

The Use of Athletics to Lessen the Negative Impacts Bullying Has on Self-Esteem Among Adolescents with Disabilities Who Are Victims of Bullying

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Abstract

Students with Disabilities struggle or encounter bullying. Past studies have indicated that participating in athletic extracurricular activities can have several socio-emotional benefits for students with disabilities. Given the findings of past studies demonstrating the positive relationship between mental health and participation in sports among students with disabilities, it is possible that participating in athletics could have a moderating relationship on the severity of the impact that bullying has on a student's self-esteem. Using the National Crime Victimization Survey/School Crime Supplement (NCVS/SCS), this study employs an ordinal logistic regression to determine if participation in athletic extracurricular activities mitigate the negative impact bullying has on self-esteem among students who have disabilities. With a sample of 728 middle to high-school-aged students with disabilities, this study identified statistically significant results suggesting that students with disabilities who participate in athletics reported reduced levels of negative low self-esteem resulting from bullying compared to their peers who did not participate in athletics.

Introduction

Bullying has been declared a "public health problem" by several national organizations, including the Centers for Disease Control (CDC) (David-Ferdon et al., 2016). In 2017, 20% of middle and high school students in the United States reported having experienced bullying, and nearly 41% of those thought it would happen again (Musu et al., 2019). The CDC (2020) describes bullying as behaviors among schoolchildren that are aggressive, repeated, and often based on an imbalance of power. These imbalances may be based on physical differences in strength or appearance, access to potentially embarrassing information, or popularity amongst peers. Types of bullying behaviors include physical, verbal, relational, and cyberbullying (Crick & Bigbee, 1998; Faith et al., 2015). These behaviors can be direct assaults or insults, as well as indirect aggressions such as leaving someone out or spreading rumors through relational bullying (Drennan et al., 2011). Bullying victimization has long been linked to both social and psychological consequences (Hoglund & Leadbeater, 2007). Children and adolescents who experience these acts can also experience challenges in pro-social development, school achievement, mental health, and physical health (Reijntjes et al., 2010; Tsaousis, 2016). Risk factors for bullying victimization include socio-economic status, age, gender, prior history of

being bullied, internalizing and externalizing behaviors, disability status, and developmental stage of life (Blake et al., 2016; Cook et al., 2010; Elgar et al., 2009; Finkelhor et al., 2009).

Bullying and Disability in Schools

Children with disabilities are more frequently victimized by bullies than children without disabilities (Farmer et al., 2012; Rose et al., 2009; Rose et al., 2011; Van Cleave & Davis, 2006). This is such a significant problem in the United States that the Office of Special Education and Rehabilitative Services (OSERS) issued a letter to school districts reiterating their responsibility to address bullying of children with disabilities as a mandate under the Individuals with Disabilities Act (IDEA) (United States Department of Education Office of Special Education and Rehabilitative Services, 2013). The letter states that allowing students with disabilities to be bullied is a denial of free and appropriate education, as mandated in the Act, and that school systems would be accountable for addressing this denial of services. According to Farmer et al. (2012), children with disabilities may be 3 to 4 times more likely to be victims of bullying. The National Center for Education Statistics (NCES) (2020) has documented that nearly 15% (more than 7 million) of children (ages 3-21) served by the public school system received services through the Individuals with Disabilities Education Act (IDEA). Children covered by these services have documented disabilities and need special education services to have access to public education. Following the admonition to school systems from the OSERS in 2013, the United States Department of Education Office of Civil Rights (2014) issued a follow-up letter affirming that their office had been receiving increasing complaints from students with disabilities regarding the effects bullying was having on their educational success.

Pinquart's (2017) recent meta-analysis of 107 studies comparing bullying experiences found higher odds of physical, relational, verbal, cyber, and illness-specific bullying among children with chronic physical illnesses and or physical or sensory disabilities. Similarly, Blake et al. (2016) found that 24.5% to 34.1% of students with disabilities were bullied and that certain types of disabilities resulted in higher odds of being victimized, including among those with diagnoses such as autism spectrum disorders, learning, and intellectual disabilities, Attention Deficit Hyperactivity Disorder, Emotional Disturbance, those with orthopedic impairments as well as those with speech-language challenges.

