LGB Students and School Sports: A Positive Youth Development Approach

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Abstract

This study investigates whether the relationship between participation in school-organized sports and youth development is similar for both heterosexual students and those who identify as gay, lesbian, or bisexual. Utilizing a survey of 72,004 high schoolers, results suggest sports participation enhances a sense of support and developmental skill for gay or lesbian students in a similar manner to heterosexual students, but the association is more moderate for bisexual students. Despite offering some benefits to LGB students, sports participation was associated with greater developmental challenges for LGB athletes as compared to LGB non-athletes instead of fewer challenges as experienced by their heterosexual athlete and non-athlete counterparts.

BACKGROUND

Decades of research have highlighted the positive impact participation in school-organized sports has on youth development. Engaging in school organized sports has a demonstrated positive relationship with academic performance (Bradley, Kean & Crawford, 2013; Dwyer, Sallis, Blizzard, Lazarus, & Dean, 2001; Eccles, Barber, Stone & Hunt, 2003) and elevated levels of academic resiliency (Peck, Roeser, Zarret & Eccles, 2008). Furthermore, student athletes tend to have greater psychological adjustment, lower levels of depression and externalizing behaviors, and positive relationships with their peers (Fredricks & Eccles, 2005, 2006). Given the well documented advantages of participation in school organized sports, it only makes sense to investigate whether these advantages are shared by all students. Specifically, in the present paper we explore the relationships between participation in school-organized sports for 9th and 11th grade students who identify as lesbian, gay, or bisexual (LGB) and the self-reported developmental challenges, supports, and skills they experience.

For many LGB students school is not a safe place. For too long schools have done too little to discourage the bullying, harassment, and social exclusion that arises due to a student's sexual orientation or gender expression (Rivers, 2000). In a nationwide survey of LGBTQ

students, over 70% frequently heard homophobic remarks, and 56.9% heard these types of remarks coming from teachers or other school staff (Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012). Bullying based on a student's sexual orientation or gender expression is common in schools (Mishna, Newman, Daley & Solomon, 2009), with over 81.9% of students reporting being verbally harassed and 38.3% reporting being physically harassed due to their sexual orientation during over the course of one academic year (Kosciw, et al., 2012). For many LGBTQ students in this situation avoiding school or classes is more desirable than facing these hostile situations, hence we can observe high rates of absenteeism for LGBTQ students (Kosciw, et al., 2012; Rivers, 2000). Sexual minority students also report very low levels of psychological well-being, such as levels of depression much lower than their heterosexual peers (Castro & Sujak, 2014; Wilkinson & Pearson, 2009), and alarmingly high instances of suicidal thoughts and attempts (Eisenberg & Resnick, 2006; Rivers, 2000).

Hutcheson and Tieso (2014) asked 12 LGBTQ university students to reflect on their experiences in high school. The most common coping strategies reported by these students related to finding a supportive peer group and adult, participating in extracurricular activities, and finding ways to develop their identities. Recent research on participation in school organized sports has highlighted that student athletes tend to perceive their school environment to be safer and more supportive than their non-athlete peers (Bulut, et al., 2015), factors that can be directly linked to those identified by the students in Hutcheson and Tieso's study. Therefore it is only logical to ask if these protective factors can be extended to student athletes who identify as LGB.

In many ways sports perpetuates heteronormative values (Wilkinson & Pearson, 2009), therefore it is possible that participation in school organized sports for sexual minority athletes may undermine the positive factors conveyed on their heterosexual peers. For example, male students who participate in the core sports such as football, baseball and basketball, tend to hold homophobic attitudes at higher rates than their non-athlete peers (Dawkins, 2012; Osborne & Wagner III, 2007; Roper & Halloran, 2007). These higher rates of homophobia may partially explain why students who identify as LGBTQ participate in sports at lower rates than their heterosexual peers (Calzo, Roberts, Corliss, Blood, Kroshus & Austin, 2014).

