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Identity, Victimization, and Support: Facebook Experiences and Mental Health Among LGBTQ Youth

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Abstract

The rise of social networking sites (SNSs) has created new contexts within which lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth and young adults manage their social identities and relationships. On one hand, SNSs provide important social support; on the other, they comprise another realm for victimization and discrimination. Context collapse refers to the ways diverse subgroups (e.g., family, co-workers) are often united in Facebook networks, which presents unique challenges related to outness. In this study, we examine the Facebook contexts of a cohort of LGBTQ youth and young adults with regard to outness, victimization, social support, and psychological distress by first examining descriptive statistics and correlations, and then testing a series of multiple regressions in an analytic sample of 175 (M_{age} = 24.02 years) LGBTQ youth. Participants reported levels of daily Facebook use comparable to other samples of non-LGBTQ youth; however, they reported greater use of security controls, which may function as a tool for managing outness. Participants reported slightly lower outness across relational subgroups on Facebook, and associations between outness to relational subgroups were slightly stronger on Facebook, illustrating the potential impact of context collapse. Regression results showed that great victimization, cyberbullying, and the offering of support online were positively associated with psychological distress. Study findings illuminate how LGBTQ youth use and manage their identities on Facebook and highlight the importance of online contexts in shaping wellbeing for LGBtQ outh and young adults.

Keywords

LGBTQ youth; Facebook; outness; context collapse; cyberbullying; mental health

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1. Introduction

A large body of work in the past decade has demonstrated the importance of social experiences in shaping mental health for youth and young adults – especially lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth[1]. Consistent with minority stress theory (Meyer, 2003), victimization on the basis of LGBTQ identity helps explain mental health inequities experienced by LGBTQ youth, including elevated depression, suicidality, and substance use (Haas et al., 2011; Institute of Medicine, 2011; Mustanski et al., 2014; Saewyc, 2011). Conversely, social support is associated with wellbeing for LGBTQ youth and young adults (Birkett, Espelage, & Koenig, 2009; Haas et al., 2011; McConnell, Birkett, & Mustanski, 2015, 2016; Russell & Joyner, 2001; Saewyc, 2011). LGBTQ youth vary substantially in social support, and these differences are associated with mental health across adolescence and into young adulthood while controlling for victimization (McConnell et al., 2015, 2016).

During this same period, the burgeoning popularity of social networking sites (SNSs) like Facebook have changed the landscape of youth's social relationships (Drushel, 2010; Wilson, Gosling, & Graham, 2012). Facebook usage has rapidly increased in the past decade, with the highest rates of usage among young adults (90%; Perrin, 2015). SNSs are believed to mobilize social capital and connection (Vitak & Ellison, 2012; Wilson et al., 2012), which decreases stress and improves wellbeing (Nabi, Prestin, & So, 2013). This is especially important for LGBTQ youth and young adults, who may use SNSs to compensate for limitations in their offline relationships. For example, LGBTQ youth may uses SNSs to access social support, connect with LGBTQ community, or solicit sexual health or identity-related information (Baams, Jonas, Utz, Bos, & van der Vuurst, 2011; DeHaan, Kuper, Magee, Bigelow, & Mustanski, 2013; Drushel, 2010; Fox & Ralston, 2016; GLSEN, CiPHR, & CCRC, 2013; Gudelunas, 2012; Hillier, Mitchell, & Ybarra, 2012; Mustanski, Lyons, & Garcia, 2011). These support-oriented functions are especially important in adolescence and young adulthood, as they play an important role in identity development and coming out processes (Baams et al., 2011; Craig & McInroy, 2013; Fox & Ralston, 2016). This is particularly true for youth whose experiences are underrepresented, such as rural, religious, or youth of color (Gray, 2009; Taylor, Falconer, & Snowdon, 2014).

However, SNSs can also expose LGBTQ youth and young adults to victimization and discrimination because of their sexual orientation or gender identity (Fox & Moreland, 2015; Fox & Ralston, 2016; Mustanski et al., 2011; Varjas, Meyers, Kiperman, & Howard, 2013). LGBTQ youth were two to three times more likely to have been targets of cyberbullying than non-LGBTQ youth (CDC, 2016; GLSEN et al., 2013). Furthermore, within LGBTQ youth, transgender youth, youth with "other" genders, and cisgender sexual minority females reported higher levels of online and text-based victimization than cisgender male sexual minority youth (GLSEN et al., 2013). Experiencing this online victimization has been associated with a number of negative outcomes, including decreased psychological

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[1]For the purpose of this paper, we use the term "LGBTQ" to refer to all sexual and gender minorities (i.e., anyone who does not identify as heterosexual and/or cisgender). We use both the terms "youth" and "young adults" as our focus extends beyond adolescence and into early adulthood.

wellbeing (GLSEN et al., 2013; Rosenthal, Buka, Marshall, Carey, & Clark, 2016). Even observing others' daily experiences of discrimination on SNSs may adversely impact outness and wellbeing (Fox & Ralston, 2016).

Experiences of online victimization may differ from experiences of in-person victimization in several important ways. Perpetrators may feel less inhibited online, thus increasing victimization's frequency or severity (Shelton & Skalski, 2013; Sticca & Perren, 2012; Varjas et al., 2013). Further, information on social media is highly visible and persistent, thus increasing victimization's potential reach and negative consequences (Fox & Moreland, 2015; Fox & Ralston, 2016; Sticca & Perren, 2012). LGBTQ youth also reported experiences of online victimization that transitioned to in-person bullying (Varjas et al., 2013).