Social characteristics of children with disabilities have been theorized to explain more bullying behaviors than the presence of a disability alone. In this view, the effects of disability on social skills and behaviors are the risk factors (Farmer et al., 2015). These can include communication or social skills, self-esteem or social competence, or internalizing or externalizing behaviors that set the child apart from their peers (Farmer et al., 2015).

Some authors suggest that opportunities for children to develop pro-social skills and social competence could result in decreases in victimization (Farmer et al., 2015). Kalymon et al. (2010) found that when students with disabilities engage in extracurricular activities, they may have greater opportunities to build friendships that protect against victimization. Similarly, Blake et al. (2016) found that children who engaged in social activities were less likely to be bullied than those who interacted less with peers outside of school. Thus, students with disabilities who engage in extracurricular activities or who socialize with peers outside of school may have

greater opportunities to garner peer support and build protective friendships that buffer them from victimization (Kalymon et al., 2010).

Athletic extracurricular activities have been found to increase several socio-emotional outcomes for students with disabilities (Palmer et al., 2017). In a recent critical review of the literature, Author (2020) found that studies focused on the role of athletics in moderating the relationship between disability and bullying were extremely limited. In addition, similar results were found for students without disabilities, with athletics decreasing bullying victimization among general student populations.

The present study begins to address this gap in the literature by exploring the role of athletics as protective against the psychosocial consequences of bullying among children and youth with disabilities. Specifically, the influence of athletic participation on the perceived negative consequences of bullying on students' self-esteem was examined among students with disabilities.

Methodology

The National Crime Victimization Survey/School Crime Supplement (NCVS/SCS) longitudinal study was used to analyze the moderating relationship that athletic extracurricular activities had on students with disabilities who reported being bullied during the 2014-2015 school year (United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics, 2015). Eligibility to participate in this study included being enrolled in a public or private face-to-face school. To focus on students with disabilities, the sample was restricted to middle school and high school students who were classified as having a disability. Classification of having a disability was based on whether the student had an Individualized Education Plan (IEP) or not. These plans are mandated by the IDEA for students with documented disabilities.

Sample Demographics

The sample size contained 728 eligible students who were identified as having a disability ($N = 728$). One hundred percent reported having experienced bullying. The range of the participants' age was 12-18, with a mean age of 14.6 ($SD = 1.2$). The gender representation of the sample was male (62%) and female (38%). Ethnicity demographics of the sample included (19%) who identified as Hispanic/Latino/a and (81%) who did not. The racial demographics of the sample were White (80%), Black (13%), Asian (3%), Native American (1%), Native Hawaiian/Island Pacifier (0.4%), and two or more races (1.6%).

Measures

Independent Variable

Using the scales provided by the NCVS/SCS, participants were asked closed-ended questions related to student demographics and participation in athletic extracurricular activities. The moderating independent variable was a dichotomous variable (yes/no) to determine if the participants were involved in athletic extracurricular activities.

Dependent Variable

Using an ordinal Likert scale, the dependent variable in this study was the impact the reported bullying had on the student's self-esteem. For this variable, students were asked, "How much has the bullying negatively impacted your self-esteem?" The answers on the ordinal scale for the participants to choose from ranged from 0 to 3 (0 = Not at all, 1 = Not very much, 2 = Somewhat, 3 = A lot).

Additional Control Variables

Control variables included age, gender, ethnicity, and race. Age was applied as a continuous variable ranging from 12 to 18 years old. Gender was a dichotomous variable in which participants self-identified as either male or female. Ethnicity was a dichotomous variable in which participants classified themselves as Hispanic/Latino/a or not Hispanic/Latino/a. Race was a categorical variable in which participants identified as White, Black, Asian, Native American, Pacific Islander, or two or more races.

Due to small cell counts, racial demographics could not be analyzed using the six original categories included in the dataset. To ensure assumptions were not violated due to small cell counts, the race variable was collapsed to Non-minority and Minority. Non-minority refers to students who were identified as Caucasian. Minority included Black, Asian, Hispanic, Pacific Islander, Native American, and individuals identified as multi-racial.