Cunningham and Sagas (2008) stressed the importance of more engaging and rigorous studies that explore the relationship between positive development and participation in sports for

LGBTQ students. The present study meets this criterion by utilizing a large sample of 9th and 11th grade students to address:

1. Is sports participation associated with gay or lesbian (GL) and bisexual (BI) students' perceptions of developmental support and self-reported developmental skills in a similar manner to heterosexual (HT) students?
2. Is sports participation associated with fewer developmental challenges for GL and BI students in equal proportion as for HT students?

METHODS

Procedure and Instrument

This study is a secondary analysis of data collected from the 2013 administration of the Minnesota Student Survey (MSS). The MSS is a statewide survey used to monitor trends in students' behaviors and thoughts related to academics, school climate, out-of-school activities, violence and safety, health, positive and risky behaviors, and family environment. The University of Minnesota Institutional Review Board Human Subjects Committee deemed this secondary data analysis as exempt status.

Participants

A total of 72,704 students in 9th and 11th grade answered the necessary MSS items for inclusion in this study. Students ranged in age from 13 – 19 years old with a mean of 15.5 years (*SD* = 1.12). Males (*n* = 36152) and females (*n* = 36552) each composed 50% of the sample with the sample being largely White (76%) followed by Multiracial (7%), Latino (6%), Asian (5%), Black (5%), and American Indian (1%). To determine LGB status, an item on the MSS asked students "Which of the following best describes you?" with the options Heterosexual (straight), Gay or Lesbian, Bisexual, or Not sure (questioning). Students who selected Not sure (questioning) or who did not answer the item were not included in the study. For the sample, 96% of students identified as HT (*n* = 69977), 3% as BI (*n* = 2111), and 1% as GL (*n* = 616). Students who reported participating in an organized school sport at least 1-2 times per week were classified as athletes while those who participated less than once a week were classified as non-athletes. This distinction was drawn because research demonstrated infrequent participation in sports produces a similar student profile as students with no sports participation (Linver, Roth, & Brooks-Gunn, 2009). The sample comprised of 49% athletes (*n* = 35882) and 51% non-athletes

(n = 36822). Analysis of missing data revealed that minority students were slightly underrepresented in the sample used, but there was no differences based on sexual orientation or sports participation.

Measures

From students' responses on MSS items, three scales of developmental support were created: perception teacher/school support, perception of general support, and sense of empowerment. Three scales of developmental skills were created: social competence, positive identity, and commitment to learning. Lastly, five scales of developmental challenges were devised: perception of school violence, perception of family violence, mental distress, bullying behavior, and being bullied. Table 1 displays the confirmatory factor analysis results, which indicate the scales had adequate model-data fit on at least one of the indices (Browne, 2006). For each scale, items were then calibrated and students scored using the Rasch measurement model using Winsteps 3.74 (Linacre, 2010). Student scores were standardized so subsequent analysis results could be interpreted in standard deviation units.

Statistical Analysis

Eleven separate regression models were constructed to determine the relationship between sports participation and sexual orientation on each of the developmental supports, skills, and challenges. Each model included two dummy variables for sexual orientation (one for GL and one for BI) with HT as the reference group and a dummy variable for sports participation with Non-Athlete as the reference group. Additionally, dummy variables for gender (Female as reference group) and student of color (White as reference group) were included to control for other factors relevant to identity development. The models also included two-way interaction terms for the two sexual orientation variables with each of the other identity variables.

RESULTS

As with previous studies (Calzo, et al., 2014), we found lower rates of participation in school sports amongst GL students (30%) and BI students (20%) as compared to HT students (50%).

