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**School Climate, Individual Support, or Both?**

**Gay Straight Alliances and the Mental Health of Sexual Minority Youth**

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**Abstract**

Using a sample of 284 sexual minority youth and young adults, this paper examines the relationships between mental health variables, the absence or presence of a gay straight alliance, and membership status in a gay straight alliance. The results suggest that the presence of a gay straight alliance in a school or college, rather than actual membership in the club, is correlated with decreased suicidality, while substance use and comfort with gender expression is correlated with membership specifically. Implications for social work practice and future research are suggested.

Key words: gay straight alliances, sexual minority youth, gay, lesbian, bisexual, transgender, mental health, suicidality, substance abuse, gender conformity

## **School Climate, Individual Support, or Both? Gay Straight Alliances and the Mental Health of Sexual Minority Youth**

One student-led attempt to improve the experiences of lesbian, gay, bisexual, transgender, and questioning (hereinafter referred to as sexual minority) youth and young adults in schools and colleges has been the formation of gay-straight alliances (GSAs) – “student-led clubs open to youth of all sexual orientations with the purpose of supporting sexual minority students and their heterosexual allies and also reducing prejudice, discrimination, and harassment within the school” (Goodenow, Szalacha, & Westheimer, 2006, p. 575). Over 4000 such groups now exist within U.S. schools and colleges, offering resources and support to the sexual minority student population and their allies (Gay, Lesbian, and Straight Education Network (GLSEN), n.d.; Miceli, 2005), and challenging institutionalized heterosexism (Sweat, 2005; Fetner & Kush, 2008).

Given the recent emergence of GSAs as a social phenomenon, scholarship on their impact is still in its early stages. What does exist largely suggests that GSAs are associated with mostly positive outcomes (Lee, 2002; Russell, Muraco, Subramaniam, & Laub, 2009; Shores, 2008; Walls, Freedenthal, & Wisneski, 2008; Walls, Kane, & Wisneski, 2010; see Hansen, 2009 for an exception). Some scholars have attributed positive outcomes to GSAs’ impact on school climate, others have focused on the social support given to sexual minority youth, and still others on both aspects (Friedman-Nimz et al., 2006; Garcia-Alonso, 2004; Mayberry, 2006; Ryan & Russell, 2001; Szalacha, 2001). However, little scholarship has actually compared whether the positive outcomes are associated with the presence of a GSA in a school, participation in the GSA, or both. To address this gap in the literature we examine the differences in several psychosocial and mental health outcomes, first by comparing sexual minority youth in schools

and colleges with GSAs with those in schools and colleges without GSAs, and then by comparing the same outcomes for sexual minority youth who are members of GSAs with those who are non-members.<sup>1</sup>

## **Literature Review**

### **School and College Experiences of Sexual Minority Youth**

The preponderance of studies on the school experiences of sexual minority youth have demonstrated that these youth experience extensive hostility and victimization in the hallways of middle and high schools (Morrow, 2006; Phoenix et al., 2006; Rhee, 2004; van Wormer & McKinney, 2003) and colleges (D’Augelli, 1992; Murphy, 2007) in the United States.

Depending on the type of victimization examined, studies suggest that between a third and two-thirds experience such harassment as a common part of their educational experience (Kosciw, 2004; Kosciw & Diaz, 2006; Walls, Hancock, & Wisneski, 2007; Walls et al., 2010).

Interpersonal victimization ranging from social isolation to vandalism to physical assault of sexual minority youth is so widespread and woven into the culture of U.S. schools that Human Rights Watch (2001) labels it “endemic.” In addition to physical harm, school-based victimization is linked to numerous negative psychosocial outcomes, both in terms of mental health and educational achievement. Experiences of victimization among sexual minority youth are correlated with increased symptoms of post-traumatic stress disorder, depression, anxiety, social phobias, and suicidality, as well as increased drug and alcohol use (D’Augelli, Grossman, & Starks, 2006; D’Augelli, Hershberger, & Pilkington, 2002; Menesini, Modena, & Tani, 2009; Tharp-Taylor, Haviland, & D’Amico, 2009; Walls et al., 2008). The psychological distress caused by victimization further acts as a barrier to strong academic achievement (Fernández-

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<sup>1</sup> Among those who attended schools and colleges where a GSA was present.

Castillo, & Gutiérrez-Rojas, 2009; Hamilton, Newman, Delville, & Delville, 2008; Rethon et al., 2009). Given the frequency of such victimization it is not surprising that academic outcomes such as GPAs and enrollment in more advanced coursework are lower for sexual minority youth than their heterosexual counterparts (Pearson, Muller, & Wilkinson, 2007).