Analysis

An ordinal logistic regression model was applied to analyze the direct relationship between participating in athletic extracurricular activities and the level of impact bullying had on the participant's self-esteem. The demographic control variables were also included in the regression model. Since this study was exploratory, the ordinal logistic regression and the overall model fit were tested for statistical significance using a significance level of $p < .05$ (Cohen, 1968).

Results

Logistic Regression Model

Independent variables in the logistic regression analysis included athletic extracurricular involvement, gender, race, ethnicity, and age. The outcome variable was the level of negative impact bullying had on the student's self-esteem. The results of the overall model were statistically significant ($\chi^2(6) = , p < .001$) (See Table 1).

Assumption of Proportional Odds. The assumption of proportional odds was met for the ordinal logistic regression, as assessed by a full likelihood ratio test comparing the fit of the proportional odds model to a model with varying location parameters. The test of parallel lines met the assumption of proportional odds ($\chi^2(12) = 14.007, p = .300$).

When looking at athletic extracurricular activities, results of the ordinal logistic regression indicated a statistically significant relationship between participating in athletic extracurricular activities and the impacts bullying had on the student's self-esteem scores ($\chi^2(1) = 15.295, p = .001$). The odds of students who did not participate in athletics who reported that being a victim of bullying had a greater negative impact on their self-esteem was 1.947 (95% CI, 1.394 to 2.719) times higher than students who participated in athletics. Thus, students who did not participate in athletics were twice as likely to report that bullying had a greater negative impact on their self-esteem in comparison to students who were involved in athletics when controlling for all other variables in the model. Additional statistically significant relationships included age ($\chi^2(1) = 10.171, p = .001$) and ethnicity ($\chi^2(1) = 10.629, p = .001$). The older a student was, the lower their odds of experiencing bullying as a negative impact on their self-esteem. Those students who did not self-identify as Hispanic/Latino/a had one-third the odds of experiencing bullying as a negative impact on their self-esteem. Control variables that did not have a statistically significant impact included gender and race.

Discussion

Athletic Extracurricular Activities

The present study adds to the existing body of literature by providing evidence that engagement in athletics can be protective against the negative effects of bullying.

Past literature demonstrates that adolescents who have disabilities are an oppressed population that is most susceptible to bullying victimization and the negative outcomes derived from being a victim of bullying (Farmer et al., 2012; Rose et al., 2009). Since athletic extracurricular activities have been found to increase several socio-emotional outcomes for students with disabilities (Palmer et al., 2017), it was predicted that athletic extracurricular activities would also lessen the degree of impact bullying had on the student's self-esteem. The findings of this analysis added to past studies by demonstrating how the benefits of athletic extracurricular activities were able to lessen the negative impact that bullying had on the students' reported self-esteem scores.

When examining athletic extracurricular activities, the null hypothesis was rejected for the logistic regression. A statistically significant relationship was observed between extracurricular involvement and the negative impact bullying had on self-esteem among students who have disabilities. Overall, results indicated that the students who participated in athletics were less likely to report worse self-esteem scores in comparison to the students who did not participate in athletics.

Limitations

As with all studies, this study was not without limitations. The primary limitation of this study is the specific disability categories were not differentiated in the NCVS/SCS dataset. Thus, this survey did not account for the diversity presented within each specific disability cluster. Thus, the influence extracurricular involvement has on mitigating the negative bullying outcomes could vary among each disability category. An additional limitation is that this study of secondary data limits the ability to manipulate, categorize, and construct variables.

Conclusion and Future Directions

Overall, athletic extracurricular activities were demonstrated to reduce the negative outcomes bullying victimization had on the students' self-esteem. However, many athletic extracurricular activities are not inclusive for all students with disabilities (Cumming, Marsh, & Higgins, 2017; Rose et al., 2015). Thus, it is crucial that educators, social workers, and disability researchers continue investigating this relationship to further advocate for more inclusive extracurricular activities being offered in their community and in school settings.