Developmental Supports and Skills

Table 2 and Figure 1 contain results of the regression models for each developmental support and skill. Results indicate students identifying as a sexual minority were, on average,

.20 standard deviations (GL on teacher/school support) to .72 standard deviations (BI on empowerment) lower on measures of developmental support and skills than their HT peers when all other covariates are equal. These are typically considered small to moderate effects (Cohen, 1988). As expected, athletes were, on average, .20 sd to .36 sd higher than non-athletes on the measures with all other covariates equal. The interaction of identifying as both GL and as an athlete was not significant at the $\alpha = .05$ level for any of the supports or skills. This indicates that participating in school sports is equally beneficial for HT and GL students (Figure 1). Conversely, the interaction of identifying as both BI and as an athlete was significant for all five supports and skills. Unfortunately, the direction of the interaction suggests sports participation does not provide benefits to BI students to the same degree as it does for HT students, although BI athletes do still tend to have higher mean values of support and skill than BI non-athletes.

Developmental Challenges

Table 3 and Figure 2 contain regression model results for each developmental challenge. Students identifying as a sexual minority were, on average, .26 sd (GL on bullying) to 1.16 sd (BI on mental distress) higher than their HT peers on the developmental challenge scales, all of which were significant at the $\alpha = .05$ level. Athletes were lower than non-athletes on all five scales, but the difference on being bullied was non-significant. The interaction of GL and athlete identification was non-significant for perceptions of family violence, mental distress, and being bullied indicating that sports participation is a protective factor equally for GL and HT students (Figure 2). Being an athlete, however, exacerbates GL students' perception of school violence and bullying behavior. For BI students, sports participation not only intensifies perceptions of school violence and bullying behavior, it also worsens perceptions of family violence and being bullied. Only on the measure of mental distress do we see sports participation acting as a protective factor and to the same degree as HT students.

DISCUSSION & SCHOLARLY SIGNIFICANCE

The positive youth development framework seeks to identify factors or assets that enhance the strengths and competencies of youth while protecting against problematic or negative developmental outcomes (Benson, Scales, Hamilton, & Sesma, 2006). Participation in school sports has been identified as a protective factor for the general student population (e.g. Fredricks & Eccles, 2006; Peck, Roeser, Zarret & Eccles, 2008), but it is unclear if these benefits

and protections extended specifically to LGB students. Results of this study suggest that while participation in school sports enhances perceived support and self-reported developmental skills for GL student-athletes as compared to GL non-athletes in a manner similar to HT students, the relationship does not hold as strongly for BI students, though it is still positive. It does not appear, however, that sports participation acts as a protective factor for GL or BI students, but rather it exacerbates two of the five challenges measured for GL students and four of the five challenges for BI students. It must be noted though that sports participation was associated with lower levels of mental distress for GL and BI students as compared to their non-athlete peers, which is not trivial given the consistent reporting of mental health problems in LGB youth (D'Augelli, 2002; Meyer, 2003). Utilizing the large sample in our study, these results also highlight that while BI and GL students are often combined into a single group, there exists distinct differences in their profiles of supports, skills, and challenges.

This study demonstrates the role of sports participation as a mechanism for positive youth development might be different for heterosexual students as compared to LGB students, suggesting that more progress is needed in creating a sense of inclusion on school organized sports teams in order to foster positive outcomes for all youth.

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Table 1

Fit Indices for Confirmatory Factor Analysis of Developmental Asset Scales

Scale	*N*	CFI	TLI	RMSEA
Support				
Teacher/School Support	5	.99	.99	.08
Supported	7	.94	.92	.16
Empowerment	6	.91	.84	.23
Skills				
Social Competence	8	.93	.90	.13
Positive Identity	6	.95	.92	.16
Commitment to Learning	8	.94	.92	.08
Challenges				
School Violence	4	.98	.95	.05
Family Violence	6	.97	.95	.05
Mental Distress	8	.98	.97	.07
Bullying	8	.92	.90	.05
Bullied	12	.92	.90	.05

Note: *N* = number of items; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error

Table 2

Standardized Regression Coefficients (and Standard Errors) Predicting Developmental Supports and Skills

