexual" and "questioning," they were categorized as "Bisexual." The following categories were created: (a) straight/heterosexual exclusively (i.e., no additional sexual identity was marked), (b) bisexual, (c) gay, lesbian, or queer (GLQ), and (d) questioning, unsure, and "other" (QUO).

Youth who reported their biological sex and gender identity as the same were categorized as "cisgender" (non-gender minority). Youth who identified as transgender, of transgender experience, as having a biological sex different from their gender identity, and/or of "other" gender identity (e.g., gender queer) were categorized as gender minority youth.

Background variables. Depressive symptomatology was measured using a brief, 10-item version of the Center for Epidemiologic Studies Depression Scale Revised (CESD-R) (Haroz, Ybarra, & Eaton, 2014) to account for the association of peer victimization and depressive symptoms ($\alpha = 0.93$). Additionally, the survey queried age, race, ethnicity, and youth-estimated relative household income (more than, equal to, or less than "average"). Respondents were also asked process-related items including self-reported honesty in completing survey questions and whether the respondent was alone in the room while completing the survey. Youth who reported being dishonest in answering survey questions were not excluded in order to maximize data. This decision was made because it was impossible to know which questions they answered honestly versus dishonestly and because the indicator in the model did not impact the relations between social support and victimization experiences.

Data management

The HPOL-recruited "general population" and the GLSEN-recruited sample of LGBT teens were weighted to approximate the national population of adolescents and also so that they could be validly combined together. First, the HPOL sample was weighted to the demographic characteristics of 13- to 18-year-olds (i.e., sex, age, race/ethnicity, parents' highest level of education, school location, and U.S. region United States' Census Bureau, 2009). Next, from the weighted HPOL sample, a demographic profile was created for teens who identified as LGBT (i.e., gender/biological sex combined classification, age, race/ethnicity, parents' highest level of education, school location, U.S. region, and sexual orientation). The profile was then applied to the GLSEN LGBT respondents, stratified by biological sex. Transgender youth in the GLSEN sample were not weighted to the transgender youth in the HPOL study on sexual identity. The demographic weighting alone did not shift the two groups into alignment: The GLSEN sample was less likely to be born-again Christian or have parental monitoring of their online activities; and more likely to be politically involved, to be out to their parents, to be a victim of bias-based bullying, to talk to other LGBT youth online, and to use the home computer for three or more hours on a typical day. As such, a second weight was added to adjust for these behavioral and attitudinal differences between the two groups. Similar to the demographic weight, the behavioral and attitudinal weight aligned GLSEN data to HPOL data. Finally, a postweight was applied so that GLSEN and HPOL LGBT each accounted for 50% of the combined total LGBT population. Additional details of the procedures for weighting and methodology can be found elsewhere (Center for Innovative Public Health Research, 2011).

Missing data were imputed using the single-imputation command "impute" in Stata (StataCorp, 2009). Imputed values were estimated in a best-set regression analysis based on sexual identity, age, sexual attraction, grade, race and ethnicity, sex, age at initiating sexual behaviors, rural versus urban, family income, and being a born-again Christian. Respondents who gave valid answers (i.e., not "do not know" responses) for less than 80% of the survey and those who did not meet valid data requirements (e.g., survey length was less than 5 min) were dropped. As a result, 365 surveys were excluded, and the final sample size was 5,542.

Data analyses

First, indicators of in-person and online peer social support were examined by sexual identities and gender identities. Next, past-year prevalence rates of the four victimization experiences (e.g., online peer victimization; in-person sexual victimization) and personal characteristics were presented, again stratified by sexual identity and gender identities. Differences across victimization experiences were respectively tested using the *F* statistic, which is a chi-square test adjusted for sampling weights. Finally, to determine the influence that social support had on the odds of victimization directly, and on attenuating the odds of victimization for LGBT youth indirectly, multinomial logistic regression models were fit to estimate the relative odds of each of the two victimization categories (e.g., generalized peer victimization, bullying) versus not being a victim given social support. For each of the four broad victimization types, two models were presented: Model 1 reported the relative odds given one's sexual and gender identities, and Model 2 adjusted for perceived quality of peer social support (i.e., the MSPSS scales for online and in-person support). If the odds ratios associated with sexual and gender identity were attenuated by at least 10% in Model 2, we concluded that social support had a positive influence on reducing the odds of victimization for these youth. The sample for these models was restricted to the 2,131 youth who reported having online friends, so that both online and in-person social support could be examined simultaneously.