Sexual minority youth cope with victimization by engaging in fear-based truancy (Walls et al., 2007; Walls et al., 2010), bringing weapons to schools (DuRant, Kahn, Beckford, & Woods, 1997; Webster, Gainer, & Champion, 1993), and dropping out of school (Remafedi, 1987; U.S. Department of Health & Human Services in Brookins-Fisher, 1995) at rates higher than heterosexual youth. Recent findings by Birkett, Espelage, and Koenig (2009), however, suggest that schools have the ability to decrease the negative outcomes for sexual minority youth through improving school climate and reducing homophobic victimization. Towards that goal, GSAs have emerged as a central strategy in holding schools accountable for providing a safe, welcoming environment conducive to learning for students of all sexual orientations (Blumenfeld, 1993).

### **Mental Health and Sexual Minority Youth**

In addition to being correlated with victimization, higher rates of mental health symptoms have been documented among members of the sexual minority community across a variety of samples with risk factors interacting in a syndemic fashion (Stall et al., 2003). This has included greater likelihood of depression or depression, anxiety, and post-traumatic stress disorder symptoms (Cochran, Sullivan, & Mays, 2003; Whitbeck, Chen, Hoyt, Tyler, & Johnson, 2004), non-suicidal self-injury (Walls, Laser, Nickels, & Wisneski, 2010), and suicidality (Grossman & D'Augelli, 2007; Russell, 2003). In addition to studies examining community samples, this pattern of increased psychosocial risks appears among homeless sexual minority youth

(Gangamma, Slesnick, Toviessi, & Serovich, 2008; Tyler, 2008), those who utilize social services (Walls et al., 2008), and adult gay men and lesbians (Cochran & Mays, 2009).

Scholarship also suggests higher rates of substance use and addiction among members of the sexual minority community (McCabe, Hughes, Bostwick, West, & Boyd, 2009; Trocki, Drabble, & Midanik, 2009).

Numerous scholars have, however, cautioned against interpreting these findings as indicating a higher base level of psychopathology among members of sexual minority communities as compared to heterosexual community members. Rather, they argue, the higher rates of mental health issues arise from having to cope with living in a heterosexist context that is hostile to the development of a healthy sexual identity and self-image (Hatzenbuehler, Nolen-Hoeksema, & Dovidio, 2009; Reed, Prado, Matsumoto, & Amaro, 2010).

### **Impact of GSAs**

While literature on GSAs is limited, what does exist has been primarily associated with positive outcomes, arguing that the student groups are an important strategy to address issues faced by sexual minority youth and young adults in educational institutions (Kilman, 2007; Perrotti & Westheimer, 2001). In Lee's (2002) qualitative study, themes emerged indicating that GSAs had positive impacts on academic performance, the sense of belonging to the school community, relationships at school and with family members, feelings of safety at school, and comfort with one's sexual orientation. Additionally, it appeared that GSAs helped students involved in them to recognize the connection between their current academic performance and their future career goals.

In addition to the improved feelings of safety associated with GSAs (GLSEN, 2003; Lee, 2002; Shore, 2008; Walls et al., 2010), reduction of social isolation for sexual minority youth is

one of the other consistently documented outcomes of GSAs and similar support groups (Cohen, 2005; Cooper-Nichols, 2007; Dietz & Dettlaff, 1997; Doppler, 2001; Hecht, 1998; Kiedman, 2002; Mayberry, 2006). Both of these documented patterns may partially explain the decreased likelihood of fear-based truancy (DuRant, Krowchuk, & Sinal, 1998; GLSEN, 2003) and dropping out of school (Walls et al., 2010), as well as increased feelings of belonging (Sadowski, 2005) associated with the presence of GSAs.

In terms of academic achievement, GSAs have been associated with improved academic performance (Lee, 2002), and improved GPAs (Walls et al., 2010). In their examination of school engagement among sexual minority youth and young adults, Seelman and colleagues (in press) found that the positive relationship between school engagement and GPA is stronger in schools with GSAs than in schools without GSAs for sexual minority youth. These findings suggest that GSAs may not only be a protective factor against certain psychosocial risks, but may also act as a catalyst that strengthens the impact of other protective factors such as school engagement.