Given this potential for victimization and the associated negative consequences, some LGBTQ youth and young adults conceal their sexual and/or gender identities on SNSs. In the few studies with this population, youth reported a range of outness across different SNSs and network subgroups (e.g., family, peers). Users tended to be more out on "gay-specific" SNSs than "general audience" SNSs (Fox & Ralston, 2016; Gudelunas, 2012). Youth also reported a number of reasons for limiting SNS outness, including homophobia, conservative family and hometown friends, religiosity-related backlash, and professional consequences (Fox & Warber, 2015). Greater online outness was associated with a sense of empowerment and willingness to speak out about LGBTQ issues online, while lower outness was characterized by a "spiral of silence" (Cooper & Dzara, 2010; Fox & Warber, 2015).

Unlike more anonymous online contexts, Facebook networks typically mirror offline networks and furthermore unite diverse subgroups in a single network (boyd & Ellison, 2007; Cooper & Dzara, 2010; Fox & Ralston, 2016; Fox & Warber, 2015; Wilson et al., 2012). This interconnection leads to a reduction in social boundaries, often referred to as context collapse, which in turn results in information sharing across diverse network subgroups (boyd, 2010; Duguay, 2016; Fox & Ralston, 2016; Hogan, 2010; Vitak & Ellison, 2012). To manage outness in this context, LGBTQ youth reported using identity management strategies such as privacy controls, selectively adding friends, creating multiple accounts, restricting self-expression, deleting or untagging posts, selectively displaying information, and restricting LGBTQ-related content to more anonymous online forums (Cooper & Dzara, 2010; Duguay, 2016). Youth also reported frustration with the difficulty and effort these strategies required, as well as some lack of control over information sharing and pressure to connect with professional and family network members on Facebook (Cooper & Dzara, 2010; Duguay, 2016; Fox & Moreland, 2015; Roundtree, 2016). Alternatively, some viewed context collapse positively because it allowed them to easily and efficiently come out to their entire network (Duguay, 2016; Hillier et al., 2012; Taylor et al., 2014).

Context collapse also has implications for understanding how social norms on SNSs differ from in-person norms. Social norms on SNSs are established through social feedback (e.g., comments and "likes") that reinforces particular behaviors (Brandes & Levin, 2014; Fox & Moreland, 2015; Fox & Ralston, 2016). Given the visibility and persistence of feedback and

the pressure of social comparison on Facebook, users are motivated to engage in selective self-presentation by restricting posts to content that supports an ideal self-image and maximizes positive feedback. For example, participants reported posting positive messages even when they were experiencing negative emotions (Fox & Moreland, 2015).

Given these different social norms, online support behavior may function differently from in-person support behavior. Some research suggests that both offering and seeking support are positive functions of SNSs, which facilitate efficient communication and provide opportunities for network members of varying closeness to respond (Vitak & Ellison, 2012). However, other research suggests these relationships may be more complicated. For example, although in-person support is linked to psychological wellbeing, emotional support on Facebook has been linked with depression and lower quality of life (McCloskey, Iwanicki, Lauterbach, Giammittorio, & Maxwell, 2015). Research suggests that although offering support is likely to be viewed positively given its compatibility with SNS social norms, seeking support may elicit more negative reactions (Carpenter, 2012; Forest & Wood, 2012; Fox & Moreland, 2015; Vitak & Ellison, 2012). Support seeking by posting when one is distressed or upset may be viewed as inappropriately personal, annoying, insincere, narcissistic, or attention-seeking, particularly if habitual or if seeking support outweighs offering it (Carpenter, 2012; Forest & Wood, 2012; Fox & Moreland, 2015; Vitak & Ellison, 2012). People with low self-esteem may be especially likely to disclose negative affect, leading to being less well-liked (Forest & Wood, 2012). Support seeking may also be viewed as a depersonalized and inappropriate way to share information better communicated through a private, personal message (Fox & Moreland, 2015; Vitak & Ellison, 2012). Given complex findings, it is possible seeking support online is beneficial to the extent that it mobilizes offline support interactions (Kang, 2007; Roundtree, 2016; Vitak & Ellison, 2012).

Although there is a rich literature on in-person victimization, support, and wellbeing, the online social contexts of LGBTQ youth and young adults are understudied, and existing research has focused on information seeking and sexual health (DeHaan et al., 2013; Fox & Moreland, 2015; Fox & Ralston, 2016; Magee, Bigelow, DeHaan, & Mustanski, 2012; Varjas et al., 2013). In the current study, we contribute to knowledge about online social contexts and mental health for LGBT youth and young adults. First, we examined descriptive statistics characterizing LGBTQ youths' Facebook use, including identity management strategies. Second, we examined associations between outness and Facebook outness to network subgroups (e.g., family, classmates, and co-workers). We hypothesized that outness and Facebook outness would be positively associated, but strength would vary by outness type and subgroup. Third, we examined how Facebook integration, cyberbullying, and online support behavior were associated with psychological distress over and above victimization and social support through a series of multiple regressions. We hypothesized cyberbullying would be positively associated with distress; given complex findings around Facebook integration and online support behavior, these analyses were exploratory.

2. Methods

2.1 Participants and Procedures

This study utilized data collected in the final wave of Project Q2, a longitudinal cohort study of LGBTQ youth and young adults that included eight waves of data collection over 5.5 years (see Mustanski, Garofalo, & Emerson, 2010). Participants were a community sample of 204 youth and young adults aged 19 to 28 who currently or formerly lived in the Chicago area and self-identified as LGBT, queer, questioning, or same gender attracted. Participants were recruited using e-mail advertisements, flyers distributed in LGBT-identified neighborhoods and events, and incentivized peer recruitment. Data collection was conducted in 2013 and 2014. Further description is reported elsewhere (Birkett, Newcomb, & Mustanski, 2015; McConnell, Birkett, & Mustanski, 2016; McConnell, Birkett, & Shattell, 2015).