Results

The sample characteristics reflect unweighted data; all subsequent results are weighted as described above. Stata provides a weighted percentage. The subsample size is the actual number, thusly providing an accurate reflection of the number of youth in each cell.

Sample

As described above, there was an oversample of LGBT youth such that 61% (n = 3,380) of study respondents self-identified as heterosexual only. Almost a quarter (23%; n = 1,282) identified as gay, lesbian, or queer, 12% (n = 655) as bisexual, and 4% (n = 225) as questioning, unsure, or "other sexual identity." Participants were 15.8 years of age on average (SD: 1.6, range: 13–18); 74% self-identified as white, 9% as black or African American, 9% as mixed race, and 8% as another race (e.g., Asian, Native American); and 12% identified as Hispanic ethnicity. Fifty-one percent of youth identified as cisgender female, 41% as cisgender male, and 8% as gender minority, including transgender, gender nonconforming, or another gender identity.

Indicators of social support

One quarter (26%) of youth reported having at least one close friend whom they first met online. The percentage of youth reporting online friends varied significantly by sexual identity, with higher prevalence rates of online friends among sexual minority youth (Table 1). Both the number of close in-person friends and the perceived quality of social support from friends known in-person differed significantly by sexual identity: Bisexual youth reported the highest number of close in-person friends and the highest perceived quality of in-person support, and QUO youth the lowest levels. Gender minority youth reported having more close online friends than cisgender youth, but did not significantly differ in quantity of close in-person friends or in their rating of social support from these friends. Moreover, the numbers of online friends subsequently met in person were similar across sexual identities and gender identities.

Appraisals of online versus in-person social support

Among youth who had close friends both online and in-person (38% of youth overall, n = 2,131), sexual minority youth were significantly more likely than heterosexual youth to indicate that their online friends were better than their in-person friends at providing support (Table 1). No differences were noted in the self-appraised quality of online versus in-person friends by gender identity.

Personal safety

Relatively few youth across all sexual and gender identities reported personal safety concerns online (Table 1). However, differences were noted in terms of feeling safe at school by sexual identity: More than one in six GLQ youth said they felt somewhat or extremely unsafe at school, as did one in ten bisexual youth. Fewer QUO and heterosexual youth felt unsafe at school. Similarly, gender minority youth were significantly more likely to report feeling unsafe at school than cisgender youth (27% versus 7%, respectively).

Past-year online and in-person peer victimization

Bullying occurred more often in-person (12%) than online (4%), whereas sexual harassment was more similarly reported in-person (4%) and online 2%. Rates of generalized peer victimization and bullying (Table 2), as well as generalized sexual victimization and sexual harassment (Table 3), significantly differed by sexual and gender identities. Indeed, almost one in two GLQ youth experienced online peer victimization, compared to one in six heterosexual youth. One in two gender minority youth experienced online peer victimization versus one in four cisgender adolescents.

The influence of quality of peer social support in predicting victimization

For both online and in-person peer victimization, the odds of bully victimization decreased by 5% with each incremental increase in perceived in-person peer social support (Table 4, Model 2). However, perceived online social support was not significantly associated with either online or in-person bullying. Furthermore, neither type of social support was associated with generalized peer victimization.

As shown in Table 5 (Model 2), the relative odds of in-person sexual harassment reduced by 5% with each incremental increase in in-person social support. In contrast, the relative odds of online generalized sexual victimization increased by 4% with each incremental increase in quality of online social support. Neither online nor in-person social support was associated with online sexual harassment or in-person generalized sexual victimization.

Table 1
Online and in-person social support by sexual identity and gender identity ($n = 5,542$).

