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The buffering effect of peer support on the links between family rejection and psychosocial adjustment in LGB emerging adults

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Abstract

Lesbian, gay, and bisexual (LGB) emerging adults often seek support from their peers if they lack support from their family of origin. We predicted that peer social support would moderate the link between negative family relationships and psychosocial adjustment, such that in the context of family rejection, experiencing more peer support would predict lower levels of anxiety, depression, and internalized homonegativity (IH) and higher self-esteem. Sixty-two (27 females) LGB individuals (ages 17–27, $M = 21.34$ years, $SD = 2.65$) reported on their families' attitudes toward homosexuality, experiences of family victimization, peer social support, anxiety and depression symptoms, IH, and self-esteem. Results showed that peer social support moderated the link between negative family attitudes and anxiety and also moderated the link between family victimization and depression. The moderating effects suggest that having a supportive peer group may protect against mental health problems for LGB emerging adults who lack support from their family of origin.

Keywords

Family attitudes, family victimization, LGB emerging adults, peer social support, psychosocial adjustment

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Considerable work has suggested that positive social relationships are critical for promoting well-being in the general population (Cohen, 2004; Uchino, 2004). Social relationships promote resilience through social connectedness and stress buffering (Cohen, 2004), which can attenuate stress response to experiences of prejudice, and promote well-being in ethnic and racial minority populations (DeGarmo & Martinez, 2006; Juang & Alvarez, 2010; Juang, Ittel, Hoferichter, & Gallarin, 2016). The importance of supportive relationships for buffering against the stresses of prejudice also has been noted for sexual minority (individuals whose sexual identity differs from the heterosexual majority, e.g., lesbian, gay, and bisexual (LGB)) populations (Kwon, 2013), but the likelihood of receiving such support from families of origin may be lower (Friedman & Morgan, 2009). Most members of ethnic and racial minority groups are raised in families with parents and siblings who share the same minority status. This is not usually true for members of sexual minority groups, and their unique sexual minority status often transforms the family into an additional source of stress rather than one of support (D'Augelli, Grossman, & Starks, 2008; D'Augelli, Hershberger, & Pilkington, 1998).

LGB individuals report higher levels of conflict with their family of origin than do heterosexual individuals, due to family members' negative reactions to the LGB individuals' distinct sexual identity (Bouris et al., 2010; D'Augelli, Grossman, & Starke, 2005; D'Augelli et al., 1998, 2008). In accord with the minority stress model (Meyer, 2003), family conflict is a proximal source of stress that has been linked to poor mental and physical health outcomes in the LGB community (Lewis, Derlega, Griffin, & Krowinski, 2003; Ryan, Huebner, Diaz, & Sanchez, 2009; Williams, Connolly, Pepler, & Craig, 2005). Family conflict associated with sexual minority status can be particularly deleterious for LGB young adults (Feinstein, Wadsworth, Davila, & Goldfried, 2014), as this age of emerging adulthood marks a critical period of instability and for identity development (Arnett, 2000, 2004). Indeed, negative family relationships stemming from individuals' sexual identity may be particularly devastating for LGB emerging adults (McConnell, Birkett, & Mustanski, 2016), as they may risk losing access to both material resources and social–emotional support from their families of origin (D'Augelli et al., 2005; Ryan et al., 2009; Williams et al., 2005). LGB individuals who live with their families of origin and who experience family victimization report lower self-esteem and internalized homonegativity (IH; i.e., the devaluation of self for being LGB; Herek & Garnets, 2007; Herek, Gillis, & Cogan, 2009). Family victimization and rejection also have been associated with psychological distress and substance use (Willoughby, Doty, & Malik, 2010). Further, LGB individuals report more depression and anxiety than their heterosexual counterparts, with lack of family support accounting for the association between their sexual minority identity and self-reported psychopathology (Savin-Williams, 1989; Williams et al., 2005).

LGB individuals' relationships both with their families of origin and with their peers can have significant effects on LGB adolescents and young adults' psychosocial adjustment (Shilo & Savaya, 2011). The purpose of the present study was to examine how these two dimensions of an individual's social environment may interact. More specifically, we considered the role of peer social support as a potential buffer against the adverse effects of negative family relationships on LGB emerging adults' psychosocial adjustment.