In our previous work comparing the impact of the presence of a GSA in a school on educational achievements and psychosocial risks with the impact of membership in a GSA on those same risks (Walls et al., 2010), we found that both the presence of a GSA and membership in a GSA were associated with improved academic achievements (lower likelihood of dropping out, and higher GPA). However, membership in a GSA was not associated with increases in feelings of safety, decreases in fear-based truancy, or increases in the likelihood of knowing of a safe adult at school, while all three were associated with the presence of a GSA in the school. Neither the presence of a GSA nor membership in a GSA were associated with decreases in the likelihood of victimization at school. The pattern of these findings led us to suggest that GSAs as

a protective factor appeared to be operating on a campus climate level in some ways (subjective feelings of fear), and as combined social support and campus climate level factor in other ways (academic achievement). No unique associations emerged that were only correlated with social support (GSA membership). The overall pattern led us to raise the question as to whether a similar pattern would emerge looking at mental health-related psychosocial risks: Is the presence of a GSA and/or membership in a GSA differentially associated with decreased mental health risks?

## **Method**

### **Participants**

Rainbow Alley – a program of The Gay, Lesbian, Bisexual, and Transgender Community Center of Colorado (The Center) – provides support, education, advocacy, youth leadership and social activities for sexual minority youth and their allies. Support is provided through open-topic groups facilitated by trained volunteers, informal case management, peer-to-peer support programming, and a drop-in center. Educational support includes access to homework assistance, GED preparation guides, and basic computer skills trainings. Social activities have included talent nights, drag shows, dinner and movie nights, and annual events like prom and weekend camping trips. The program is built on a youth-adult partnership model whereby staff members engage youth in decision-making roles for programming, policies, and administrative changes.

As part of its annual programmatic evaluation, program staff at Rainbow Alley conduct a survey of youth. Historically administered as a pen and paper survey, the survey had targeted only youth receiving services at Rainbow Alley. In 2006, staff decided to utilize an online survey format, and to make the survey available to a wider audience of sexual minority youth to better understand the social service needs of Colorado's sexual minority youth who were not receiving



services in order to provide direction for future program development. As such, youth were recruited to participate in the survey through a number of activities. Staff directly requested that youth receiving services at Rainbow Alley take part in the survey, explaining that participation was voluntary, and that decisions not to participate would not influence the youth's relationship with the program. Additionally, subjects were recruited at a number of social events where large groups of sexual minority youth could be found, and to broaden participation beyond Colorado, survey information was mailed to numerous community-based agencies in the U.S. that work with sexual minority youth. Finally, information about the survey was prominently displayed on The Center's webpage with a link inviting sexual minority youth and young adults to participate to allow those not associated with youth-serving agencies to access the survey.

The online survey consisted of ten screens, each made up of four to fifteen questions regarding a specific topic, and took approximately 20 minutes to complete. Topics included school experiences, mental health issues, identity, levels of outness, drug and alcohol usage, among others. Measures were modeled after questions from the National Youth Risk Behavior Surveillance survey (Centers for Disease Control and Prevention, 2004) and the GLSEN 2003 National Climate Survey (Kosciw, 2004). Data were collected anonymously with no identifying information collected and all respondents had to electronically sign a consent form prior to completing the survey. Approval was obtained for secondary data analyses by the University of Denver's Institutional Review Board.

The full sample consists of 306 youth who identify as gay, lesbian, bisexual, transgender, questioning, or queer, between the ages of 13 and 22 who self-selected to participate in the Center's online survey. Of those, 22 were dropped because examination of the data indicated that they were missing data for more than one variable of interest to this study. This resulted in a

sample size of 284 participants who had taken and completed the majority of the survey, and who were either missing no data or were missing data only on one variable. Multiple imputation by chained equations (van Buuren, Boshuizen, & Knook, 1999) was used to address the remaining missing values.

## Measures

Respondents were asked to indicate their age, and to identify their gender with five potential responses: *female, male, trans/male, trans/female, self identify/ other*. For race/ethnicity, respondents were given the options of describing themselves as *American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino/Latina, Native Hawaiian or other Pacific Islander, White, or Biracial/Multiracial*.

Three questions examining depressed feelings and suicidal thoughts and behaviors were included in the analyses. The first asked about depressed feelings: “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some of your usual activities?” with a yes/no response set. The second asked, “During the past 12 months, did you ever seriously consider attempting suicide?”, again with a yes/no response set. The final question in this cluster asked about suicide attempts, “During the past 12 months, how many times did you attempt suicide?” with a response set of *0 times, 1 time, 2 or 3 times, 4 or 5 times, and 6 or more times*. The suicide attempt responses were recoded into a dichotomous variable indicating whether or not the respondent had ever attempted suicide or not in the past 12 months.