Personal characteristics	Sexual identity ($n = 5,542$)					Gender Identity ($n = 5,542$)		
	Heterosexual (62%, $n = 3,380$)	Gay, Lesbian, and Queer youth (GLQ) (15%, $n = 1,282$)	Bisexual (19%, $n = 655$)	Questioning, unsure, and youth of other sexual identities (QUO) (4%, $n = 225$)	p-Value[a]	Cisgender youth (94%, $n = 5,100$)	Gender minority youth (Transgender, gender nonconforming, and other gender youth) (6%, $n = 442$)	p-Value[a]
Online social support								
Friend first met online (any)	24.5% (812)	62.0% (846)	54.8% (399)	33.2% (87)	<0.001	34.9% (1,852)	58.2% (292)	<0.001
Perceived quality of social support ($n = 2,131$[b]; range: 4–28)	18.2 (0.21)	20.4 (0.47)	20.5 (0.53)	19.9 (0.73)	<0.001	19.4 (0.21)	20.8 (1.02)	0.15
Number of close online friends[b]	0.8 (0.08)	1.8 (0.15)	2.3 (0.46)	0.8 (0.15)	<0.001	1.2 (0.11)	1.7 (0.24)	0.07
Number of close online friends subsequently met in person[b]	1.9 (0.26)	1.3 (0.14)	2.4 (0.76)	1.4 (0.32)	0.16	1.9 (0.28)	1.2 (0.24)	0.06
In-person social support								
Perceived quality of social support (range: 4–28)	22.0 (0.10)	22.1 (0.34)	22.4 (0.28)	20.7 (0.47)	0.02	22.0 (0.10)	21.9 (0.44)	0.84
Number of close in-person friends	5.7 (0.15)	5.9 (0.27)	6.8 (0.49)	4.5 (0.36)	<0.001	5.9 (0.14)	5.8 (0.55)	0.93
Online versus in-person social support ($n = 2,131$)[b,c]								
Better at listening when you have a problem					<0.001			0.97
Friends first met online	13.8% (108)	30.0% (224)	27.0% (119)	24.9% (24)		22.1% (389)	22.6% (86)	
Friends first met in-person	51.0% (413)	34.9% (334)	35.4% (141)	38.3% (30)		42.0% (819)	40.7% (99)	
No difference	35.3% (291)	35.1% (283)	37.6% (132)	36.8% (32)		35.9% (635)	36.7% (103)	
Less judgmental					0.01			0.31
Friends first met online	29.3% (226)	41.0% (324)	42.2% (168)	40.1% (38)		36.9% (639)	31.9% (117)	
Friends first met in-person	28.4% (236)	20.7% (164)	17.8% (85)	20.4% (16)		23.4% (447)	19.5% (54)	
No difference	42.3% (350)	38.3% (353)	40.0% (139)	39.5% (32)		39.7% (757)	48.6% (117)	
Better at letting you express who you really "are"					<0.001			0.68
Friends first met online	15.9% (125)	31.5% (250)	30.8% (146)	29.8% (26)		24.3% (441)	28.7% (106)	
Friends first met in-person	43.9% (359)	33.9% (256)	26.8% (115)	27.4% (27)		36.2% (680)	32.6% (77)	
No difference	40.2% (328)	34.7% (335)	42.3% (131)	42.8% (33)		39.5% (722)	38.7% (105)	
Better at understanding you					0.006			0.53
Friends first met online	12.8% (96)	25.6% (206)	20.2% (104)	27.3% (22)		18.3% (347)	23.1% (81)	
Friends first met in-person	56.7% (459)	46.1% (392)	46.7% (179)	41.5% (36)		51.0% (949)	45.7% (117)	
No difference	30.6% (257)	28.4% (243)	33.1% (109)	31.3% (28)		30.7% (547)	31.2% (90)	
Personal safety								
Feel somewhat/extremely unsafe online	5.2% (176)	7.1% (70)	4.1% (35)	6.8% (16)	0.30	5.2% (270)	6.5% (27)	0.56
Feel somewhat/extremely unsafe at school	5.6% (184)	16.6% (228)	9.7% (97)	6.9% (19)	<0.001	6.9% (417)	26.5% (111)	<0.001

Note: Variables with multiple categories (e.g., Better at listening when you have a problem) sum down the column (i.e., Friends first met online + friends first met in-person + No difference). Data shown for dichotomous variables (e.g., Self-appraised online safety) reflect one of the two categories (e.g., Feel somewhat/extremely unsafe online). The value for the other category (e.g., Feel somewhat/extremely safe online) can be computed by subtracting the value shown (e.g., 5.2%) from 100% (i.e., 94.8%). Cisgender = Not Gender Minority.

[a] Statistical significance of chi-square test to determine whether values were similar across the four categories of sexual identity.
[b] Only asked of youth who reported having an online friend.
[c] Youth who reported having close friends online and close friends in-person were asked to compare those friends on the listed qualities.

Table 2
Past-year prevalence rates of online and in-person peer victimization by youth characteristics (n = 5,542).