Family relationships and psychosocial adjustment in LGB emerging adults

Creating an accepting and supportive environment within the family context helps individuals adapt to the social world and fosters positive physical and mental health outcomes across the life span (Baumrind, 1991; Peterson, 2005; Repetti, Taylor, & Seeman, 2002). When there is congruence between the structure, practices, and values of the family environment and the emerging adults' developing self-awareness and identity (as would typically be the case for offspring with a heterosexual identity being raised in a family with heterosexual parents), emerging adults are likely to feel supported in their development (Rogoff, 2003). However, many LGB individuals are not born into or raised in families of origin or communities that share their sexual minority status and many do not feel accepted for their emerging sexual identities (Pew Research Center, 2013). Corroborative evidence suggests that parents' heteronormative beliefs (i.e., the belief that heterosexuality is the normal or preferred sexual orientation) and the resulting expectations they have for their children (e.g., parents expecting their children to date people of the opposite sex) may generate conflict, aversive parenting practices, and victimization or rejection of LGB offspring (D'Augelli et al., 1998, 2005, 2008). Many LGB youths prove to be resilient to such experiences (Zimmerman, Darnell, Rhew, Lee, & Kaysen, 2015); nevertheless, these negative family experiences can hinder some LGB emerging adults' own validation and integration of their sexual identity (Appleby, 2001) and increase the risk for developing mental health problems (Bouris et al., 2010).

These mental health problems are attributable to the aversive family experiences of LGB offspring, not simply due to the fact that there is incongruence between parents' and children's sexuality. Previous studies have reported that positive parental support for LGB adolescents is related to greater self-esteem, less anxiety and depression (Savin-Williams, 1989), and more positive health outcomes (Bouris et al., 2010; McConnell, Birkett, & Mustanski, 2015). Further, LGB emerging adults also report greater self-esteem and better mental health outcomes when there is support from all members of their family of origin, not just their parents (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010). However, many LGB young adults do not experience positive family relationships and may therefore seek from their peers the social support that everyone needs and might typically expect from their families of origin.

Peer social support in LGB emerging adults' psychosocial adjustment

Peers may provide the particular positive relationships in which LGB individuals can develop healthier individual and social adjustment. Like heterosexual individuals (Laursen & Collins, 2009), LGB emerging adults seek, rely on, and place great importance on their peer social networks for emotional and social support (Oswald, 2002). LGB individuals who report more social support from peers also report less depression (Sheets & Mohr, 2009) and higher self-esteem (Snapp, Watson, Russell, Diaz, & Ryan, 2015; Van Heeringen & Vincke, 2000; Watson, Grossman, & Russell, 2016). Sometimes, these close peer relationships evolve into "families of choice" (Goldfried & Goldfried, 2001; Weeks, Heaphy, & Donovan, 2001; Weston, 2013) that provide substantial support to LGB individuals when they lack such support from their

family of origin. LGB individuals report that close peers become their families of choice because these strong relationships are a salient source of reciprocal care, love, and support (Weeks et al., 2001; Weston, 2013). Moreover, strong bonds with families of choice for LGB individuals are essential throughout the life span (Cohen & Murray, 2007) evidenced by reports of older LGB individuals more likely to seek and rely on their families of choice, rather than their families of origin (Cantor, Brennan, & Shippy, 2004), when in need of physical care and emotional support. It is well documented that peer social support contributes to the well-being of all individuals (Cohen, 2004; Uchino, 2004), and it is therefore plausible that peer support may help buffer across multiple indices of psychosocial adjustment in LGB emerging adults (e.g., anxiety, depression, IH, and self-esteem).

Examining LGB emerging adults' relationships with both their parents and their peers is crucial to illuminating the social ecological contexts (Bronfenbrenner & Ceci, 1994) in which LGB individuals psychologically and socially develop (Rogoff, 2003; Shilo & Savaya, 2011). To our knowledge, no empirical studies have examined the moderating effects of peer social support on well-being in the context of negative family relationships for LGB emerging adults. Therefore, the goal of this investigation was to examine whether peer support was positively associated with healthy psychosocial adjustment in LGB individuals who experienced negative family relationships.

Hypotheses

Due to the existing literature pointing to the risks of a negative family environment (Appleby, 2001; Bouris et al., 2010; D'Augelli et al., 2005, 2008) and to the benefits of supportive peers for LGB young adults (Sheets & Mohr, 2009; Snapp et al., 2015; Van Heeringen & Vincke, 2000; Watson et al., 2016), we predicted that (1) perceived negative family attitudes toward homosexuality and experiences of family victimization would be positively associated with anxiety, depression, and IH and negatively associated with self-esteem and (2) that peer social support would be negatively associated with anxiety, depression, and IH and positively associated with self-esteem. We also hypothesized that (3) among LGB individuals who reported more peer social support, negative family attitudes and greater levels of family victimization would not be associated with more anxiety and depression symptoms or IH, or with lower self-esteem. Those relations were expected to be evident when peer social support was low.

