

NIH Public Access

Author Manuscript

Child Dev. Author manuscript; available in PMC 2016 January 01

Published in final edited form as: *Child Dev.* 2015 January ; 86(1): 176–193. doi:10.1111/cdev.12289.

Contextualizing Gay-Straight Alliances: Student, Advisor, and Structural Factors Related to Positive Youth Development Among Members

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Abstract

Gay-Straight Alliances (GSAs) may promote resilience. Yet, what GSA components predict wellbeing? Among 146 youth and advisors in 13 GSAs (58% lesbian, gay, bisexual, or questioning; 64% white; 38% received free/reduced-cost lunch), student (demographics, victimization, attendance frequency, leadership, support, control), advisor (years served, training, control) and contextual factors (overall support or advocacy, outside support for the GSA) that predicted purpose, mastery, and self-esteem were tested. In multilevel models, GSA support predicted all outcomes. Racial/ethnic minority youth reported greater wellbeing, yet lower

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support. Youth in GSAs whose advisors served longer and perceived more control and were in more supportive school contexts reported healthier outcomes. GSA advocacy also predicted purpose. Ethnographic notes elucidated complex associations and variability in how GSAs operated.

Keywords

Gay; lesbian; bisexual; transgender; Positive youth development; Gay-Straight Alliance; prejudice; homophobia; resilience

There has been considerable documentation of health and academic disparities disadvantaging lesbian, gay, bisexual, and transgender (LGBT) youth. Much work has focused on school-based discrimination or unwelcoming climates contributing to lower academic achievement or wellbeing (D'Augelli, Pilkington, & Hershberger, 2002; Goodenow, Szalacha, & Westheimer, 2006; Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012; Murdock & Bolch, 2005). Other studies show that heterosexual youth experience homophobic victimization, at times based on their perceived sexual orientation or gender expression, and that this is associated with similar concerns (Pascoe, 2007; Patrick, Bell, Huang, Lazarakis, & Edwards, 2013; Poteat, Mereish, DiGiovanni, & Koenig, 2011). Few studies, however, have examined factors that promote resilience among these youth, especially in schools. Yet, schools are a critical setting for youth development. Emerging work has focused on Gay-Straight Alliances (GSAs) as school-based groups that may promote resilience for LGBT and heterosexual youth (Griffin, Lee, Waugh, & Beyer, 2004; Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013; Walls, Kane, & Wisneski, 2010). Nevertheless, we know little as to what components of GSAs contribute to resilience. To address this issue, we sought to contextualize GSAs by testing a range of student, advisor, and structural factors and processes within GSAs that may be associated with purpose, mastery, and self esteem, which are among indices of positive youth development (PYD).

The Intent of GSAs and Basic Findings

Being situated in schools, GSAs are in a key position to promote youth resilience. Their presence has grown at a national level (GSA Network, 2013). GSAs are framed as youthdriven groups intended as a setting for LGBT and heterosexual youth to receive support, socialize, and engage in advocacy (Griffin et al., 2004; Mayberry, 2007; Russell, Muraco, Subramaniam, & Laub, 2009). These roles can be considered within PYD models (Lerner, Phelps, Forman, & Bowers, 2009; Shinn & Yoshikawa, 2008), which note the value of cultivating youths' strengths, placing them in leadership roles with adult support, and encouraging civic engagement as mechanisms by which to promote wellbeing.

The standard approach to document GSA effects has been non-experimental comparisons of youth based on the presence or absence of a GSA in their school. Youth in schools with GSAs report greater wellbeing and safer climates than youth in schools without GSAs (Heck, Flentje, & Cochran, 2011; Poteat et al., 2013; Szalacha, 2003; Toomey & Russell, 2013; Walls et al., 2010). Thus, we contend that GSAs do have a significant role in

contributing to healthy youth development and that access to GSAs can be critical. At the same time, we maintain that not all GSAs are equal; they should not be considered a standardized program. Because studies have yet to consider what GSA components actually contribute to such effects, researchers have had to speculate on what factors explain why GSA-involved youth, or youth in schools with GSAs, report greater wellbeing.

One of the primary limitations to the comparative approach is that it treats GSAs as uniform and monolithic. As such, they have not been considered along multiple dimensions. Though GSAs have a clear purpose in theory, they likely differ from one another in their actual structure and function. Therefore, we use an ecological and systems perspective, considering GSAs as youth settings (Bronfenbrenner & Morris, 2006; Tseng & Seidman, 2007) to identify dimensions of their functioning and how these dimensions at the individual, interpersonal, and broader contextual level relate to PYD, including sense of purpose, mastery, and self-esteem.

These PYD indices are important to consider for GSA-involved youth, as well as LGBT youth in particular. Purpose reflects one's sense of connection and contribution to something larger than oneself (Damon, Menon, & Bronk, 2003). PYD models and youth programs seek to foster this outcome by promoting civic engagement (Shinn & Yoshikawa, 2008). In GSAs, this can involve advocacy to address various forms of social inequality (Mayberry, 2007). Also, adolescence is a period during which many youth explore their sense of purpose through volunteering with community-based organizations or engaging in social causes (Damon et al., 2003). Mastery is another important index to consider, as adolescents learn more complex tasks, accept more responsibilities, and show more independence. Aligning with these developmental processes and the PYD framework, GSAs are intended to be youth-driven (Griffin et al., 2004), which should promote mastery among members. For LGBT youth, mastery could be indicative of empowerment in the face of marginalization in society. Finally, self-esteem is a major index, especially among LGBT youth, due to both marginalization and victimization. Higher self-esteem would reflect resilience in the face of these stressors and social conditions, as noted in other studies (Dumont & Provost, 1999; Umaña-Taylor & Updegraff, 2007). This, too, would align with another major goal of GSAs to provide support to members (Griffin et al., 2004).

Student Attributes in Relation to Positive Development among GSA Members

Several factors may characterize GSA members who report healthier development than others. First, we consider sexual orientation and race. There are competing arguments for whether LGBT or racial minority youth would report lower PYD than heterosexual or white youth, respectively. Many LGBT and racial minority youth experience greater victimization and marginalization at school than their heterosexual or white peers (Burchinal, Roberts, Zeisel, & Rowley, 2008; D'Augelli et al., 2002; Kosciw et al., 2012; Poteat et al., 2011), and victimization is strongly associated with mental health concerns (Nishina, Juvonen, & Witkow, 2005). For these reasons we also consider the effects of victimization. LGBT and racial minority youth may join GSAs for support, suggesting they may report lower wellbeing than their dominant counterparts. Alternatively, these differences may be less

evident among GSA members than what has been found in general youth population samples. Heterosexual GSA members, whether white or racial minority, may face victimization from affiliating with LGBT peers or because of their perceived sexual minority status. Further, little attention has been given to the experiences of racial minority youth in GSAs (McCready, 2004). As such, considering their potentially different experiences would be informative. Beyond demographic factors, we also consider differences based on youths' perceptions of support from their GSA. One of the primary goals of GSAs is to provide support (Griffin et al., 2004). Thus, we suspect youths' perception of support from their GSA is associated with wellbeing.