Youth characteristics	Online peer victimization			In person peer victimization		
	No peer victimization	Generalized peer victimization	Bullying (repetitive with differential power)	No peer victimization	Generalized peer victimization	Bullying (repetitive with differential power)
Sexual identity[a,b]						
Heterosexual	69.6% (2,848)	43.2% (422)	23.8% (110)	70.8% (2,124)	58.2% (904)	38.0% (352)
GLQ	12.2% (677)	23.0% (387)	30.6% (218)	10.1% (407)	17.1% (467)	29.5% (408)
Bisexual	14.1% (330)	30.0% (196)	42.0% (129)	15.8% (231)	18.9% (215)	28.8% (209)
QUO	4.2% (170)	3.8% (41)	3.6% (14)	3.3% (109)	5.9% (85)	3.7% (31)
Gender identity[a,b]						
Cisgender youth	95.5% (3,822)	90.0% (901)	86.8% (377)	96.6% (2,762)	92.7% (1,513)	87.5% (825)
Gender minority youth (Transgender, gender nonconforming, and other gender youth)	4.5% (203)	10.0% (145)	13.2% (94)	3.4% (109)	7.3% (158)	12.5% (175)
Demographic characteristics						
Age (M: SE)[a,b]	15.7 (0.04)	15.7 (0.08)	15.4 (0.14)	15.9 (0.04)	15.5 (0.06)	15.3 (0.09)
White (vs. non-white)[b]	66.3% (2,933)	69.7% (803)	69.0% (340)	64.4% (2,039)	69.3% (1,277)	72.0% (760)
Hispanic (versus non-Hispanic)	20.6% (513)	15.5% (108)	16.3% (51)	21.0% (379)	17.4% (187)	17.3% (106)
Lower than average household income (versus average, higher than average) [a,b]	27.5% (920)	32.1% (259)	35.8% (146)	26.3% (632)	29.5% (400)	36.3% (293)
Setting						
Urban	29.1% (1,188)	28.3% (312)	22.8% (139)	29.3% (846)	27.7% (498)	27.3% (295)
Suburban	32.9% (1,589)	33.9% (420)	32.0% (170)	33.3% (1,165)	32.9% (664)	32.0% (350)
Small town	38.0% (1,248)	37.8% (314)	45.2% (162)	37.4% (860)	39.5% (509)	40.7% (355)
Depressive symptomatology[a,b]	3.9% (128)	6.9% (75)	19.3% (86)	4.1% (97)	4.4% (68)	12.1% (124)
Survey process measures						
Dishonest in answering questions[a]	1.3% (43)	0.5% (11)	2.1% (11)	1.4% (34)	0.8% (17)	1.6% (14)
Not alone when completing the survey	32.1% (1,284)	33.2% (331)	35.4% (135)	32.7% (930)	31.3% (506)	34.1% (314)

Note. QUO = Questioning, unsure, and youth of other sexual identities. GLQ = Gay, Lesbian, and Queer youth. Cisgender = Not Gender Minority. Variables with multiple categories (e.g., setting) sum down the column (i.e., urban + suburban + small town). Data shown for dichotomous variables (e.g., race) reflect one of the two categories (e.g., white). The value for the other category (e.g., non-white) can be computed by subtracting the value shown (e.g., 67.4%) from 100% (i.e., 32.6%).

[a] Distribution of youth characteristic is statistically significantly different by online peer victimization experience (p< = 0.05).

[b] Distribution of youth characteristic is statistically significantly different by in-person peer victimization experience (p< = 0.05).

Effect modification of sexual identity by social support was explored for each of the four outcomes, but could not be estimated due to model instability as a result of insufficient cell sizes.

The indirect influence of quality of social support in predicting victimization by sexual identity and gender identity

In all cases, quality of social support did little to attenuate the relative odds of victimization for LGBT youth (odds ratios shown in Tables 3 and 4, Model 2 versus Model 1). For example, the odds of being a victim of generalized peer victimization for GLQ youth were 2.38 times higher than for heterosexual youth without taking into account levels of social support, and 2.25 times higher once social support was included in the model.

Discussion

Findings from this large national sample of LGBT and non-LGBT youth, aged 13 to 18 years, suggest that both online and in-person peer relationships play an important role in youths' lives and affect their perceptions of feeling supported and safe. Furthermore, most youth across sexual identities and gender identities feel safe online. Results also suggest that LGBT youth are more likely than non-LGBT youth to have friends they only know online and to rate these friendships as more supportive than their in-person friendships. This study adds to the growing literature suggesting that the Internet can be a safe haven for some LGBT youth (Hillier & Harrison, 2007; Hillier et al., 2004) and supports growing efforts to invigorate safe and supportive places online for LGBT youth.