Implications for Practice

Although the promotion of inclusive athletic extracurricular activities is a growing trend among the disability community, students with disabilities are still limited in extracurricular options due to the lack of accessibility (Blake, Lund, Zhou, Kwok, & Benz, 2012; Cumming et al., 2017; Rose et al., 2015). For example, very few schools offer athletics that accommodate students with disabilities (Rose et al., 2015). Despite the regulations set by the Americans with Disabilities Act (ADA), school-based athletics are not always inclusive for students who have varied needs due to their disability (Author, XXXX; Murphy & Carbone, 2008). This means that students with disabilities are forced to find extracurricular activities outside of their school to participate in them. Unfortunately, there are several communities that do not have organizations that offer special needs sports (Author, XXXX; Cumming et al., 2017).

The findings of this analysis support past studies by emphasizing the importance of social workers advocating for more inclusive extracurricular activities that accommodate the needs of students who have disabilities. Since students with disabilities are four times more likely to experience bullying victimization and the negative consequences stemming from bullying (Farmer et al., 2012), it is crucial that educators, social workers, and disability researchers ensure students who have disabilities are provided with equal accessibility to extracurricular activities so they can acquire the social-emotional benefits from them. If students with disabilities are provided with more access to athletic extracurricular activities, then they will be less likely to experience the detrimental impacts bullying has on their self-esteem.

Implications for Future Research

In a study conducted by Peguero (2008), results indicated that different forms of extracurricular activities (e.g., clubs versus athletics) impacted the students' emotional well-being in different ways. Thus, it is possible that the findings in this study could have had different outcomes depending on the type of extracurricular activities being examined. If different types of extracurricular activities result in different levels of socio-emotional benefits, it is possible that non-athletic extracurricular activities would not produce the same results among victims of bullying who have a disability. Implications for future research include investigating how the different types of extracurricular involvement may have varied influences on the self-esteem of bullying victims with disabilities. In addition, future studies are needed to address the diversity of disability types and how these interact with athletic participation and bullying experiences.

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| Parameter | | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | 95% Wald Confidence Interval for OR | | |
|-----------|-------------------------------------|----------------|------------|------------------------------|-------|-----------------|----|------|-------------------------------------|-------|-------|
| | | | | Lower | Upper | Wald Chi-Square | df | Sig. | OR | Lower | Upper |
| Threshold | Negative Self-Esteem Outcome = 1 | -1.084 | .6528 | -2.363 | .195 | 2.758 | 1 | .097 | .338 | .094 | 1.216 |
| | Negative Self-Esteem Outcome = 2 | -.290 | .6516 | -1.567 | .987 | .198 | 1 | .657 | .749 | .209 | 2.684 |
| | Negative Self-Esteem Outcome = 3 | .929 | .6565 | -.357 | 2.216 | 2.004 | 1 | .157 | 2.533 | .699 | 9.171 |
| | Participates in Non-Athletics [No] | -.269 | .1586 | -.580 | .042 | 2.879 | 1 | .090 | .764 | .560 | 1.043 |
| | Participates in Non-Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| | Participates in Athletics [No] | .666 | .1704 | .332 | 1.000 | 15.295 | 1 | .000 | 1.947 | 1.394 | 2.719 |
| | Participates in Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| | Gender [Male] | .158 | .1562 | -.148 | .464 | 1.025 | 1 | .311 | 1.171 | .862 | 1.591 |
| | Gender [Female] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| | Race [Non-Minority] | .298 | .2024 | -.098 | .695 | 2.172 | 1 | .141 | 1.348 | .906 | 2.004 |
| | Race [Minority] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| | [Not Hispanic/Latino/a] | -.702 | .2152 | -1.123 | -.280 | 10.629 | 1 | .001 | .496 | .325 | .756 |
| | [Hispanic/Latino/a] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| | Age (Scale) | -.138 | .0432 | -.223 | -.053 | 10.171 | 1 | .001 | .871 | .800 | .948 |
| | | 1 ^b | . | . | . | . | . | . | . | . | . |

Pearson Chi-Square: $\chi^2(6) = 39.504, p < .001$