Some past studies have compared GSA members to nonmembers (Toomey et al., 2011; Walls et al., 2010); however, we consider involvement on a continuum, as some members likely participate more than others. Notably, greater involvement in youth programs is associated with healthier outcomes (Fredricks & Simpkins, 2012). We also consider whether youth who hold GSA leadership positions report greater wellbeing, as one PYD principle is that placing youth in leadership positions fosters healthy development (Lerner et al., 2009).

Advisor Attributes and Roles in GSAs

The ecological and PYD frameworks emphasize that factors beyond the individual contribute to their wellbeing, including proximal interpersonal relationships with peers and adults (Bronfenbrenner & Morris, 2006; Lerner et al., 2009). In this case, youths' relationships with their GSA advisor would be important to consider. Nevertheless, there has been little attention given to the attributes and roles of GSA advisors. Some studies have described adults' motivations to become advisors (Valenti & Campbell, 2009) and how they advocate for youth (Watson, Varjas, Meyers, & Graybill, 2010). Yet, we are aware of no studies that have connected advisor attributes to the wellbeing of GSA youth members.

The lack of attention to how advisors contribute to PYD among GSA members is a major limitation. As noted in the PYD literature, healthy development is dependent on supportive adults (Lerner et al., 2009), and advisors may foster empowerment and leadership development (Russell et al., 2009; Spillane, 2006). Different leadership styles may, for example, be linked to the kinds of opportunities and the quality of experiences that youth have in their GSAs. We consider training received and the time advisors have served in their position. Advisors who have had training may have greater efficacy or knowledge of how to provide support or guidance to youth. Similarly, advisors who have served for longer periods may draw from past experiences to provide better support. Also, they may be more adept at using their position to secure resources or to address school politics. These situations are common challenges among GSA advisors (Watson et al., 2010).

The power dynamics between GSA advisors and students also may relate to youths' experiences. Some GSAs may reflect a "top-down" decision process driven by advisors, which may correlate with less positive youth outcomes (e.g., less sense of mastery). Youth in GSAs with more horizontal power sharing and decision-making (Fairweather, 1972; Goldenberg, 1978) may report more positive outcomes, as this is more in line with PYD models (Lerner et al., 2009). At the same time, adult advisors need to provide some level of

direction to youth or structured opportunities for decision-making (Lerner et al., 2009). Thus, there may be a complex relation between advisor control and how it relates to youth wellbeing.

Overall Support and Advocacy and the Broader School Context

Building again on an ecological and systems perspective, the broader context in which youth interact can influence their development and shape their wellbeing (Bronfenbrenner & Morris, 2006; Tseng & Seidman, 2007). As noted, GSAs are intended to provide both emotional support and opportunities to engage in advocacy (Griffin et al., 2004; Mayberry, 2007; Russell et al., 2009). While all GSAs may provide members with both, they may vary in the extent to which each is provided. This variability may relate to PYD indices. For instance, does greater advocacy overall at the GSA level relate to greater sense of mastery, or does greater support overall at the GSA level relate to higher self-esteem? In keeping with a person-environment fit framework (Moos & Lemke, 1983), the primary emphasis of a GSA may reflect the present needs or interests of current members. It would be beneficial to identify the existence of such associations in an initial effort to understand what GSA components relate to youths' wellbeing.

The broader school context may affect GSAs in ways that are tied to youth wellbeing. In particular, the extent to which the GSA is supported by other students, teachers, parents, and administrators may affect the types of resources available and GSA activities approved. Some advisors have reported a range of barriers and levels of resistance to their GSA from these sources and that this pushback presented challenges to engage in advocacy or secure external resources (Watson et al., 2010). Consequently, this resistance could be disempowering to students and could diminish the positive development anticipated from involvement in the GSA.

The Current Study

Despite the important basic pattern that youth in schools with GSAs report better wellbeing than those who are not, studies have yet to consider what GSA factors or "active ingredients" actually contribute to this pattern. Also, studies have focused on suppressed negative outcomes rather than positive outcomes. Mixed-methods approaches that combine self-report survey data and formative observational data of students within GSAs could be especially useful to understand the processes by which contextual factors may or may not serve as health promoting factors, particularly when these processes are complex (Yoshikawa, Weisner, Kalil, & Way, 2008). Therefore, applying an ecological and systems perspective we aimed to contextualize GSAs through the use of both surveys and field observations to identify student, advisor, and broader structural factors that may be associated with indices of PYD among GSA members. We drew upon factors from the general youth program and PYD literature (e.g., support, leadership; Eccles & Gootman, 2002; Lerner et al., 2009), while including additional ones that may be critical for youth in settings such as GSAs that serve marginalized populations (e.g., broader external support for the group).

Using survey data from student members and GSA advisors in thirteen schools, we used multilevel modeling of youth nested within their GSAs to consider factors that predicted sense of purpose, mastery, and self-esteem. At the student level we hypothesized that lower victimization, perceptions of greater support received from the GSA, and perceptions of more personal control in the decision-making process would predict youths' higher scores on these outcomes. In addition, we hypothesized that youth who were more involved in their GSA, as represented by frequency of attendance and leadership, would report greater wellbeing. Finally, we considered sexual orientation and racial differences, though without definitive hypotheses given the limited data for these youth populations who are GSA members. In a similar manner, we tested whether the strength of associations between our set of factors and PYD indices differed for sexual minority and heterosexual youth for exploratory purposes.

At the contextual level, we considered advisor and structural factors based in PYD and ecological theories. We hypothesized that youth in GSAs whose advisors had received training and had served for longer periods would report greater wellbeing. Also, while we hypothesized individual members' perceptions of less advisor control would relate to greater wellbeing, we expected this to differ at the group level. We hypothesized that youth in GSAs whose advisors themselves reported more control over the group as a whole would report greater wellbeing. We expected this divergence because, while it is important for individual youth to be empowered to make decisions, PYD theory specifies that it is equally important for them to receive sufficient adult guidance (Lerner et al., 2009). Thus, it may be important for both youth and advisors to feel some degree of control over certain actions of the group. We also expected that youth in GSAs with higher overall advocacy levels would report higher scores on these indices. We expected this result because youth already experiencing healthy outcomes may have more ability to further engage in advocacy, which can require a high level of visibility and social risk. Also, youth have reported positive experiences from engaging in advocacy through their GSA, and participation in social justice activities is further associated with other positive indices for LGBT youth (Russell et al., 2009; Toomey & Russell, 2013). More broadly, we hypothesized that youth in GSAs whose schools were more supportive of the group (as reported by the GSA advisor) would report better wellbeing. Finally, as a complement to our tests at the individual level, we examined whether the proportions of racial minority and sexual minority members across GSAs were associated with variability in wellbeing.

To supplement the quantitative data, our team observed one GSA meeting per school and wrote field notes as part of formative research to further understand interpersonal dynamics and activities within GSAs that may be connected to PYD. We gave attention to issues and dynamics that we anticipated would be complex and difficult to capture purely from our quantitative data. For instance, we were interested in how GSAs functioned differently in power sharing between youth and advisors (e.g., in how the meetings were run, who had control over decision-making). We were also interested in observing the relative focus of meetings on support and advocacy, and whether this focus responded to the needs and interests raised by youth during the meetings.

