Published in final edited form as:

*J Appl Dev Psychol.* 2018; 56: 13–20. doi:10.1016/j.appdev.2018.01.001.

# Gay-Straight Alliance Involvement and Youths' Participation in Civic Engagement, Advocacy, and Awareness-Raising

V. Paul Poteat, Ph.D.,

Boston College, Campion Hall 307, 140 Commonwealth Ave., Chestnut Hill, MA 02460

Jerel P. Calzo, Ph.D., and

San Diego State University, 5500 Campanile Dr., San Diego, CA 92182

Hirokazu Yoshikawa, Ph.D.

New York University, New York University, 726 Broadway, 5th Floor, New York, NY 10003

### **Abstract**

Civic engagement among lesbian, gay, bisexual, transgender, or questioning (LGBTQ) youth and heterosexual cisgender allies can challenge oppressive systems. Among 295 youth in 33 Gay-Straight Alliances (GSAs; 69% LGBQ, 68% cisgender female, 68% white,  $M_{age} = 16.07$ ), we examined whether greater GSA involvement was associated with greater general civic engagement, as well as participation in greater LGBTQ-specific advocacy and awareness-raising efforts. Further, we tested whether these associations were partly mediated through members' sense of agency. Greater GSA involvement was associated with greater civic engagement, advocacy, and awareness-raising; associations did not differ based on sexual orientation or gender identity. Finally, the association between GSA involvement and civic engagement was partially mediated through youths' greater sense of agency. Agency did not mediate the association between GSA involvement and engagement in advocacy or awareness-raising efforts. The results suggest GSAs are settings with potential to foster students' capacity to be active and engaged citizens.

#### Keywords

Gay-Straight Alliance; Civic engagement; Lesbian; gay; bisexual; questioning youth; Positive youth development; Agency

Within the area of positive youth development, scholars have emphasized the importance of preparing youth to be active and engaged citizens in society (Lerner, Wang, Champine, Warren, & Erickson, 2014; Sherrod, 2007; Zaff, Boyd, Li, Lerner, & Lerner, 2009). This outcome can be reflected in youths' involvement in addressing issues affecting their community (Flanagan & Faison, 2001; Zaff et al., 2009). Such work could be especially

Corresponding author: PoteatP@bc.edu.

**Publisher's Disclaimer:** This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

critical for youth who face societal oppression, as their efforts could serve to challenge oppressive systems (Russell, Toomey, Crockett, & Laub, 2010). Specific to lesbian, gay, bisexual, and questioning youth as well as transgender youth (LGBTQ youth), myriad laws and policies have direct implications for their safety and civil liberties at school (e.g., antibullying or anti-discrimination laws, policies that regulate discussion of LGBTQ issues in classrooms; Meyer & Beyer, 2013; Russell, Kosciw, Horn, & Saewyc, 2010) and in society at large (e.g., marriage, adoption, immigration; Baunach, 2012; Nakamura & Pope, 2013; Whitehead & Perry, 2016). Heterosexual cisgender youth, as allies, also stand to play an important role in advocating for LGBTQ equality through civic participation. In addition to general civic engagement, this type of work could include their engagement in awarenessraising efforts (e.g., campaigns or events to educate others about the experiences of LGBTQ youth, their histories, and the ongoing discrimination they face), or engaging in advocacy efforts to directly counter discrimination (Russell, Muraco, Subramaniam, & Laub, 2009; Poteat, Scheer, Marx, Calzo, & Yoshikawa, 2015; Toomey & Russell, 2013). Given the association between civic engagement and a range of immediate and long-term benefits, including community connection, self-esteem, and sense of self-efficacy (Busseri, Rose-Krasnor, Willoughby, & Chalmers, 2006; Feldman Farb & Matjasko, 2012), as well as the direct relevance of awareness-raising and advocacy efforts in promoting social justice and countering discrimination, greater attention to these issues among LGBTQ youth and heterosexual cisgender allies is warranted. In doing so, we focus on Gay-Straight Alliances (GSAs).

## **GSAs and Positive Youth Development**

GSAs are school-based extracurricular groups for LGBTQ youth and heterosexual cisgender allies that aim to provide support, access to resources, and opportunities to engage in advocacy and awareness-raising efforts on issues related to sexual orientation and gender identity (Griffin, Lee, Waugh, & Beyer, 2004). Generally, they meet once per week for up to one hour during or after school and they are structured such that they place youth in leadership positions with support from adult advisors (often teachers, nurses, or guidance counselors in the school); and they aim to affirm and empower youth and increase their sense of self-efficacy through various discussions and activities (Griffin et al., 2004; Poteat et al., 2015; Russell et al., 2009). In addition to members providing social and emotional support to one another, some GSAs engage in various advocacy efforts within the school to counter discrimination and to raise others' awareness of LGBTQ issues (Poteat et al., 2015; Russell et al., 2009; Toomey & Russell, 2013). As part of these efforts, many GSAs host schoolwide day- or week-long events such as Day of Silence, National Transgender Day of Remembrance, National Coming Out Day, and Ally Week, or they advocate for their schools to adopt anti-bullying policies that explicitly protect students based on sexual orientation and gender identity or expression (GLSEN, n.d.).

GSAs are based on models of positive youth development (PYD; Eccles & Gootman, 2002; Lerner et al., 2014). PYD models emphasize that all youth have strengths and can contribute to society, and that positive development occurs when there are resources available (e.g., extracurricular activities and clubs at school) to cultivate strengths and promote thriving (Damon, 2004; Lerner et al., 2014). For example, one prominent PYD model has

conceptualized thriving in youth as reflecting a sense of competence, confidence, connection, character, and caring (i.e., the "Five Cs"; Lerner, Phelps, Forman, & Bowers, 2009). In turn, this model proposes that youth who thrive are then more likely to contribute (i.e., the "Sixth C"; Lerner et al., 2009, 2014). Civic engagement is important to foster among adolescents as they steadily gain access to a larger number of responsibilities and opportunities to impact and shape their communities (e.g., through voting, holding leadership positions in their communities; Youniss et al., 2002).

