HHS Public Access

Author manuscript

Am Educ Res J. Author manuscript; available in PMC 2017 July 28.

Published in final edited form as:

Am Educ Res J. 2016 December ; 53(6): 1732–1758. doi:10.3102/0002831216674804.

Greater Engagement Among Members of Gay-Straight Alliances: Individual and Structural Contributors

V. Paul Poteat,
Boston College

Nicholas C. Heck,
Marquette University

Hirokazu Yoshikawa, and
New York University

Jerel P. Calzo
San Diego State University

Abstract

Using youth program models to frame the study of Gay-Straight Alliances (GSAs), we identified individual and structural predictors of greater engagement in these settings with a cross-sectional sample of 295 youth in 33 GSAs from the 2014 Massachusetts GSA Network Survey (69% LGBQ, 68% cisgen-der female, 68% White, M_{age} = 16.07). Multilevel modeling results indicated that members who perceived more support/socializing from their GSA, had more LGB friends, were longer serving members, and were in GSAs with more open and respectful climates reported greater engagement. Further, there was a curvilinear association between organizational structure in the GSA and engagement: Perceptions of more structure were associated with greater engagement to a point, after which greater structure was related to less engagement.

Keywords

engagement; Gay-Straight Alliance; lesbian; gay; bisexual; trans-gender; organizational structure; youth programs

Many youth participate to varying degrees in a wide range of programs in schools or the broader community that can promote positive development (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; DuBois, Holloway, Valentine, & Cooper, 2002; Eccles & Gootman, 2002). Nevertheless, studies have given little attention to the experiences of sexual and gender minority youth (e.g., lesbian, gay, bisexual, or transgender youth; LGBT) or to programs that specifically address sexual orientation– related issues. Given that many schools and communities remain unsafe for LGBT youth and that many LGBT youth and some heterosexual youth face homophobic victimization at school (Poteat, Scheer, DiGiovanni, & Mereish, 2014; Russell, Everett, Rosario, & Birkett, 2014), there is a pressing need for greater consideration of such programs and youths' engagement in them.

Gay-Straight Alliances (GSAs) are school-based groups across the United States that provide a setting for youth to receive support and engage in advocacy around issues related to sexual orientation and gender identity (e.g., coming out, bias-based harassment; Griffin, Lee, Waugh, & Beyer, 2004; Russell, Muraco, Subramaniam, & Laub, 2009). They can be described within the framework of youth program models, which identify characteristics of successful youth programs such as safe and structured environments, opportunities to foster peer connection, building on youths' strengths to promote self-confidence, empowering youth by placing them in positions of responsibility, and providing adult support and role modeling (Damon, 2004; Eccles & Gootman, 2002). Consistent with these models, GSAs are youth-driven and supported by an adult advisor, with a major aim of providing social support and opportunities to engage in advocacy (Griffin et al., 2004). Nonexperimental studies show that youth in schools with GSAs report lower health and academic risks than youth in schools without GSAs (Davis, Stafford, & Pullig, 2014; Heck, Flentje, & Cochran, 2011; Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013; Walls, Kane, & Wisneski, 2010). Additionally, qualitative studies suggest that multiple factors, such as bullying and a desire to improve the school climate for LGBT students, influence youths' decisions to join a GSA (Heck, Lindquist, Stewart, Brennan, & Cochran, 2013; Sweat, 2004). However, few studies have considered the experiences among youth who have joined GSAs and, in particular, how youth who are GSA members vary from one another in their levels of engagement. As such, we move from studying GSA involvement as a dichotomous indicator (i.e., members vs. nonmembers) to look at varying levels of active engagement specifically among GSA members. Within the present study, we consider youth engagement to be reflected by behaviors such as consistently attending GSA meetings, contributing to conversations, helping with projects, and taking leadership roles. Using data from the 2014 Massachusetts GSA Network Survey, we examine whether student demographics, membership duration, level of support received, having LGBT friends, organizational structure, and GSA climate are associated with greater levels of engagement among GSA members.

There are important reasons to identify factors that may promote or impede levels of engagement among GSA members. Youth who are more actively engaged and invested in youth programming in general derive greater academic, developmental, and economic benefits relative to those who are less engaged (Busseri & Rose-Krasnor, 2009; Dawes & Larson, 2011; Kuhn & Weinberger, 2005; Pearce & Larson, 2006). For example, youth program involvement is associated with greater empowerment and college attendance (Mahoney, Cairns, & Farmer, 2003; McMahon, Singh, Garner, & Benhorin, 2004). Specific to GSAs, youth membership is connected to greater empowerment and lower substance use, depressive symptoms, and suicidality (Russell et al., 2009; Toomey, Ryan, Diaz, & Russell, 2011). Thus, it is important to not simply identify predictors of whether youth become members in these programs but also to consider how engaged members are within them. Also, as GSAs are largely youth-driven, it is incumbent on youth members to take an active role in order to ensure that the group remains a stable resource within the school. Together, these issues underscore the importance of identifying individual and group characteristics that relate to higher levels of GSA engagement.

Individual Factors Related to GSA Engagement

Drawing on models from the youth program literature (Eccles & Gootman, 2002) and from the intergroup relations literature, we consider individual characteristics that could relate to variability in members' GSA engagement. First, we consider demographic patterns based on sexual orientation, gender, and race/ethnicity. GSAs are intended to be a supportive setting for both sexual minority and heterosexual youth (Griffin et al., 2004), and GSAs appear beneficial for both groups (Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013; Russell et al., 2009). As such, we expect that sexual minority and heterosexual GSA members, on average, will not differ in their level of GSA engagement. Regarding gender, cisgender females could be more engaged than cisgender males because male adolescents often face peer pressure to prove their heterosexuality and conform to masculine norms that stigmatize sexual minorities (Pascoe, 2007). Yet, cisgender male GSA members may be a unique group of youth who may feel less pressured to conform to these norms. Thus, while cisgender females and males in the general student population could differ in their likelihood to join a GSA, those who do join may not differ in their level of engagement. Also, it would be important to consider whether transgender members differ from cisgender members in their GSA engagement. Transgender youth face similar stressors as lesbian, gay, and bisexual (LGB)[1] youth as well as unique barriers in school (Grossman & D'Augelli, 2006; McGuire, Anderson, Toomey, & Russell, 2010). These unique barriers could either impede transgender youth members' level of engagement or galvanize them to be even more engaged in GSAs to make use of this setting as a means to address these issues. Finally, scholars have called for attention to racial/ethnic minority youths' experiences in youth programs (Fredricks & Simpkins, 2012; Perkins et al., 2007). In a recent finding, racial/ethnic minority GSA members reported feeling less supported in their GSA than White GSA members (Poteat et al., 2015). We anticipate, then, that racial/ethnic minority GSA members will report lower engagement than White GSA members because they may feel less welcomed.

Youth program models indicate that supportive relationships are a critical element of successful programs (Dawes & Larson, 2011; Eccles & Gootman, 2002; Serido, Borden, & Wiggs, 2014); thus, we hypothesize that the amount of support and socializing that youth receive from their GSA will relate to greater levels of engagement. One of the primary aims of GSAs and youth programs in general is to provide a safe context in which youth can socialize with one another and provide mutual support (Griffin et al., 2004; Jarrett, Sullivan, & Watkins, 2005). Perceived levels of GSA support are related to greater self-esteem, mastery, and sense of purpose among GSA members (Poteat et al., 2015). This could be due to the fact that youth who perceive greater support from their GSA also engage more in their GSA, thus leading to these positive outcomes.