	TSS	SP	EM	SC	PI	CTL
Intercept	-0.067**	-0.096**	-0.121**	-0.002	-0.225**	0.028**
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Gay or Lesbian	-0.197*	-0.582**	-0.528**	-0.303**	-0.537**	-0.360**
	(0.082)	(0.081)	(0.08)	(0.079)	(0.079)	(0.077)
Bisexual	-0.413**	-0.594**	-0.715**	-0.558**	-0.631**	-0.566**
	(0.033)	(0.033)	(0.033)	(0.033)	(0.032)	(0.032)
Athlete	0.203**	0.355**	0.342**	0.278**	0.311**	0.263**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)
Student of Color	-0.140**	-0.251**	-0.214**	-0.136**	-0.109**	0.049**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Male	0.024**	-0.009	0.047**	-0.176**	0.236**	-0.305**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)
GL x Athlete	-0.163	-0.142	-0.164	-0.116	0.138	-0.135
	(0.093)	(0.092)	(0.091)	(0.09)	(0.089)	(0.087)
BI x Athlete	-0.191**	-0.194**	-0.178**	-0.206**	-0.130*	-0.166**
	(0.057)	(0.056)	(0.056)	(0.056)	(0.056)	(0.054)
GL * SoC	-0.194*	0.086	-0.045	-0.172*	0.016	-0.426**
	(0.087)	(0.086)	(0.084)	(0.084)	(0.083)	(0.081)
BI * SoC	0.032	0.149**	0.221**	0.045	0.179**	0.036
	(0.048)	(0.048)	(0.047)	(0.047)	(0.046)	(0.045)
GL * Male	0.076	0.277**	0.077	0.167*	0.047	0.305**
	(0.087)	(0.086)	(0.084)	(0.083)	(0.083)	(0.081)
BI * Male	0.276**	0.254**	0.265**	0.379**	0.210**	0.333**
	(0.055)	(0.054)	(0.053)	(0.053)	(0.053)	(0.052)
Observations	67255	67581	68386	69637	68513	72212
R^2	0.023	0.060	0.061	0.041	0.060	0.046
F Statistic	140.946**	393.334**	400.741**	267.384**	398.910**	317.990**
df	11; 67243	11; 67569	11; 68374	11; 69625	11; 68501	11; 72200

Note. TSS = Teacher/School Support; SP = Supported; EM = Empowerment; SC = Social Competence; PI = Positive Identity; CTL = Commitment to Learning; GL = Gay or Lesbian; BI = Bisexual; SoC = Student of Color
*$p < .05$, *$p < .01$

Table 3

Standardized Regression Coefficients (and Standard Errors) Predicting Developmental Challenges

	SV	FV	MD	BY	BD
Intercept	-0.118**	0.056**	0.264**	-0.142**	0.057**
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Gay or Lesbian	0.327**	0.726**	0.952**	0.259**	0.841**
	(0.079)	(0.079)	(0.076)	(0.08)	(0.078)
Bisexual	0.446**	0.694**	1.162**	0.479**	0.751**
	(0.032)	(0.033)	(0.031)	(0.033)	(0.032)
Athlete	-0.069**	-0.171**	-0.295**	-0.017*	-0.012
	(0.008)	(0.008)	(0.007)	(0.008)	(0.008)
Student of Color	0.081**	0.235**	0.186**	0.128**	0.099**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Male	0.227**	-0.103**	-0.399**	0.206**	-0.208**
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)
GL x Ath	0.458**	-0.001	-0.108	0.398**	0.093
	(0.088)	(0.09)	(0.087)	(0.092)	(0.088)
BI x Ath	0.338**	0.239**	-0.050	0.183**	0.157**
	(0.054)	(0.056)	(0.053)	(0.056)	(0.054)
GL * SoC	0.484**	0.194*	-0.137	0.392**	-0.004
	(0.082)	(0.084)	(0.08)	(0.085)	(0.082)
BI * SoC	0.114*	0.143**	-0.207**	0.144**	-0.116*
	(0.046)	(0.047)	(0.045)	(0.047)	(0.046)
GL * Male	-0.166*	-0.232**	-0.131	-0.060	-0.057
	(0.082)	(0.084)	(0.08)	(0.084)	(0.082)
BI * Male	-0.049	-0.309**	-0.231***	-0.182***	-0.030
	(0.053)	(0.054)	(0.051)	(0.054)	(0.052)
Observations	72156	68079	68812	69014	72090
R^2	0.027	0.047	0.123	0.024	0.037
F Statistic	180.307***	307.919***	875.581***	152.416***	248.979***
df	11; 72144	11; 68067	11; 68800	11; 69002	11; 72078