Participation in youth programs predicts greater civic engagement and civic responsibility (Fredricks & Eccles, 2006; Gullan, Power, & Leff, 2013; Viau, Denault, & Poulin, 2015). Nevertheless, much of this work has not considered how youth programs address issues of diversity and social justice. Also, most research on youth programs has overlooked the experiences of LGBTQ youth and has not included settings that focus on LGBTQ social issues (Horn, Kosciw, & Russell, 2009). Finally, many of these programs are based primarily in the community and not directly in schools. These represent important omissions, particularly because LGBTQ youth are not always welcomed in or they historically have been excluded from certain youth programs and feel unsafe participating in certain youth settings and school clubs or sports (Gill, Morrow, Collins, Lucey, & Schultz, 2010; Kosciw, Greytak, Giga, Villenas, & Danischewski, 2016). Moreover, much of the discrimination faced by LGBTQ youth occurs in the school (Kosciw et al., 2016). Thus, it cannot be assumed that these other programs are meeting the needs or interests of LGBTQ youth or promote their civic engagement, either in general or specific to addressing sexual orientation and gender identity issues.

These points further emphasize the need to focus directly on whether youths' level of GSA involvement relates to greater civic engagement in general, as well as involvement in advocacy and awareness-raising efforts specific to LGBTQ issues. In addition, we also examine whether the association between GSA involvement level and these forms of civic engagement is partially mediated through youth feeling a greater sense of agency (i.e., a global belief in one's ability to make and attain goals in general; Snyder et al., 1996). Finally, we consider whether associations differ for LGBQ and heterosexual members as well as for transgender/genderqueer and cisgender members.

## Accounting for How GSA Involvement Relates to Forms of Civic Engagement

Whereas a range of correlational studies show that students in schools with GSAs report better wellbeing and academic functioning (Davis, Stafford, & Pullig, 2014; Heck et al., 2014; Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013; Toomey, Ryan, Diaz, & Russell, 2011; Walls, Kane, & Wisneski, 2010), these studies have not focused on actual members of GSAs nor have they considered variability among GSA members themselves. Thus, there has been a certain assumption of homogeneity among GSA members in their experiences. To address this limitation, we consider whether some GSA members report more civic engagement, advocacy, and participation in awareness-raising activities and events than others.

We expect that GSA members who report more involvement in their GSAs will report greater civic engagement in general, as well as engagement in advocacy and awareness-raising efforts specific to sexual orientation and gender identity. This would align with findings that participating in youth programs predicts civic engagement (Fredricks & Eccles, 2006; Gullan et al., 2013; Viau et al., 2015). Adding nuance to this, beyond simply joining the GSA and counting oneself as a member, those members who contribute more to conversations in meetings, more often take on leadership roles, and invest more time on projects in the GSA may be even more likely to engage in forms of civic participation. Indeed, youth who report greater investment in youth programs gain more benefits such as greater empowerment, motivation, and self-efficacy (Akiva, Cortina, & Smith, 2014; Dawes & Larson, 2011; McMahon, Singh, Garner, & Benhom, 2004; Pearce & Larson, 2006). These benefits could be critical to then promote youths' civic engagement, as self-efficacy and competence predict civic engagement (Hope & Jagers, 2014; Youniss et al., 2002).

We expect, then, that the association between GSA involvement and civic engagement is partially mediated through feeling a greater sense of agency. Similar to factors such as selfefficacy and competence, a greater general sense of agency could be an important precursor for building members' confidence to act as engaged citizens in their schools and communities. This mediated process is outlined in PYD models: youth programs aim to promote thriving (e.g., reflected by the "Five Cs", empowerment, self-efficacy, or in this case agency), and thriving subsequently leads youth to make contributions to society (Lerner et al., 2009, 2014). Indeed, involvement in youth programs leads to a greater sense of empowerment (McMahon et al., 2004) and youth leaders in GSAs report feeling more empowered as a result of their GSA involvement (Russell et al., 2009). Thus, although agency (or other indicators of thriving) may also predict greater initial involvement in youth programs, in this study we consider greater GSA involvement to predict greater agency, as this particular temporal order has a strong basis in theory and extant empirical findings (Lerner et al., 2009, 2014; McMahon et al., 2004; Russell et al., 2009; Sherrod, 2007). As such, we expect that greater GSA involvement will relate to greater agency, which will relate to greater contribution in the form of general civic engagement as well as participating in advocacy and awareness-raising efforts specific to sexual orientation and gender identity.

Building on these potential associations between GSA involvement and forms of civic engagement, we consider whether these associations are stronger for LGBQ members than heterosexual members, as well as whether they are stronger for transgender/genderqueer members than cisgender members. GSAs aim to address issues that affect LGBTQ youth (e.g., discrimination; Russell, Everett, Rosario, & Birkett, 2014). Consequently, involvement in this setting may be especially empowering for LGBTQ youth to find their voice and to be more active citizens. As such, although GSA involvement may be associated with various forms of civic engagement for both LGBTQ and heterosexual cisgender youth, we consider whether these associations are relatively stronger for LGBQ youth and transgender/genderqueer youth than for heterosexual and cisgender youth, respectively.

We also consider several potential important covariates in relation to GSA members' civic engagement, advocacy, and awareness-raising efforts. Two factors include age and GSA membership duration. Older youth closer to adult legal status may have more opportunities

or outlets available for civic participation and they may feel a greater sense of autonomy and support from adults to take on these roles. Similarly, youth who have been members of their GSA for a longer duration may have had more time to derive benefits from their membership (e.g., greater self-confidence or leadership skills) and to actually engage in more civic action. Also, we consider potential demographic differences based on race/ethnicity. The broader literature on civic engagement shows differences, for example, among Latino, Black, Asian and White youth and adults due to a number of factors such as differential access to resources (Sánchez-Jankowski, 2002; Waters & Pineau, 2015). Studies show mixed findings for gender differences (Cicognani, Zani, Fournier, Gavray, & Born, 2012; Crocetti, Jahromi, & Meeus, 2012; Jenkins, 2005).