Method

Participants

Student participants included 146 youth in grades 9 to 12 who were current GSA members across thirteen Massachusetts high schools. The GSAs ranged in size from four to 35 students ($M_{size} = 11$ students, SD = 8 students). Students ranged from 14 to 19 years of age ($M_{age} = 16.04$, SD = 1.26), represented across grade levels (Grade 9: n = 46; Grade 10: n = 38; Grade 11: n = 33; Grade 12: n = 23). Of the participants, 57 identified as heterosexual, 36 as bisexual, 27 as gay or lesbian, 9 as questioning their sexual orientation, 12 identified as 'other', and 5 did not report their sexual orientation. Most students identified as female (n = 99), 40 as male, 2 as transgender (both as female to male), while 4 identified as 'other' and 1 did not report their gender. Most students identified as White, non-Hispanic (n = 93), 26 as Latino/a, 9 as biracial or multiracial, 6 as Asian or Asian American, 5 as African American, 2 as Middle Eastern/Arab or Arab American, while 2 identified as 'other' and 2 did not report their race or ethnicity. Fifty-six students reported that they received a free or reduced-price lunch at school. Finally, 27 students reported that they currently held a leadership position in their GSA.

There were 18 advisor participants across the thirteen GSAs. There were two co-advisors in five of the GSAs. Advisors ranged from 24 to 59 years of age ($M_{age} = 42.13$, SD = 9.92). Nine advisors identified as heterosexual, five as gay or lesbian, and four as bisexual. Most advisors identified as female (n = 15) and three as male. All advisors identified as White. Eight advisors reported that they had received some training specific to being a GSA advisor. The length of time advisors reported serving as an advisor ranged from 7 months to 21 years.

Procedures

We purposefully sampled GSAs to represent regions across Massachusetts, with attention to racial and socioeconomic diversity and school size. We considered six regions in the state: the greater Boston area, Northeastern, Southeastern, Central, and Western Massachusetts, and Cape Cod. We selected schools and GSAs across these regions in consultation with representatives of the Massachusetts Commission on LGBT Youth and the Massachusetts Department of Elementary and Secondary Education with knowledge of these school-level parameters (i.e., racial and socioeconomic diversity and size). We secured permission from GSA advisors and school principals prior to recruiting student participants. Two of the original schools that we contacted declined participation. We substituted two comparable schools in their place. Thus, we secured an 85% school-level recruitment rate. Due to the potential risks of inadvertently outing LGBT youth to their guardians in seeking parent consent, we secured waivers of parent consent and obtained consent from an adult with sufficient knowledge of the students for them to participate. This is a common method in LGBT youth research to protect their safety and confidentiality and to minimize potential risk (Mustanski, 2011). For all participants in this study, GSA advisors provided consent for youth to participate and youth then provided their own assent. Advisors also consented to their own participation. This procedure was approved by the primary institution's IRB and each of the participating schools.

We coordinated two visits to each school. At the first visit, we distributed and collected surveys during a regularly scheduled GSA meeting. At the second visit, we observed a regularly scheduled GSA meeting. Although we could not verify that all of the same students were present at both visits, this was not a requirement of our research design. That is, the purpose of the second visit was not to connect the behaviors of specific students to their own survey reports. The intent was to observe the dynamics of the group as a whole. Informally, however, we noticed that many of the same youth were present at both visits. Advisors announced the visits several weeks in advance. At each visit, students were provided a general description of the study prior to being asked their consent. They were told that the researchers were interested in their experiences within their GSA. Advisors were provided the same description prior to obtaining their consent as well. All advisors and students who were present chose to participate at each of our visits (thus, both the advisor and student recruitment rates were 100%).

GSA meetings (ranging from 45 to 60 minutes) were devoted to survey completion on the first visit and to observing the meeting on the second visit. At the first visit, youth and advisors completed surveys and returned them to proctors prior to the end of the meeting. They were assured that their answers would remain confidential and that their responses would not be shared with other students, advisors, teachers, parents, or other adults. Prior to the second visit, an anthropologist with expertise in qualitative LGBT youth research trained the team in observational methods and descriptive field note writing suitable for the GSA setting. Observer interactions with youth and advisors during the meeting were purposefully minimal to avoid interrupting normal processes. Two to three trained observers attended each of the second visits. Each observer took field notes on what transpired during the GSA meeting.

Student Survey Measures: Predictors

Demographics—Students reported their age, grade, gender, sexual orientation, racial or ethnic identity, whether they received a free or reduced-price lunch, whether they currently held a leadership position in their GSA, and their frequency of attending GSA meetings and events (response options were *never*, rarely, sometimes, often, or all the time). Response options for sexual orientation were gay or lesbian, bisexual, questioning, heterosexual, or other. Response options for race or ethnicity were African American, Asian or Asian American, Latino/a, Middle Eastern/Arab or Arab American, Native American, White (non-*Hispanic*), *biracial or multiracial*, or *other*. Because of the limited representation of each specific sexual minority category, we dichotomized the responses as heterosexual or sexual minority (written responses for those who identified as 'other' indicated non-heterosexual identities, such as queer, pansexual, or bi-curious). For the same reason, we dichotomized the responses for race and ethnicity as white or racial/ethnic minority. We created an aggregate index of the proportion of sexual minority and racial/ethnic minority youth in each GSA based on these data. For comparative purposes, we also accessed publicly available data on the proportion of racial/ethnic minority students at the schools of these GSAs. There was a high correlation between the GSA-based proportion and school-based proportion of racial/ethnic minority youth (r = .81, p < .01). When we tested our models using one or the other indicator, the results were comparable. Thus, we retained the GSA-based proportion of

racial/ethnic minority youth to be consistent with our use of the GSA-based proportion of sexual minority youth in these models.

Victimization—Students reported their frequency of victimization over the past 30 days. Four items assessed verbal, relational, and physical forms of victimization, and reflected some of the most common items used to assess victimization in self-report and peernomination measures (e.g., Crick & Bigbee, 1998; Mynard & Joseph, 2000). These items were: (a) I had a rumor spread about me by other students; (b) Others excluded me from their group; (c) I was hit or pushed around by others; and, (d) I got picked on, teased, or made fun of by others. Response options were 0 *times*, 1 or 2 *times*, 3 or 4 *times*, 5 or 6 *times*, and 7 or more times (scaled 0 to 4). Higher average scores represent more frequent victimization. The internal consistency estimate was $\alpha = .77$.

GSA support and advocacy—Students reported their perceptions of the level of support they received from their GSA and the level of advocacy engaged in by their GSA. All items were preceded by the stem, "My GSA…". Five items comprised the support measure: (a) Provides me with emotional support; (b) Provides a safe environment where I am free to be myself; (c) Is a place where I can have fun; (d) Provides a place to hang out with others; and, (e) Provides a place to meet and get to know others. Two items comprised the advocacy measure: (a) Advocates for LGBTQ issues in our school; and, (b) Advocates for LGBTQ issues in the community. Response options for both measures ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher average scores on these measures represent higher levels of support and advocacy, respectively. We developed these assessments through prior pilot testing among an LGBT and heterosexual youth sample in GSAs. The internal consistency estimate was $\alpha = .85$ for the GSA support measure, and the GSA advocacy items were strongly associated (r = .57, p < .01). At the group level, we created aggregate mean scores for each GSA based on all students' responses in the GSA as indicators of the GSA's overall level of support and advocacy.