In addition to youth program models emphasizing the need for supportive relationships, having LGBT friends may be a major factor related to heterosexual and sexual minority youths' greater engagement in programs such as GSAs that focus on issues of diversity. The

[1]In the current article, we use the LGBT acronym when referring to studies and findings focused on both sexual and gender minority youth, and we use the LGB acronym for those specifically referring to sexual orientation. Because the data in this current study assessed sexual orientation and gender identity separately, as well as LGB and transgender friends separately, we use the LGB acronym when we refer to findings in this study specific to sexual orientation.

intergroup contact literature has shown that having intergroup friendships is linked to lower prejudice (Pettigrew & Tropp, 2006). Similarly, heterosexual adults have noted that their LGB friends influenced their engagement in advocacy (Duhigg, Rostosky, Gray, & Wimsatt, 2010; Goldstein & Davis, 2010). We expect that heterosexual GSA members with more LGBT friends will be more engaged in the group because they may wish to support their LGBT friends or engage in advocacy to counter discrimination that their LGBT friends experience. Likewise, as an intragroup dynamic, we expect that LGBT members with more LGBT friends will have an even greater investment and motivation to be engaged in their GSA. Notably, LGBT youth who socialize with LGBT peers may be less susceptible to the negative effects of stigma (Frable, Platt, & Hoey, 1998). Additionally, LGBT GSA members may wish to build a larger community with LGBT youth at other schools when their GSA participates in multi-GSA events (e.g., conferences).

Finally, we anticipate that longer membership duration will relate to greater engagement in the GSA. Findings from other youth-driven programs show that youth in these programs have a distinct sense of ownership compared to those in adult-driven programs (Larson, Walker, & Pearce, 2004). Longer-serving GSA members may be more engaged because they may have a greater sense of ownership after having invested in their GSA over time. Longer-serving members could also represent a more selective sample of youth who had positive experiences within their GSA, whereas youth with less positive experiences may have discontinued their involvement. In that case, it would be likely for membership duration to relate to engagement levels. As such, we include membership duration as a covariate and focus on whether our other primary set of variables relate to engagement levels even while controlling for youths' membership duration.

Organizational Structure and Climate Related to GSA Engagement

A systems framework maintains that the organizational structure and climate of social settings have significant effects on youths' experiences in these settings (Tseng & Seidman, 2007). These dimensions are therefore important to consider in addition to individual factors. We expect that elements related to how GSAs are structured and run as groups will relate to how engaged members are in the GSA. Youth program models underscore the need for adequate organizational structure within these settings in order for them to be successful (Catalano et al., 2004; Eccles & Gootman, 2002; Wood, Larson, & Brown, 2009). Organizational structure— represented in this study by factors such as agenda setting, continuity across meetings, and group facilitation—can enhance programs' capacity to promote positive youth development (Catalano et al., 2004). At the same time, too much structure could stifle organic discussions from emerging or could be monotonous, which could lead youth to disengage in their GSA.

Organizational structure within work settings appears to have a curvilinear relationship with work engagement (Tanskanen, Taipale, & Anttila, 2016). Research has identified a similar curvilinear relationship between parental control and adolescent problem behavior (Mason, Cauce, Gonzales, & Hiraga, 1996). Such findings, although not directly from the youth program literature, suggest that the connection between structure and youth engagement in GSAs may be complex, and we anticipate a similar curvilinear relationship. This is because

GSAs attempt to serve a variety of functions and meet a range of needs (Griffin et al., 2004; Russell et al., 2009). GSAs may need to provide some structure to ensure multiple needs and interests can be voiced and larger goals can be addressed while also allowing sufficient flexibility to accommodate unanticipated events or for new discussions to emerge.

We also consider youth engagement levels in association with the climate of the GSA as one that allows members to voice different views respectfully and have a say in what is done in the group. These qualities have been examined as attributes of open classroom climates, and findings show them to be associated with outcomes such as civic engagement and social competence (Brock, Nishida, Chiong, Grimm, & Rimm-Kaufmann, 2008; Campbell, 2008). Open climates could be particularly important in settings such as GSAs where issues of diversity are addressed directly among members from different backgrounds. Indeed, intergroup dialogue research has emphasized the need for safe and respectful group norms in order for dialogues to be effective (Dessel & Rogge, 2008; Sorensen, Nagda, Gurin, & Maxwell, 2009). Youth in GSAs without such norms may feel silenced or fear judgment from other members and thus may be less actively engaged in the group. Further, this issue aligns with youth program models that underscore the need for positive social norms (Eccles & Gootman, 2002; Roth & Brooks-Gunn, 2003). Thus, we expect that youth in GSAs where these norms are more apparent will report more active engagement because they feel more assured that their views will be respected.

Current Study and Hypotheses

As studies continue to suggest the benefit of having GSAs in schools, research must look carefully at members' actual levels of engagement in GSAs and identify factors that promote more active engagement. This knowledge will be crucial to help GSAs maximize their potential benefits for members. In this study, we consider individual and group characteristics that could account for variability among members of GSAs in their levels of engagement. As individual characteristics, we consider demographic factors, perceived support and socializing received from the GSA, having LGBT friends, and membership duration. As group characteristics, we consider youths' perceived levels of organizational structure within their GSAs and their perceptions of an open climate within their GSAs.

In relation to individual characteristics, we hypothesize that sexual minority and heterosexual youth and cisgender male and female youth will not differ significantly in their levels of engagement in their GSAs; for exploratory purposes, we examine whether transgender youth report more or less engagement than cisgender youth. Also, we hypothesize that racial/ethnic minority youth will report less engagement than White youth based on emerging findings that racial/ethnic minority youth in GSAs perceive less support from their GSAs than White youth (Poteat et al., 2015). In addition to these demographic comparisons, we further hypothesize that youth who perceive receiving more support and socializing from their GSA, have more LGBT friends, and have been longer serving members of their GSA will report greater engagement in their GSA. We base these hypotheses on established youth program models and intergroup contact theory (Dawes & Larson, 2011; Eccles & Gootman, 2002; Pettigrew & Tropp, 2006).

In relation to GSA characteristics, we hypothesize a curvilinear association between youths' perception of organizational structure within their GSA and their level of engagement in the GSA: Greater organizational structure may be linked to greater engagement among GSA members to a point, after which it may then relate to less engagement. We base this hypothesis on research conducted in work and family settings (Mason et al., 1996; Tanskanen et al., 2016) and youth program models indicating the need for adequate structure in order to promote youth engagement in these settings (Catalano et al., 2004; Eccles & Gootman, 2002; Wood et al., 2009). We consider this association as it relates to each individual's own perception of structure in the GSA as well as the collective perception of structure based on the composite average perceptions of all the members in the same GSA. We consider each individual's perception of structure because each youth may perceive structure differently; some youth may find a given level of organizational structure to be rigid while other youth may find it to be desirable. Thus, the effect may be more evident at the individual level than group level. At the same time, the composite index of organizational structure for each GSA could account for variability across GSAs as a whole in their youths' level of engagement. Finally, we hypothesize that youth in GSAs with a more open climate will report greater engagement. We base this hypothesis on the open classroom climate and intergroup dialogue literature as well as youth program models (Campbell, 2008; Roth & Brooks-Gunn, 2003; Sorensen et al., 2009).

Method

Data Source and Procedures

In collaboration with the Massachusetts GSA Network, we conducted secondary data analyses using the 2014 Massachusetts GSA Network Survey of GSA members. The GSA Network is sponsored by the Massachusetts Commission on LGBTQ Youth and the Massachusetts Safe Schools Program for LGBTQ Students. It gathers data for needs assessments, program evaluations, and identification of youths' experiences in their GSAs. The 2014 data were collected at five regional conferences throughout Massachusetts and through postings to GSA advisors on their GSA-based list-serv. At the conferences, surveys were made available at the start of the meetings. Through the listserv, GSA advisors requested surveys be sent to them, which they then made available to and collected from youth (the surveys were sent to GSAs that had not attended regional conferences). For both outlets, youth voluntarily completed the anonymous survey if their GSA advisor granted adult consent. The GSA Network uses adult consent over parent consent to avoid potential risks of outing LGBT youth to parents. This method is common in research among LGBT youth to protect their safety and confidentiality (Mustanski, 2011). The youth were told that their responses would be anonymous and that data would be used for program evaluation and potentially for research purposes to produce reports or articles. Youth who did not want to take the survey at the conferences could do other activities. Youth who did not want to complete the survey available through their GSA advisor could elect not to ask for a survey from their advisor. We secured Institutional Review Board approval for our secondary data analysis.