Twenty-nine participants were dropped from analysis due to not having an active Facebook account ($n = 26$) or missing data across key variables ($n = 3$), resulting in an analytic sample of 175. Of these, 74 were cisgender males, 105 were cisgender females, and 24 were transgender; 59 identified as gay, 49 as lesbian, 42 as bisexual, 9 as heterosexual, and 5 as questioning/unsure; 21 identified as White, 104 as African-American, 18 as Hispanic/Latino, and 32 as other (including Asian, Native American, and multiracial). The mean age was 24.02 years ($SD = 1.65$).

2.2 Measures

2.2.1 Facebook Use—Several Facebook use items were developed for the current study, including frequency, number of accounts, use of privacy and security controls, and who participants tended to "friend" on Facebook. Facebook feature use was assessed using an 8-item measure developed by Smock and colleagues (Smock, Ellison, Lampe, & Wohn, 2011) in which participants indicated agreement (e.g., "I use the comments feature on Facebook often") on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale ($\alpha = .87$).

2.2.2 Facebook Integration—Facebook integration was assessed using the 10-item Social Media Use Integration Scale (Jenkins-Guarnieri, Wright, & Johnson, 2013). Both subscale scores were used: Social Integration and Emotional Connection (6 items; e.g., "I feel disconnected from friends when I have not logged into Facebook") and Integration into Social Routines (4 items; e.g., "Using Facebook is a part of my everyday routine"). Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*; $\alpha = 84$)

2.2.3 Outness—LGBTQ outness across relational contexts was assessed based on an adaptation of the Outness Inventory (Mohr & Fassinger, 2000) by Legate and colleagues (2012) which recognizes that outness may vary between relational contexts. Five items each were used to assess both outness (i.e., in youths' lives generally) and Facebook-specific outness to family members, friends, classmates, co-workers, and others in general. Response options ranged from 1 (*not at all out*) to 5 (*completely out*) for outness overall ($\alpha = .90$) and online ($\alpha = .95$).

2.2.4 Social Support—Social support was assessed using total scores on the 12-item Multidimensional Scale of Perceived Social Support (Zimet et al., 1990). This scale assesses family (e.g., "My family really tries to help me"), peer (e.g., "I can talk about my problems with my friends"), and significant other support (e.g., "There is a special person with whom I can share my joys and sorrows"). Response options ranged from 1 (*very strongly disagree*) to 7 (*very strongly agree*; α = .91).

2.2.5 Online Support Behavior—Online support behavior was assessed using two scales developed by Carpenter (2012). Offering (e.g., "I use Facebook to offer emotional support to people I know when they are feeling upset about something") and seeking support (e.g., "Whenever I am upset I usually post a status update about what is bothering me") were each assessed using four items. Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*) for offering (α = .89) or seeking online support (α = .93).

2.2.6 Victimization—Past 6-month victimization on the basis of LGBT identity was assessed using a 10-item scale based on the work of D'Augelli and colleagues (1998). Items assessed verbal and physical threats, assault, and property damage (e.g., "How many times have you been punched, kicked, or beaten because you are LGBT?"). Response options ranged from 0 (*never*) to 3 (*three times or more*; α = .89).

2.2.7 Cyberbullying—Cyberbullying was assessed using two items based on Ybarra and Mitchell's (2004) work. We added "because you are LGBT" to specifically assess cyberbullying on the basis of LGBT identity. Participants reported lifetime frequency of cyberbullying (e.g., "In your entire life, how many times have you felt worried or threatened because of someone bothering or harassing you online because you are LGBT?"). Response options ranged from 0 (*never*) to 3 (*more than 10 times*; α = .68).

2.2.8 Psychological distress—Past week psychological distress was assessed using the 18-item Brief Symptom Inventory (Derogatis, 2000). Items assess frequency of distress (e.g., "feeling hopeless about the future"). Response options ranged from 0 (*not at all*) to 4 (*always*; α = .94).

2.3 Analytic Strategy

To characterize LGBTQ youths' Facebook use, we calculated a number of descriptive statistics. As our descriptive statistics included percentages of youth who do and do not actively use Facebook, we used available data from all 204 youth in the study rather than the analytic sample of 175 used in subsequent analyses. First, we calculated the percentage of youth in our sample who engaged in particular forms of Facebook use, including privacy and control features. Next, we calculated sample means on scales measuring Facebook feature use, Facebook integration, and frequency of friending certain types of people on Facebook.

To examine associations between outness and Facebook outness across relational contexts, we first calculated sample means for outness and Facebook outness to five relational subgroups: friends, family, classmates, co-workers, and others in general. Next, we calculated intercorrelations between outness and Facebook outness.

To examine how Facebook integration, cyberbullying, and online support behavior were associated with psychological distress, we first examined intercorrelations between study variables. Next, we ran a series of multiple regressions using the stepwise approach. Model 1 examined associations between demographics (i.e., age, current gender, and race/ethnicity) and psychological distress. Model 2 added victimization and social support. Model 3 added the Facebook integration subscales, cyberbullying, and online support behavior (i.e., offering and seeking support). All analyses were conducted in SAS v9.4 (Cary, NC).

3. Results

3.1 Facebook Use

Descriptive results illustrating patterns of Facebook use are reported in Table 1. For users with multiple accounts, questions were answered with respect to their primary account (i.e., the account they used the most). The vast majority of youth in our sample used Facebook, and over half of active users checked Facebook on a daily basis within two hours of waking up.

3.2 Outness Online

Youth reported high outness ($M = 4.13$, $SD = 1.17$) and Facebook outness ($M = 4.05$, $SD = 1.31$). These forms of outness were strongly positively correlated ($r = 0.72$, $p < .001$). Table 2 depicts intercorrelations between outness and Facebook outness by each relational subgroup. Outness and Facebook outness within each relational subgroup were consistently positively correlated, with classmates showing the strongest association (r = .73) and friends showing the weakest association (r = .53). Furthermore, associations across subgroups were stronger for Facebook outness than for outness.