Responses to four questions asking about drug and alcohol usage were included in this study. The first two inquired about alcohol and marijuana usage, “During the past 30 days, on how many days [did you have five or more drinks of alcohol in a row, that is, within a couple of

hours?] or [did you use marijuana?]" and had a response set of *0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10 to 19 days, 20 to 29 days, and every day*. Since both variables capture recent usage, both were recoded to a dichotomous variable to indicate whether or not the respondent had had more than five drinks in one sitting or had used marijuana in the past month. To capture usage of other drugs, respondents were asked, "During your life, which best describes your usage of each of the following drugs? Cocaine (powder, crack, or freebase), Methamphetamines (meth, speed, crystal, crank, ice), Inhalants (sniffed glue, aerosol cans, paints)" with a response set of *I have never used this drug, I have tried this drug once or twice, I have used this drug occasionally, I have used this drug frequently, and I have used this drug a lot*. Because the variables for cocaine, methamphetamine, and inhalant usage were for lifetime usage, they were not recoded into dichotomous variables, but were left in ordinal form.

The question regarding the respondent's feelings about their gender expression was stated as, "Which of the following best describes how you feel about your femininity/masculinity?" with a response set of *Strongly wish I were more feminine, Somewhat wish I were more feminine, Very happy with how I am, Somewhat wish I were more masculine, and Strongly wish I were more masculine*. A new dichotomous variable was derived from the responses to indicate whether or not the respondent wished they were more gender conforming. For example for females, those who indicated that they *somewhat wish* or *strongly wish* that they were more feminine were coded as a one, and the opposite pattern was coded as a one for males.

Finally to capture information about gay straight alliances, two questions were used. The first asked, "Does [did] your school have a gay/straight alliance?" with a response set of *yes, no, and I don't know*. Respondents who indicated that they did not know if their school had a gay straight alliance were recoded as noes for the purpose of analyses based on the assumption that

their school either did not have a gay straight alliance or if their school had a gay straight alliance they were not aware of its presence and therefore it was not a resource for them (Walls et al., 2008). A second question asked, “Are [were] you a member of your school’s gay/straight alliance?” with a yes/no response set. From these two questions, a variable was derived to indicate which of the following three categories the respondent fell into: (a) attended a school without a GSA; (b) attended a school with a GSA, but was not a member; or (c) attended a school with a GSA and was a member.

## **Results**

The analyses of the survey responses were conducted using chi-square tests to determine independence between the variables of interest and the GSA variables. Initial analyses were conducted using a three category GSA variable (no GSA, GSA but not a member, GSA member), which were then decomposed into two separate chi-square tests (Iverson, 1979) comparing (a) respondents who attended schools and colleges with GSAs with those who attended schools and colleges without GSAs, and (b) GSA members and GSA non-members in schools and colleges with GSAs. For ease of interpretation of analyses, only the results of the chi-square decomposition are reported as the results of the analyses using the three category GSA variable did not add additional relevant information. All analyses were conducted using Stata 9.2.

### **Descriptive Statistics**

Table 1 contains information regarding the demographic makeup of the sample. Females made up 52.8% ( $n=150$ ) of the sample, and respondents who identified as transgender made up 6.3% ( $n=18$ ) of the sample. A majority (72.9%,  $n=201$ ) of the respondents identified as White or

Asian<sup>2</sup>, 11.6% ( $n=28$ ) identified as bi- or multi-racial, 6.0% ( $n=17$ ) as African American, 6.3% ( $n=18$ ) as Latino/a, and 3.2% ( $n=9$ ) as Native American or Hawaiian Native. Ages ranged from 13 years to 22 years old with a mean age of 17.9 ( $SD=2.1$ ) and a median age of 18.0.

Of the sample, 82.0% ( $n=233$ ) were currently in school or college, with the remaining 18.0% ( $n=51$ ) no longer attending school or college because of having completed their education (either high school or college dependent upon their individual educational goal). In terms of those currently attending school, slightly more than 2/3<sup>rd</sup>s (68.7%,  $n=160$ ) were between 8<sup>th</sup> and 12<sup>th</sup> grades, and 1/3<sup>rd</sup> (31.3%,  $n=73$ ) were attending college.

| TABLE 1 ABOUT HERE |

Shifting now to the mental health variables of interest in this study we find that 55.5% ( $n=167$ ) reported that they had been so sad or hopeless for two weeks or more that they stopped doing typical activities in the last year, and 39.8% ( $n=113$ ) reported that they had seriously considered suicide in the past 12 months. In the sample, 23.6% ( $n=67$ ) reported that they had attempted suicide one or more times in the past year. See Table 2 which includes percentages in subsamples based on GSA status category as well.

| TABLE 2 ABOUT HERE |

With regard to alcohol and drug usage, 34.5% ( $n=98$ ) reported drinking five or more drinks in one sitting at least once in the last 30 days, and 29.2% ( $n=83$ ) reported using marijuana in the previous month. Slightly more than 81% ( $n=231$ ) reported that they had never used cocaine, 88.4% that they had never used methamphetamines, and 78.2% that they had never used inhalants in their lives.