## **Current Study Hypotheses**

More studies now show the potential health and academic benefits related to GSA presence, but variability among members and their involvement in forms of civic engagement have been overlooked. Civic engagement – both in general and specific to addressing sexual orientation and gender diversity issues - warrants closer attention given the prominence of civic engagement within PYD models as a major asset to be cultivated (Sherrod, 2007). In this study, we hypothesize that members' greater levels of involvement in the GSA will be associated with greater civic engagement, advocacy, and awareness-raising efforts. Further, while accounting for age, membership duration, and demographic factors, we hypothesize that the association between GSA involvement and forms of civic engagement will be partially mediated through feeling a greater sense of agency. In addition, we explore whether these associations are stronger for LGBQ youth than heterosexual youth, as well as whether they are stronger for transgender/genderqueer youth than cisgender youth. Finally, for exploratory purposes, we consider whether there are mean differences in GSA involvement and forms of civic engagement on account of sexual orientation, race, and gender identity. Rather than make specific hypotheses, we consider these factors in an exploratory manner, because youth involved in GSAs likely represent a subsample of youth distinct from larger population-based samples in extant studies. Further, extant studies have focused on comparisons between cisgender male and cisgender female youth as opposed to between cisgender youth and transgender youth.

## **Methods**

#### **Participants**

We used the 2014 Massachusetts GSA Network Survey data for the current study. The sample included 295 currently involved GSA members ( $M_{\rm age} = 16.07$ , SD = 1.14) in 33 GSAs in Massachusetts. All students were in high school, Grades 9 through 12, with the exception of four students who were in Grade 8. We secured IRB approval for secondary data analysis. The Network is supported by the Massachusetts Commission on LGBTQ Youth and the Massachusetts Safe Schools Program for LGBTQ Students. The data were collected at conferences held in five regions across the state and through postings to GSA advisors. Surveys were distributed to youth at each conference as they arrived and prior to the formal start of the conference. Youth were asked to voluntarily and anonymously

complete the survey with their GSA advisor's adult consent. Adult consent was used instead of parent consent to avoid risks of inadvertently outing LGBTQ youth to their parents. This is a common consent method used in research with LGBTQ youth to protect their safety (Mustanski, 2011). The youth were informed that their responses could be used for program evaluation and potentially for research purposes to produce reports or articles. Youth could choose to do other activities at the conferences if they did not want to complete the survey (e.g., make buttons, browse materials). Youth who chose to complete the survey were provided space in the conference areas to spread out to ensure the confidentiality of their responses and they returned their completed surveys to proctors. Youth who did not want to complete the survey from their GSA advisor could choose not to request a copy of the survey. Advisors were asked to proctor survey completion during a regularly scheduled GSA meeting and to return the surveys within two weeks of receiving them.

Eighty seven youth identified as heterosexual, 73 as lesbian or gay, 59 as bisexual, 18 as questioning, and 55 self-reported other sexual orientation identities; 3 youth did not report their sexual orientation. Two hundred youth identified as cisgender female, 66 as cisgender male, 9 as genderqueer, 11 as transgender (10 as female to male, 1 as male to female), and 7 self-reported other gender identities; 2 youth did not report their gender. Two hundred one youth identified as White, 32 as biracial or multiracial, 18 as Latino/a, 16 as Asian or Asian American, 16 as Black or African American, 4 as Native American, and 5 self-reported other racial/ethnic identities; 3 youth did not report their race/ethnicity. Four youth were in 8<sup>th</sup> Grade, 47 in 9<sup>th</sup> Grade, 90 in 10<sup>th</sup> Grade, 95 in 11<sup>th</sup> Grade, and 55 in 12<sup>th</sup> Grade; 4 youth did not report their grade level. Most youth (n = 189) reported that they did not receive a free or reduced-cost lunch, 74 reported that they did receive one, and 32 did not respond to the question. The average membership duration of youth in their GSA was 1.56 years (SD = 1.22 years).

## Measures

**Demographics**—Youth self-reported their age, whether they received a free or reduced-cost lunch (*yes, no*), sexual orientation (*lesbian or gay, bisexual, questioning, heterosexual,* or other write-in responses), gender identity (*male, female, transgender (male to female), transgender (female to male), genderqueer,* or other write-in responses), and race / ethnicity (*Asian/Asian American, Black or African American, Latino/a, Native American, White (non-Hispanic), bi/multiracial,* or other write-in responses). Because there were only a limited number of youth in the specific transgender, genderqueer, and other write-in responses, we considered them together in a trans/genderqueer group for analyses (the open responses represented genderqueer identities such as gender fluid or non-binary/pangender). We also dichotomized the race/ethnicity responses as White or racial/ethnic minority because there were very limited numbers of Asian, Black and Latino youth. For similar reasons, we dichotomized sexual orientation as LGBQ or heterosexual because of the limited number of youth in the specific sexual minority groups. Youth also reported the number of months and/or years they had been members of their GSA. We converted these responses to be expressed in the number or fraction of years.

**GSA** involvement level—Youth completed five items assessing their current level of involvement and investment in their GSA: (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. Response options were *never*, *rarely, sometimes, often*, and *all the time* (scaled 0 to 4). Higher average scale scores represent greater involvement and investment as a member of the GSA. Coefficient alpha reliability was  $\alpha = .89$ .

**Agency**—Youth reported their sense of agency by completing the six-item State Hope Scale, which assesses agency and pathways to achieving goals (Snyder et al., 1996; e.g., "If I should find myself in a jam, I could think of many ways to get out of it" and "At the present time, I am energetically pursuing my goals"). Response options ranged from 1 (*definitely false*) to 8 (*definitely true*). Higher average scale scores represent greater sense of agency. Coefficient alpha reliability was a = .91.

**Civic engagement**—Youth completed the six-item participatory citizenship scale (Flanagan, Syversten, & Stout, 2007): (a) I am actively involved in community issues; (b) State and local issues are important to me; (c) I work to make a difference in my community; (d) I work with others in the community to make things better; (e) I get involved in issues that affect my community; and, (f) I work with groups to solve problems in my community. Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher average scale scores represent greater civic engagement. Coefficient alpha reliability was a = .93.

Advocacy and awareness-raising efforts—Youths reported their participation in advocacy and awareness-raising efforts in two ways. First, they completed a 7-item index to assess the extent to which they participated in advocacy and awareness-raising efforts in their GSA in general (e.g., "Organize school events to raise awareness of LGBT issues"; "Do advocacy events in the community"), with response options from 1 (*not at all*) to 5 (*a lot*). A higher average score across the items represents greater engagement in advocacy and awareness-raising efforts. Second, youth reported whether they had participated in eight specific awareness-raising activities and events: Day of Silence, Ally Week, Youth Pride, running workshops, decorating school areas, Diversity Week, Transgender Day of Remembrance, and National Coming Out Day. We summed their responses for a total scale score, with higher scores indicating participation in a greater number of awareness-raising activities and events.