Participants

The full sample included 308 youth in 42 GSAs; however, because of our focus on individual and group factors and because we considered the youth nested within their GSAs, we only included youth who were in GSAs with three or more members represented in order to avoid complications with limited or no variability in scores within GSAs. This produced a final sample size of 295 youth in 33 GSAs (M_{age} = 16.07, SD = 1.14). The average membership duration of youth in their GSA was 1.56 years (SD = 1.22 years). Descriptive demographic data are presented in Table 1.

Measures

Demographics—Youth reported their age, grade, sexual orientation, gender identity, and race/ethnicity. We dichotomized the sexual orientation responses as heterosexual or sexual minority because of the limited number of youth represented in each specific sexual minority group (write-in responses represented nonheterosexual identities such as pansexual or queer). For gender, because of the limited number of youth represented in the specific transgender, gender-queer, and other write-in responses, we considered them together in a trans/gender-queer group for our analyses (write-in responses were largely reflective of gender-queer identities such as gender-fluid or nonbinary/pangender). We dichotomized the race/ethnicity responses as White or racial/ethnic minority because of the limited number of youth represented in each specific racial/ethnic minority group.

Membership Duration—Youth reported the number of months and/or years they had been involved in their GSA. We converted responses to be expressed in the number or fraction of years.

LGB and Transgender Friends—Youth reported their number of close friends who identified as lesbian, gay, or bisexual. Response options were *zero*, *one*, *two*, *three*, *four*, or *five or more* (scored 0–5). Youth also reported their number of close friends who identified as transgender, with identical response options.

Support and Socializing Received—Youth reported the amount of support and socializing they received from their GSA across seven items, which were preceded by a stem asking them to report the extent to which they personally felt they got each thing from their GSA. The items were: (a) a place of safety, (b) emotional support, (c) validation and reassurance, (d) a place where I share any concerns, (e) hang out with others, (f) just be myself with others, and (g) meet new people or make new friends. Response options ranged from 1 (*not at all*) to 5 (*a lot*). An exploratory factor analysis with principal axis factor extraction indicated a unidimensional factor structure for these items (eigenvalue: 4.02; factor loadings: .84, .83, .82, .77, .77, .63, and .62, respectively). Higher average scores represent greater support and socializing youth perceived they received from their GSA. Coefficient alpha reliability was α = .90.

Perceived Level of GSA Organizational Structure—Youth reported the extent to which they perceived a level of organizational structure to their GSA meetings based on four items, preceded by the stem, “How often does your GSA do these things”: (a) We do check-

ins at the beginning of GSA meetings, (b) we follow up about things that were discussed in the last GSA meeting, (c) our GSA meetings follow an agenda, and (d) there is someone who leads our GSA meetings. Response options were *never*, *rarely*, *sometimes*, *often*, and *all the time* (scaled 0–4). An exploratory factor analysis with principal axis factor extraction indicated a unidimensional factor structure for these items (eigenvalue: 1.46; factor loadings: .76, .62, .52, and .48, respectively). Higher average scores represent greater perceived organizational structure within GSA meetings. Coefficient alpha reliability was $\alpha = .68$. Individual perceptions of structure were included as a predictor at Level 1 (the individual level), and a composite score for each GSA derived from the mean of all the students in that GSA was included as a predictor at Level 2 (the GSA level) in our multilevel model.

Perceived Open GSA Climate—Youth used the Open Classroom Climate Scale (Flanagan, Syvertsen, & Stout, 2007) to report whether they perceived an open climate in their GSA that encouraged members to express their beliefs, have input on GSA projects, and express disagreements respectfully. The four items were preceded by the stem, "In my GSA, students … ": (a) have a voice in what happens; (b) can disagree with the advisor, if they are respectful; (c) can disagree with each other, if they are respectful; and (d) are encouraged to express opinions. Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher average scores represent a more open GSA climate. Past coefficient alpha reliability has been reported at $\alpha = .86$ (Flanagan et al., 2007) and the scale is associated with factors such as trusting others and group solidarity (Flanagan & Stout, 2010). The coefficient alpha reliability from the current data was $\alpha = .91$. Individual perceptions of the GSA climate were included as a predictor at Level 1 (the individual level), and a composite score for each GSA derived from the mean of all the students in that GSA was included as a predictor at Level 2 (the GSA level) in our multilevel model.

Engagement Level in GSA—Youth reported their level of active engagement in the GSA based on five items, preceded by the stem, "Please consider your own GSA involvement in responding to these items": (a) I attend GSA meetings or other GSA events, (b) I participate in conversations at GSA meetings, (c) I take leadership roles in activities and events in my GSA, (d) I have discussions with my GSA advisor(s) about GSA-related matters, and, (e) I help with events or projects in my GSA. These items have been piloted and refined over several iterations by the GSA Network prior to this current version. Response options were *never*, *rarely*, *sometimes*, *often*, and *all the time* (scaled 0–4). An exploratory factor analysis with principal axis factor extraction indicated a unidimensional factor structure for these items (eigenvalue: 3.19; factor loadings: .86, .84, .84, .81, and .63, respectively). Higher average scale scores represent greater engagement in the GSA. Coefficient alpha reliability was $\alpha = .89$.

Analytic Strategy

We conducted MANOVAs to test for demographic group differences on our main predictors and the outcome of engagement based on sexual orientation, gender identity, and race/ethnicity. We also examined simple bivariate associations among the variables prior to testing our multilevel model.

We used HLM 7.0 with restricted maximum likelihood (REML) estimation to test our hypothesized model in which our set of factors accounted for variability in youth members' level of engagement in their GSA. We used multilevel modeling to account for the interdependence of respondents, where youth were nested within their respective GSAs. As we later note, there was a significant amount of interdependence among youth in the same GSA, making multilevel modeling an appropriate analytic approach. In our models, individual youth data were included at Level 1, and GSA-level data were included at Level 2. First, we tested the unconditional null model to determine whether there was significant variance across GSAs in youths' level of engagement. Next, we tested a model with our Level 1 independent variables, including youths' demographics (i.e., sexual orientation, gender, race/ethnicity) and their number of LGB friends, transgender friends, membership duration, perceived support and socializing received from the GSA, their own perception of organizational structure within their GSA (including linear and quadratic effects), and their own perception of open climate within their GSA, all of which were group-mean centered. Finally, we tested the full multilevel model in which we added our Level 2 independent variables. The composite average scores of perceived open climate and structure (linear and quadratic effects) of all the youth in each GSA, as well as the number of youth participants in each GSA (simply as a control variable), were included at Level 2 as predictors of the Level 1 intercept (i.e., to account for differences across GSAs in average levels of youth engagement).

Results

Group Differences and Bivariate Correlations

The MANOVA for sexual orientation was significant, Wilks' $\Lambda = .81$, $F(7, 252) = 8.53$, $p < .001$, $\eta_p^2 = .19$. Follow-up ANOVAs indicated that sexual minority youth reported receiving more support and socializing from the GSA, having more LGB friends and transgender friends, longer membership duration, perceived a more open GSA climate, and greater engagement in the GSA than heterosexual youth (Table 2). The MANOVA for race/ethnicity also was significant, Wilks' $\Lambda = .93$, $F(7, 252) = 2.72$, $p = .01$, $\eta_p^2 = .07$. Follow-up ANOVAs indicated that White youth reported having more LGB friends and transgender friends and greater engagement in the GSA than racial/ethnic minority youth (Table 2). Finally, the MANOVA for gender was significant, Wilks' $\Lambda = .85$, $F(14, 504) = 2.99$, $p < .001$, $\eta_p^2 = .08$. Follow-up ANOVAs indicated gender differences for number of transgender friends, membership duration, and engagement level (Table 3). Tukey post hoc comparisons indicated that trans/gender-queer youth reported having more transgender friends than cisgender male youth ($p < .05$, $d = 0.66$) and cisgender female youth ($p < .05$, $d = 0.78$); cisgender male youth reported shorter membership duration than cisgender female youth ($p < .05$, $d = 0.39$) and trans/gender-queer youth ($p < .05$, $d = 0.70$); and trans/gender-queer youth reported greater engagement in the GSA than cisgender female youth ($p < .05$, $d = 0.59$).