Although benefits are noted, findings also suggest that the Internet is not universally safe. Rates of online peer victimization and sexual victimization are unacceptably high, particularly among LGBT youth. Results mirror previous reports of ongoing and stark disparities of victimization rates by sexual identity and gender identity (LeVasseur, Kelvin, & Grosskopf, 2013; Robinson & Espelage, 2013). This is not to say that the Internet is more dangerous than in-person spaces. Both types

Table 3
Past-year prevalence rates of online and in-person sexual victimization by youth characteristics ($n = 5542$).

Youth characteristics	Online sexual victimization			In-person sexual victimization		
	No sexual victimization	Generalized sexual victimization	Sexual harassment	No sexual victimization	Generalized sexual victimization	Sexual harassment
Sexual identity[a,b]						
Heterosexual	68.2% (3087)	32.6% (227)	20.7% (66)	68.8% (2898)	42.1% (362)	27.2% (120)
GLQ	12.0% (802)	29.9% (330)	38.0% (150)	12.1% (783)	23.5% (316)	33.1% (183)
Bisexual	15.7% (404)	32.6% (174)	39.8% (77)	15.1% (365)	29.0% (181)	37.9% (109)
QUO	4.1% (188)	5.0% (31)	1.5% (6)	4.1% (173)	5.4% (42)	1.8% (10)
Gender identity[a,b]						
Cisgender youth	95.6% (4218)	88.9% (663)	78.2% (219)	95.9% (3983)	90.2% (789)	81.5% (328)
Gender minority youth (Transgender, gender nonconforming, and other gender youth)	4.4% (263)	11.1% (99)	21.8% (80)	4.1% (236)	9.8% (112)	18.5% (94)
Demographic characteristics						
Age (M: SE)	15.7 (0.04)	15.8 (0.09)	15.6 (0.17)	15.7 (0.04)	15.7 (0.08)	15.7 (0.14)
White (vs. non-white)	67.4% (3351)	65.9% (520)	64.0% (205)	67.8% (3182)	65.1% (604)	63.7% (290)
Hispanic (versus non-Hispanic)	20.1% (529)	15.9% (106)	15.8% (37)	19.2% (494)	20.9% (125)	18.4% (53)
Lower than average household income[a,b]	28.9% (1042)	24.9% (188)	39.5% (95)	28.4% (975)	27.0% (217)	38.0% (133)
Setting						
Urban	28.4% (1293)	25.6% (237)	37.0% (109)	27.9% (1201)	29.9% (296)	32.0% (142)
Suburban	33.1% (1779)	32.1% (292)	33.8% (108)	33.5% (1684)	32.5% (344)	29.1% (151)
Small town	38.6% (1409)	42.4% (233)	29.3% (82)	38.7% (1334)	37.6% (261)	39.0% (129)
Depressive symptomatology[a,b]	4.5% (158)	5.7% (60)	22.1% (71)	4.1% (147)	5.1% (54)	20.7% (88)
Survey process measures						
Dishonesty in answering questions	1.2% (45)	1.8% (16)	1.1% (4)	1.2% (45)	2.1% (17)	0.6% (3)
Not alone when completing the survey	32.4% (1439)	32.8% (221)	33.5% (90)	31.8% (1338)	35.3% (277)	34.2% (135)

Note. GLQ = Gay, Lesbian, and Queer youth. QUO = Questioning, unsure, and youth of other sexual identities. Cisgender = Not Gender Minority.
Variables with multiple categories (e.g., setting) sum down the column (i.e., urban + suburban + small town). Data shown for dichotomous variables (e.g., race) reflect one of the two categories (e.g., white). The value for the other category (e.g., non-White) can be computed by subtracting the value shown (e.g., 67.4%) from 100% (i.e., 32.6%).

[a] Distribution of youth characteristic is statistically significantly different by online sexual victimization experience ($p <= 0.05$).
[b] Distribution of youth characteristic is statistically significantly different by in-person sexual victimization experience ($p <= 0.05$).

of victimization assessed occur more frequently in-person than online. More needs to be done to prevent biased-based aggression across the places and spaces in which youth traverse.

Contrary to our hypothesis, online and in-person social support are inconsistently related to online and in-person victimization. In-person social support is associated with reduced odds of bullying victimization (online and in-person) and sexual harassment (in-person), but is not associated with any of the other outcomes of interest, including online and in-person generalized peer victimization and sexual victimization. For its part, online social support does not appear to reduce the likelihood of victimization risk for any of the outcomes online or in-person. There is even some suggestion that the likelihood of sexual harassment and bullying victimization increases as one's level of online social support increases. This is particularly interesting because we are comparing parallel ratings of social support: Social support from relationships that begin online is not protective, whereas an equally strong perceived level of social support from relationships that begin in-person may be protective in some circumstances. Perhaps the type of support needed to combat victimization is more conducive to face-to-face situations. For example, although the current data cannot determine temporality, it may be that in-person friends are more likely to know when victimization occurs, be direct witnesses of the event, and have more opportunities to provide support and intervene. Online friends may need to hear about the event after it occurs and have more limited options for helping the victim. More research is needed to examine how opportunities for support via the online environment may lead to more supportive in-person relationships.