#### **Analytic Plan**

To address our exploratory research questions, we conducted three separate MANOVAs to test for group mean differences on our indicators of civic engagement based on sexual orientation, race/ethnicity, and gender identity. We also examined simple bivariate correlations among all of our continuous measures.

For our main analyses, we used linear multivariable regression in generalized estimating equations (GEE) in SAS (Liang & Zeger, 1986) to test several models. We used this analytic

approach to account for the interdependence of some youth within the same GSAs. First, we tested the association between level of GSA involvement and our three indicators of civic engagement, each in their own model, while adjusting for the covariates of age, membership duration, race/ethnicity (racial/ethnic minority or White), gender (cisgender female, cisgender male, or trans/genderqueer), and sexual orientation (LGBQ or heterosexual). Second, we examined whether the association between GSA involvement and each indicator of civic engagement differed for LGBQ and heterosexual members by testing for an interaction between sexual orientation identity and GSA involvement. We performed similar analyses to test whether the association between GSA involvement and each indicator of civic engagement differed for transgender/genderqueer and cisgender members. Third, we tested whether the association between GSA involvement and the three indicators of civic engagement was partially mediated through agency using the publicly available SAS MEDIATE macro. This macro enables the calculation of the percentage of the association that is mediated as well as a 95% confidence interval for the effect (Hertzmark, Pazaris, & Spiegelman, 2012). We did test alternative models in which agency was treated as the predictor and GSA involvement as the mediator, but results from these models were no better than our proposed models. Given that the extant conceptual and empirical literature emphasizes the order of the variables as we had originally arranged them, we maintain the focus on our original proposed models in the presentation of results (i.e., agency as a mediator of the association between GSA involvement and civic engagement).

## Results

## **Group Differences and Bivariate Correlations**

First, we conducted three separate MANOVAs to identify whether there were significant mean differences in GSA members' levels of general civic engagement and our two measures of involvement in LGBTQ-specific advocacy and awareness-raising efforts based on (a) youths' sexual orientation (LGBQ or heterosexual), (b) race/ethnicity (racial/ethnic minority or White), and (c) gender identity (trans/genderqueer, cisgender female, or cisgender male). The MANOVA for sexual orientation was significant, Wilks'  $\Lambda = .95$ , F(3,262) = 4.16, p < .01,  $\eta_p^2 = .05$ . Follow-up ANOVAs indicated that LGBQ youth reported doing more advocacy, F(1, 264) = 5.51, p < .05,  $\eta_{\rm p}^2 = .02$  (LGBQ youth: M = 3.20, SD =0.96; heterosexual youth: M = 2.90, SD = 0.88) and participating in a greater number of specific awareness-raising activities and events, F(1, 264) = 9.93, p < .01,  $\eta_p^2 = .04$  (LGBQ) youth: M = 2.17, SD = 1.54; heterosexual youth: M = 1.57, SD = 1.19) than heterosexual youth. The MANOVA for race was marginally significant, Wilks'  $\Lambda = .97$ , F(3, 263) =2.71, p = .05,  $\eta_p^2 = .03$ . Follow-up ANOVAs indicated that White youth reported doing more advocacy than racial/ethnic minority youth, F(1, 265) = 7.87, p < .01,  $\eta_p^2 = .03$  (White youth: M=3.22, SD=0.91; racial/ethnic minority youth: M=2.87, SD=0.98). Finally, the MANOVA for gender was significant, Wilks'  $\Lambda = .95$ , F(6, 526) = 2.54, p < .05,  $\eta_{\rm p}^2 = .03$ , and follow-up ANOVAs indicated significant gender differences on advocacy, F(2, 265) =4.10, p < .05,  $\eta_{\rm p}^2 = .03$ , and awareness-raising activities and events F(2, 265) = 3.64, p < .05,

 $\eta_{\rm p}^2$  = .03. Tukey post-hoc comparisons indicated that trans/genderqueer youth reported doing more advocacy than cisgender female youth (p < .05, d = 0.60; trans/genderqueer youth: M = 3.58, SD = 0.96; cisgender female youth: M = 3.02, SD = 0.89) and that trans/genderqueer youth reported participating in a greater number of specific awareness-raising activities and events than cisgender male youth (p < .05, d = 0.61; trans/genderqueer youth: M = 2.62, SD = 1.47; cisgender male youth: M = 1.70, SD = 1.54).

Next we examined bivariate associations among our measures (Table 1). As hypothesized, higher levels of GSA involvement were associated with greater general civic engagement as well as involvement in advocacy and awareness-raising efforts specifically around sexual orientation and gender identity. Similarly, greater sense of agency was associated with greater general civic engagement and advocacy specific to sexual orientation and gender identity, but not the number of specific awareness-raising activities and events in which members had participated. Also as expected, levels of GSA involvement and agency were significantly associated. Table 1 includes correlations among all the measures and descriptive statistics.

## **Model Testing**

In Model 1, after adjusting for covariates, greater GSA involvement was associated with greater overall civic engagement ( $\beta$  = 0.52; 95% CI = 0.41, 0.64; see Table 2 for all estimated effects). Similarly, greater GSA involvement was associated with engaging in more LGBTQ-specific advocacy efforts ( $\beta$  = 0.34; 95% CI = 0.12, 0.56; see Table 3 for all estimated effects). Finally, greater GSA involvement was associated with engaging in more LGBTQ-specific awareness-raising activities ( $\beta$  = 0.29; 95% CI = 0.05, 0.53; see Table 4 for all estimated effects). For all three of these associations, we found no evidence of effect modification by sexual orientation or gender identity, indicating that the association between GSA involvement and the three indicators of civic engagement did not differ significantly for LGBQ and heterosexual youth, nor did they differ significantly for cisgender female, cisgender male, or trans/genderqueer youth.

Next, we tested whether the association between level of GSA involvement and the three indicators of civic engagement was partially mediated through greater sense of agency. These results are displayed in the Model 2 results for general civic engagement, advocacy, and awareness-raising efforts in Tables 2, 3, and 4, respectively. As displayed in Model 2 in Table 2, agency was significantly associated with civic engagement ( $\beta$  = 0.28; 95% CI = 0.17, 0.38), although the association between GSA involvement and civic engagement remained significant ( $\beta$  = 0.45; 95% CI = 0.34, 0.56). The mediation analysis indicated that agency accounted for 13.3% of the variance of the association between level of GSA involvement and civic engagement (95% CI = 6.1%, 26.4%; p < 0.01). As displayed in Model 2 in Table 3, greater levels of agency were associated with engaging in more advocacy efforts ( $\beta$  = 0.16; 95% CI = 0.03, 0.29); however, the mediation results were not significant. Finally, as displayed in Model 2 in Table 4, agency was not significantly associated with engaging in more awareness-raising activities and the mediation results were also not significant.