All the independent variables were significantly associated with level of engagement in the GSA as hypothesized (we tested for the curvilinear effect of organizational structure in the

multilevel model in the following section). Youth who reported greater engagement in their GSA than others reported higher levels of perceived support and socializing received from their GSA ($r = .34$, $p < .001$), more LGB friends ($r = .25$, $p < .001$), more transgender friends ($r = .21$, $p < .001$), longer membership duration ($r = .47$, $p < .001$), perceived more organizational structure within their GSA ($r = .18$, $p < .01$), and perceived a more open climate within their GSA ($r = .35$, $p < .001$). All bivariate correlations among the independent variables are included in Table 4.

Multilevel Model of Engagement Levels in GSAs

The initial unconditional null model without independent variables indicated that there was significant variance across GSAs in youths' level of engagement (i.e., on average, some GSAs had more engaged members than others; $\chi^2 = 104.13$, $p < .01$, deviance = 788.97). The amount of variance within GSAs was 0.81, and the amount of variance across GSAs was 0.18. The intraclass correlation coefficient thus indicated that 18% of the total variance in youths' level of engagement was across GSAs. Next, we tested our Level 1 model (Table 5). At the individual level, multiple factors accounted for variability among youth in their level of engagement in the GSA. First, longer-serving members reported greater engagement than those who more recently had joined (b = 0.31, $p < .01$). A year longer membership was associated with roughly a third of a point greater GSA engagement—which could be interpreted as an engagement level roughly one-third of a standard deviation higher as the standard deviation for engagement was about one point. Second, youth who perceived receiving more support and socializing from their GSA reported greater engagement than others (b = 0.23, $p < .05$). A one unit increase in perceived amount of support and socializing received from the GSA was associated with nearly a quarter of a point greater level of engagement (again, comparable to a quarter standard deviation greater engagement). Third, youth who had more LGB friends reported greater engagement (b = 0.11, $p < .05$). A one unit increase in a member's number of LGB friends (e.g., from having one friend to having two friends) related to about a tenth of a point greater level of engagement. For exploratory purposes, we tested whether individuals' sexual orientation moderated this association; it did not, indicating that having more LGB friends was associated with engagement levels for both heterosexual and sexual minority youth members. Also for exploratory purposes, we tested the potential interaction of sexual orientation with all other individual-level factors. None of these interaction effects were significant. Fourth, the quadratic effect of perceived organizational structure was significant (b = 20.14, $p < .01$). Figure 1 displays the association between organizational structure and level of youth engagement in their GSA. As hypothesized, perceptions of greater organizational structure were associated with more engagement in the GSA to a point, which was followed by a decrease in engagement as perceptions of structure further increased. Fifth, trans/gender-queer youth reported greater engagement in the GSA than cisgender female youth (b = 0.47, $p < .01$). Trans/gender-queer youths' engagement was close to a half of a point greater (and comparable to a one-half standard deviation greater) than non-trans/gender-queer youth. Finally, racial/ethnic minority youth reported less engagement in the GSA than White youth (b = 20.26, $p < .05$). Racial/ethnic minority youths' level of engagement was about a quarter of a point lower than White youths' level of engagement. The amount of variance at Level 1

was reduced to 0.53 with these variables included, and the pseudo R^2 value indicated that our model accounted for 35% of the variance at this level.

Finally, we tested our full multilevel model (Table 5), displayed in the Appendix. At the GSA level, youth in GSAs who collectively perceived a more open climate in their GSA reported greater engagement than youth in GSAs who collectively perceived a less open climate in their GSA ($\gamma = 0.52$, $p < .05$). At the group level, a one unit increase in youths' collective perceptions of a more open climate in their GSA was associated with half of a point greater level of engagement among youth in that GSA—or a collective engagement level roughly one standard deviation higher, as the standard deviation for engagement at the group level was about half of a point. Also, related to our control variable, youth in GSAs that had more participants reported less engagement ($\gamma = 20.06$, $p < .01$). An increase of one member in the GSA was associated with an overall decrease of less than a tenth of a point in level of engagement among members of that GSA. The amount of variance at Level 2 was reduced to 0.01 with these variables included, and the pseudo R^2 value indicated that our model accounted for 94% of the variance at this level.

Discussion

As studies suggest the benefits of GSA presence in schools, research needs to focus on the varied experiences of GSA members. We focused on members' engagement levels because more engaged youth derive greater benefits from their involvement in youth programming (Busseri & Rose-Krasnor, 2009; Dawes & Larson, 2011; Kuhn & Weinberger, 2005; Pearce & Larson, 2006). As hypothesized, youth who reported greater engagement were those who perceived receiving more support and socializing from their GSA, had more LGB friends, were longer serving members, and were in GSAs with a more open climate. We also documented demographic differences. Also as hypothesized, there was a curvilinear association between perceived organizational structure in the GSA and engagement. These findings can be used to provide empirically based recommendations for how GSAs might increase members' engagement, which in turn could maximize the benefits that members derive.

Patterns of GSA Engagement Across Demographic Groups

Because GSAs aim to include youth from different social backgrounds, it is important to identify whether members from certain groups report less engagement. We identified initial differences between sexual minority and heterosexual youth, but they were not significant in the full multilevel model. This may be because by their name and historical precedence, GSAs are expressly intended for both sexual minorities and heterosexual allies (Griffin et al., 2004). Similarly, there were no differences between cis-gender male or female youth. Trans/gender-queer youth reported greater engagement than cisgender females but no significant difference from cis-gender males. Given the added barriers that transgender youth face in school (Grossman & D'Augelli, 2006; McGuire et al., 2010), it is possible that transgender GSA members were aware of these additional inequalities and were galvanized to be active and address these issues. Within the context of Massachusetts, and historically around the time during which these data were collected, there were legislative efforts to

extend explicit protections to transgender youth in schools. Transgender GSA members may have been able to use the GSA setting to contribute to these efforts, which might explain this difference. Yet, because we focused entirely on GSA members, it would be important for research to consider how transgender nonmembers perceive their school's GSA to ensure that GSAs are equally welcoming of transgender youth and whether this difference reflects one that would either be stable or variant over time.

Racial/ethnic minority GSA members reported less engagement than White members. We anticipated this pattern because racial/ethnic minority youth have reported less perceived support from their GSA than White youth (Poteat et al., 2015), and adequate support provision is a key necessity for youth programs (Dawes & Larson, 2011; Eccles & Gootman, 2002). Other factors could also account for this finding. For example, certain engagement styles may be differentially valued across cultures, and this may not have been adequately captured with the measure in this survey.

The general youth program literature has called for greater focus on the experiences of racial/ethnic minority youth in these settings (Fredricks & Simpkins, 2012; Perkins et al., 2007), and our findings underscore that this need extends to GSAs. Whereas GSAs may be known for their focus on sexual orientation issues, this perception may not extend to race and racial discrimination. Racial/ethnic minority youth, whether heterosexual or LGB, may have perceived GSAs as less inclusive of their needs that intersect with their racial/ethnic background, leading them to engage less in their GSA. Alternatively, they may have faced added barriers to accessing their GSA or youth programs in general (Perkins et al., 2007; Serido et al., 2014). Advisors could play a role in addressing this issue by being intentional in raising issues of race or racism and ensuring that an intersectional lens is applied to discussions and activities within GSAs. Doing so could foster greater engagement among racial/ethnic minority youth by ensuring the relevance of such discussions or activities and demonstrating affirmation of their personal experiences.

Individual Factors Related to Variability in GSA Engagement

We drew from youth program models and the intergroup relations literature to identify several individual factors associated with greater engagement. Congruent with youth program models that emphasize the importance of supportive relationships in these settings (Dawes & Larson, 2011; Eccles & Gootman, 2002; Jarret et al., 2005), members who perceived receiving more support and socializing from their GSA were more engaged. Perceived GSA support has been linked to positive development among GSA members (Poteat et al., 2015), and our findings add to this by showing that support is strongly connected to engagement. There could be a potential mediational process among these factors: Youth who perceive more initial support may become more engaged, which could lead them to experience greater well-being. This finding adds weight to one of the central aims of GSAs, which is to provide support (Griffin et al., 2004). As such, although GSAs often attempt to serve multiple functions within a limited scope of time, it would be important that these functions not overshadow this fundamental provision.