3.3 Psychological Distress

First, we examined intercorrelations between study variables (see Table 3). Next, we tested a series of regression models using the stepwise approach. Results and fit statistics are reported in Table 4. Model 3 explained the greatest amount of variance and showed that greater victimization, cyberbullying, and offering of online support were all associated with increased distress. The Facebook social integration and emotional connection subscale was marginally negatively associated with distress.

4. Discussion

LGBT youth and young adults in our sample reported similar patterns of Facebook use to previously published nationwide samples of youth and young adults regarding the percentage of youth on Facebook (88.73% vs. 90%; Perrin, 2015) and the percentage of users who log in daily (74.30% vs. 70%) or multiple times per day (48.04% vs. 43%; Duggan, 2015). Youth in our sample showed similar friending behavior compared to other samples, with friends, classmates, and family members constituting the most common friend categories (Madden et al., 2013).

At the same time, study findings suggest that LGBTQ youth may find identity management strategies online particularly important. For example, a sizeable percentage of our sample reported use of multiple accounts (13.26%). We were unable to find prevalence statistics on multiple account use and thus are not able to compare this with other samples. However, this suggests that a sizeable minority of LGBTQ youth and young adults may use multiple accounts as an identity management strategy. Furthermore, regarding privacy controls, youth in our sample showed similar rates of restricting their profile to friends only (53.59% vs. 60%), but reported slightly higher rates of fully public profiles (27.33% vs. 14%; Madden et al., 2013) compared to nationwide youth; this may be due to the slightly older age range of our sample (19 to 28 years vs. 12 to 17 years; Madden et al., 2013). Finally, youth in our sample were also much more likely than previously published samples of youth to report controlling what certain friends could see (42.50% vs. 19%; Madden et al., 2013). This may reflect use of security controls to negotiate differential outness to specific network subgroups given context collapse on Facebook. Although we compared our findings to previously published data on Facebook use, a limitation of our work is that we were not able to directly test for differences between LGBTQ and non-LGBTQ youth as our sample only included LGBTQ youth.

Stronger associations were found between outness by relational subgroup on Facebook than for outness by subgroups in youths' lives more generally, and youth reported slightly higher outness than Facebook outness. These findings may also reflect the impact of context collapse: youth with differential outness by relational subgroup may be less likely to be out on Facebook, where relational subgroup outness tends to be more uniform. Outness and Facebook outness showed strongest associations for classmates and weakest for friends. Participants may have imaged a wide range of network members when asked to think about outness to "friends," especially given use of the term to refer to all Facebook connections. Future research may wish to reference more specific categories, as this subgroup may be too obtuse to be conceptually useful. Overall, findings illustrate that although youth and young adults who are out more generally also tended to be out on Facebook, this association was not perfect and varied by relational subgroup. To the extent that LGBTQ youth are differentially out to these subgroups online and in-person, they may feel compelled to engage in identity management strategies to control their Facebook outness to network subgroups (Cooper & Dzara, 2010; Duguay, 2016; Fox & Warber, 2015).

Multiple regression findings illustrate the extent to which cyberbullying contributes to psychological distress for LGBTQ youth and young adults, even while accounting for experiences of victimization and support. Although victimization was a stronger predictor of distress, cyberbullying showed a sizeable effect. Results should be contextualized in light of several limitations. First, participants were not instructed to respond to the victimization measure strictly relative to in-person experiences of victimization; thus, it is possible some youth responded with respect to online victimization. Future research should specifically distinguish between online and in-person experiences to provide greater clarity and specificity. Also, our measure of cyberbullying asked about lifetime experiences, while our measure of victimization asked about past six month experiences and our measure of psychological distress asked about past week symptoms. Participants' experiences of cyberbullying may thus have occurred more distally than their experiences of victimization,

which could impact strength of association regarding current symptoms. Overall, study findings suggest that cyberbullying contributes to distress for LGBTQ youth and young adults and highlight the importance of SNSs as contexts for minority stress and health inequities research (Fox & Moreland, 2015; Fox & Ralston, 2016; GLSEN et al., 2013; Sticca & Perren, 2012; Varjas et al., 2013).

Social support was not significantly associated with distress when accounting for victimization. However, it showed a trend towards a negative association with distress ($p = .10$) and was significant in correlational analyses. Given that social support has been found to be especially important early in adolescence (McConnell et al., 2016) and victimization is a stronger predictor of distress over time (Birkett, Newcomb, & Mustanski, 2015), the older age of our sample may account for this nonsignificant fining.

Seeking online support was not associated with psychological distress, while the propensity to offer support online was more strongly associated with distress than cyberbullying. Given the existence of social norms against expression of negative affect on SNSs (Carpenter, 2012; Forest & Wood, 2012; Fox & Moreland, 2015; Vitak & Ellison, 2012), seeking online support by posting when upset or distressed may not be as adaptive as seeking in-person support, which may be why it shows no association with distress. Future research should examine potential moderators, such as narcissism (Carpenter, 2012), habitual online communication patterns (Forest & Wood, 2012; Vitak & Ellison, 2012), self-esteem (Forest & Wood, 2012), and weak versus strong network ties (Fox & Moreland, 2015; Vitak & Ellison, 2012), that may illuminate subgroups for whom seeking online support has either a beneficial or adverse function. Youth who report higher offering online support may have peers who experience more frequent or severe victimization and discrimination; perhaps this vicarious exposure leads to increased distress (Fox & Ralston, 2016). It is also possible that youth who experience higher psychological distress themselves are more sensitive to others' online support seeking behavior and are more likely to respond empathically (e.g., by providing support). Also, research has documented that participants may minimize negative experiences on Facebook in survey-based research given strong social norms against posting negative content (Fox & Moreland, 2015). Thus, it is possible that participants felt it was socially acceptable to report offering support but under-reported support seeking, which may have skewed findings. Given mixed research regarding the positive (Vitak & Ellison, 2012) and negative (Forest & Wood, 2012; McCloskey et al., 2015) impacts of online support behavior, the mechanisms through which online support and mental health may be linked are likely complex. Future research is warranted to identify and clarify these potential mechanisms.