Almost one-fourth (23.6%,  $n=67$ ) of the respondents indicated that they either somewhat

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<sup>2</sup>Asians made up a very small number of the sample and were not significantly different than Whites on any of the variables of interest. As such the two categories were combined.

or strongly wished that they were more gender conforming. For males, this was slightly higher (30.0%,  $n=33$ ) while it was lower for females (18.5%,  $n=27$ ). Transgender respondents fell in between (22.2%,  $n=4$ ).

Finally with regard to the GSA status category variable, 41.6% ( $n=118$ ) reported attending schools where there was not a GSA. Slightly more than one-fifth (20.8%,  $n=59$ ) reported attending schools where there was a GSA of which they were not a member. And, 37.7% ( $n=107$ ) reported being a member of the GSA at their school.

### **The Presence of GSAs**

In this section we examine whether relationships emerge between the variables of interest and whether or not there was a GSA in the school or college the respondent attended. Table 3 summarizes the findings of this section.

| TABLE 3 ABOUT HERE |

### **Depressed mood and suicidality**

We find no significant difference in depressed mood based on the presence or absence of a GSA in the school attended by the respondent ( $\chi^2=0.75$ ,  $p=.688$ ). A marginally significant relationship does emerge regarding seriously considering suicide in the last twelve months with 45.8% of respondents in schools without GSAs reporting seriously considering suicide and only 35.5% of respondents in schools with GSAs doing so ( $\chi^2=3.01$ ,  $p=.083$ ). For respondents in schools without GSAs, 33.1% report actually attempting suicide in the past year, while 16.9% report attempting in schools with GSAs. This relationship is statistically significant ( $\chi^2=10.02$ ,  $p=.002$ ).

### **Alcohol and other drugs**

Turning our attention to relationships with use of alcohol and other drugs, we find that no

significant differences emerge between respondents who attend schools with GSAs and those who attend schools without. Approximately a third (33.9%) of the respondents in schools without GSAs reporting drinking more than five alcoholic drinks in one sitting in the past month, while 34.9% of respondents in schools with GSAs reported the same ( $\chi^2=0.33, p=.856$ ).

Percentages were, likewise, similar for use of marijuana in the last 30 days, with 29.7% of those in schools without and 28.9% of those in schools with GSAs reporting this behavior. Among those who attend schools without GSAs, we find that 79.7% report never using cocaine, 86.4% report never using methamphetamine, and 82.2% report never using inhalants. Corresponding to those percentages are 82.5% (cocaine), 89.8% (methamphetamine), and 75.3% (inhalants) for those in schools with GSAs who report never using. None of these relationships reach a level of significance ( $\chi^2=1.70, p=.790$  for cocaine;  $\chi^2=4.28, p=.369$  for methamphetamines, and  $\chi^2=6.72, p=.152$  for inhalants).

### **Gender conformity**

We find no significant difference regarding wanting to be more gender conforming ( $\chi^2=0.38, p=.540$ ) between those who attend schools without GSAs (25.4%) and those who attend schools with GSAs (22.3%).

### **GSA Membership**

We now turn our attention to this same set of mental health and psychosocial variables, but rather than examining relationships based on whether a GSA is present in the school attended by the respondent, we examine whether significant relationships emerge based on membership status, that is, whether the respondent is a member of the GSA or not? To avoid confounding the results with the impact of whether or not a GSA exists in the school, we have restricted these analyses to the portion of the sample that attends a school or college where a GSA exists

( $n=166$ ). Given that our sample size is smaller, we have reduced statistical power to detect actual relationships that might exist. Results for this section are reported in Table 4.

| TABLE 4 ABOUT HERE |

### **Depressed mood and suicidality**

We find no significant relationship between depressed mood, considering suicide, or attempting suicide and membership in a GSA. Of those who were not members, 54.2% reported feelings of depression, while 58.9% of those who were GSA members reported the same ( $\chi^2=0.33, p=.563$ ). Similarly, 40.7% of non-members and 32.7% of members ( $\chi^2=1.05, p=.305$ ) report considering suicide while 20.3% of non-members and 15.0% of members ( $\chi^2=0.79, p=.375$ ) report actual suicide attempts.