Youth settings such as GSAs that place a specific emphasis on issues of diversity may need to draw not only from general youth program models but also from the intergroup relations

literature to identify ways to fully engage their members. To this point, as hypothesized, GSA members with more LGB friends reported more active engagement, which did not differ for heterosexual or sexual minority members. For heterosexuals, having LGBT friends is associated with more favorable attitudes toward and more advocacy on behalf of LGBT people (Duhigg et al., 2010; Goldstein & Davis, 2010; Herek & Capitanio, 1996). Within the present sample, LGB friendships may have strengthened heterosexual youths' motivation to be actively engaged in the GSA in order to support their friends. For LGB members, friendships with LGB peers could have prompted their greater engagement in order to strengthen their connection to others in the community and because these intragroup connections could promote their own well-being (Frable et al., 1998). This finding highlights the unique nature of GSAs as an intergroup setting and suggests that this could be viewed as an asset for fostering engagement among members and potentially other positive outcomes that should be examined in future research.

In contrast, having more transgender friends was not associated with greater GSA engagement in the multilevel model. This difference could partly be due to the restricted response range in that most youth reported having relatively few transgender friends. It is also possible that GSAs may give less focus to transgender-related issues than LGB issues, and thus youth with more transgender friends may not have seen the GSA as ideal an outlet in which to become involved as they may have seen it for addressing issues faced by their LGB friends.

Longer-serving GSA members reported more engagement in their GSA. These members may have felt a greater sense of ownership to contribute to the GSA or take on leadership roles. These youth attributes are particularly evident in youth-driven programs (Larson et al., 2004). At the same time, these youth could have been a rather selective sample, especially when considering the sampling methodology of this project. These youth may have had initially more positive experiences than others, leading them to stay, whereas other youth may have discontinued their membership. Still, while controlling for the effects of membership duration, our other factors accounted for significant variance in members' levels of engagement.

The Importance of Organizational Structure and Open Climates Within GSAs

We identified two important elements related to how GSAs operated that were associated with greater engagement among members. First, we documented a curvilinear association between youths' perception of organizational structure in the GSA and their level of engagement: Perceptions of more structure were associated with greater engagement to a point, after which stronger perceptions of structure were related to less engagement. This finding aligned with a foundational point of youth program models that adequate structure is an essential element of successful programs (Catalano et al., 2004; Eccles & Gootman, 2002; Wood et al., 2009). The curvilinear effect captured further nuance and may suggest that excessive or rigid structure could stifle youth participation; this finding appears consistent with the literature on structure and work engagement as well as the family literature on parental structure and youth behavior (Mason et al., 1996; Tanskanen et al., 2016). GSAs fulfill quite varied functions (e.g., socializing, support, advocacy) and work

with youth from diverse backgrounds (Griffin et al., 2004). Thus, GSAs may have all the more need for flexible structure to ensure that multiple needs and interests can be voiced and acted on in a way that is neither too rigid to prevent unanticipated issues from being addressed nor inadequate for a necessary level of cohesion. Some of these dynamics have been noted in observational findings (Poteat et al., 2015), and our quantitative findings add to this within a larger model of factors related to engagement. Building on this finding, at a practical level, the items comprising this measure suggest several concrete ways in which GSA advisors or youth leaders could provide structure within their group. For example, they could reserve time for members to do check-ins and follow-ups at the beginning of meetings, or they could prepare a flexible agenda for some of their meetings.

We identified this pattern for structure at the individual level but not the group level. We anticipated this result because individual youth in the same GSA may perceive or react to organizational structure differently. Thus, collective perceptions of greater organizational structure among members of a GSA did not distinguish those GSAs that, on average, had more engaged members than other GSAs. Rather, it appeared that individual youths' own perception of the amount of organizational structure was more important in accounting for their level of engagement. As such, advisors or youth leaders may want to check with youth members individually and not only collectively about whether they perceive the current level of structure in the group as helpful or restrictive.

Finally, GSAs whose members perceived them to have more open climates had more engaged members. This finding aligns with those related to open classroom climates (Brock et al., 2008; Campbell, 2008). This finding also aligns with the intergroup dialogue literature showing that safe and respectful norms must be present for dialogues to be effective (Dessel & Rogge, 2008; Sorensen et al., 2009). Especially in GSAs and in other youth settings that bring together youth from different social backgrounds, open climates may be essential. Youth who perceived a more open climate in their GSA may have felt more assured that their views and experiences would be respected, even if they differed from those of others; as a result, they may have been more motivated to actively engage in their GSA. It could be valuable, then, for members of GSAs to occasionally discuss their perceptions of the group's climate and identify ways to cultivate and maintain respectful dialogues and interactions, even when youth hold different beliefs or have different goals or expectations for the group.

Strengths, Limitations, and Future Directions

To date, most GSA research has focused on comparisons of youth based on GSA presence in their school or dichotomous GSA membership status. Although this has offered support for the importance of GSAs, there has been little research on the varied experiences of GSA members. As such, the major contribution of the current study was to identify a range of factors associated with youths' greater engagement levels as members of GSAs. Further, we applied established youth program and intergroup relations models to identify major factors that could account for variability in youths' experiences in GSAs. As additional strengths, our study included several hundred youth from across multiple GSAs located in diverse settings (e.g., rural, suburban, and urban settings; economically diverse settings). Finally, we

were able to use multilevel modeling of youths' data for a more rigorous test of individual and group factors associated with their engagement.

Along with these strengths, there were several limitations to the study. First, despite the number of GSAs and their geographic diversity, they were all located in Massachusetts, and the GSAs were not randomly sampled. As such, there may be limitations to the representativeness of the sample (e.g., average levels of engagement in this sample may be higher than in other GSAs). The generalizability of our findings across other parts of the country should be considered. In relation to this, it would be important to consider how broader social factors might account for further variability in youths' ability to engage within the GSA (e.g., the political climate or legislative policies—affirming or discriminatory—in certain districts or states; the economy or resource availability within certain districts). Second, our primary GSA organizational variables were aggregated individual perceptions at the GSA level. Aggregate individual perceptions are in fact important features of social settings that predict individual-level outcomes. However, future research should add advisor-reported data and direct observations of GSA functioning. For example, a smaller recent study of GSAs found that using participant-observation methods, there was meaningful variation in aspects of GSA structure and climate and that advisor reports of GSA characteristics were associated with positive youth development (Poteat et al., 2015). Third, some items were not from preestablished scales, such as those assessing organizational structure. At the same time, the items comprising these scales were concrete and directly relevant to GSAs. In this manner, they could be directly translatable into practice (e.g., items for structure pointed to specific actions such as offering check-ins and follow-ups). Fourth, although there was a degree of sexual orientation, racial/ethnic, and gender diversity, the number of youth from specific minority group backgrounds was insufficient to conduct specific comparisons or examine patterns related to the intersection of these identities (e.g., racial/ethnic minority LGB youth). Attention to this level of specificity will be important as GSAs seek to tailor their services to diverse members (Poteat & Scheer, 2016). In addition, it would be beneficial for future research to include other demographic indicators such as measures of social class. Fifth, our data were cross-sectional and nonexperimental. Thus, we cannot attribute causality between our independent variables and level of engagement. Still, our identification of these associations can inform the development of interventions to be tested within GSAs that incorporate these factors and examine their potential causal effects. Sixth, we could not distinguish in this article between non–GSA-involved students in the same schools and the GSA members who participated. Certainly this basic level of involvement (whether one is a GSA member or not) determines the composition of GSAs, which may in turn affect level of engagement of GSA members. Future work could sample both populations and include prediction of any involvement simultaneously with level of engagement among members. Finally, we focused on behavior-based engagement. Future research should consider emotional and cognitive indices of engagement as well (Fredricks, Blumenfeld, & Paris, 2004).

