



5-2019

Defeating Bullying Victimization: The Relationship Between Extracurricular Involvement and Bullying Among Students with Disabilities

Kaycee Lynn Bills
University of Tennessee, kbills@uncfsu.edu

Follow this and additional works at: https://trace.tennessee.edu/utk_graddiss

Recommended Citation

Bills, Kaycee Lynn, "Defeating Bullying Victimization: The Relationship Between Extracurricular Involvement and Bullying Among Students with Disabilities. " PhD diss., University of Tennessee, 2019. https://trace.tennessee.edu/utk_graddiss/5370

This Dissertation is brought to you for free and open access by the Graduate School at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

Defeating Bullying Victimization:
The Relationship Between Extracurricular Involvement and Bullying Among Students with
Disabilities

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Kaycee Lynn Bills
May 2019

Copyright © 2019 by Kaycee Lynn Bills
All rights reserved

Dedication

I dedicate this to the Whitley County Dazzler Special Needs Cheer team for inspiring me. I also dedicate this to Grandpa Horn, Grandpa Bills, and Ryan Mays for believing when no one else did. Not many are lucky enough to have guardian angels like you.

Acknowledgements

I would like to thank Dr. David Dupper for taking the time out of his busy schedule to serve as my Chair of my dissertation committee. I would also like to thank my committee members Dr. Stacia Martin-West, Dr. Shandra Forrest-Bank, and Dr. Mitsunori Misawa for their continual mentorship, flexibility, and the time put into providing me with careful feedback. Additional University of Tennessee faculty and staff I would like to thank include Dr. Stephen McGarity, Ms. Cary Springer, and Mr. Jeff Price for providing me with guidance and feedback through out this process.

To my military family: thank you for all the tough love and keeping me grounded throughout this process. To my Hawaii Pacific University family: mahalo for the continual encouragement and for showing me what I am capable of. To my family in Indiana: Mom, Dad, Grandma Horn, Grandma Bills, Gunner, Emily, Coryne, September, Denise, and Sydney, thank you for supporting me as I take on this academic adventure.

Abstract

Bullying is a social epidemic receiving ample attention across the United States. Students who have disabilities are student population that experiences higher rates of bullying victimization in comparison to other student demographics. The following dissertation analyzes the relationship between participating in extracurricular activities and bullying victimization rates and outcomes among students who have disabilities. This dissertation employs three studies. Study One is a review of literature exploring the gaps in past research pertaining to the relationship between extracurricular involvement and bullying victimization among the general student population and students who have disabilities. Study two employs the National Crime Victimization Survey – School Crime Supplement (NCVS/SCS) in order to quantitatively explore if extracurricular activity involvement decreases the number of times students with disabilities experience bullying. Study three also uses the NCVS/SCS dataset in order to quantitatively explore if participating in extracurricular activities influences the amount of negative impact that bullying has on academic performance, social relationships, self-esteem, and physical health among students who have disabilities. Implications for social work and future directions are discussed after each study.

Table of Contents

| | |
|---|----|
| Introduction | 1 |
| Chapter I: Extracurricular Involvement and Bullying: A Review of the | |
| Literature | 4 |
| Abstract..... | 6 |
| Background..... | 7 |
| Methods..... | 13 |
| Results..... | 16 |
| Discussion..... | 29 |
| References..... | 35 |
| Chapter II: The Relationship Between Extracurricular Involvement and Bullying | |
| Occurrence Rates | 41 |
| Abstract..... | 43 |
| Background..... | 44 |
| Methods..... | 45 |
| Results..... | 49 |
| Discussion..... | 52 |
| References..... | 58 |
| Chapter II Appendix..... | 61 |
| Study Two IRB Letter..... | 68 |
| Chapter III: Examining the Influence Extracurricular Activity Participation has on the | |
| Outcomes Experienced by Students with Disabilities who are | |
| Bullied | 69 |

| | |
|-----------------------------|------------|
| Abstract..... | 71 |
| Background..... | 72 |
| Methods..... | 75 |
| Results..... | 76 |
| Discussion..... | 82 |
| References..... | 88 |
| Chapter III Appendix..... | 91 |
| Study Three IRB Letter..... | 96 |
| Conclusion..... | 98 |
| Vita..... | 102 |