Method

Participants

Twenty-seven lesbian and bisexual young women and 35 gay and bisexual young men ($N = 62$; ages 17–27, $M = 21.34$, $SD = 2.65$) were recruited through LGB and student groups, college and university settings, and university health clinics in the greater metropolitan area of Montréal, Québec. Participants' primary language was English (76%) or French (24%). Most participants were Caucasian (76%) and self-identified as predominantly or exclusively homosexual (79%); 21% self-identified as bisexual. A

greater proportion of women (15) than men (1) reported a bisexual identity, $\chi^2(1) = 22.11$, $p < .001$. Seventy-one percent of the participants were college students, 19% were employed, and 10% were unemployed. Thirty-two percent of the participants reported living with their families of origin, 18% reported living alone, 34% lived with at least one roommate, 14% lived with their romantic partners, and 2% resided in a group community home. Self-identification as LGB tended to occur during late adolescence ($M = 17.86$ years, $SD = 2.78$). Ninety percent of the sample had come out to one or both parents ($M = 18.6$ years, $SD = 2.61$), and 100% had come out to at least one other person (including siblings, peers, and coworkers; $M = 19.01$ years, $SD = 2.54$). Thus, the sample generally represented young adults who lived openly as LGB individuals.

Procedure

Bilingual research staff introduced the study and addressed questions about its methodology and purpose. Participants received an envelope that contained all questionnaires. Standardized French translations were available for all measures.

Measures

Sexual Orientation Scale. Sexual orientation was assessed with the 7-point Kinsey Likert-type scale (Kinsey, Pomeroy, & Martin, 1948). Participants were asked to self-identify their sexual orientation by circling a number on a scale from 0 to 6 that best described them, where 0 = *exclusively heterosexual* and 6 = *exclusively homosexual*. Participants who endorsed numbers 2–4 were classified as bisexual and those who endorsed numbers 5 and 6 were classified as homosexual (as described in Rieger, Chivers, & Bailey, 2005).

Sexual orientation disclosure. The Sexual Orientation Developmental Milestones is a 15-item questionnaire (Floyd & Stein, 2002) that asked about participants' age at which they self-identified as LGB (e.g., "At what age did you consider that you were definitely homosexual/bisexual?"), the degree of "outness" (e.g., *Currently, you are out to:* 1 = *no one* to 5 = *most or all the significant people in your life*), and the age at which participants disclosed their sexual orientation to their parents and others (e.g., "How old were you when you disclosed your homosexuality to your mother?").

Family attitudes. Within the 15 items of the Sexual Orientation Developmental Milestones questionnaire (Floyd & Stein, 2002), one question measured participants' perceptions of their families' attitudes toward homosexuality: "In your family, homosexuality is (1) ridiculed, stigmatized, discriminated; (2) tolerated; (3) accepted, respected; and (4) celebrated, appreciated." We used this item as a continuous variable such that lower scores represented more negative family attitudes and higher scores represented more positive family attitudes.

Family victimization. Instances of victimization enacted by family members related to one's sexual orientation were measured with the Scope and Prevalence of Anti-Lesbian/Gay Victimization (Pilkington & D'Augelli, 1995). This measure inquired about the

lifetime frequency of nine forms of aggressive acts such as "verbal insults" and "threats of physical violence." For each type of aggressive act, the frequency can be rated as "never," "once," "twice," and "more than twice" ($\alpha = .75$).

Peer social support. The Interpersonal Relationship Inventory (Tilden, Nelson, & May, 1990) is a 39-item measure of perceived peer social support. Items were scored on a 5-point Likert-type scale (1 = *strongly disagree* and 5 = *strongly agree*). The social support subscale (e.g., "I can count on a friend to make me feel better when I need it") asked participants to report perceived availability of helping behaviors by members of the social network, outside the family. The reciprocity subscale (e.g., "When I need help, I get it from my friends, and when they need help, I give it back") inquired about perceived availability and exchange of helping behaviors with others. The two subscales were averaged, with higher scores representing greater social support ($\alpha = .86$).