Advisor support—Students reported their perceptions of advisor support by completing six scales from the Network of Relationships Inventory (NRI; Furman, 1996). Each scale included three items. The scales were: instrumental aid (e.g., "How much does your advisor help you when you need to get something done?"), intimate disclosure, (e.g., "How often do you tell your advisor everything that you are going through?"), reassurance of worth (e.g., "How much does your advisor treat you like you're admired and respected?"), relationship satisfaction, (e.g., "How happy are you with the way things are between you and your advisor?"), emotional support (e.g., "How often do you depend on your advisor for help, advice, or sympathy?"), and approval (e.g., "How often does your advisor praise you for the kind of person you are?"). Response options ranged from 1 (*very little/never/poor*) to 5 (*the most/always/excellent*). The correlations among the scales ranged from r = .26 to .78. Scores on these indices were averaged to create an overall index of advisor support. Higher scores represent higher levels of support. The internal consistency estimate was $\alpha = .93$.

Perceived advisor control—Students reported their perceptions of the level of control they themselves or their advisors had in the GSA using the 3-item relative power scale from

the NRI (Furman, 1996; e.g., "In your relationship with your GSA advisor(s), who tends to take charge and decide what should be done, you or the advisor(s)?"). Response options were *they always do, they often do, about the same, I often do,* and *I always do* (scaled 1 to 5). These items were reverse-scored such that higher average scores indicate greater advisor control. The internal consistency estimate was $\alpha = .80$.

Student Survey Measures: Outcomes

Mastery—Students completed the 7-item Mastery Scale as a measure of sense of mastery (Pearlin & Schooler, 1978; e.g., "I can do just about anything I really set my mind to do"). Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher average scores represent greater sense of mastery and control over one's life. The internal consistency estimate was $\alpha = .76$.

Sense of purpose—Students completed the 12-item Purpose in Life scale (Robbins & Francis, 2000; e.g., "I feel my life has a sense of meaning"). Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher average scores represent greater sense of purpose in one's life. The internal consistency estimate was $\alpha = .92$.

Self-esteem—Students completed the 10-item Rosenberg Self-Esteem scale (Rosenberg, 1965; e.g., "I feel that I have a number of good qualities"). Response options ranged from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher average scores represent greater self-esteem. The internal consistency estimate was $\alpha = .88$.

Advisor Survey Measures

Demographics—Advisors reported their age, gender, sexual orientation, race or ethnicity, how many years and months they had served as a GSA advisor, and whether they had received any training for their role as a GSA advisor. Sexual orientation and race/ethnicity were coded in the same way as for youth.

Perceived control—Advisors completed the same 3-item relative power scale from the NRI (Furman, 1996; e.g., "In your relationship with your GSA students, who tends to take charge and decide what should be done, you or the students?") as described in the student measures section. In this case, items were not reverse-scored such that higher scores again represented perceptions of greater advisor control. The internal consistency estimate was $\alpha = .65$.

Perceived outside support for the GSA—We developed an assessment for this study for advisors to report their perceptions of support for the GSA from seven sources (we were unaware of any existing measure for this): (a) Other heterosexual students in the school who are not GSA members; (b) Other LGBTQ students in the school who are not GSA members; (c) Teachers in the school; (d) The principal of the school; (e) Other adults in the school (e.g., office staff); (f) Parent(s)/guardian(s) of GSA members; and, (g) Administrators at the district level (e.g., Superintendent). Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher average scores represent greater perceptions of outside support for the GSA. The internal consistency estimate was $\alpha = .82$.

Field Notes

Field observations were conducted prior to quantitative data analysis and provided detailed narratives of the GSA meetings as they transpired, as well as overall impressions. For the purposes of this study, we extracted field observation data concerning school climate, student-advisor leadership dynamics, and the focus on support and advocacy. We used this supplemental observational data to help interpret the quantitative results, with a particular focus on explicating conflicting or complex results.

Results

Descriptive and Basic Survey Analyses

A multivariate analysis of variance (MANOVA) to test for sexual orientation differences in our set of predictors in the multilevel models (i.e., attendance frequency, victimization, support received from the GSA, advocacy done by the GSA, support from the GSA advisor, GSA advisor control) was not significant, Wilks's $\Lambda = .94$, F (6, 124) = 1.41, p = .22. Similarly, a logistic regression indicated that LGBTQ youth were no more likely than heterosexual youth to currently hold a GSA leadership position (OR = 0.87, p = .74). Univariate ANOVAs for the three PYD indices indicated that LGBTQ youth reported lower

sense of purpose than heterosexual youth, F(1, 140) = 5.40, p < .05, $\eta_p^2 = .04$ (LGBTQ: M = 3.11, SD = 0.69; Heterosexual: M = 3.36, SD = 0.57), but there were no sexual orientation differences on mastery, F(1, 139) = 2.47, p = .12, or self-esteem, F(1, 140) = 2.32, p = .13.

A MANOVA to test for racial/ethnic differences in our set of predictors was significant,

Wilks's $\Lambda = .89$, F(6, 122) = 2.49, p < .05, $\eta_p^2 = .11$. Follow-up ANOVAs indicated that white youth attended meetings more frequently than racial/ethnic minority youth, F(1, 127) = 8.54, p < .01, $\eta_p^2 = .06$ (Racial/ethnic minority: M = 3.64, SD = 1.23; White: M = 4.18, SD = 0.94); White youth reported receiving more social support from the GSA, F(1, 127) = 6.06, p < .05, $\eta_p^2 = .05$ (Racial/ethnic minority: M = 4.48, SD = 0.75; White: M = 4.73, SD = 0.42); and white youth perceived their advisor as having more control, F(1, 127) = 4.22, p < .05, $\eta_p^2 = .03$ (Racial/ethnic minority: M = 3.22, SD = 0.75; White: M = 3.51, SD = 0.75). Racial/ethnic minority youth were no more likely than white youth to currently hold a GSA leadership position (OR = 0.50, p = .17). Univariate ANOVAs to test for racial/ethnic differences on the PYD indices were not significant (ps = .13 to .40).

A MANOVA to test for gender differences in our set of predictors was not significant, Wilks's $\Lambda = .95$, *F* (6, 119) = 0.99, *p* = .44. There were also no gender differences in likelihood to hold a leadership position (OR = 0.99, *p* = .98). Finally, univariate ANOVAs to test for gender differences on the PYD indices were not significant (*p*s = .51 to .77). Because there were no gender differences on any of the variables, we did not include it in our multilevel models.

We report basic descriptive data and correlations among the youth-based variables in Tables 1 and 2. We provide these simply for descriptive purposes; they do not take into consideration the nesting of the participants. These data also provide an indication of the

associations among the predictor variables in our multilevel models. We refrain from reporting correlations among advisor-based variables because of the small sample for these correlations and because we did not have a strong theoretical basis to expect that these variables would be associated with one another. Descriptive data for advisors are reported in Table 1.