Although marginal, the finding that Facebook social integration and emotional connection was negatively associated with distress supports research linking SNS use to wellbeing (Nabi et al., 2013) and is consistent with a strengths-based view of social capital on SNSs (Drushel, 2010; Vitak & Ellison, 2012; Wilson et al., 2012). Given that Facebook integration into social routines was not associated with distress, it is possible that the benefits of SNS use are specific to functions related to social and emotional connection. As this finding was marginal and other research suggests negative consequences of social media integration

(e.g., Fox & Moreland, 2015; Shelton & Skalski, 2013), this should be investigated in future research.

Overall, study findings illustrate the importance of SNSs as social contexts for LGBTQ youth and young adults. Similar to youth overall, LGBTQ youth reported widespread and frequent Facebook use. They also engaged in identity management strategies (e.g., multiple accounts, privacy controls) for negotiating context collapse. These strategies may be especially important for youth who report varying levels of outness to network subgroups. Finally, victimization and support behaviors on SNSs are associated with mental health for LGBTQ youth, illustrating that social experiences in these contexts have important relationships to wellbeing. Given dramatic increases in SNS use in the past decade, these online social contexts are crucial to incorporate in research and practice with LGBTQ youth and young adults.

References

Baams L, Jonas KJ, Utz S, Bos HMW, Van Der Vuurst L. Internet use and online social support among same sex attracted individuals of different ages. Computers in Human Behavior. 2011; 27(5):1820–1827. DOI: 10.1016/j.chb.2011.04.002

Birkett M, Espelage DL, Koenig B. LGB and questioning students in schools: The moderating effects of homophobic bullying and school climate on negative outcomes. Journal of Youth and Adolescence. 2009; 38:989–1000. [PubMed: 19636741]

Birkett M, Newcomb ME, Mustanski B. Does it get better? A longitudinal analysis of psychological distress and victimization in lesbian, gay, bisexual, transgender, and questioning youth. Journal of Adolescent Health. 2015; 56:280–285. DOI: 10.1016/j.jadohealth.2014.10.275 [PubMed: 25586226]

boyd, dm. Social network sites as networked publics: Affordances, dynamics, and implications. In: Papacharissi, Z., editor. A networked self: Identity, community, and culture on social network sites. New York: Routledge; 2010. p. 39-58.

boyd, dm, Ellison, NB. Social network sites: Definition, history, and scholarship. Journal of Computer-Mediated Communication. 2007; 13:210–230. DOI: 10.1111/j.1083-6101.2007.00393.x

Brandes SB, Levin D. "Like My Status": Israeli teenage girls constructing their social connections on the Facebook social network. Feminist Media Studies. 2014; 14:743–758. DOI: 10.1080/14680777.2013.833533

Carpenter CJ. Narcissism on Facebook: Self-promotional and anti-social behavior. Personality and Individual Differences. 2012; 52:482–486. DOI: 10.1016/j.paid.2011.11.011

Centers for Disease Control and Prevention. First national study of lesbian, gay, and bisexual high school students' health. NCHHSTP Newsroom. 2016. Retrieved December 22, 2016 from: http://www.cdc.gov/nchhstp/newsroom/2016/lgb-youth-report-press-release.html

Cooper, M., Dzara, K. The Facebook revolution: LGBT identity and activism. In: Pullen, C., Cooper, M., editors. LGBT identity and online media. New York: Routledge; 2010. p. 100-112.

Craig SL, McInroy L. You can form a part of yourself online: The influence of new media on identity development and coming out for LGBTQ youth. Journal of Gay & Lesbian Mental Health. 2013; 18:95–109. DOI: 10.1080/19359705.2013.777007

D'Augelli AR, Hershberger SL, Pilkington NW. Lesbian, gay, and bisexual youth and their families: Disclosure of sexual orientation and its consequences. American Journal of Orthopsychiatry. 1998; 68:361–371. DOI: 10.1037/h0080345 [PubMed: 9686289]

DeHaan S, Kuper LE, Magee JC, Bigelow L, Mustanski BS. The interplay between online and offline explorations of identity, relationships, and sex: A mixed-methods study with LGBT youth. Journal of Sex Research. 2013; 50:421–434. DOI: 10.1080/00224499.2012.661489 [PubMed: 22489658]

Derogatis, LR. The Brief Symptom Inventory – 18 (BSI-18): Administration, scoring, and procedures manual. 3rd. Minneapolis, MN: National Computer Systems; 2000.

Drushel, BE. Virtually supportive: Self-disclosure of minority sexualities through online social networking sites. In: Pullen, C., Cooper, M., editors. LGBT identity and online media. New York: Routledge; 2010. p. 62-72.