Our findings suggest several areas for continued research and for programming efforts with GSAs and similar youth settings. For instance, future studies should consider how advisors promote greater engagement among youth members. Longitudinal studies should also examine youths' engagement in GSAs over time and identify factors that might account for

periodic fluctuations in their engagement. Further, studies should consider links between youths' GSA engagement and developmental outcomes. In terms of programming, our findings point to several strategies that could be implemented in GSAs to promote engagement. For instance, GSAs might adopt approaches reflected in the items of our measures. Similarly, GSAs should be mindful to be inclusive and supportive of all members, particularly those who may be more underrepresented and have specific concerns and strengths (e.g., Black, Latino, and Asian youth). Ultimately, this expanded and more nuanced approach to studying GSAs and the experiences of youth involved in them will provide empirically based knowledge on how GSAs can be structured and tailored to maximize their benefits for a wide range of youth.

Acknowledgments

Support for the writing of this manuscript was partially based on funding awarded from the National Institute of Minority Health and Health Disparities (NIMHD), R01MD009458, to Poteat (Principal Investigator) and Calzo and Yoshikawa (Co-Investigators). Additional support for the second author (Calzo) was provided by funding from the National Institute on Drug Abuse (NIDA), K01DA034753.

Biographies

V. Paul Poteat is associate professor in the Department of Counseling, Developmental, and Educational Psychology at Boston College, Campion Hall 307, 140 Commonwealth Ave., Chestnut Hill, MA 02467, USA; PoteatP@bc.edu. His research on Gay-Straight Alliances (GSAs) has identified specific individual, group, advisor, and school factors that contribute to youth members' experiences in GSAs and the mechanisms by which GSAs promote youths' well-being.

Nicholas C. Heck is an assistant professor in the Department of Psychology at Marquette University. His research centers on the identification and reduction of health disparities that exist among lesbian, gay, bisexual, and transgender people.

Hirokazu Yoshikawa is the Courtney Sale Ross University Professor of Globalization and Education at New York University's Steinhardt School of Culture, Education and Human Development. He studies Gay-Straight Alliances and their associations with youth development. In addition, he examines the effects of programs related to immigration, early childhood development, and poverty reduction on children and youth in the United States as well as in low- and middle-income countries.

Jerel P. Calzo is associate professor in the Division of Health Promotion and Behavioral Science at San Diego State University Graduate School of Public Health. His research examines the development of gender and sexual orientation health disparities in adolescence and young adulthood and evaluates school- and community-based programs to promote the health and positive youth development of gender and sexual minority adolescents and young adults.

Appendix

The tested multilevel model is presented in the following:

$$\begin{aligned}\text{Engagement}_{ij} = {} & \beta_{0j} + \beta_{1j}(\text{Sexual minority}_{ij}) + \beta_{2j}(\text{Male}_{ij}) + \\ & \beta_{3j}(\text{Trans/Gender- queer}_{ij}) + \beta_{4j}(\text{Racial minority}_{ij}) + \beta_{5j}(\text{LGB friends}_{ij}) + \\ & \beta_{6j}(\text{Transgender friends}_{ij}) + \beta_{7j}(\text{Membership duration}_{ij}) \\ & + \beta_{8j}(\text{Support/socializing received}_{ij}) + \beta_{9j}(\text{Perceived organizational structure}_{ij}) + \\ & \beta_{10j}(\text{Perceived organizational structure}_{ij})^2 + \beta_{11j}(\text{Perceived open climate}_{ij}) + r_{ij}\end{aligned}$$

$$\begin{aligned}\beta_{0j} = {} & \gamma_{00} + \gamma_{01}(\text{Group size})_j + \gamma_{02}(\text{Composite organizational structure})_j + \\ & \gamma_{03}(\text{Composite organizational structure})^2{}_j + \\ & \gamma_{04}(\text{Composite open climate})_j + u_{0j}\end{aligned}$$

References

Brock LL, Nishida TK, Chiong C, Grimm KJ, Rimm-Kaufman SE. Children's perceptions of the classroom environment and social and academic performance: A longitudinal analysis of the contribution of the Responsive Classroom approach. Journal of School Psychology. 2008; 46:129–149. [PubMed: 19083354]

Busseri MA, Rose-Krasnor L. Breadth and intensity: Salient, separable, and developmentally significant dimensions of structured youth activity involvement. British Journal of Developmental Psychology. 2009; 27:907–933. [PubMed: 19994486]

Campbell DE. Voice in the classroom: How an open classroom climate fosters political engagement among adolescents. Political Behavior. 2008; 30:437–454.

Catalano RF, Berglund ML, Ryan JAM, Lonczak HS, Hawkins JD. Positive youth development in the United States: Research findings on evaluations of positive youth development programs. Annals of the American Academy of Political and Social Science. 2004; 591:98–124.

Damon W. What is positive youth development? Annals of the American Academy of Political and Social Science. 2004; 591:13–24.

Davis B, Stafford MBR, Pullig C. How Gay-Straight Alliance groups mitigate the relationship between gay-bias victimization and adolescent suicide attempts. Journal of the American Academy of Child & Adolescent Psychiatry. 2014; 53:1271–1278. [PubMed: 25457925]

Dawes NP, Larson R. How youth get engaged: Grounded-theory research on motivational development in organized youth programs. Developmental Psychology. 2011; 47:259–269. [PubMed: 21114348]

Dessel A, Rogge ME. Evaluation of intergroup dialogue: A review of the empirical literature. Conflict Resolution Quarterly. 2008; 26:199–238.

DuBois DL, Holloway BE, Valentine JC, Cooper H. Effectiveness of mentoring programs for youth: A meta-analytic review. American Journal of Community Psychology. 2002; 30:157–197. [PubMed: 12002242]

Duhigg JM, Rostosky SS, Gray BE, Wimsatt MK. Development of heterosexuals into sexual-minority allies: A qualitative exploration. Sexuality Research and Social Policy. 2010; 7:2–14.

Eccles, J., Gootman, JA. Community programs to promote youth development. Washington, DC: National Academy Press; 2002.

Flanagan CA, Stout M. Developmental patterns of social trust between early and late adolescence: Age and school climate effects. Journal of Research on Adolescence. 2010; 20:748–773. [PubMed: 20936077]

Flanagan, CA., Syvertsen, AK., Stout, MD. Civic measurement models: Tapping adolescents' civic engagement (CIRCLE Working Paper 55). 2007. Retrieved from http://www.politicipublice.ro/uploads/adolescents.pdf

Frable DES, Platt L, Hoey S. Concealable stigmas and positive self-perceptions: Feeling better around similar others. Journal of Personality and Social Psychology. 1998; 74:909–922. [PubMed: 9569651]

Fredricks JA, Blumenfeld PC, Paris AH. School engagement: Potential of the concept, state of the evidence. Review of Educational Research. 2004; 74:59–109.

Fredricks JA, Simpkins SD. Promoting positive youth development through organized after-school activities: Taking a closer look at participation of ethnic minority youth. Child Development Perspectives. 2012; 6:280–287.

Goldstein SB, Davis DS. Heterosexual allies: A descriptive profile. Equity & Excellence in Education. 2010; 43:478–494.

Griffin P, Lee C, Waugh J, Beyer C. Describing roles that Gay-Straight Alliances play in schools: From individual support to social change. Journal of Gay & Lesbian Issues in Education. 2004; 1:7–22.

Grossman AH, D'Augelli AR. Transgender youth: Invisible and vulnerable. Journal of Homosexuality. 2006; 51:111–128. [PubMed: 16893828]

Heck NC, Flentje A, Cochran BN. Offsetting risks: High school Gay-Straight Alliances and lesbian, gay, bisexual, and transgender (LGBT) youth. School Psychology Quarterly. 2011; 26:161–174.

Heck NC, Lindquist LM, Stewart BT, Brennan C, Cochran BN. To join or not to join: Gay-Straight Student Alliances and the high school experiences of lesbian, gay, bisexual, and transgender youths. Journal of Gay and Lesbian Social Services. 2013; 25:77–101.

Herek GM, Capitanio JP. "Some of my best friends": Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. Personality and Social Psychology Bulletin. 1996; 22:412–424.

Jarrett RL, Sullivan PJ, Watkins ND. Developing social capital through participation in organized youth programs: Qualitative insights from three programs. Journal of Community Psychology. 2005; 33:41–55.