Anxiety symptoms. The Beck Anxiety Inventory (Beck, Epstein, Brown, & Steer, 1988) asked participants to rate the severity of 21 anxiety-related symptoms. Each item (e.g., "fear of the worst happening") was scored from 0 = *not at all* to 3 = *severely*, with higher scores indicating more severe anxiety symptoms ($\alpha = .94$). The possible total range for the scale after summing all items was 0–63. Scores of 0–21, 22–35, and 36–63 represented low, moderate, and severe symptoms of anxiety, respectively (Beck et al., 1988).

Depressive symptoms. The Beck Depression Inventory—Second Edition (Beck, Steer, Ball, & Ranieri, 1996) asked the degree to which the participant agrees with the statement on a scale from 0 to 3, with higher responses more indicative of depressive symptomology (e.g., 0 = *I do not feel sad* and 3 = *I am so sad or unhappy that I can't stand it*) ($\alpha = .95$). The possible total range for the scale after summing all items was 0–63. Scores of 0–16, 17–30, and 31–63 represented low, moderate, and severe symptoms of depression, respectively (Beck et al., 1996).

Internalized homonegativity. The Nungesser Homosexual Attitudes Inventory–Revised (Shidlo, 1994) consisted of 40 items (e.g., "Whenever I think a lot about being gay, I feel depressed") regarding attitudes toward homosexuality. Participants answered on 5-point Likert-type scales where 1 = *strongly disagree* and 5 = *strongly agree*. The possible range for the scale was 40–200, with greater scores representing greater levels of IH ($\alpha = .91$).

Self-esteem. Self-esteem was measured using the Rosenberg Self-Esteem Inventory (Rosenberg, 1965). Participants responded to 10 items (e.g., "On the whole, I am satisfied with myself") on a 4-point Likert-type scale ranging from 1 = *strongly disagree* to 4 = *strongly agree*. The possible range for this scale was 0–30, with higher scores indicating stronger sense of global self-esteem ($\alpha = .91$).

Analysis plan

We first examined zero-order correlations. Then the main predictor variables (family attitudes, family victimization, and peer social support) were mean-centered prior to creating interaction terms, and four multiple regression analyses were conducted to predict each outcome variable (anxiety and depression symptoms, IH, and self-esteem). Regression models were fit using structural equation modeling in the package lavaan (Rosseel, 2012) in R. We then obtained confidence intervals (CIs) for each of the models' estimates using bootstrapping (see notes in Table 2; MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2008). We used bootstrapping because Shapiro–Wilk tests of normality showed that our predictor and outcome variables (with the exception of social support and IH, respectively, both ps > .05) were not normally distributed, all ps < .001. Lastly, significant interactions were further evaluated post hoc via simple slope analyses.

Results

Descriptive analyses

Table 1 displays the means, standard errors, and zero-order correlations for all measures. On average, participants reported low to moderate levels of anxiety and depression symptoms, low IH, and moderately high self-esteem. As expected, LGB emerging adults who reported more negative family attitudes, more family victimization, and less peer social support, also reported more depression, anxiety, and IH, and lower self-esteem.

Next, t-tests and correlations were conducted to test for significant relations between the psychological measures and participants' age, ethnicity (White vs. non-White), language (English vs. French), sex, and their current living situation (living with family of origin or not). Older participants marginally reported more perceived negative family attitudes toward homosexuality, $r(62) = .23$, $p = .08$. Ethnicity was not significantly associated with the target variables ($p > .10$). English-speaking participants reported more depression, lower self-esteem, and lower peer social support, than French-speaking participants; all $t > 2.24$ and all $p < .05$. Male participants in the sample reported more family victimization compared to female participants ($p < .05$). Further, LGB emerging adults who lived with their families of origin did not differ from those who did not live with their families of origin across all predictor and outcome variables ($p > .10$). To statistically account for these associations, participants' language, age, and sex were included as covariates in all the regression models.

Links between family conflict, peer social support, and psychosocial adjustment

The regression models are reported in Table 2. Overall, all four models had good fit to the data and accounted for 33%, 42%, 36%, and 50% of the variability in anxiety and depression symptomatology, IH, and self-esteem, respectively. In accord with Hypothesis 1, negative family attitudes toward homosexuality and greater family victimization each predicted more anxiety and depression symptoms. Negative family attitudes toward

Table 1. Descriptive statistics and correlations.