## **Discussion**

This study expands research on GSAs by examining the relationship between youth members' level of involvement in them and several indicators of civic engagement. As expected, GSA members who reported higher levels of involvement in their GSA reported greater general civic engagement as well as more involvement in advocacy and awareness-raising efforts specific to sexual orientation and gender identity. Further, the association between GSA involvement and general civic engagement, but not between GSA involvement and advocacy and awareness-raising, was partially mediated through feeling a greater sense of agency. Our results are consistent with PYD frameworks that emphasize how involvement in youth programs can be associated with youth thriving and contribution to society (Eccles & Gootman, 2002; Lerner et al., 2009, 2014; Silbereisen & Lerner, 2007).

## **GSA Involvement in Relation to Forms of Civic Engagement**

Given the ongoing context of social stigma and oppression faced by many LGBTQ youth (Meyer & Beyer, 2013; Russell et al., 2010), identifying factors that could promote civic engagement among them and their heterosexual cisgender allies is paramount. LGBTQ youth and allies can play an active role in countering oppressive practices, policies, and systems in their own environments (Russell et al., 2010). Our findings add to those in the general youth program literature showing that greater involvement in youth settings is associated with various PYD indicators (Fredricks & Eccles, 2006; Gullan et al., 2013; Viau et al., 2015), to show that members who were more involved in their GSA also reported greater civic engagement – both in general and specific to addressing sexual orientation and gender diversity issues. Indeed, these significant correlations were moderate in size. Also, the associations remained significant in the full model, even after adjusting for other factors.

The significant associations between GSA involvement and forms of civic engagement are important to note in light of existing knowledge that many LGBTQ youth feel unsafe in accessing other youth programs in or outside of school and the absence of attention to issues of diversity and social justice in such programs (Gill et al., 2010; Horn et al., 2009; Kosciw et al., 2016). Similarly, whereas some studies have documented that youth programs promote civic engagement in general (Fredricks & Eccles, 2006; Gullan et al., 2013; Viau et al., 2015), they have not considered whether this includes efforts to address discrimination and social inequality. Our results suggest that GSAs are settings with the potential to enhance members' capacity to be active and engaged citizens in this manner.

By considering variability among GSA members in their involvement and civic engagement, our study expands significantly upon extant research that has focused on basic differences between members and nonmembers. Notably, by considering variability along several concrete indices of GSA involvement, our findings highlight factors that could be targeted for future work among members. For instance, in line with some youth program findings (Akiva et al., 2014), GSA advisors could work to increase members' active involvement in meetings, projects, leadership roles, and discussions, as well as encourage their contribution to decision-making, thus moving beyond basic attendance.

There were no sexual orientation differences in general civic engagement but LGBQ members did report more advocacy and awareness-raising specific to sexual orientation and gender identity issues than heterosexual members. This distinction for sexual orientation- and gender identity-specific civic participation suggests the particular relevance of GSAs as a space where LGBQ youth can address issues that directly affect them (Griffin et al., 2004; Poteat et al., 2015a; Russell et al., 2009; Toomey & Russell, 2013).

The strength of association between level of GSA involvement and forms of civic engagement did not differ for LGBQ and heterosexual members, nor did it differ on account of gender identity. Heterosexual and cisgender members may have felt equally galvanized as LGBQ and transgender members to be civically engaged through their GSA involvement for several reasons. First, their involvement may have put them in greater contact with LGBTQ peers and fostered stronger connections with these peers. This would align with other work showing that heterosexual youth with sexual minority friends report greater support for sexual minorities (Heinze & Horn, 2009). Second, GSAs may have provided similar opportunities for both LGBTQ and heterosexual cisgender members to address LGBTQrelated issues. Indeed, GSAs are explicitly intended to bring together both LGBTQ and allies to work collaboratively against discrimination and to promote equality (Griffin et al., 2004). These opportunities may have been equally empowering for allies and LGBTQ youth and led them to be more civically engaged in their broader community and in awarenessraising and advocacy efforts around sexual orientation- and gender-identity specific issues. These results also indicate an opportunity to closely consider ways in which heterosexual and cisgender ally youth are included in the mission and functions of GSAs (Lapointe, 2015; Scheer & Poteat, 2016), while still maintaining a focus on supporting the needs of LGBTQ youth for whom this space is important.

## Sense of Agency as a Mediator of GSA Involvement and Civic Engagement

The association between level of GSA involvement and general civic engagement in the broader community was partly mediated through youth feeling a greater sense of agency. These significant findings – including the bivariate associations between GSA involvement and agency, between agency and civic engagement, and the mediated associations - align with processes stipulated within PYD conceptual models (Eccles & Gootman, 2002; Lerner, 2009, 2014). Specifically, these models propose that resources that build upon youths' strengths will promote thriving (e.g., the "Five Cs" of competence, confidence, connection, character, and caring; self-efficacy; empowerment), which will go on to increase youths' likelihood of making contributions to society (Lerner et al., 2009, 2014). In addition, our findings add to the empirical literature indicating that sense of agency is an asset that youth programs based in PYD seek to cultivate (Larson & Angus, 2011), and that constructs similar to agency (e.g., self-efficacy and competence) are associated with civic engagement (Hope & Jagers, 2014; Youniss et al., 2002). Our mediation findings could assist GSAs in identifying more immediate psychological outcomes (e.g., sense of agency) to promote among members that could eventually lead them to act as engaged citizens outside of the immediate GSA setting. At the same time, however, our cross-sectional findings are limited in showing the relative strength of this specific directional process among these variables. Therefore, having established these significant associations, it would be important for future

longitudinal research to consider whether ongoing GSA involvement does indeed promote an increased sense of agency as a precursor that ultimately leads youth to become even more engaged in their communities. Alternatives to this process should also be considered: some youth who are already more civically engaged in general may have a stronger propensity to become more involved in the GSA. In addition, it would be important to account for other possible contributing factors that might explain variability in both civic engagement and GSA involvement (e.g., individual characteristics such as extraversion or a general propensity to be involved in organizations or activities).