Multilevel Models

We used the SAS PROC MIXED procedure to test our multilevel models. We tested a total of three models, one for each PYD index (i.e., purpose, mastery, and self-esteem). We included the same variables across these models. At Level 1 (the student), we included these factors: students' sexual orientation (1 = sexual minority), race or ethnicity (1 = racial/ethnic minority), age, meeting attendance frequency, whether they held a GSA leadership position (1 = leadership position held), victimization, perceived support received from the GSA, perceived level of advocacy done by the GSA, perceived advisor support, and perceived advisor control. At Level 2 (the GSA), we included these factors: the aggregate index of support provided by the GSA, the aggregate index of advocacy done by the GSA, advisors' reports of length of time served as an advisor, whether advisors had received training for their position, advisors' perceived level of control, advisors' perceived support of the GSA from those outside the GSA, and the proportion of racial/ethnic minority and sexual minority youth in the GSA. For those GSAs that had two advisors, we averaged their responses because only one of these values could be applied to each GSA. We noted, however, that their responses to these items were similar and varied little from one another. A preliminary test of the models without independent variables indicated that the betweengroup variance was above zero, though not significantly different from zero; however, multilevel modeling was still advisable given the nature of the data (e.g., advisors' data applied across youth in their GSAs) and is still recommended for testing focal hypotheses at Level 2 (Murnane & Willett, 2010). All fixed effects and fit indices are reported in Table 3. The fit indices across the models were fairly comparable. Although we tested whether the strength of associations between our predictors and PYD indices differed for sexual minority and heterosexual youth, none were significant and we excluded these interaction terms in the final models for parsimony. Below we focus on the significant associations in each model.

In our model for sense of purpose, we identified significant associations at the student and contextual level. At the student level, greater perceptions of support from the GSA ($\beta = 0.20$, p < .05) and from the GSA advisor ($\beta = 0.09$, p < .07) predicted higher scores on sense of purpose. LGBTQ youth reported lower scores on sense of purpose ($\beta = -0.22$, p < .01) while racial/ethnic minority youth reported higher scores ($\beta = 0.42$, p < .01). At the contextual level, youth in GSAs whose members overall reported greater advocacy ($\gamma = 0.71$, p < .01) reported higher scores on sense of purpose, and youth in GSAs whose advisors had served a longer duration ($\gamma = 0.02$, p < .07) and whose advisors perceived that they had greater control ($\gamma = 0.30$, p < .07) and that the GSA was more supported by those outside the GSA ($\gamma = 0.17$, p < .05) reported higher scores on sense of purpose.

In our model for mastery, at the student level more frequent attendance ($\beta = 0.05$, p < .07), lower victimization ($\beta = -0.17$, p < .01), greater perceptions of support from the GSA ($\beta =$

0.22, p < .01), and perceptions that advisors had less control in decision-making ($\beta = -0.19$, p < .01) predicted higher scores on mastery. Racial/ethnic minority youth reported higher scores on mastery than white youth ($\beta = 0.24$, p < .01). At the contextual level, youth in GSAs whose advisors had served a longer duration ($\gamma = 0.05$, p < .01), whose advisors perceived holding greater control in decision making ($\gamma = 0.49$, p < .01), and whose advisors perceived that the GSA was more supported by those outside the GSA ($\gamma = 0.31$, p < .01) reported higher scores on mastery. Youth in GSAs comprised of a higher percentage of racial/ethnic minority youth also reported higher scores on mastery ($\gamma = 0.01$, p < .05).

In our model for self-esteem, at the student level greater perceptions of support from the GSA ($\beta = 0.12, p < .05$) predicted higher scores on self-esteem. Racial/ethnic minority youth reported higher scores on self-esteem than white youth ($\beta = 0.28, p < .001$). At the contextual level, youth in GSAs whose advisors had served a longer duration ($\gamma = 0.04, p < .01$) and whose advisors had received formal training ($\gamma = 0.19, p < .05$), whose advisors perceived holding greater control in decision making ($\gamma = 0.38, p < .07$), and whose advisors perceived that the GSA was more supported by those outside the GSA ($\gamma = 0.17, p < .07$) reported higher scores on self-esteem. Youth in GSAs comprised of a higher percentage of racial/ethnic minority youth also reported higher scores on self-esteem ($\gamma = 0.01, p < .05$).

Insights from Observational Data

As we anticipated, the quantitative results indicated nuance in the support and advocacy functions of GSAs, as well as in how youth and advisor perceptions of control predicted PYD indices. For example, students' perceptions that advisors had less decision-making control were associated with greater mastery, but so, too, were advisors' perceptions that they had more decision-making control. Our field note data helped to interpret these complex associations.

Levels of support and advocacy—The GSA meetings appeared to fall along a spectrum. On one end were GSAs entirely structured around an established agenda, focusing on attaining certain goals that could be related to advocacy (e.g., planning for an upcoming Day of Silence) or community-building (e.g., designing GSA t-shirts). On the other end of the spectrum were meetings that resembled unstructured group therapy sessions, where students and advisors alike could reflect on their personal lives, recent personal struggles or successes, and emotional states.

One explanation for the student-level vs. GSA-level associations between support and PYD indices may be that the structure and focus of GSA meetings is determined by the needs of the students, with GSAs being more "support-focused" if more of the members require support, and GSAs being more "advocacy-focused" if support needs are being met. The qualitative data suggested in fact that some of the GSA advisors provided supportive comments in reaction to disclosures by specific youth, rather than having pre-planned questions about personal or support issues as a pre-determined focus for the overall meeting. This may help explain why overall perceptions of support at the GSA level were not associated with students' wellbeing over and above their own sense of received support. At the student level (that is, within GSAs) higher perceptions of support were associated with

wellbeing. If individual members who reveal personal issues (e.g., coming out struggles) receive support, as we observed in these cases, then we would expect this association to hold when examining variability within GSAs.

It is also possible that once support needs are met, some GSA members may become less involved. From these observations, two advisors noted a problem with retaining juniors and seniors in the GSA – the majority of youth who attended GSA meetings regularly were freshmen and sophomore students. One advisor noted that the GSA helped youth find community and support in a new school context.

It would be problematic, however, to assume that more advocacy-focused GSAs are comprised of youth who no longer require extensive emotional or social support. For example, one GSA meeting followed an agenda focused on event planning. In the last five minutes of the meeting, one student disclosed that another student had been kicked out of her home because her father discovered she was dating a girl. There was little time to discuss this event in the group and for the students to provide support (although the advisor followed up with the student to ensure that she was safe and connected with resources before allowing her to leave). This example highlights that it may be optimal for GSAs to provide flexible meeting structures that protect time for both support and advocacy activities. The field note data identified several methods by which this balance was negotiated in some GSAs. For example, one GSA – which was co-facilitated by a teacher and a school counselor - alternated therapy-focused and game-focused meetings. Other GSAs began meetings with check-ins where each student could share a high point and a low point from his or her week before the meetings focused on GSA agenda items. Such structures may have enabled a balance of support and advocacy opportunities to suit students' needs. These observations helped to inform the quantitative findings, which were less able to capture this flexibility within and across meetings.