Kuhn P, Weinberger C. Leadership skills and wages. Journal of Labor Economics. 2005; 23:395–436.

Larson R, Walker K, Pearce N. A comparison of youth-driven and adult-driven youth programs: Balancing inputs from youth and adults. Journal of Community Psychology. 2004; 33:57–74.

Mahoney JL, Cairns BD, Farmer TW. Promoting interpersonal competence and educational success through extracurricular activity participation. Journal of Educational Psychology. 2003; 95:409–418.

Mason CA, Cauce AM, Gonzales N, Hiraga Y. Neither too sweet nor too sour: Problem peers, maternal control, and problem behavior in African American adolescents. Child Development. 1996; 67:2115–2130. [PubMed: 9022233]

McGuire JK, Anderson CR, Toomey RB, Russell ST. School climate for transgender youth: A mixed method investigation of student experiences and school responses. Journal of Youth and Adolescence. 2010; 39:1175–1188. [PubMed: 20428933]

McMahon SD, Singh JA, Garner LS, Benhorin S. Taking advantage of opportunities: Community involvement, well-being, and urban youth. Journal of Adolescent Health. 2004; 34:262–265. [PubMed: 15040994]

Mustanski B. Ethical and regulatory issues with conducting sexuality research with LGBT adolescents: A call to action for a scientifically informed approach. Archives of Sexual Behavior. 2011; 40:673–686. [PubMed: 21528402]

Pascoe, CJ. Dude, you're a fag: Masculinity and sexuality in high school. Los Angeles, CA: University of California Press; 2007.

Pearce NJ, Larson RW. How teens become engaged in youth development programs: The process of motivational change in a civic activism organization. Applied Developmental Science. 2006; 10:121–131.

Perkins DF, Borden LM, Villarruel FA, Carlton-Hug A, Stone MR, Keith JG. Participation in structured youth programs: Why ethnic minority urban youth choose to participate—or not to participate. Youth & Society. 2007; 38:420–442.

Pettigrew TF, Tropp LR. A meta-analytic test of intergroup contact theory. Journal of Personality and Social Psychology. 2006; 90:751–783. [PubMed: 16737372]

Poteat VP, Scheer JR. GSA advisors' self-efficacy related to LGBT youth of color and transgender youth. Journal of LGBT Youth. 2016; 13:311–325.

Poteat VP, Scheer JR, DiGiovanni CD, Mereish EH. Short-term prospective effects of homophobic victimization on the mental health of heterosexual adolescents. Journal of Youth and Adolescence. 2014; 43:1240–1251. [PubMed: 24337663]

Poteat VP, Sinclair KO, DiGiovanni CD, Koenig BW, Russell ST. Gay-Straight Alliances are associated with student health: A multi-school comparison of LGBTQ and heterosexual youth. Journal of Research on Adolescence. 2013; 23:319–330.

Poteat VP, Yoshikawa H, Calzo JP, Gray ML, DiGiovanni CD, Lipkin A, Shaw MP. Contextualizing Gay-Straight Alliances: Student, advisor, and structural factors related to positive youth development among members. Child Development. 2015; 86:176–193. [PubMed: 25176579]

Roth JL, Brooks-Gunn J. What exactly is a youth development program? Answers from research and practice. Applied Developmental Science. 2003; 7:94–111.

Russell ST, Everett BG, Rosario M, Birkett M. Indicators of victimization and sexual orientation among adolescents: Analyses from youth risk behavior surveys. American Journal of Public Health. 2014; 104:255–261. [PubMed: 24328633]

Russell ST, Muraco A, Subramaniam A, Laub C. Youth empowerment and high school Gay-Straight Alliances. Journal of Youth and Adolescence. 2009; 38:891–903. [PubMed: 19636734]

Serido J, Borden LM, Wiggs CB. Breaking down potential barriers to continued program participation. Youth & Society. 2014; 46:51–69.

Sorensen N, Nagda BA, Gurin P, Maxwell KE. Taking a "hands on" approach to diversity in higher education: A critical-dialogic model for effective intergroup interaction. Analyses of Social Issues and Public Policy. 2009; 9:3–35.

Sweat JW. Crossing boundaries: Identity and activism in gay-straight alliances. Dissertation Abstracts International. 2004; 65(9-A) (UMI No. 3148503).

Tanskanen J, Taipale S, Anttila T. Revealing hidden curvilinear relations between work engagement and its predictors: Demonstrating the added value of generalized additive model (GAM). Journal of Happiness Studies. 2016; 17:367–387.

Toomey RB, Ryan C, Diaz RM, Russell ST. High school Gay-Straight Alliances (GSAs) and young adult well-being: An examination of GSA presence, participation, and perceived effectiveness. Applied Developmental Science. 2011; 15:175–185. [PubMed: 22102782]

Tseng V, Seidman E. A systems framework for understanding social settings. American Journal of Community Psychology. 2007; 39:217–228. [PubMed: 17436080]

Walls NE, Kane SB, Wisneski H. Gay-Straight Alliances and school experiences of sexual minority youth. Youth & Society. 2010; 41:307–332.

Wood D, Larson RW, Brown JR. How adolescents come to see themselves as more responsible through participation in youth programs. Child Development. 2009; 80:295–309. [PubMed: 19236407]

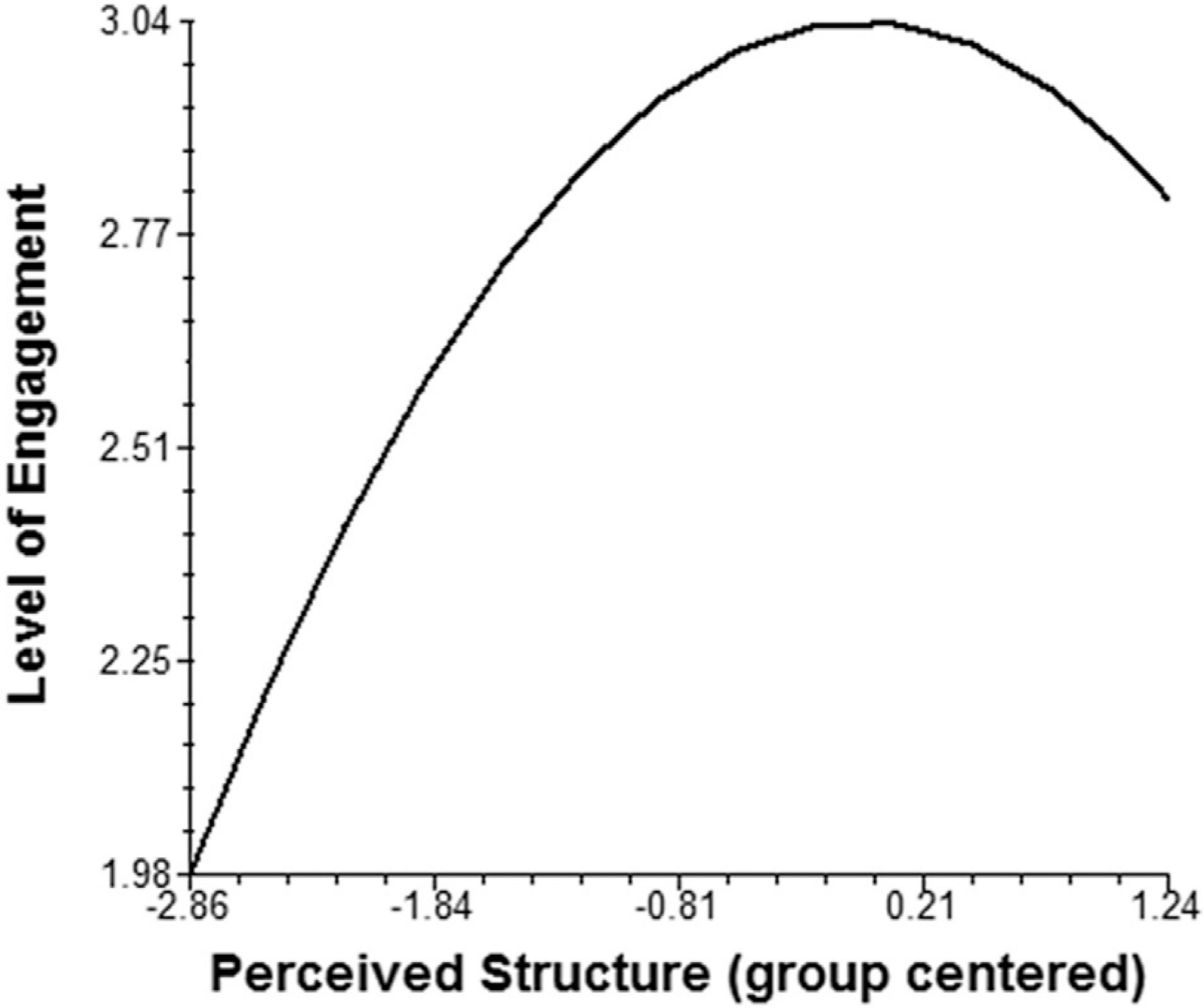

Figure 1.
Curvilinear association between perceived organizational structure within the Gay-Straight Alliance (GSA) and members' levels of engagement in the GSA.