Agency did not mediate the association between greater GSA involvement and advocacy or participation in a greater number of specific awareness-raising activities or events around sexual orientation or gender identity (e.g., National Coming Out Day, Ally Week, decorating school areas). It is possible that some of these specific activities and events were tied directly to GSA meetings (e.g., in planning them or completing parts of them). If so, then even youth who felt a weaker sense of agency may have been able to participate in more of these activities and events as part of a collective group effort that would not require as much self-initiation or individual goal-setting and pursuit (i.e., aspects of greater individual sense of agency). In sum, greater GSA involvement may directly relate to youths' involvement in more advocacy and awareness-raising around sexual orientation and gender identity issues through their GSA, and it may also indirectly relate to broader civic engagement in their community by building youths' sense of agency. Again, future longitudinal research would be important to test for these potential processes and the relative size of associations between these variables as they predict one another over time.

In relation to our covariates, whereas membership duration and age had significant bivariate associations with forms of civic engagement, these associations were either weaker or no longer significant in the full models. It is possible that, over time, growing older and becoming more senior members of the GSA lead some youth to be more actively involved in their GSA and to feel a greater sense of agency and have more opportunities for civic engagement. These additional potential mediating processes warrant greater attention with longitudinal data.

#### Strengths, Limitations, and Future Directions

Expanding beyond the extant attention in the GSA literature to patterns of lower student health risks tied to GSA presence or basic membership, the current study focused on forms of civic engagement as major youth behavioral assets. Further, we gave explicit attention to variability among members of GSAs and factors related to their variability in these actions. This allowed us to consider the heterogeneity of youth members and capture greater nuance in their experiences within GSAs. Thus, we were able to identify a more refined understanding of, and specific implications for, the connection between GSA involvement and civic engagement. In addition, the sample was drawn from a number of GSAs that represented economically and geographically diverse regions of Massachusetts. Further, participants were high school students reporting their current experiences, thereby avoiding limitations of retrospective recall among adults in some prior GSA studies.

There are also several limitations to this study that future research should address. First, and most importantly, the data were cross-sectional. Thus, although our proposed models were based on extant theory and research, it is not possible to determine the relative size and directionality of effects with our data. Longitudinal or intervention evaluation data would be necessary to identify whether GSA involvement promotes increased civic engagement over time and the mechanisms by which it may do so, to compare this process to the alternative that initial civic engagement may lead to greater GSA involvement, and to control for other contributing factors. In addition, the measures were phrased in the present tense. Future research should tease out the timing of such activities in adolescents' development. Second, data were not available on youths' involvement in other organizations that might also contribute to civic engagement in general or specific to issues of diversity and social justice. Future research should consider how involvement in GSAs might coincide with involvement in other settings to promote these forms of civic engagement and other desired outcomes. Additionally, participants were predominantly White and recruited from Massachusetts, and thus their experiences may not be as generalizable to youth of different racial or ethnic backgrounds, or youth from other geographic regions of the country.

#### **Conclusions**

Fostering civic engagement among youth can provide them with a number of immediate and long-term benefits (Busseri et al., 2006; Feldman et al., 2012). The current study demonstrated significant associations between GSA involvement level and forms of civic engagement, including efforts to counter discrimination and raise others' awareness of LGBTQ issues. Our findings highlight the promising role that GSAs could play in building civic engagement capacity among their members. Ultimately, as active and engaged citizens, LGBTQ youth and their allies could play a major role in challenging oppressive systems and promoting social justice for LGBTQ individuals in society.

## **Acknowledgments**

Author note. 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.

#### References

- Akiva T, Cortina KS, Smith C. Involving youth in program decision-making: How common and what might it do for youth? Journal of Youth and Adolescence. 2014; 43:1844–1860. [PubMed: 25223360]
- Baunach DM. Changing same-sex marriage attitudes in America from 1988 through 2010. Public Opinion Quarterly. 2012; 76:364–378.
- Busseri MA, Rose-Krasnor L, Willoughby T, Chalmers H. A longitudinal examination of breadth and intensity of youth activity involvement and successful development. Developmental Psychology. 2006; 42:1313–1326. [PubMed: 17087563]
- Cicognani E, Zani B, Fournier B, Gavray C, Born M. Gender differences in youths' political engagement and participation. The role of parents and of adolescents' social and civic participation. Journal of Adolescence. 2012; 35:561–576. [PubMed: 22032976]
- Crocetti E, Jahromi P, Meeus W. Identity and civic engagement in adolescence. Journal of Adolescence. 2012; 35:521–532. [PubMed: 21868083]