Variables	Mean	*SE*	Minimum	Maximum	1	2	3	4	5	6	7
1. Family attitudes	2.40	0.12	1.00	4.00	–	–.04	.15	–.31*	–.31*	–.50**	.45**
2. Family victimization	10.44	0.36	9.00	24.00		–	.13	.26*	.24†	–.03	–.04
3. Peer social support	53.62	0.66	42.50	64.00			–	–.12	–.28*	–.30*	.04
4. Anxiety symptoms	15.29	1.48	0.00	49.00				–	.71**	.23†	–.06
5. Depression symptoms	9.98	1.03	0.00	43.00					–	0.31*	–0.13
6. IH	80.50	2.43	51.00	127.00						–	–0.17
7. Self-esteem	24.87	0.26	21.00	33.00							–

Note. $N = 62$; IH: internalized homonegativity.
*$p < .05$; **$p < .01$; †$p < .10$ (all tests were two tailed).

homosexuality predicted greater IH and lower self-esteem. In accord with Hypothesis 2, participants who reported more peer social support also reported less depression and IH.

Peer support also moderated the link between family attitudes and anxiety (see Figure 1) and between family victimization and depression (see Figure 2). Peer social support did not moderate the links between family attitudes and family victimization with IH and self-esteem.

As shown in Figure 1, more negative family attitudes significantly predicted more anxiety symptoms only when LGB emerging adults reported low peer social support, $b = -.280$, $t(3, 56) = -2.190$, $p < .05$, CI [−6.117, −0.273]. There was no association between family attitudes toward homosexuality and anxiety symptoms when peer support was higher, $b = -.094$, $t(3, 56) = -0.587$, $p > .05$, CI [−4.709, 2.575].

As shown in Figure 2, more family victimization significantly predicted more depression symptoms when LGB emerging adults reported low peer support, $b = .816$, $t(3, 58) = 3.384$, $p < .001$, CI [2.71, 10.54]. There was no association between family victimization and depression when peer support was higher, $b = -.112$, $t(3, 58) = -0.586$, $p > .05$, CI [−4.008, 2.192].

Discussion

The present study examined the influence of family and peer relationships on LGB individuals' psychosocial adjustment. Our study extends the existing research by suggesting that the social support provided by peers of LGB young adults protects against the adverse effects of experiencing rejection and victimization. Just like heterosexual individuals (Cohen, 2004; Criss, Pettit, Bates, Dodge, & Lapp, 2002), the possibility that a positive peer environment buffers against anxiety and depression symptoms within a rejecting family environment illuminates the importance of peer relationships in sexual minority young adults' well-being. Our findings are the first to show that positive peer

Table 2. Anxiety, depression, IH, and self-esteem as a function of family attitudes, family victimization, and peer social support.