Table 1

Participant Demographic Information

Demographic Factor	*N* (%)
Grade level	
Grade 8	4 (1.4)
Grade 9	47 (15.9)
Grade 10	90 (30.5)
Grade 11	95 (32.2)
Grade 12	55 (18.6)
Not reported	4 (1.4)
Sexual orientation	
Heterosexual	87 (29.5)
Lesbian or gay	73 (24.8)
Bisexual	59 (20.0)
Questioning	18 (6.1)
Other self-reported sexual orientations	55 (18.6)
Not reported	3 (1.0)
Gender	
Cisgender female	200 (67.8)
Cisgender male	66 (22.4)
Gender-queer	9 (3.0)
Transgender	11 (3.7)
Other self-reported gender identities	7 (2.4)
Not reported	2 (0.7)
Race/ethnicity	
White	201 (68.1)
Biracial/multiracial	32 (10.9)
Latino/a	18 (6.1)
Asian/Asian American	16 (5.4)
Black or African American	16 (5.4)
Native American	4 (1.4)
Other self-reported racial/ethnic identities	5 (1.7)
Not reported	3 (1.0)

Note. Total sample size: $n = 295$.

Table 2

Descriptive Data for Demographic Comparisons: Sexual Orientation and Race/Ethnicity

	Sexual Orientation				Race/Ethnicity			
	Sexual Min. (*n* = 181)	**Heterosexual (*n* = 79)**	***F***	η_p^2	**Racial Min. (*n* = 76)**	**White (*n* = 184)**	***F***	η_p^2
Engagement	2.92 (0.94)	2.55 (1.01)	8.45**	.03	2.47 (1.13)	2.95 (0.87)	13.51**	.05
M. duration	1.75 (1.22)	1.14 (1.08)	14.52**	.05	1.41 (1.22)	1.65 (1.20)	2.09	—
LGB friends	3.76 (1.47)	2.57 (1.64)	33.64***	.12	3.03 (1.54)	3.55 (1.62)	5.90*	.02
Trans friends	1.00 (1.22)	0.39 (0.71)	17.07***	.06	0.55 (0.92)	0.93 (1.18)	6.18*	.02
Sup/soc received	4.53 (0.58)	4.30 (0.86)	6.30**	.02	4.36 (0.82)	4.49 (0.61)	1.93	—
Structure	3.12 (0.73)	2.94 (0.69)	3.55	—	2.93 (0.78)	3.10 (0.70)	2.77	—
Open climate	4.73 (0.51)	4.39 (0.89)	15.49***	.06	4.51 (0.87)	4.68 (0.56)	3.38	—

Note. Values represent the means and standard deviations (in parentheses) of scores for each demographic group. Engagement = level of youth engagement in the GSA; M. duration = membership duration in number of years; LGB friends = number of LGB friends; trans friends = number of transgender friends; sup/soc received = amount of support/socializing received from the GSA; structure = perceived level of structure within the GSA; open climate = perceived level of open climate within the GSA; sexual min. = sexual minority youth; racial min. = racial/ethnic minority youth; GSA = Gay-Straight Alliance.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3

Descriptive Data for Demographic Comparisons: Gender

	Male (*n* = 59)	Female (*n* = 176)	Trans/G-Queer (*n* = 26)	*F*	η_p^2	Tukey Post Hoc Comparisons
Engagement	2.79 (1.03)	2.74 (0.95)	3.29 (0.90)	3.79*	.03	T/G > F
M. duration	1.19 (1.06)	1.64 (1.23)	2.00 (1.24)	5.03**	.04	M < T/G, F
LGB friends	3.27 (1.67)	3.42 (1.59)	3.62 (1.65)	0.43	—	—
Trans friends	0.80 (1.14)	0.68 (0.93)	1.77 (1.73)	11.52***	.08	T/G > M, F
Sup/soc received	4.59 (0.47)	4.41 (0.74)	4.56 (0.58)	1.86	—	—
Structure	3.16 (0.71)	3.03 (0.71)	3.02 (0.86)	0.74	—	—
Open climate	4.68 (0.65)	4.59 (0.71)	4.77 (0.34)	1.07	—	—

Note. Values represent the means and standard deviations (in parentheses) of scores for each demographic group. Engagement = level of youth engagement in the GSA; M. duration = membership duration in number of years; LGB friends = number of LGB friends; trans friends = number of transgender friends; sup/soc received = amount of support/socializing received from the GSA; structure = perceived level of structure within the GSA; open climate = perceived level of open climate within the GSA; trans/g-queer = trans/gender-queer youth. For Tukey post hoc comparisons, T/G = trans/gender-queer youth, M = cisgender male youth, and F = cisgender female youth. GSA = Gay-Straight Alliance.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 4

Bivariate Correlations among the Variables

	Engagement	M. Duration	LGB Friends	Trans Friends	Sup/Soc Received	Structure
Engagement	—					
M. duration	.47***	—				
LGB friends	.25***	.19**	—			
Trans friends	.21***	.22***	.36***	—		
Sup/soc received	.34***	.05	.19**	.19**	—	
Structure	.18**	.02	.22***	.14*	.42***	—
Open climate	.35***	.09	.13*	.16**	.56***	.31***

Note. Engagement = level of youth engagement in the GSA; M. duration = membership duration; LGB friends = number of LGB friends; trans friends = number of transgender friends; sup/soc received = amount of support/socializing received from the GSA; structure = perceived level of structure within the GSA; open climate = perceived level of open climate within the GSA; GSA = Gay-Straight Alliance.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 5

Individual and Gay-Straight Alliance (GSA) Factors Associated With Level of Youth Engagement in GSAs

	Level 1 Model		Multilevel Model	
	Coefficient	***SE***	**Coefficient**	***SE***
Level 1: Individual level				
Sexual orientation	0.03	0.12	−0.02	0.11
Male	0.04	0.12	0.06	0.11
Trans/gender-queer	0.47**	0.17	0.45**	0.16
Race/ethnicity	−0.26*	0.12	−0.28**	0.10
Membership duration	0.31**	0.05	0.31**	0.05
LGB friends	0.11**	0.04	0.11**	0.04
Trans friends	0.00	0.05	0.00	0.05
Support/socializing received	0.23*	0.09	0.23*	0.09
Individual perception of structure (lin. fx)	−0.02	0.09	−0.02	0.09
Individual perception of structure^2 (quad, fx)	−0.14**	0.04	−0.13**	0.04
Individual perception of open climate of GSA	0.12	0.09	0.13	0.09
Level 2: GSA level				
Number of participants in the GSA			−0.06**	0.01
Collective perception of structure (lin. fx)			0.02	0.14
Collective perception of structure^2 (quad, fx)			0.04	0.05
Collective perception of open climate of GSA			0.52*	0.20
Deviance statistic	623.65		603.72	

Note. Values are unstandardized coefficient estimates and their standard errors (*SE*). Sexual orientation is dichotomized as 1 = sexual minority; race/ethnicity is dichotomized as 1 = racial/ethnic minority. Lin. fx = linear effect; quad fx = quadratic effect.

* $p < .05$.

** $p < .01$.