Damon W. What is positive youth development? The 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 and 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]
- Eccles, JS., Gootman, JA., editors. Community programs to promote youth development. Washington, DC: National Academy Press; 2002.
- Feldman Farb A, Matjasko JL. Recent advances in research on school-based extracurricular activities and adolescent development. Developmental Review. 2012; 32:1–48.
- Flanagan CA, Faison N. Youth civic development: Implications of research for social policy and programs. Social Policy Reports. 2001; 15:3–14.
- Flanagan, CA., Syversten, AK., Stout, MD. CIRCLE Working Paper. Medford, MA: CIRCLE; 2007. Civic measurement models: Tapping adolescents' civic engagement; p. 55
- Fredricks JA, Eccles JS. Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal associations. Developmental Psychology. 2006; 42:698–713. [PubMed: 16802902]
- Gill DL, Morrow RG, Collins KE, Lucey AB, Schultz AM. Perceived climate in physical activity settings. Journal of Homosexuality. 2010; 57:895–913. [PubMed: 20665330]
- Gullan RL, Power T, Leff SS. The role of empowerment in a school-based community service program within inner-city, minority youth. Journal of Adolescent Research. 2013; 28:664–689. [PubMed: 25104875]
- 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.
- Heck NC, Livingston NA, Flentje A, Oost K, Stewart BT, Cochran BN. Reducing risk for illicit drug use and prescription drug misuse: High school gay-straight alliances and lesbian, gay, bisexual, and transgender youth. Addictive Behaviors. 2014; 39:824–828. [PubMed: 24531638]
- Heinze JE, Horn SS. Intergroup contact and beliefs about homosexuality in adolescence. Journal of Youth and Adolescence. 2009; 38:937–951. [PubMed: 19636737]
- Hertzmark, E., Pazaris, MJ., Spiegelman, D. The SAS MEDIATE Macro. Boston, MA: Channing Laboratory Brigham & Women's Hospital and Harvard Medical School; 2012.
- Hope EC, Jagers RJ. The role of sociopolitical attitudes and civic education in the civic engagement of Black youth. Journal of Research on Adolescence. 2014; 24:460–470.
- Horn SS, Kosciw JG, Russell ST. Special issue introduction: New research on lesbian, gay, bisexual, and transgender youth: Studying lives in context. Journal of Youth and Adolescence. 2009; 38:863–866. [PubMed: 19636731]
- Jenkins, K. CIRCLE Working Paper. College Park, MD: CIRCLE; 2005. Gender and civic engagement: Secondary analysis of survey data; p. 41
- Kosciw, JG., Greytak, EA., Giga, NM., Villenas, C., Danischewski, DJ. The 2015 National School Climate Survey: The experiences of lesbian, gay, bisexual, transgender, and queer youth in our nation's schools. New York: GLSEN; 2016.
- Lapointe AA. Standing "straight" up to homophobia: Straight allies' involvement in GSAs. Journal of LGBT Youth. 2015; 12:144–169.
- Larson R. Positive youth development, willful adolescents, and mentoring. Journal of Community Psychology. 2006; 34:677–689.
- Larson R, Angus RM. Adolescents' development of skills for agency in youth programs: Learning to think strategically. Child Development. 2011; 82:277–294. [PubMed: 21291442]
- Lerner, JV., Phelps, E., Forman, Y., Bowers, EP. Positive youth development. In: Lerner, RM., Steinberg, L., editors. Handbook of adolescent psychology: Vol. 1. Individual bases of adolescent development. 3rd ed. Hoboken, NJ: Wiley; 2009. p. 524-558.

Lerner RM, Wang J, Champine RB, Warren DJA, Erickson K. Development of civic engagement: Theoretical and methodological issues. International Journal of Developmental Science. 2014; 8:69–79.

- Liang B, Spencer R, West J, Rappaport N. Expanding the reach of youth mentoring: Partnering with youth for personal growth and social change. Journal of Adolescence. 2013; 36:257–267. [PubMed: 23267749]
- Liang KY, Zeger SL. Longitudinal data analysis using generalized linear models. Biometrika. 1986; 73:13–22.
- Macgillivray IK. Shaping democratic identities and building citizenship skills through student activism: Mexico's first gay-straight alliance. Equity & Excellence in Education. 2005; 38:320–330
- 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]
- Meyer IH, Beyer R. School-based gay-affirmative interventions: First amendment and ethical concerns. American Journal of Public Health. 2013; 103:1764–1771. [PubMed: 23948002]
- 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]
- Nakamura N, Pope M. Borders and margins: Giving voice to lesbian, gay, bisexual, and transgender immigrant experiences. Journal of LGBT Issues in Counseling. 2013; 7:122–124.
- 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.
- Poteat VP, Scheer JR, Marx RA, Calzo JP, Yoshikawa H. Gay-Straight Alliances vary on dimensions of youth socializing and advocacy: Factors accounting for individual and setting-level differences. American Journal of Community Psychology. 2015a; 55:422–432. [PubMed: 25855133]
- 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, Mundy-Shephard A, Perrotti J, Scheer JR, Shaw MP. Contextualizing Gay-Straight Alliances: Student, advisor, and structural factors related to positive youth development among members. Child Development. 2015b; 86:176–193. [PubMed: 25176579]
- 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, Kosciw J, Horn S, Saewyc E. Safe schools policy for LGBTQ students. Society for Research in Child Development Social Policy Report. 2010; 24:3–17.
- 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]
- Russell, ST., Toomey, RB., Crockett, J., Laub, C. LGBT politics, youth activism, and civic engagement. In: Sherrod, LR.Torney-Purta, J., Flanagan, CA., editors. Handbook of research on civic engagement in youth. Hoboken, NJ: Wiley; 2010. p. 471-494.
- Sánchez-Jankowski M. Minority youth and civic engagement: The impact of group relations. Applied Developmental Science. 2002; 6:237–245.
- Scheer JR, Poteat VP. Factors associated with straight allies' current engagement levels within Gay-Straight Alliances. Journal of Applied Developmental Psychology. 2016; 43:112–119.
- Sherrod, L. Civic engagement as an expression of positive youth development. In: Silbereisen, R., Lerner, R., editors. Approaches to positive youth development. London: Sage; 2007.
- Silbereisen, RK., Lerner, RM. Approaches to Positive Youth Development. London: Sage Publications; 2007.

Snyder CR, Sympson SC, Ybasco FC, Borders TF, Babyak MA, Higgins RL. Development and validation of the State Hope Scale. Journal of Personality and Social Psychology. 1996; 70:321– 335. [PubMed: 8636885]

- 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; 15:1–11.
- Toomey RB, Russell ST. Gay-Straight Alliances, social justice involvement, and school victimization of lesbian, gay, bisexual, and queer youth: Implications for school well-being and plans to vote. Youth & Society. 2013; 45:500–522. [PubMed: 26224893]
- Viau A, Denault AS, Poulin F. Organized activities during high school and adjustment one year post high school: Identifying social mediators. Journal of Youth and Adolescence. 2015; 44:1638–1651. [PubMed: 25404238]
- Walls NE, Kane SB, Wisneski H. Gay-Straight Alliances and school experiences of sexual minority youth. Youth & Society, 2010; 41:307–332.
- Waters, M., Pineau, MG., editors. The integration of immigrants into American society. Washington, DC: National Academy Press; 2015.
- Whitehead AL, Perry SL. Religion and support for adoption by same-sex couples: The relative effects of religious tradition, practices, and beliefs. Journal of Family Issues. 2016; 37:789–813.
- Youniss J, Bales S, Christmas-Best V, Diversi M, McLaughlin M, Silbereisen R. Youth civic engagement in the twenty-first century. Journal of Research on Adolescence. 2002; 12:121–148.
- Zaff J, Boyd M, Li Y, Lerner JV, Lerner RM. Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. Journal of Youth and Adolescence. 2009; 39:736–750.