Consistent with previous research (Craig & Smith, 2014; Friedman, Koeske, Silvestre, Korr, & Sites, 2006; Mustanski, Newcomb, & Garofalo, 2011b), peer social support did little to attenuate the relative odds of victimization for LGBT youth (Models 2 versus Models 1). Perhaps it is insufficient in overcoming or compensating for the substantial barriers to well-being that many LGBT may face. As conceptualized by minority stress models (Hatzenbuehler, 2009; Hendricks & Testa, 2012; Herek, Gillis, & Cogan, 2009; Meyer, 2003; Rosario, Schrimshaw, Hunter, & Gwadz, 2002), these barriers not only include victimization, but also larger social forces of stigma and marginalization affecting sexual and gender minority people. For youth, these social forces can include exposure to peers who have a developmentally naïve perspective on diversity and lack empathy for youth who are different (Robinson & Espelage, 2012).

Table 4
Multinomial logistic regression models estimating the relative odds of peer victimization (online and in-person) given one's sexual and gender identity, as well as social support among youth who have online friends ($n = 2131$).

Youth characteristics	Model 1: Relative odds of peer victimization given sexual identity and gender identity				Model 2: +Social Support			
	Generalized peer victimization		Bully victimization		Generalized peer victimization		Bully victimization	
Outcome: **Online** peer victimization	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value
Sexual identity								
Heterosexual	1.0 (RG)		1.0 (RG)		1.0 (RG)		1.0 (RG)	
GLQ	**2.38 (1.58, 3.58)**	**<0.001**	**4.03 (2.31, 7.03)**	**<0.001**	**2.25 (1.51, 3.36)**	**<0.001**	**3.94 (2.23, 6.98)**	**<0.001**
Bisexual	**2.53 (1.65, 3.87)**	**<0.001**	**4.60 (2.61, 8.13)**	**<0.001**	**2.39 (1.55, 3.67)**	**<0.001**	**4.61 (2.52, 8.43)**	**<0.001**
QUO	**2.03 (1.13, 3.64)**	**0.018**	0.74 (0.25, 2.18)	0.587	**1.95 (1.08, 3.51)**	**0.027**	0.71 (0.24, 2.05)	0.523
Gender minority (versus cisgender)	1.13 (0.64, 2.00)	0.669	1.37 (0.68, 2.76)	0.376	1.11 (0.63, 1.94)	0.720	1.40 (0.70, 2.82)	0.339
In-person social support					1.01 (0.97, 1.04)	0.713	**0.95 (0.91, 0.99)**	**0.016**
Online social support					1.02 (0.99, 1.06)	0.160	1.02 (0.97, 1.06)	0.513
Youth characteristics	Generalized peer victimization		Bully victimization		Generalized peer victimization		Bully victimization	
Outcome: **In-person** peer victimization	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value
Sexual identity								
Heterosexual	1.0 (RG)		1.0 (RG)		1.0 (RG)		1.0 (RG)	
GLQ	**2.29 (1.49, 3.50)**	**<0.001**	**5.48 (3.30, 9.11)**	**<0.001**	**2.32 (1.50, 3.60)**	**<0.001**	**5.12 (3.10, 8.43)**	**<0.001**
Bisexual	*1.51 (0.97, 2.35)*	*0.065*	**2.77 (1.68, 4.56)**	**<0.001**	*1.54 (0.98, 2.43)*	*0.063*	**2.63 (1.57, 4.38)**	**<0.001**
QUO	**2.06 (1.17, 3.62)**	**0.012**	0.77 (0.33, 1.81)	0.551	**2.05 (1.16, 3.63)**	**0.013**	0.68 (0.28, 1.60)	0.372
Gender minority (versus cisgender)	1.13 (0.60, 2.15)	0.704	1.50 (0.74, 3.04)	0.266	1.15 (0.60, 2.22)	0.668	1.54 (0.78, 3.05)	0.212
In-person social support					0.98 (0.95, 1.01)	0.264	**0.95 (0.92, 0.99)**	**0.007**
Online social support					1.00 (0.96, 1.03)	0.824	*1.04 (1.00, 1.08)*	*0.075*