Youth and advisor control—The field observations helped to unpack the nuanced finding that greater advisor control from the advisors' perspective and less advisor control from the youths' perspective were both associated with greater mastery among youth. They also helped contextualize how advisors' perceptions of greater control may have been marginally associated with higher levels of youth purpose and self-esteem. Although GSAs are conceptualized as student-led groups, we observed that advisors frequently took an active role in scaffolding decision-making processes for youth by offering a limited range of activities, action steps, or program options from which GSA members could choose. Advisors also appeared to enable GSA members to bring their ideas to fruition by working behind-the-scenes to secure support from other school staff (e.g., asking the vice principal to organize transportation for GSA members to attend a conference). At times, some advisors overtly took control of the meetings away from the students. These instances sometimes resulted in advisors redirecting social support conversations towards reflecting on their own lives, or dismissing more thorough consideration of students' ideas or personal disclosures. However, students in these scenarios often responded with sincere concern for their advisors' wellbeing or deference to the advisors' decision or expertise. In general, we were struck by the positive emotional climates of the meetings, regardless of the degree of control advisors took over them.

Our observations also showed that many youth without formal leadership titles took on various responsibilities and leadership roles for specific projects. For instance, in one GSA that was planning a day-long event at the school each member took a leadership role for planning one part of the event while several members in formal leadership positions oversaw the wider efforts. In other GSAs, meetings had been planned in advance and were led by a single youth leader (e.g., GSA president), while leaders in other GSAs were not as prominent or directive. Finally, other forms of leadership appeared valued in GSAs beyond the traditional hierarchical style of formal leadership positions. For example, we noticed leadership expressed and valued in other ways, such as by actively showing emotional support to another member in crisis.

GSAs within their school context and climate—Our quantitative data drew attention to the role of the broader school climate in predicting PYD indices. The field notes also indicated variability in this broader context across the GSAs. Visibility and financial support for GSAs varied across the sites. For example, one school had anti-bullying flyers prominently displayed, a large bulletin board dedicated to the GSA (which included cards on which students could publicly declare themselves as allies), and even had a reminder for the GSA meeting announced on the school loudspeaker along with other group meetings. The GSA also received financial support to attend regional GSA conferences. By contrast, at another site the advisors disclosed that they receive no financial support from the school and are required to pay for all GSA events out of their own pockets or through fundraising. Youth in schools that have an affirming GSA climate may report greater wellbeing because the environment is more encouraging of the group's presence and success.

To summarize, beyond facilitating a richer interpretation of the complex quantitative results, the field note data also highlighted variation across GSAs in how they balanced their support and advocacy roles, as well as youth and advisor control and power sharing. This balance appeared to be affected in part by the diverse needs of youth who comprised the different GSAs, the particular student-advisor leadership dynamics and personalities, and the level of support provided to the GSA from the school. These qualitative data help to inform and offer potential explanations for the nature of the quantitative findings.

Discussion

Studies have emphasized the clear potential for GSAs to promote resilience among LGBT youth. Whereas most studies have relied on comparisons of LGBT youth, based on GSA presence or absence at their school, our study is among the first to examine a range of specific student, advisor, and contextual factors in combination that contribute to wellbeing among GSA-involved youth. In doing so, we moved beyond issues of basic access to GSAs to consider the actual components of GSAs that contributed to their effects and to variability in the experiences of youth within GSAs. The youth program literature has identified dimensions of programs related to positive youth outcomes (Eccles & Gootman, 2002), but these dimensions have been absent in GSA research. Concomitantly, the youth program literature has given less attention to dimensions relevant to settings for marginalized populations. Thus, our findings contribute to both GSA research and the broader developmental science on youth settings and programs.

Student Factors Associated with Positive Development

There was much variability among GSA members in their wellbeing. This adds nuance to extant findings that have treated youth experiences in GSAs essentially as uniform when comparing them as a group to non-members in the same school or to youth in schools without GSAs (Goodenow et al., 2006; Heck et al., 2011; Poteat et al., 2013; Walls et al., 2010). LGBT and heterosexual youth did not differ in wellbeing, with the exception of sense of purpose. Although this pattern stands in contrast to the consistent disparities documented in the general literature (Meyer, 2003), this pattern may reflect the distinct population of youth who are GSA members. This could be based on the support function of GSAs that may attenuate sexual orientation-based disparities (Griffin et al., 2004). Indeed, provision of support is a major role of youth programs in general (Fredricks & Simpkins, 2012), and individuals' own perceptions of support that they received from the GSA consistently predicted their own wellbeing in our study. Alternatively, LGBT youth in GSAs may be a more select group of LGBT youth who are resilient prior to their involvement, or heterosexual GSA members may simply have more comparable experiences to LGBT youth (e.g., in terms of victimization).

Our supplemental observations, however, run counter to some of these alternatives; LGBT youth did raise serious concerns. For instance, one youth had just been kicked out of her home. Across the GSAs, parental and peer rejection were common themes raised in their meetings. This would suggest that GSA involvement may have some influence on wellbeing, over and above prior functioning. Longitudinal and controlled intervention data would aid in delineating the relative size and direction of causality of such effects in future studies.

Of note, racial/ethnic minority youth reported greater wellbeing than white youth on all three indices. Yet, they also reported lower perceived support from their GSA. There has been little attention to the experiences of racial/ethnic minority youth in GSAs (McCready, 2004). GSA studies that have considered group differences have focused on sexual orientation and gender differences (Poteat et al., 2013) or overall differences based on GSA presence without consideration of additional demographic differences (Heck et al., 2011; Walls et al., 2010). Attention to the needs of racial/ethnic minority youth in GSAs represents a key part of the mission of GSAs to support their members and to address multiple systems of inequality (Griffin et al., 2004; Russell et al., 2009). Also of note was the fact that all GSA advisors in our sample were white. As in much of urban education in the U.S., white teachers are likely to be teaching racial/ethnic minority youth. Research should consider the extent to which GSA advisors are prepared to discuss the experiences of racial/ethnic minority youth around sexuality or other experiences, and how equipped advisors feel to facilitate such discussions. Racial/ethnic minority youth attended GSA meetings less frequently than white youth, which could indicate their needs are not being met due to a poor fit between the GSA context and the identities and experiences of racial/ethnic minority youth. Also, because many of these youth live in high-poverty areas, they may face more barriers or other responsibilities that limit their involvement (e.g., after-school jobs). At the group level, youth in GSAs with a higher percentage of racial/ethnic minority youth than others reported greater wellbeing. It is possible that these groups may be distinct in some

key ways, such as in their focus on certain topics or connections among members. We were unable to explore this in greater detail; however, this finding further underscores the need to consider issues of racial diversity in GSAs and how GSAs meet the needs of racial/ethnic minority youth. Future research might consider GSAs wherein the majority of members identify as racial/ethnic minorities to contextualize this finding. Of interest, we did find a strong association between the proportion of racial/ethnic minority youth in the GSAs and the proportion of racial/ethnic minority youth in their respective schools. This suggests the possibility that the demographics of GSAs mirror those of the general school population. This, too, should be considered further in future research.

Of our wellbeing indices, GSA attendance only weakly predicted one outcome – greater mastery. Because GSAs serve multiple functions (Griffin et al., 2004; Mayberry, 2007; Russell et al., 2009), this may explain why there was no clear pattern in relation to attendance and concurrent wellbeing for sense of purpose or self-esteem. Some youth may attend frequently out of a critical need for support while others may do so to contribute to advocacy efforts. Of our three PYD indices, attendance may have been associated with mastery because youth can feel a sense of empowerment or confidence whether in relation to receiving support or through their efforts to engage in advocacy. This association with mastery is encouraging given the increased independence and responsibility during this developmental period and because this is a part of the mission of youth programs in general (Eccles & Gootman, 2002; Shinn & Yoshikawa, 2008).