## **Highlights**

- Gay-Straight Alliances (GSAs) have potential to enhance members' capacity to be active and engaged citizens in their communities.
- GSA members who reported higher levels of involvement in their GSA reported greater civic engagement, as well as advocacy and awareness-raising efforts specific to sexual orientation and gender identity.
- The association between GSA involvement and general civic engagement was partially mediated through a greater sense of agency among more involved members.

Table 1

Correlations among the Measures and Descriptive Statistics

	Civic engagement	Advocacy	Civic engagement Advocacy Awareness-raising GSA involvement Agency	GSA involvement	Agency	Age	Membership duration
Civic engagement	1						
Advocacy	.37 ***	I					
Awareness-raising	.29	.26 ***	1				
GSA involvement	.47 ***	.39 ***	.37 ***				
Agency	.37 ***	.21 ***	.10	.25 ***			
Age	.23 ***	.12*	*41.	.26 ***	.18**		
Membership duration	.18**	.21 ***	.40	.47	60.	.47	I
$M(\mathrm{SD})$	2.96 (1.03)	3.12 (0.96)	1.89 (1.47)	2.77 (1.00)	5.02 (1.70)	5.02 (1.70) 16.07 (1.14)	1.54 (1.23)
Possible range	1.00 - 5.00	1.00 - 5.00	0.00 - 8.00	0.00 - 4.00	1.00 - 8.00	I	
Actual range	1.00 - 5.00	1.00 - 5.00	0.00 - 8.00	0.00 - 4.00	1.00 - 8.00	1.00 - 8.00 $13.00 - 20.00$	0.00 - 5.00

Note. Averages and standard deviations (in parentheses) for the measures as well as the possible range of values and the actual range of reported values among participants are included in the final two rows of the table. Membership duration is reported in number of years.

p < .05, p < .05, p < .05,

Table 2

Models for Factors Associated with General Civic Engagement

	Model 1	Model 2
	β (95% C.I.)	β (95% C.I.)
Age	0.14 (0.02, 0.27)*	0.10 (0.00, 0.21)
Membership duration	-0.11 (-0.30, 0.07)	-0.09 (-0.25, 0.06)
Sexual orientation	-0.04 (-0.28, 0.19)	0.03 (-0.20, 0.26)
Gender identity		
Cisgender male	0.12 (-0.19, 0.43)	-0.05 (-0.32, 0.22)
Trans/genderqueer	0.04 (-0.29, 0.36)	0.01 (-0.35, 0.37)
Racial/ethnic minority	0.10 (-0.15, 0.34)	-0.01 (-0.24, 0.23)
GSA involvement level	0.52 (0.41, 0.64) ***	0.45 (0.34, 0.56)***
Agency	_	0.28 (0.17, 0.38) ***

Note. Model 1 tested the association between level of GSA involvement and general civic engagement, adjusting for age, membership duration, sexual orientation, gender identity, and race/ethnicity. Model 2 expanded on Model 1 to add GSA members' perceived sense of agency as a hypothesized mediator. Sexual orientation was coded as 0 = heterosexual and 1 = sexual minority; racial/ethnic minority was coded as 0 = White and 1 = racial/ethnic minority; gender identity was coded as 0 = cisgender female (referent), 1= cisgender male, 2 = trans/genderqueer.

Page 19

Poteat et al.

<sup>\*</sup>p < .05,

<sup>\*\*\*</sup> p < .001

Page 20

Table 3

Models for Factors Associated with Involvement in Advocacy Efforts

	Model 1	Model 2
	β (95% C.I.)	β (95% С.Ι.)
Age	0.03 (-0.06, 0.12)	0.00 (-0.10, 0.11)
Membership duration	0.01 (-0.12, 0.14)	0.02 (-0.12, 0.15)
Sexual orientation	0.12 (-0.14, 0.37)	0.12 (-0.14, 0.38)
Gender identity		
Cisgender male	0.09 (-0.19, 0.37)	0.00 (-0.26, 0.27)
Trans/genderqueer	0.33 (-0.11, 0.77)	0.29 (-0.16, 0.73)
Racial/ethnic minority	-0.14 (-0.36, 0.07)	-0.20 (-0.41, 0.01)
GSA involvement level	0.34 (0.12, 0.56)**	0.31 (0.10, 0.53) **
Agency	_	0.16 (0.03, 0.29)*

Note. Model 1 tested the association between level of GSA involvement and involvement in advocacy efforts, adjusting for age, membership duration, sexual orientation, gender identity, and race/ethnicity. Model 2 expanded on Model 1 to add GSA members' perceived sense of agency as a hypothesized mediator. Sexual orientation was coded as 0 = heterosexual and 1 = sexual minority; racial/ethnic minority was coded as 0 = White and 1 = racial/ethnic minority; gender identity was coded as 0 = cisgender female (referent), 1= cisgender male, 2 = trans/genderqueer.

Poteat et al.

p < .05,

<sup>\*\*</sup> p < .01,

<sup>\*\*\*</sup> p<.001

Table 4

Models for Factors Associated with Involvement in Awareness-Raising Activities

	Model 1	Model 2
	β (95% C.I.)	β (95% C.I.)
Age	-0.10 (-0.24, 0.04)	-0.07 (-0.21, 0.07)
Membership duration	0.49 (0.29, 0.70)***	0.50 (0.30, 0.70)
Sexual orientation	0.22 (-0.03, 0.48)	0.29 (0.04,0.54)*
Gender identity		
Cisgender male	-0.03 (-0.44, 0.38)	-0.13 (-0.50, 0.25)
Trans/genderqueer	0.55 (-0.07, 1.16)	0.40 (-0.25, 1.04)
Racial/ethnic minority	0.04 (-0.33, 0.42)	0.08 (-0.25, 0.42)
GSA involvement level	0.29 (0.05, 0.53)*	0.33 (0.06, 0.61)*
Agency	_	0.03 (-0.17, 0.23)

Note. Model 1 tested the association between level of GSA involvement and involvement in awareness-raising activities, adjusting for age, membership duration, sexual orientation, gender identity, and race/ethnicity. Model 2 expanded on Model 1 to add GSA members' perceived sense of agency as a hypothesized mediator. Sexual orientation was coded as 0 = heterosexual and 1 = sexual minority; racial/ethnic minority was coded as 0 = White and 1 = racial/ethnic minority; gender identity was coded as 0 = cisgender female (referent), 1= cisgender male, 2 = trans/ genderqueer.

\* p < .05,

\*\* p < .01,

\*\*\* p<.001