Note. SV = School Violence; FV = Family Violence; MD = Mental Distress; BY = Bullying; BD = Bullied; GL = Gay or Lesbian; BI = Bisexual; SoC = Student of Color

*$p < .05$, *$p < .01$

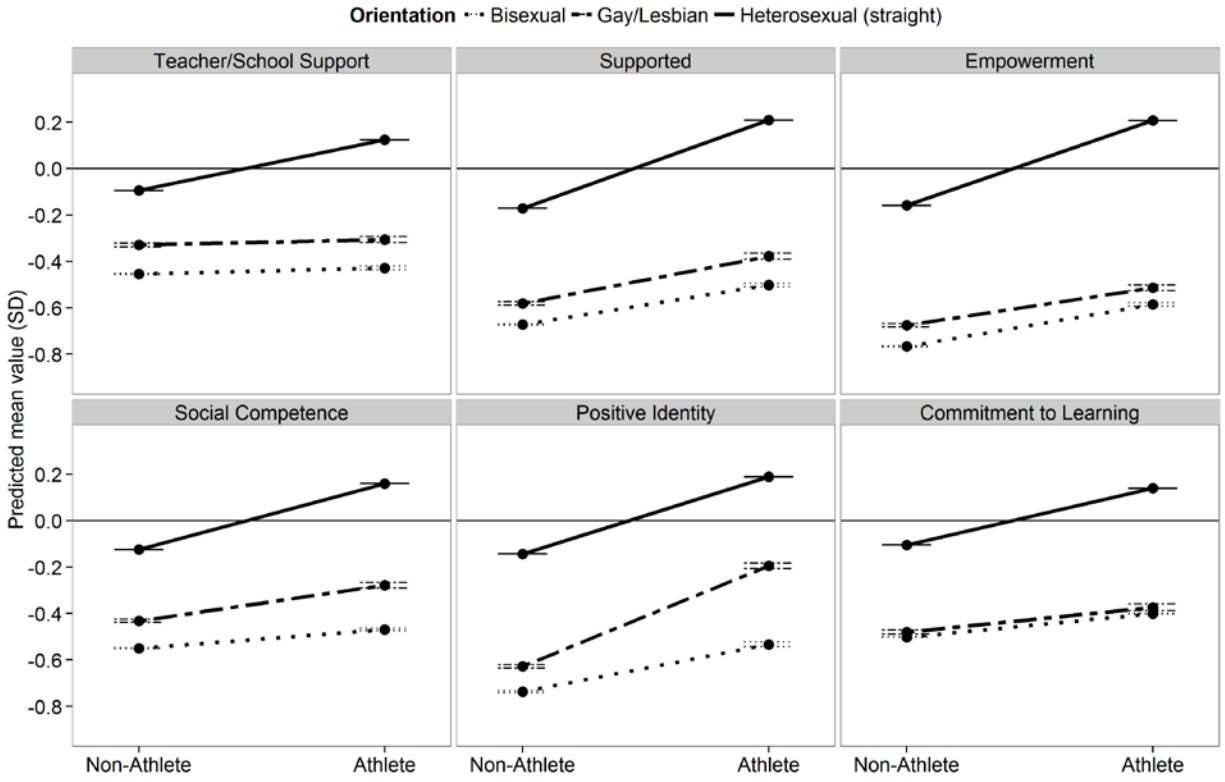

Figure 1. Predicted mean developmental support or skill value for gay or lesbian, bisexual, and heterosexual students who are athletes or non-athletes (controlling for gender and student of color). Error bars represent standard errors. The horizontal line at 0 is the average for all students.