Duggan, M. The demographics of social media users. Pew Research Center. 2015 Aug 19. Retrieved December 22, 2016 from: http://www.pewinternet.org/2015/08/19/the-demographics-of-social-media-users/

Duguay S. "He has a way gayer Facebook than I do": Investigating sexual identity disclosure and context collapse on a social networking site. New Media & Society. 2016; 18:891–907. DOI: 10.1177/1461444814549930

Forest AL, Wood JV. When social networking is not working: Individuals with low self-esteem recognize but do not reap the benefits of self-disclosure on Facebook. Psychological Science. 2012; 23:295–302. DOI: 10.1177/0956797611429709 [PubMed: 22318997]

Fox J, Moreland JJ. The dark side of social networking sites: An exploration of the relational and psychological stressors associated with Facebook use and affordances. Computers in Human Behavior. 2015; 45:168–176. DOI: 10.1016/j.chb.2014.11.083

Fox J, Ralston R. Queer identity online: Informal learning and teaching experiences of LGBTQ individuals on social media. Computers in Human Behavior. 2016; 65:635–642. DOI: 10.1016/j.chb.2016.06.009

Fox J, Warber KM. Queer identity management and political self-expression on social networking sites: A co-cultural approach to the spiral of silence. Journal of Communication. 2015; 65:79–100. DOI: 10.1111/jcom.12137

GLSEN, CiPHR, CCRC. Out online: The experiences of lesbian, gay, bisexual and transgender youth on the Internet. New York: GLSEN; 2013. Retrieved December 22, 2016 from: http://www.glsen.org/sites/default/files/Out%20Online%20FINAL.pdf

Gray ML. Negotiating identities/queering desires: Coming out online and the remediation of the coming-out story. Journal of Computer-Mediated Communication. 2009; 14:1162–1189. DOI: 10.1111/j.1083-6101.2009.01485.x

Gudelunas D. There's an app for that: The uses and gratifications of online social networks for gay men. Sexuality & Culture. 2012; 16:347–365. DOI: 10.1007/s12119-012-9127-4

Haas AP, Eliason M, Mays VM, Mathy RM, Cochran SD, D'Augelli AR, et al. Clayton PJ. Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. Journal of Homosexuality. 2011; 58:10–51. DOI: 10.1080/00918369.2011.534038 [PubMed: 21213174]

Hillier L, Mitchell KJ, Ybarra ML. The Internet as a safety net: Findings from a series of online focus groups with LGB and non-LGB young people in the United States. Journal of LGBT Youth. 2012; 9:225–246. DOI: 10.1007/s12119-012-9127-4

Hogan B. The presentation of self in the age of social media: Distinguishing performances and exhibitions online. Bulletin of Science, Technology & Society. 2010; 30:377–386. DOI: 10.1177/0270467610385893

Institute of Medicine. The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. Washington, DC: The National Academies Press; 2011. Retrieved December 22, 2016 from: https://www.nap.edu/catalog/13128/the-health-of-lesbian-gay-bisexual-and-transgender-people-building

Jenkins-Guarnieri MA, Wright SL, Johnson B. Development and validation of a social media use integration scale. Psychology of Popular Media Culture. 2013; 2:38–50. DOI: 10.1037/a0030277

Kang S. Disembodiment in online social interaction: Impact of online chat on social support and psychosocial well-being. Cyberpsychology & Behavior. 2007; 10:475–477. DOI: 10.1089/cpb.2006.9929 [PubMed: 17594274]

Legate N, Ryan RM, Weinstein N. Is coming out always a "good thing"? Exploring the relations of autonomy support, outness, and wellness for lesbian, gay, and bisexual individuals. Social Psychological and Personality Science. 2012; 3:145–152. DOI: 10.1177/1948550611411929

Madden, M., Lenhart, A., Cortesi, S., Gasser, U., Duggan, M., Smith, A., Beaton, M. Teens, social media, and privacy. Pew Research Center. 2013. Retrieved December 22, 2016 from: http://www.pewinternet.org/2013/05/21/teens-social-media-and-privacy/

Magee JC, Bigelow L, DeHaan S, Mustanski BS. Sexual health information seeking online: A mixed-methods study among lesbian, gay, bisexual, and transgender young people. Health Education & Behavior. 2012; 39:276–289. DOI: 10.1177/1090198111401384/ [PubMed: 21490310]

McCloskey W, Iwanicki S, Lauterbach D, Giammittorio DM, Maxwell K. Are Facebook "friends" helpful? Development of a Facebook-based measure of social support and examination of relationships among depression, quality of life, and social support. Cyberpsychology, Behavior, and Social Networking. 2015; 18:499–505. DOI: 10.1089/cyber.2014.0538

McConnell EA, Birkett MA, Mustanski B. Families matter: Social support and mental health trajectories among lesbian, gay, bisexual, and transgender youth. Journal of Adolescent Health. 2016; 59:674–680. DOI: 10.1016/j.jadohealth.2016.07.026 [PubMed: 27707515]

McConnell EA, Birkett MA, Mustanski B. Typologies of social support and associations with mental health outcomes among LGBT youth LGBT Health. 2015; 2:55–61. DOI: 10.1089/lgbt.2014.0051 [PubMed: 26790019]

McConnell EA, Birkett MA, Shattell M. The future of big data: Innovative methodological approaches. Issues in Mental Health Nursing. 2015; 36:478–480. [PubMed: 26241575]

Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. Psychological Bulletin. 2003; 129:674–697. DOI: 10.1037/0033-2909.129.5.674 [PubMed: 12956539]

Mohr JJ, Fassinger RE. Measuring dimensions of lesbian and gay male experience. Measurement and Evaluation in Counseling and Development. 2000; 33:66–90.

Mustanski BS, Garofalo R, Emerson EM. Mental health disorders, psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. American Journal of Public Health. 2010; 100:2426–2432. [PubMed: 20966378]

Mustanski B, Lyons T, Garcia SC. Internet use and sexual health of young men who have sex with men: A mixed-methods study. Archives of Sexual Behavior. 2011; 40:289–300. DOI: 10.1007/s10508-009-9596-1 [PubMed: 20182787]

Mustanski B, Van Wagenen A, Birkett M, Eyster S, Corliss HL. Identifying sexual orientation health disparities in adolescents: Analysis of pooled data from the Youth Risk Behavior Survey, 2005 and 2007. American Journal of Public Health. 2014; 104:211–217. DOI: 10.2105/AJPH.2013.301748 [PubMed: 24328640]