Predictor	Est.	β	*SE*	[LCI, UCI]
Anxiety symptoms				
Age	1.206†	.275	0.646	[–0.159, 2.398]
Language	–1.639	–.061	3.038	[–7.025 5.229]
Sex	1.977	.085	2.880	[–3.347, 8.044]
Family attitudes	–4.183*	–.342	1.881	*[–7.856, –0.521]*
Family victimization	1.573*	.382	0.732	*[0.785, 4.122]*
Peer social support	–0.135	–.122	0.316	[–0.814, 0.367]
Family Attitudes × Peer Social Support	0.276†	.259	0.299	*[0.002, 1.154]*
Family Victimization × Peer Social Support	–0.052	–.090	0.213	[–0.618, 0.180]
$R^2 = .329$; $\chi^2 = 4.233$, $df = 3$, $p > .237$; CFI = .968; RMSEA = .081				
Predictor				
Depression symptoms				
Age	0.641	.211	0.399	[–0.134, 1.422]
Language	–2.770	–.149	2.071	[–6.529, 1.733]
Sex	2.616	.163	2.006	[–0.951, 6.946]
Family attitudes	–2.516**	–.298	0.983	*[–4.489, –0.631]*
Family victimization	1.228**	.432	0.484	*[0.374, 2.581]*
Peer social support	–0.258**	–.338	0.189	*[–0.904, –0.169]*
Family Attitudes × Peer Social Support	0.151†	.205	0.183	[–0.034, 0.683]
Family Victimization × Peer Social Support	–0.093†	–.233	0.109	*[–0.444, –0.010]*
$R^2 = .424$; $\chi^2 = 4.233$, $df = 3$, $p > .237$; CFI = .975; RMSEA = .081				
Predictor				
IH				
Age	–1.122	–.156	0.927	[–3.107, 0.503]
Language	–2.792	–.063	5.077	[–12.623, 7.289]
Sex	2.044	.054	4.853	[–7.756, 11.339]
Family attitudes	–9.109**	–.462	2.438	*[–14.156, –4.700]*
Family victimization	0.302	.045	1.396	[–1.835, 4.198]
Peer social support	–0.497†	–.274	0.583	[–2.047, 0.226]
Family Attitudes × Peer Social Support	0.084	.048	0.483	[–0.803, 1.086]
Family Victimization × Peer Social Support	–0.114	–.121	0.390	[–0.918, 0.438]
$R^2 = .362$; $\chi^2 = 4.233$, $df = 3$, $p > .237$; CFI = .968; RMSEA = .081				
Predictor				
Self-esteem				
Age	0.132†	.164	0.079	[–0.038, 0.275]
Language	2.406**	.489	0.578	*[1.333, 3.611]*
Sex	–0.180	–.042	0.511	[–1.186, 0.813]
Family attitudes	0.648*	.290	0.257	*[0.134, 1.138]*
Family victimization	–0.048	–.064	0.072	[–0.198, 0.098]
Peer social support	–0.021	–.101	0.049	[–0.132, 0.060]
Family Attitudes × Peer Social Support	0.028	.143	0.051	[–0.037, 0.161]
Family Victimization × Peer Social Support	0.001	.005	0.049	[–0.047, 0.048]
$R^2 = .501$; $\chi^2 = 4.233$, $df = 3$, $p > .237$; CFI = .968; RMSEA = .081				

Note. LCI and UCI: lower confidence interval and upper confidence interval (bias corrected 95%); 10,000 bootstrap samples; CFI: comparative fit index; RMSEA: root mean square error of approximation; CI: bias corrected 95% confidence interval; 10,000 bootstrap samples; IH: internalized homonegativity. Significant CIs are presented in italic font. *$p < .05$; **$p < .01$; $^{\dagger}p < .10$.

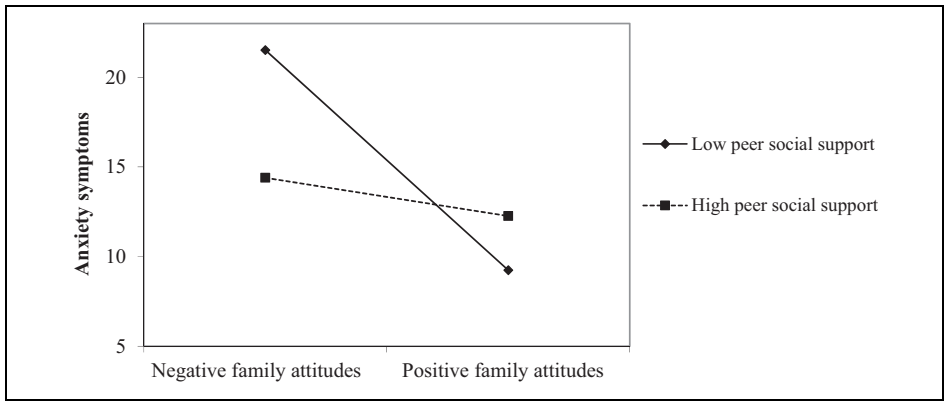

Figure 1. Peer social support moderates the link between family attitudes toward homosexuality and anxiety symptoms.

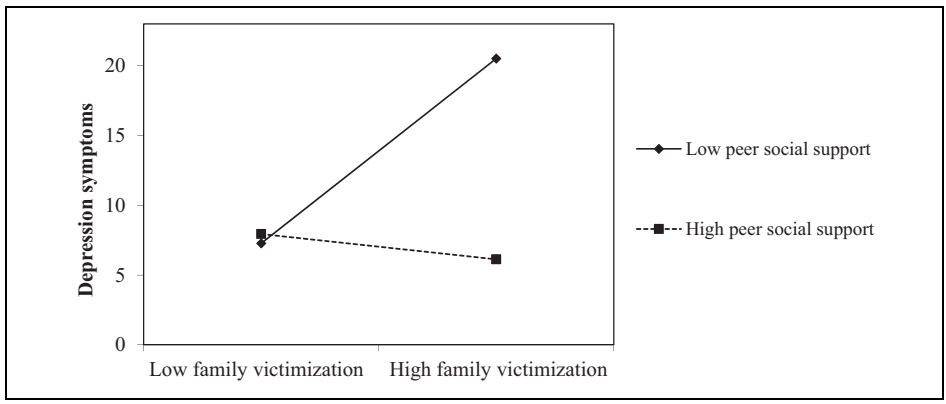

Figure 2. Peer social support moderates the link between family victimization and depression symptoms.