From our observational data, several GSAs spent sessions planning events while others addressed mental health concerns. Others were more flexible within the meeting in determining the emphasis. These findings point to the need to consider ways to more accurately capture such dynamic and flexible processes in future research. Do some students, for example, flexibly choose among school-level supports to meet their changing needs? Are GSAs simply one of a set of supports for some youth? In that case, under what circumstances are GSAs the locus of choice for soliciting or obtaining support? Longitudinal data might identify more distinct patterns in the trajectories of wellbeing among GSA-involved youth based on their reasons for attendance.

Although victimization was associated with each wellbeing index based on simple correlations, it was not a consistent predictor in our models when other factors were included. Notably, basic correlations showed that youth who reported more frequent victimization also reported more support from their GSA and their advisor. Also, while rates of victimization covered the full range, the average level of victimization was low. These results may reflect the ability of GSAs to provide support to these youth to mitigate negative effects of victimization.

Finally, holding a formal leadership position did not predict wellbeing. Several potential explanations underscore the need for closer attention to this issue. Youth who did not hold a formal leadership position may have taken periodic leadership roles on projects. From our observations, leadership was not under the sole province of youth with leadership titles, but was distributed across members. This could reflect different leadership styles (Spillane, 2006) and the notion that leadership and characteristics valued in leaders can vary across

groups (Lewis, Sullivan, & Bybee, 2006). Our observations suggested that leadership included organizational (e.g., fundraising) and relational leadership (e.g., being the first to give support to another member). Attention to multiple kinds of youth leadership in GSAs is essential, as a major approach to PYD is placing youth in leadership roles (Lerner et al., 2009). Yet, first it is critical to understand what forms of leadership are valued and promote healthy development within this context and how they are developmentally appropriate for these youth. For instance, some youth may experience stress in holding leadership positions if they are not adequately supported.

Advisor and Contextual Factors Associated with Positive Development

Our findings are among the first to link advisor data directly to youth wellbeing. As hypothesized, youth in GSAs whose advisors had served longer reported greater PYD on all indices. In contrast, formal training was only associated with greater youth self-esteem. Advisors with longer service may have more learned experience in navigating the politics and dynamics of their school in ways that benefit youth. For instance, they may be more successful at securing resources, which can be a major challenge for advisors (Watson et al., 2010). General formal trainings may not be as capable of addressing such school-specific processes. It would be important for future research to consider the nature of trainings that advisors receive and ways that training may be beneficial. Identifying and meeting the training needs of adults working with marginalized populations would contribute substantially to the general youth program literature that seeks to identify best practices for such programs (Eccles & Gootman, 2002).

Youth who perceived more control in decision making and, perhaps paradoxically, those whose advisors also perceived more control reported greater mastery. Advisor control was also weakly associated with greater purpose and self-esteem among youth. This may reflect the complexity in how youth and adults negotiate their roles in making GSA-related decisions and whether this reflects a "top-down" or shared process (Fairweather, 1972; Goldenberg, 1978). The power dynamic between advisors and youth is an understudied facet of how GSAs function. Yet, it represents a potentially difficult dynamic to balance. PYD models emphasize the importance of youth leadership while noting the need for adult support (Lerner et al., 2009). Developmentally, youth also may be learning to manage greater autonomy and decision-making. As supported by the observational data, and consistent with PYD models, advisors may assist younger members through scaffolding and providing initial options to aid youth in developing additional ones and reaching decisions. This would also suggest why advisor perceived control was significant for mastery, while marginally significant for the other indices. Rather than contradictory findings, our results may have captured this balance of control from youths' and advisors' perspectives.

Although the association between perceived support and wellbeing was significant at the individual level, the association was not significant at the contextual level. It may be that GSAs whose members *overall* are currently experiencing little distress prefer to place less emphasis on support-based discussions or activities, while at the same time they may provide targeted support to individual members when needed. We noticed this group-level flexibility from our field note data. In fact, these data suggested that the focus of a given

GSA on support or advocacy can be quite dynamic within meetings. It is important to note, however, that *within* GSAs, youth who perceivd greater support than others did report greater self-esteem, mastery, and purpose.

In addition to support, GSAs are intended to foster advocacy (Mayberry, 2007; Russell et al., 2009; Toomey & Russell, 2013). The association between GSA advocacy and sense of purpose among youth in these GSAs aligns with one aspect of purpose, which is a contribution to something larger than oneself (Damon et al., 2003). The association may convey two possible processes. Youth who already feel a greater sense of purpose may engage more in advocacy. Alternatively, greater advocacy engagement may foster a sense of purpose. Ultimately, the needs and interests of GSA members likely direct the focus of the GSA on support or advocacy, as was suggested by our observational data. These associations may point to GSA flexibility to meet the needs and interests of members. These single time-point findings highlight a relevant issue for further consideration using longitudinal data to understand the directionality of such associations.

Extended to the broader social context, greater support for the GSA from those outside the GSA was associated with greater wellbeing among youth in these GSAs. Advisors have reported forms of resistance to their GSAs that have inhibited their ability to secure resources or participate in certain activities (Watson et al., 2010). As research continues to consider how GSAs function to promote healthy youth development, this finding underscores that it is critical to remain attentive to the broader school context in which they are embedded and operate.

Strengths, Limitations, Future Research

We aimed to expand the focus on GSAs from one that has sought to document youth differences based on GSA accessibility to one that directly seeks to identify the components of GSAs that actually contribute to PYD outcomes. To initiate this new direction for GSA research, we assessed an expansive range of GSA factors and processes associated with youth wellbeing. Our approach brought GSA research in greater alignment with broader youth program research (Eccles & Gootman, 2002). At the same time, these findings highlighted additional factors to incorporate into youth program research in settings that serve marginalized populations (e.g., external support for the group), while calling attention to the need to review how certain factors considered foundational to PYD are conceptualized in these settings (e.g., youth leadership, their youth-driven vs. adult-driven nature).

We note several limitations to our study. First, we cannot determine causality from our data. Distinguishing between selection and socialization effects that account for the contribution of GSA involvement on PYD outcomes would provide a more rigorous indication of the unique effects of GSAs over and above students' wellbeing prior to joining. However, as a preliminary study of variation among GSA members, the current research design did not include data on all students in the sampled schools. We therefore could not estimate a model of selection into GSAs when estimating associations of GSA characteristics with youth outcomes. There may be reciprocal causal relations among our measures, and future research should disentangle associations as they exist over time. For example, this issue could be important for the association between advocacy and wellbeing.