### **Alcohol and other drugs**

Among non-member respondents, 39.0% reported drinking more than five alcoholic drinks in one sitting in the past month, while 32.7% of member respondents reported the same, a relationship that was non-significant ( $\chi^2=0.66, p=.417$ ). However, the relationship between membership and using marijuana in the last 30 days was statistically significant ( $\chi^2=6.16, p=.013$ ) with 40.7% of non-members and 22.4% of members reporting use. Similarly, the relationship between membership and lifetime use of cocaine reached a level of statistical significance ( $\chi^2=13.43, p=.009$ ). We found that 76.3% of non-member respondents and 86.0% of member respondents reporting that they had never used cocaine in their lives. For lifetime methamphetamine usage, 89.8% of non-members and 89.7% of GSA members reported never using the substance, a relationship that is not significant ( $\chi^2=6.94, p=.139$ ). For GSA non-members, 69.5% reported never using inhalants, while 78.5% of GSA members reported never using inhalants which was, again, non-significant ( $\chi^2=4.89, p=.298$ ).



### **Gender conformity**

Turning our attention to our final variable of interest, we find a significant relationship between GSA membership and strongly wishing to be more gender conforming. Among non-members, 37.3% report wishing they were more gender conforming, while only 14.0% of GSA members report the same ( $\chi^2=11.89, p=.001$ ).

## **Discussion**

### **Limitations**

The primary limitation of this study is the non-representativeness of the sample. While the sample does include sexual minority youth and young adults from a number of locations in the U.S., there is an over-representation of Colorado youth as well as youth from the Denver metropolitan area. Likewise because of the way in which youth were recruited into the study – through predominately urban-based youth organizations – we would also anticipate that sexual minority youth from rural areas and those who are not associated with social service organizations are under-represented.

An additional limitation of the convenience sample is that it consists of youth who self-identify as sexual minority youth. Same-sex attracted youth who have not yet – or may never – identify as gay, lesbian, bisexual, or transgender are not likely to be included in this sample (Savin-Williams, 2005). Same-sex attracted youth – whether or not they identify as sexual minority youth – who are not comfortable accessing social services or who do not need the services offered because of greater support in their life are less likely to be included as well. These limitations mean that the findings here may not necessarily generalize to the overall same-sex attracted youth population. It is only through replication with different samples, particularly those that are representative, that the degree of restriction on generalizability will become

apparent.

One additional consideration is the retrospective reporting of educational experiences for those who had completed their educational goals or had dropped out of school with reporting of more recent mental health outcomes. Additionally, while the largest segment of the sample were attending junior high or high school, approximately 1/3<sup>rd</sup> of those students still in school were attending college. While the college environment may differ in significant ways from the secondary educational environment, sexual minority students continue to face similar psychosocial risks (D'Augelli, 1992; Murphy, 2007) and support in the form of GSAs are also found at the college level. Future research, with larger samples, would be helpful to begin to understand how school experiences for sexual minority youth differ across these two different educational contexts.

Finally, because of the cross-sectional nature of these data, these findings do not allow us to understand causality. Future studies that are longitudinal in nature that examine these similar questions would be helpful in assessing causality.

### **Implications for Social Work Practice**

While previous work (Walls et al., 2010) found that membership in GSAs was associated only with improved academic performance, and not with subjective experiences of safety (fear-based truancy, feeling unsafe, and knowing a safe adult), our results here suggest that membership in GSAs may have some unique contribution to make in terms of developing social networks among sexual minority youth who are less likely to engage in use of substances, and to support more self-acceptance of gender expression. At the same time, the presence of GSAs does appear to be associated with decreased likelihood in suicidality among the youth, a finding that mirrors earlier findings using a different sample (Walls et al., 2008).

Combined, these results suggest a complex relationship between psychosocial risks and GSAs, with some appearing to be positively associated with GSAs' influence on campus climate, and others through GSAs' individualized social support. The results of this study and our previous analyses (Walls et al., 2010) seem to suggest – as other authors have theorized – that GSAs are likely to function at both the macro and micro levels (Friedman-Nimz et al., 2006; Garcia-Alonso, 2004; Mayberry, 2006; Ryan & Russell, 2001; Szalacha, 2001), all of which can have positive impact on the school experiences and mental health of sexual minority youth. Regardless of whether a school social workers' target for intervention is on the overall campus climate or on supporting individual sexual minority youth, GSAs appear to be one vehicle through which to do both – although it appears that they impact different psychosocial risks differentially. As such school social workers should encourage the initiation and development of GSAs in their commitment to the optimal mental health and academic achievement of sexual minority youth.

One particularly promising finding in this study was the higher rates of self-acceptance of one's gender expression for those who were members of GSAs compared to those who were not members. Given the documented relationship between gender variability and a number of psychosocial risks (Grossman & D'Augelli, 2006, 2007; Grossman, D'Augelli, Howell, & Hubbard, 2005), GSAs may be particularly helpful in supporting gender variant students come to greater levels of self-acceptance. School social workers should pay particular attention to the needs of gender variant sexual minority students who may experience an even higher likelihood of risk than the already elevated risk that all sexual minority students experience.