Note. Two separate victimization types assessed: Online peer victimization and in-person victimization. The two categories (generalized peer victimization and bullying) are compared to reporting no peer victimization in the past year using multinomial logistic regression. For each victimization type, the relative odds of victimization are estimated given one's sexual and gender identities (Model 1); and then social support is added to the model to determine its relative influence on the relation between victimization and sexual and gender identity (Model 2). All models are adjusted for: age, race, ethnicity, income, urbanicity, major depressive symptomatology and survey process measures. QUO = Questioning, unsure, and youth of other sexual identities. GLQ = Gay, Lesbian, and Queer youth. Cisgender = Not Gender Minority. aOR = Adjusted Odds Ratio. 95% CI = 95% Confidence Interval.

Table 5
Multinomial logistic regression models estimating the relative odds of sexual victimization (online and in-person) given one's sexual identity and gender identity, as well as social support among youth who have online friends ($n = 2131$).

Personal characteristics	Model 1: Relative odds of victimization given sexual and gender identity				Model 2: +Social support			
	Generalized sexual victimization		Sexual harassment		Generalized sexual victimization		Sexual harassment	
Outcome: **Online** sexual victimization	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value
Sexual identity								
Heterosexual	1.0 (RG)		1.0 (RG)		1.0 (RG)		1.0 (RG)	
GLQ	**3.40 (2.20, 5.25)**	**<0.001**	**5.31 (2.77, 10.17)**	**<0.001**	**3.14 (2.05, 4.82)**	**<0.001**	**4.91 (2.54, 9.47)**	**<0.001**
Bisexual	**3.20 (2.10, 4.88)**	**<0.001**	**3.95 (2.01, 7.75)**	**<0.001**	**2.93 (1.93, 4.46)**	**<0.001**	**3.77 (1.88, 7.55)**	**<0.001**
QUO	*1.76 (0.91, 3.43)*	*0.094*	1.04 (0.33, 3.31)	0.946	1.66 (0.86, 3.22)	0.134	0.95 (0.29, 3.06)	0.925
Gender minority (versus cisgender)	*1.28 (0.70, 2.34)*	*0.422*	*1.88 (0.93, 3.79)*	*0.077*	1.25 (0.69, 2.27)	0.467	*1.95 (0.99, 3.84)*	*0.052*
In-person social support					1.00 (0.97, 1.03)	0.991	*0.96 (0.92, 1.01)*	*0.084*
Online social support					**1.04 (1.01, 1.07)**	**0.019**	1.03 (0.99, 1.08)	0.173
Personal characteristics	Generalized sexual victimization		Sexual harassment		Generalized sexual victimization		Sexual harassment	
Outcome: **In-person** sexual victimization	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value	aOR (95% CI)	*p*-Value
Sexual identity								
Heterosexual	1.0 (RG)		1.0 (RG)		1.0 (RG)		1.0 (RG)	
GLQ	**2.33 (1.48, 3.66)**	**<0.001**	**5.06 (2.75, 9.33)**	**<0.001**	**2.17 (1.41, 3.35)**	**<0.001**	**4.93 (2.63, 9.25)**	**<0.001**
Bisexual	**2.60 (1.71, 3.95)**	**<0.001**	**3.86 (2.01, 7.40)**	**<0.001**	**2.43 (1.60, 3.69)**	**<0.001**	**3.89 (1.99, 7.61)**	**<0.001**
QUO	1.15 (0.57, 2.32)	0.690	0.81 (0.25, 2.59)	0.720	1.07 (0.52, 2.18)	0.858	0.76 (0.24, 2.46)	0.650
Gender minority (versus cisgender)	1.36 (0.74, 2.48)	0.318	1.69 (0.85, 3.35)	0.134	1.34 (0.74, 2.43)	0.336	*1.76 (0.90, 3.43)*	0.099
In-person social support					0.98 (0.94, 1.02)	0.377	**0.95 (0.91, 0.99)**	0.009
Online social support					*1.04 (1.00, 1.08)*	*0.067*	1.02 (0.97, 1.06)	*0.466*

Note. Two separate victimization types assessed: Online sexual victimization and in-person sexual victimization. The two categories (generalized sexual victimization and sexual harassment) are compared to reporting no sexual victimization in the past year using multinomial logistic regression. For each victimization type, the relative odds of victimization are estimated given one's sexual and gender identities (Model 1); and then social support is added to the model to determine its relative influence on the relation between victimization and sexual and gender identity (Model 2). All models are adjusted for: age, race, ethnicity, income, urbanicity, major depressive symptomatology and survey process measures. QUO = Questioning, unsure, and youth of other sexual identities. GLQ = Gay, Lesbian, and Queer youth; aOR = Adjusted Odds Ratio. 95% CI = 95% Confidence Interval.