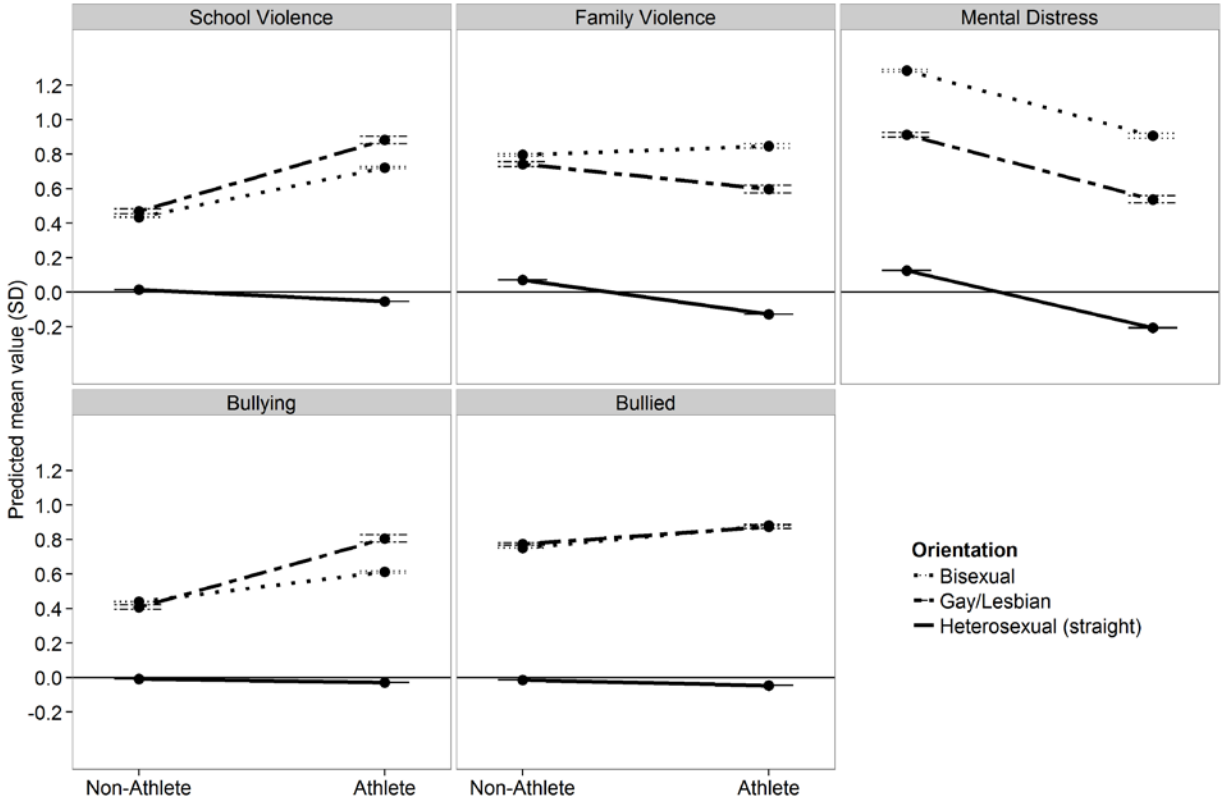

Figure 2. Predicted mean developmental challenge value for gay or lesbian, bisexual, and heterosexual students who are athletes or non-athletes (controlling for gender and student of color). Error bars represent standard errors. The horizontal line at 0 is the average for all students.