### **Implications for Future Research**

Future quantitative research on the impact of GSAs would greatly benefit from

longitudinal research to enable scholars to begin to examine causal relationships. A number of cross-sectional relationships have been documented in the literature (some of which have been replicated with different samples) to suggest that causal relationships are likely to exist and need to be explored.

One area of scholarship on GSAs that has continued to be overlooked is the role of context in explaining or mediating impacts. While numerous authors have documented the barriers and supports that can come into play in the development and maintenance of GSAs (Geroux & Sherman, 2008; Mayberry, 2006; Valenti & Campbell, 2009), little is known about how those barriers and supports impact the effectiveness of GSAs at either the campus climate or individual support levels. Context variables that may be important include the size of the GSA, how active it is, what types of activities it is involved in, and how it is perceived in the particular school context.

Finally, while difficult to obtain until greater numbers of nationally representative samples ask questions regarding sexual orientation, examination of these relationships with representative samples would signify an important step forward in understanding the impact of GSAs on various psychosocial risks.

### **Conclusion**

The recent emergence and proliferation of GSAs on the educational landscape in the U.S. appear to offer an exciting opportunity for school social workers and other educational staff to support greater academic achievement and mental health outcomes, decrease social isolation, and challenge the heterosexist environments that sexual minority youth and young adults must negotiate on a daily basis. In addition to their potential institutional and individual impact, involvement in GSAs also provides young people with an opportunity for civic and political

education that can lay the foundation for the skills needed for active participatory citizenry (Flanagan & van Horn, 2003). A generation of young people who have been involved in these efforts at personal and collective empowerment (Garcia-Alonso, 2004) to support social justice for sexual minority youth and young adults, may be the key to a not-too-distant future of greater equality for sexual minority youth.

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*Table 1. Descriptive Statistics: Demographics*

|                            | <b>Female</b>              | <b>Male</b>                 | <b>Trans</b>    |                         |                 |
|----------------------------|----------------------------|-----------------------------|-----------------|-------------------------|-----------------|
| <b>Gender</b>              | 52.8%                      | 40.9%                       | 6.3%            |                         |                 |
|                            | <b>Native<br/>American</b> | <b>African<br/>American</b> | <b>Latino/a</b> | <b>White/<br/>Asian</b> | <b>Bi/Multi</b> |
| <b>Race/<br/>Ethnicity</b> | 3.2%                       | 6.0%                        | 6.3%            | 72.9%                   | 11.6%           |

*Table 2. Descriptive Statistics: Percentage Reporting Experience, for Sample and by GSA Status*

|   | <b>Sample</b> | <b>No GSA</b> | <b>GSA,<br/>non-<br/>member</b> | <b>GSA,<br/>member</b> |
|---|---------------|---------------|---------------------------------|------------------------|
| <b>Depressed Mood</b>                         | 55.5%         | 61.0%         | 54.2%                           | 58.9%                  |
| <b>Consider Suicide</b>                       | 39.8%         | 45.8%         | 40.7%                           | 32.7%                  |
| <b>Suicide Attempt</b>                        | 23.6%         | 33.1%         | 20.3%                           | 15.0%                  |
| <b>Alcohol Usage<br/>(5 or more, 30 days)</b> | 34.5%         | 33.9%         | 39.0%                           | 32.7%                  |
| <b>Marijuana Usage (30 days)</b>              | 29.2%         | 29.7%         | 40.7%                           | 22.4%                  |
| <b>Cocaine Usage (lifetime)</b>               | 18.7%         | 20.3%         | 23.7%                           | 14.0%                  |
| <b>Methamphetamine Usage<br/>(lifetime)</b>   | 11.6%         | 13.6%         | 10.2%                           | 10.3%                  |
| <b>Inhalant Usage (lifetime)</b>              | 21.8%         | 17.8%         | 31.5%                           | 22.5%                  |
| <b>Wish More Gender Conforming</b>            | 23.6%         | 25.4%         | 37.3%                           | 14.0%                  |