Limitations

When sexual identity and gender identity are examined simultaneously, results seem to suggest that sexual minority status is strongly related to victimization, whereas gender minority status is less so, if at all. The overlay of gender identity and sexual identity is complicated, however. For example, transgender youth may respond to a sexual identity question based on their current gender (e.g., a female-to-male transgender boy who dates cisgender girls may identify as heterosexual). Alternatively, they may respond in ways that incorporate gender and sexual identity (e.g., a female-to-male transgender boy may date cisgender girls and also be attracted to cisgender or transgender boys) as well as gender expression and sexual attractions (e.g., he may reflect his history of being lesbian and therefore identify as queer, bisexual, or another sexual identity). Because of the complex interplay of gender and sexual identity, victimization risk for gender minority youth is likely being masked in our multivariable models. Future research might find it advantageous to look at how gender minority experiences compare to cisgender LGB experiences in greater depth. It may also be useful to explore gender differences (e.g., transgender boys, transgender girls, and so forth).

As a cross-sectional analysis, data are correlational, and temporality cannot be determined. It may be that peer social support predicts one's victimization risk—that is, lower levels of social support may leave youth more vulnerable to peer victimization. Or perhaps, one's victimization experiences may temporally precede less social support, such that victimization makes youth more likely to subsequently withdraw from peers or avoid seeking social support. Youth may also lose social support when they are victimized. The relation is likely complex such that both scenarios are experienced by youth.

Furthermore, social support is a multidimensional construct (Zimet et al., 1988). We assessed a subscale pertaining to perceived emotional support by peers. Other types of support (e.g., instrumental Taylor, 2011) and aspects of support (e.g., reciprocity Taylor, 2011) necessitate future consideration. We also did not measure all sources of social support that may be additionally relevant in buffering youth against victimization experiences, such as family members, youth counselors, or teachers. It could be that other support systems play a larger role in helping youth in these situations.

As with all research, self-selection bias may be affecting our results. Despite the procedures we implemented to ensure anonymity, youth still needed to have both a space and a computer device safe enough for them to complete the survey. Those who were living in abusive homes, for example, may be underrepresented as a result. Additionally, because recruitment was conducted online, youth in the current sample may possibly be more intense users of the Internet compared to other non-sampled youth. The general population sample was recruited from HPOL. While weighting was applied so that the data would behave as if they were nationally representative, underlying factors related to self-selection in the HPOL may possibly have affected the generalizability of the sample. Findings should be replicated with other national recruitment procedures (e.g., random digit dialing) to confirm patterns.

Comparisons of online and in-person social support did not take into account those relationships that started online but then moved to in-person versus those that started and stayed online. This unaccounted-for heterogeneity may possibly have masked important variations in online social support that could help explain the null findings observed.

Future directions

There are many future directions that are suggested from the current findings. To address the issue of temporality, a next step could be to measure social support and victimization longitudinally to parse out the timing and interplay between the two experiences. Social support is likely neither static nor fixed, but dynamic over time and across adolescence. Understanding youths' patterns of accessing social support in-person and online, including determinants of which online friends LGBT youth are more or less likely to meet in-person, could be an important next step. Future research could also examine the trajectory of online friendships compared to in-person friendships to better understand, for example, whether online relationships are of similar or different length to in-person relationships, and when youth choose to seek out support from online versus in-person friends. Finally, more in-depth qualitative interviews with youth, particularly sexual minority youth, would provide some important details as to the role social support plays in both preventing peer victimization and helping victims when victimization occurs.

Conclusion

Many youth 13 to 18 years of age report having both online and in-person friends, and a sizeable portion of youth, particularly those who identify as LGBT, describe their online friends as a key source of support. However, given that in-person social support appears to be more protective against victimization than online social support, youth should not completely replace in-person with online avenues of support, particularly in the event of victimization. Nonetheless, given the perceived importance of online support for some youth, online support may possibly function in important ways in relation to victimization, perhaps as a means of coping, catharsis, or for acquiring information about how to address and deal with the problem in concrete ways. Such avenues for support are conducive to online relationships and, as a result, may contribute to better well-being.

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