relationships may be one avenue by which sexual minority young adults could diminish anxiety and depression symptomatology associated with negative family relationships. When LGB emerging adults have experienced a rejecting or unaccepting family, they may feel motivated to turn to peers in order to feel support and acceptance, thereby developing close peer relationships that serve an essential need left unfulfilled by an alienating family of origin (Goldfried & Goldfried, 2001; Weston, 2013). Clearly not all LGB emerging adults successfully seek peer support when family acceptance is lacking; the positive correlations between the family and peer measures were not significant. For those who do so successfully, though, the vital support provided by caring peers seems to buffer them against the adverse mental health consequences of negative attitudes and family victimization.

LGB individuals seem to have a strong potential for resilience against poor psychosocial adjustment by way of seeking and gaining acceptance and belonging from

others (Kwon, 2013; Vincke & Van Heeringen, 2002). While supportive peer relationships may not be able to completely replace or compensate for families of origin (Goldfried & Goldfried, 2001; Nesmith, Burton, & Cosgrove, 1999), they may still provide a substantial support system that can help alleviate some of the negative effects imposed by the family of origin. Peers who become families of choice for LGB individuals foster a sense of unity (Weeks et al., 2001; Weston, 2013) and offer guidance and support during sexual identity development (Nesmith et al., 1999). For example, sexual minority peers of LGB individuals have been shown to provide higher sexuality-related and general support when compared to family of origin and heterosexual peers (Doty, Willoughby, Lindahl, & Malik, 2010). While our findings suggest that peer support may buffer against negative family relationships, the process by which LGB late adolescents and emerging adults define their social networks and families of choice beyond their peers is likely nuanced and warrants further empirical examination. It is plausible that close relationships with nonpeers (e.g., teachers/professors, elders in their community, mentors, older coworkers, etc.) also are important for forming families of choice and providing support for LGB individuals.

Although peer social support did not moderate the links between family attitudes or family victimization with IH, we did find that IH was negatively associated with both family attitudes and peer social support and positively associated with both anxiety and depression symptoms, which is in accord with prior studies (Cochran, Sullivan, & Mays, 2003; Igartua, Gill, & Montoro, 2009; Shidlo, 1994). Similarly, we found that family attitudes was a robust predictor of self-esteem in our sample of LGB emerging adults which also is in accord with the previous findings (Snapp et al., 2015; Van Heeringen & Vincke, 2000). This begs the question of why peer support moderated the effect of family environment on mental health but not on the specific self-reflective cognitions of IH and self-esteem.

The answer may be found when examining how IH and self-esteem were assessed in our study. To tap into IH and self-esteem, participants were asked to report on cognitive processes of conscious self-evaluation and attitudes. It is possible that the self-reflective processes of IH constitute a negative cognitive schema (Proujansky & Pachankis, 2014) that may be linked to the anticipation of rejection and prejudicial acts from family members (D'Augelli et al., 1998, 2005, 2008), perhaps experienced during childhood when individuals who later identified as sexual minorities may have displayed gender nonconforming behaviors (Skidmore, Linsenmeier, & Bailey, 2006). Indeed, studies have shown that parents' heteronormative beliefs have been linked to victimization or rejection of their LGB offspring (D'Augelli et al., 1998, 2005, 2008). Further, self-esteem is an early-developing schema (Stein, 1995) that relies largely on perceptions of support from parents (Harter, 1999). Therefore, it is plausible that both IH and self-esteem are more heavily and specifically rooted in one's perception of the family of origin's evaluations of oneself than are symptoms of anxiety and depression, which have been shown to be multidetermined (Hastings, 2015). If so, then the potential benefits of support provided by the family of choice may be less effective for ameliorating these internalized negative self-evaluations. This explanation is speculative, of course, and will require scrutiny in future studies. In order to tease out the specific affective, cognitive, and/or somatic mechanisms by which peers can buffer against a negative

family environment, future research could examine the possibly multiple moderating pathways linking mental health, self-esteem, IH, and other processes, such as identity development, within the family network. This task may perhaps be pursued by employing advanced analytical techniques (e.g., social network analyses; Kornienko, Santos, Martin, & Granger, in press), which are useful to test how peers may influence psychosocial adjustment processes across multiple domains including ethnic/racial (Nishina, Bellmore, Witkow, & Nylund-Gibson, 2010; Santos, Kornienko, & Rivas-Drake, in press) and gender identity (Kornienko et al., in press) development over time.