Other limitations point to areas for expansion in future research. Our field observations were conducted once; repeated visits could provide a richer portrayal of certain processes within GSAs. However, after the meetings many of the advisors did share that the dynamics of that meeting generally were reflective of their typical meetings. Regardless, the observations yielded information on an array of content and processes within these meetings that provide insights into the different ways that GSAs operate. Also, while our sample reflected a degree of racial diversity, the small number of youth from specific groups prevented us from estimating associations for each group. Similarly, while the associations between our predictors and PYD outcomes did not differ for heterosexual and LGBT youth, these comparisons were exploratory, and potential sexual orientation-based or race/ethnicity-based differences should be examined in larger and more diverse samples. In addition, some of our measures were generated to capture previously unexamined GSA components and processes (e.g., advocacy). These should be refined in future work. In terms of outcomes, future research should add objective outcomes such as standardized achievement or teacher-rated outcomes (e.g., classroom engagement) to supplement the self-report outcomes we considered. Finally, although our sample was drawn from geographically diverse regions. they were all in Massachusetts. Although there is substantial variability across the state on such factors as political and socioeconomic diversity, future studies should test whether youth experiences in GSAs or the ways that GSAs function vary according to even broader contextual factors (e.g., their presence in conservative or liberal states in the U.S.). For instance, the opportunities or resources for GSAs could be more limited in conservative or economically impoverished areas, which could attenuate the benefits of GSA involvement. Attention to these issues would build on the contextual framework that we sought to apply.

Despite these limitations, we believe this study makes significant advances to the scientific literature on LGBT youth development and to the direction of research on GSAs. Our primary contribution was to move beyond simple comparisons based on GSA presence or absence to test a range of individual and contextual factors that contributed to youth wellbeing. Our data suggest that GSAs are not homogeneous or monolithic, and that variation across them should be studied. The initial identification of these relevant factors at individual and contextual levels was a critical and necessary step to precede extensive longitudinal or experimental studies to test the effects of these very components with attention to causal effects. Second, we used a multi-informant approach to gather data from both youth and advisors. This bridged the extant research that has examined only youth or adult experiences separately and allowed us to examine factors beyond the immediate youth members that contributed to their wellbeing. Third, we included multiple schools in a purposeful manner to ensure greater representation of GSA-involved youth. We made efforts not to capitalize on the largest or most active GSAs or those that were not experiencing any struggles (e.g., in securing resources). Fourth, we made direct visits to schools to help ensure greater representation of GSA members in these schools. Finally, we used a mixed-method approach by supplementing our quantitative data with qualitative observations. This allowed us to further understand the experiences of youth and advisors in GSAs, how GSAs varied from one another, as well as gain insight on some of the complex associations in the quantitative results. We believe that these approaches, in combination,

elevate our knowledge of GSAs and provide a more robust and rigorous scientific examination of them.

This new direction of research on GSAs necessitates a much greater focus on variability in their structure and function, how they meet the diverse needs of their members, the complex interplay among youth, advisors, and the broader school context, and how GSAs contribute to youth development over time. Doing so would serve to elucidate how these factors and dynamics come to shape healthy youth development. Ongoing attention to these issues will advance the field of developmental research on LGBT youth by considering how GSAs can be implemented most effectively to meet their aspirational goals of supporting their diverse members and empowering them to advocate for social justice within their schools and communities.

Acknowledgments

This project was supported in part through funding awarded to the first and second authors by the William T Grant Foundation OR #181301.

Jerel Calzo was supported through funding from the National Institute on Drug Abuse (NIDA), K01DA034753, Substance Use and Disordered Weight Behaviors in Sexual Minority Youth Contexts, PI: Calzo.

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Table 1

Descriptive Data for Youth and Advisor Measures

Scale	<i>M</i> (SD)	Actual Response Range
Youth Measures		
Sense of mastery	2.93 (0.64)	1.57 - 4.00
Sense of purpose	3.23 (0.64)	1.25 - 4.00
Self-esteem	2.89 (0.70)	1.00 - 4.00
Attendance frequency	3.98 (1.06)	1.00 - 5.00
Leadership position held	18.90%	—
Victimization	0.73 (0.83)	0.00 - 3.75
GSA support	4.65 (0.56)	1.60 - 5.00
GSA advocacy	3.85 (0.91)	1.75 - 5.00
Advisor support	3.84 (0.78)	1.76 - 5.00
Advisor control	3.44 (0.78)	1.00 - 5.00
Advisor Measures		
Years as advisor	7.99 (6.23)	0.58 - 21.00
Training received	44.44%	
Advisor control	3.59 (0.59)	2.67 - 5.00
Outside support for GSA	3.87 (0.55)	3.09 - 4.71

GSA = Gay-Straight Alliances;

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Individual-Level Correlations and Descriptive Data

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1. Mastery	I									
2. Purpose	.58***									
3. Esteem	.62***	.72***								
4. Attendance	.12	.10	.01	I						
5. Leadership	.20*	.15	.17*	.28**						
6. Victimization	25**	18*	18*	.04	02					
7. GSA support	.08	.16*	.07	.34***	.15	.19*				
8. GSA advocacy	17	03	10	06	07	.14	.31***			
9. Advisor support	08	.12	.07	.32***	$.18^{*}$.24**	.50***	.27**		
10. Advisor control	11	09	18*	.10	16	06	.04	.02	02	

teen; Attendance = frequency of GSA attendance; Leadership = holding a leadership position GSA; GSA advocacy = perceived level of GSA advocacy; Advisor support = perceived support from GSA advisor; Advisor control = perceived level of control of the GSA advisor in decision-making.

 $_{p < .05.}^{*}$

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p < .01.

p < .001.

Table 3

Individual and GSA-Level Factors Associated with Positive Youth Development among GSA Members

	Sense of Purpose	Irpose	Mastery	v	Self-Esteem	sem.
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Level 1: Individual						
Sexual orientation	-0.22^{**}	0.09	-0.11	0.15	-0.14	0.11
Race/ethnicity	0.42^{***}	0.08	0.24^{***}	0.08	0.28^{***}	0.08
Attendance frequency	0.02	0.04	0.05^{\ddagger}	0.03	-0.03	0.07
Leadership position	0.07	0.08	0.08	0.12	0.13	0.09
Victimization	-0.09	0.08	-0.17^{***}	0.04	-0.07	0.05
Support provided by GSA	0.20^*	0.09	0.22^{**}	0.07	0.12^*	0.06
Advocacy engaged in by GSA	-0.06	0.08	-0.09	0.06	-0.10	0.07
Perceived advisor support	0.09 \ddagger	0.05	-0.07	0.10	0.12	0.10
Perceived advisor control	-0.07	0.07	-0.19^{**}	0.05	-0.10	0.07
Level 2: Contextual Factors						
Overall support provided by GSA	-0.39	0.18	0.13	0.16	-0.38	0.20
Overall advocacy provided by GSA	0.71^{**}	0.11	-0.04	0.10	0.32	0.15
Advisor number of years advising	0.02^{\ddagger}	0.01	0.05^{**}	0.004	0.04^{**}	0.01
Advisors with formal training	-0.06	0.04	0.04	0.04	0.19^*	0.05
Advisor perceived control	0.30^{\ddagger}	0.08	0.49^{**}	0.09	0.38^{\dagger}	0.14
School support for the GSA	0.17^{*}	0.05	0.31^{**}	0.05	0.17^{\dagger}	0.06
Percent racial minorities in GSA	0.01	0.001	0.01^*	0.002	0.01^*	0.002
Percent sexual minorities in GSA	-0.01	0.003	0.00	0.002	0.00	0.004
Fit Indices						
AIC	227.5		228.8		249.7	
BIC	236.7		238.0		258.9	
-2Ln(Likelihood)	189.5		190.8		211.7	

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 $\dot{\tau}_{p < .07}$

"100" > d "10" > d "*" "50" > d " NIH-PA Author Manuscript

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