Nabi RL, Prestin A, So J. Facebook friends with (health) benefits? Exploring social network site use and perceptions of social support, stress, and well-being. Cyberpsychology, Behavior, and Social Networking. 2013; 16:721–727. DOI: 10.1089/cyber.2012.0521

Perrin, A. Social media usage: 2005 – 2015. Pew Research Center. 2015 Oct 8. Retrieved December 22, 2016 from: http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/

Rosenthal SR, Buka SL, Marshall BD, Carey KB, Clark MA. Negative experiences on Facebook and depressive symptoms among young adults. Journal of Adolescent Health. 2016; 59:510–516. DOI: 10.1016/j.jadohealth.2016.06.023 [PubMed: 27546886]

Roundtree AK. Social health content and activity on Facebook: A survey study. Journal of Technical Writing and Communication. 2016; Advance Online Publication. doi: 10.1177/0047281616641925

Russell ST, Joyner K. Adolescent sexual orientation and suicide risk: Evidence from a national study. American Journal of Public Health. 2001; 91:1276–1281. DOI: 10.2105/AJPH.91.8.1276 [PubMed: 11499118]

Saewyc EM. Research on adolescent sexual orientation: Development, health disparities, stigma, and resilience. Journal of Research on Adolescence. 2011; 21:256–272. DOI: 10.1111/j.1532-7795.2010.00727.x [PubMed: 27099454]

Shelton AK, Skalski P. Blinded by the light: Illuminating the dark side of social network use through content analysis. Computers in Human Behavior. 2013; 33:339–348. DOI: 10.1016/j.chb.2013.08.017

Smock AD, Ellison NB, Lampe C, Wohn DY. Facebook as a toolkit: A uses and gratification approach to unbundling feature use. Computers in Human Behavior. 2011; 27:2322–2329. DOI: 10.1016/j.chb.2011.07.011

Sticca F, Perren S. Is cyberbullying worse than traditional bullying? Examining the differential roles of medium, publicity, and anonymity for the perceived severity of bullying. Journal of Youth and Adolescence. 2012; 42:739–750. DOI: 10.1007/s10964-012-9867-3 [PubMed: 23184483]

Taylor Y, Falconer E, Snowdon R. Queer youth, Facebook and faith: Facebook methodologies and online identities. New Media & Society. 2014; 16:1138–53. DOI: 10.1177/1461444814544000

Varjas K, Meyers J, Kiperman S, Howard A. Technology hurts? Lesbian, gay, and bisexual youth perspectives of technology and cyberbullying. Journal of School Violence. 2013; 12:27–44. DOI: 10.1080/15388220.2012.731665

Vitak J, Ellison NB. 'There's a network out there you might as well tap': Exploring the benefits of and barriers to exchanging informational and support-based resources on Facebook. New Media & Society. 2012; 15:243–259. DOI: 10.1177/1461444812451566

Wilson RE, Gosling SD, Graham LT. A review of Facebook research in the social sciences. Perspectives on Psychological Science. 2012; 7:203–220. DOI: 10.1177/1745691612442904 [PubMed: 26168459]

Ybarra ML, Mitchell KJ. Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. Journal of Child Psychology and Psychiatry. 2004; 45:1308–1316. DOI: 10.1111/j.1469-7610.2004.00328.x [PubMed: 15335350]

Zimet GD, Powell SS, Farley GK, Werkman S, Berkoff KA. Psychometric characteristics of the multidimensional scale of perceived social support. Journal of Personality Assessment. 1990; 55:610–617. DOI: 10.1080/00223891.1990.9674095 [PubMed: 2280326]

Highlights

- LGBTQ youth may use more online identity management strategies than youth overall.

- LGBTQ youth are slightly less out on Facebook than in their lives in general.

- LGBTQ youth are more uniformly out across relational subgroups on Facebook.

- Cyberbullying is associated with distress over and above victimization.

- Offering support on Facebook is associated with distress; seeking support is not.

Table 1

Descriptive Statistics Characterizing Facebook Use

Facebook Use		% (n)	Facebook Feature Use (n = 179)	M (SD)	Range
Have a Facebook account? (n = 204)	Yes	88.73% (181)	Facebook overall	3.66 (1.13)	1.00 - 5.00
	No	11.27% (23)	Comments	3.27 (1.15)	1.00 - 5.00
Active use (past month login)? (n = 181)	Yes	98.34% (178)	Private messages	3.25 (1.19)	1.00 - 5.00
	No	1.66% (3)	Chat	3.08 (1.26)	1.00 - 5.00
Multiple accounts? (n = 181)	Yes	13.26% (24)	Updating status	2.97 (1.28)	1.00 - 5.00
	No	86.74% (157)	Posting on friends' walls	2.89 (1.12)	1.00 - 5.00
Number of active accounts? (n = 24)	1	29.17% (7)	Other Facebook apps/games	2.49 (1.36)	1.00 - 5.00
	2	58.33% (14)	Facebook groups	2.28 (1.20)	1.00 - 5.00
	3	8.33% (2)	**Facebook Integration (n = 179)**		
	4	4.17% (1)	SIEC	2.55 (0.99)	1.00 - 5.00
Frequency of login? (n = 179)	Multiple times a day	48.04% (86)	ISR	3.55 (0.83)	1.00 - 5.00
	Daily	26.26% (47)	**Frequency of Friending (n = 179)**		
	A few times a week	15.08% (27)	Friends	4.61 (0.76)	1.00 - 5.00
	Once a week	5.03% (9)	Classmates	3.86 (1.24)	1.00 - 5.00
	Once a month	5.59% (10)	Family members	3.85 (1.34)	1.00 - 5.00
If daily login, how soon? (n = 133)	First thing	30.08% (40)	Co-workers	3.09 (1.46)	1.00 - 5.00
	1-2 hours after waking up	43.61% (58)	Others in general	3.02 (1.38)	1.00 - 5.00
	3-6 hours after waking up	21.80% (29)			
	7-12 hours after waking up	4.51% (6)			
Privacy and Security Control Use					
Account privacy setting? (n = 172)	Set to public so everyone can see it	27.33% (47)			
	Partially private so friends of friends can see it	19.19% (33)			
	Private so only friends can see it	53.49% (92)			
Account security setting? (n = 120)	Limit what certain friends can see	42.50% (51)			
	All friends can see the same thing	57.50% (69)			

Note. Descriptive analyses conducted with all available data from the original sample (*n* = 204) rather than the analytic sample (*n* = 175). The *n* for each item is indicated in parentheses.