A limitation of our study is that our findings are based on a self-report cross-sectional design and we therefore cannot infer causality or direction of effect. Pursuing studies with a repeated measures, longitudinal design would help to advance research in this area considerably, potentially revealing whether family rejection precedes the efforts of LGB individuals to seek out supportive nonfamilial relationships, and whether there is a sensitive period during which the support of peers is most essential for buffering against poor psychosocial outcomes for LGB individuals with rejecting families. Our study also tested a convenience sample and was limited in the number of self-identified bisexual male participants and our findings, therefore, may not be generalizable to this population. Further, our construct of "family attitudes" was assessed using a single item and thus could not reveal whether acceptance varied across different family members (D'Augelli et al., 2008). Another interesting factor is that the participants lived in a city, province, and country that is generally considered to be accepting of sexual minorities (e.g., early support for marriage equality; Pew Research Center, 2015); they were all out to at least one person in their lives; they reported relatively low anxiety and depression symptoms, and IH; and they reported moderately high levels of self-esteem. However, the predicted associations among the variables still emerged despite our small sample size. LGB emerging adults remained vulnerable to the adverse psychological effects of perceived and enacted prejudice against their sexual identities stemming from their families of origin even in a generally low-risk community. If anything, this study may conservatively underestimate the magnitude of the associations that would be seen in other national or cultural contexts.

The specific type of social support that can help buffer against poor mental health may also be an important factor to consider. Given that all of these participants had disclosed their sexual identity to someone, it is an open question whether LGB individuals who have not disclosed their sexual minority status to anybody would be able to benefit from peer support in the same way that our sample of "out" LGB individuals was able to benefit. Examining support specific to sexuality, versus general supportiveness, also may produce varying results (Doty et al., 2010; Freedman & Morgan, 2009; Sheets & Mohr, 2009; Shilo & Savaya, 2011; Van Heeringen & Vincke, 2000; Vincke & Van Heeringen, 2002; Watson et al., 2016). Although positive peer support of any kind may be beneficial to an LGB individual as they navigate adolescence and emerging adulthood in a heteronormative society, knowing that their sexual identity is specifically accepted and supported—by peers or by families—may confer particular strengths.

There has been considerable research in the general population on the effects of both positive peer relationships and positive family relationships on an individual's well-being. For LGB individuals, as well, both peers and family members play vital roles

in shaping one's feelings of acceptance and self-esteem, either by supporting or by rejecting the individual due to their sexual minority status. These findings provide hopeful evidence that supportive peer relationships are not only beneficial to LGB individuals but also are powerful enough to lighten the effect of negative family attitudes and victimization experiences on psychosocial adjustment. It is well-documented that positive attitudes of parents toward their child's sexual minority identity (Floyd, Stein, Harter, Allison, & Nye, 1999; Sheets & Mohr, 2009) and support from family for an individual's sexuality (Ryan et al., 2010) predict more positive self-esteem and overall better mental health in LGB youths. Mental health providers may employ strategies that encourage family warmth, acceptance, and support as crucial steps toward ensuring the well-being of their sexual minority youth. Alternatively, families who experience difficulties with their children's sexual orientation may benefit from joining national support groups such as parents, families, and friends of lesbians and gays that promote healthy family relationships with their children through active engagement (Fehlbaum, 2016). However, our findings suggest that, if extenuating circumstances make family intervention difficult or impossible, encouraging LGB individuals to seek positive social support networks could be sufficient to counteract the risk of the development of poor mental health outcomes. This also provides an opportunity for institutional school-based programs, such as gay–straight alliances, to continue fostering positive relationships between individuals of differing sexual identities by promoting school engagement and providing safe spaces for sexual minority individuals to feel more connected to their communities (Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012), which has been associated with better psychosocial adjustment among LGB individuals (Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013; Toomey, Ryan, Diaz, & Russell, 2011; Watson & Russell, 2014).

Authors' Note

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