Table 3. Tests of Difference: GSA Presence in School (n=284)

|   |                      | No GSA | GSA   | $\chi^2$ | p-value            |
|---|----------------------|--------|-------|----------|--------------------|
| <b>Depressed Mood</b>                         | <b>Yes</b>           | 61.0%  | 57.2% | 0.41     | .523               |
| <b>Consider Suicide</b>                       | <b>Yes</b>           | 45.8%  | 35.5% | 3.01     | .083 <sup>^</sup>  |
| <b>Suicide Attempt</b>                        | <b>Yes</b>           | 33.1%  | 16.9% | 10.02    | .002 <sup>**</sup> |
| <b>Alcohol Usage<br/>(5 or more, 30 days)</b> | <b>Yes</b>           | 33.9%  | 34.9% | 0.03     | .856               |
| <b>Marijuana Usage (30 days)</b>              | <b>Yes</b>           | 29.7%  | 28.9% | 0.02     | .892               |
| <b>Cocaine Usage (lifetime)</b>               | <b>Never</b>         | 79.7%  | 82.5% | 1.70     | .790               |
|   | <b>Once or Twice</b> | 10.2%  | 10.2% |          |                    |
|   | <b>Occasional</b>    | 4.2%   | 3.6%  |          |                    |
|   | <b>Frequent</b>      | 2.5%   | 2.4%  |          |                    |
|   | <b>A lot</b>         | 3.4%   | 1.2%  |          |                    |
| <b>Methamphetamine Usage<br/>(lifetime)</b>   | <b>Never</b>         | 86.4%  | 89.8% | 4.28     | .369               |
|   | <b>Once or Twice</b> | 2.5%   | 4.8%  |          |                    |
|   | <b>Occasional</b>    | 3.4%   | 2.4%  |          |                    |
|   | <b>Frequent</b>      | 2.5%   | 1.2%  |          |                    |
|   | <b>A lot</b>         | 5.1%   | 1.8%  |          |                    |
| <b>Inhalant Usage (lifetime)</b>              | <b>Never</b>         | 82.2%  | 75.3% | 6.72     | .152               |
|   | <b>Once or Twice</b> | 10.2%  | 16.9% |          |                    |
|   | <b>Occasional</b>    | 3.4%   | 6.0%  |          |                    |
|   | <b>Frequent</b>      | 0.9%   | 1.2%  |          |                    |
|   | <b>A lot</b>         | 3.4%   | 0.6%  |          |                    |
| <b>Wish More Gender<br/>Conforming</b>        | <b>Yes</b>           | 25.4%  | 22.3% | 0.38     | .540               |

Note: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , ^ $p < .10$



Table 4. Tests of Difference: GSA Membership (n=166)

|   |                      | Nonmember | Member | $\chi^2$ | p-value |
|---|----------------------|-----------|--------|----------|---------|
| <b>Depressed Mood</b>                         | <b>Yes</b>           | 54.2%     | 58.9%  | 0.33     | .563    |
| <b>Consider Suicide</b>                       | <b>Yes</b>           | 40.7%     | 32.7%  | 1.05     | .305    |
| <b>Suicide Attempt</b>                        | <b>Yes</b>           | 20.3%     | 15.0%  | 0.79     | .375    |
| <b>Alcohol Usage<br/>(5 or more, 30 days)</b> | <b>Yes</b>           | 39.0%     | 32.7%  | 0.69     | .417    |
| <b>Marijuana Usage (30 days)</b>              | <b>Yes</b>           | 40.7%     | 22.4%  | 6.16     | .013*   |
| <b>Cocaine Usage (lifetime)</b>               | <b>Never</b>         | 76.3%     | 86.0%  | 13.43    | .009**  |
|   | <b>Once or Twice</b> | 15.3%     | 7.5%   |          |         |
|   | <b>Occasional</b>    | 0.0%      | 5.6%   |          |         |
|   | <b>Frequent</b>      | 6.8%      | 0.0%   |          |         |
|   | <b>A lot</b>         | 1.7%      | 0.9%   |          |         |
| <b>Methamphetamine Usage<br/>(lifetime)</b>   | <b>Never</b>         | 89.8%     | 89.7%  | 6.94     | .139    |
|   | <b>Once or Twice</b> | 1.7%      | 6.5%   |          |         |
|   | <b>Occasional</b>    | 1.7%      | 2.8%   |          |         |
|   | <b>Frequent</b>      | 3.4%      | 0.0%   |          |         |
|   | <b>A lot</b>         | 3.4%      | 0.9%   |          |         |
| <b>Inhalant Usage (lifetime)</b>              | <b>Never</b>         | 69.5%     | 78.5%  | 4.89     | .298    |
|   | <b>Once or Twice</b> | 20.3%     | 15.0%  |          |         |
|   | <b>Occasional</b>    | 8.5%      | 4.7%   |          |         |
|   | <b>Frequent</b>      | 0.0%      | 1.9%   |          |         |
|   | <b>A lot</b>         | 1.7%      | 0.0%   |          |         |
| <b>Wish More Gender<br/>Conforming</b>        | <b>Yes</b>           | 37.3%     | 14.0%  | 11.89    | .001*** |

Note: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , ^ $p < .10$