Table 2

Intercorrelations Between Outness and Facebook Outness to Relational Subgroups

		Facebook Outness				
		Friends	**Family**	**Classmates**	**Co-workers**	**Others in General**
Outness		**4.42 (1.18)**	**3.96 (1.50)**	**4.05 (1.40)**	**4.01 (1.48)**	**3.99 (1.46)**
Friends	4.63 (0.97)	0.53 *	0.71 *	0.79 *	0.77 *	0.78 *
Family	4.16 (1.29)	0.58 *	0.65 *	0.75 *	0.77 *	0.71 *
Classmates	4.08 (1.44)	0.63 *	0.57 *	0.73 *	0.91 *	0.85 *
Co-workers	3.99 (1.49)	0.59 *	0.50 *	0.82 *	0.69 *	0.87 *
Others in General	4.02 (1.39)	0.60 *	0.56 *	0.85 *	0.83 *	0.69 *

Note. Interrelations between outness and Facebook outness are depicted along the diagonal. Interrelations for Facebook outness are presented above the diagonal, and interrelations for outness are presented below the diagonal. Means and standard deviations for Facebook outness are presented in the vertical columns, and means and standard deviations for outness are presented in the horizontal rows.

* $p < .05$.

Table 3

Intercorrelations Between Study Variables

Variable	1	2	3	4	5	6	7	8	Mean	SD	Range
1. Victimization	--	-0.37[*]	0.16[*]	0.02	0.40[*]	0.12	0.13	0.47[*]	0.20	0.41	0.00 - 2.40
2. Social support		--	-0.05	0.10	-0.06	0.03	-0.05	-0.23[*]	5.30	1.39	1.00 - 7.00
3. Social media use: SIEC			--	0.63[*]	0.18[*]	0.45[*]	0.47[*]	0.08	2.53	0.98	1.00 - 5.00
4. Social media use: ISR				--	0.09	0.42[*]	0.36[*]	0.07	3.55	0.83	1.25 - 5.00
5. Cyberbullying					--	0.09	0.09	0.32[*]	0.36	0.76	0.00 - 3.00
6. Offering online support						--	0.43[*]	0.27[*]	3.53	0.94	1.00 - 5.00
7. Seeking online support							--	0.16[*]	2.63	1.09	1.00 - 5.00
8. Psychological distress								--	0.54	0.68	0.00 - 2.94

[*]
$p < 0.5$

Table 4

Summary of Multiple Regression Analyses

		Psychological Distress								
	Model 1			Model 2			Model 3			
Variable	b (SE)	β	t	b (SE)	β	t	b (SE)	β	t	
Intercept	0.45 (0.11)		4.16**	0.51 (0.22)		2.38*	0.08 (0.28)		0.27	
Demographics										
Age[a]	0.02 (0.03)	0.05	0.58	0.02 (0.03)*	0.04	0.56	0.03 (0.03)	0.06	0.89	
Gender										
Cisgender male[b]	--	--	--	--	--	--	--	--	--	
Cisgender female	0.08 (0.12)	0.06	0.71	0.11 (0.10)	0.08	1.00	0.12 (0.10)	0.08	1.13	
Transgender	0.28 (0.18)	0.13	1.52	-0.13 (0.17)	-0.06	-0.74	-0.11 (0.17)	-0.05	-0.68	
Race/ethnicity										
African-American[b]	--	--	--	--	--	--	--	--	--	
White	-0.06 (0.17)	-0.03	-0.37	0.04 (0.15)	0.02	0.28	0.01 (0.15)	0.00	0.06	
Hispanic/Latino	0.08 (0.20)	0.04	0.39	0.06 (0.18)	0.03	0.32	0.01 (0.18)	0.01	0.07	
Other	0.08 (0.14)	0.05	0.55	0.07 (0.13)	0.04	0.51	0.05 (0.12)	0.03	0.40	
Study Variables										
Victimization				0.79 (0.13)	0.47	6.13**	0.62 (0.13)	0.37	4.59**	
Social support				-0.04 (0.04)	-0.08	-1.03	-0.06 (0.04)	-0.12	-1.64	
Facebook integration: SIEC							-0.13 (0.06)	-0.18	-1.94^	
Facebook integration: ISR							0.04 (0.07)	0.05	0.52	
Cyberbullying							0.17 (0.07)	0.19	2.51*	
Offering online support							0.17 (0.06)	0.24	3.06**	
Seeking online support							0.04 (0.05)	0.06	0.76	
Model statistics										
F	0.65			6.58**			5.96**			
R^2	0.02			0.24			0.33			
F	--			5.93			-0.62			

Psychological Distress

Variable	Model 1			Model 2			Model 3		
	b (*SE*)	*β*	*t*	*b* (*SE*)	*β*	*t*	*b* (*SE*)	*β*	*t*
R^2	--			0.22			0.07		
AIC	-123.9			-164.1			-174.6		
BIC	-121.3			-161.2			-170.2		

Note.

*
p < .05;

**
p < .01;

^
p < .10.

[a]Mean centered.

[b]Reference group.

SIEC = Social integration and emotional connection. ISR = Integration into social routines. For AIC and BIC, a more negative value indicates better model fit.