List of Tables

| | |
|--|----|
| Table 1.1: Articles Analyzing Adolescent Students With Disabilities..... | 19 |
| Table 1.2: Articles that Do Not Mention Disabilities..... | 25 |
| Table 2.1: School Crime Supplement (SCS) Survey Questions Used..... | 61 |
| Table 2.2: Chi-Square Test - Having a Disability and Bullying Occurrence Rates..... | 62 |
| Table 2.3: Chi-Square Test - Having a Disability and Bullying Occurrence Rates (Collapsed)..... | 63 |
| Table 2.4: Chi-Square Test - Participating in Athletics and Bullying Occurrence Rate..... | 64 |
| Table 2.5: Chi-Square Test - Participating in Non-Athletics and Bullying Occurrence Rate..... | 65 |
| Table 2.6: Binary Logistic Regression Results..... | 66 |
| Table 3.1: School Crime Supplement (SCS) Survey Questions Used..... | 91 |
| Table 3.2: Ordinal Logistic Regression One - Negative Bullying Impact on Schoolwork..... | 92 |
| Table 3.3: Ordinal Logistic Regression Two - Negative Bullying Impact on Friends..... | 93 |
| Table 3.4: Ordinal Logistic Regression Three - Negative Bullying Impact on Self- Esteem..... | 94 |
| Table 3.5: Ordinal Logistic Regression Four - Negative Bullying Impact on Physical Health..... | 95 |

List of Figures

| | |
|--|----|
| Figure 2.1: Binary Logistic Regression Model..... | 67 |
| Figure 3.1: Ordinal Logistic Regression Model..... | 97 |

Introduction

Bullying victimization is a social issue experienced by all student groups. Specifically, students with disabilities are a marginalized population that faces higher bullying victimization rates in comparison to any other oppressed student group (Rose, Espelage, Monda-Amaya, Shogren, & Aragon, 2015). Bullying can have several socio-emotional and health consequences for the victims. These consequences can include a decrease in academic performance, a negative impact on the student's friendships, decreased self-esteem, and decreased physical health outcomes (Dupper, 2013; Hymel & Swearer, 2015). In order to promote social justice for students who have disabilities, it is vital for social workers to explore potential methods to combat bullying victimization and the negative outcomes derived from being a victim of bullying.

Participating in extracurricular activities has shown to have several positive impacts on students across all populations (Eime, Young, Harvey, Charity, & Payne, 2013). When examining students who have disabilities, studies have indicated several social and health benefits acquired from participating in either athletic or non-athletic extracurricular activities (Shaefer, Simpkins, Vest, & Price, 2011). Considering the positive outcomes gained from extracurricular activities, it is possible that participating in extracurricular activities can also directly decrease bullying rates and also mitigate the magnitude of the negative outcomes derived from being a victim of bullying among students who have disabilities.

This dissertation contains three studies analyzing the relationship between bullying victimization and extracurricular involvement among students who have disabilities. Study one is a review of literature assessing past studies pertaining to the relationships between extracurricular involvement and bullying victimization. Study one synthesizes the overall results of past findings and identifies gaps in past research. Study two explores if there is a direct relationship between extracurricular involvement and the frequency in which students are

bullied. Study three then analyzes the relationship between participating in extracurricular activities and how they influence the negative outcomes faced by students with disabilities who are bullied. Implications for future social work practice and research are discussed following each study

Chapter I: Extracurricular Involvement and Bullying: A Review of the Literature

This manuscript has not been published. Reviewers included my dissertation committee, Drs. David Dupper (Chair), Stacia Martin-West, Shandra Forrest-Bank, and Mitsunori Misawa.

Abstract

Social issues pertaining to bully victimization is a topic receiving national attention in social work literature. It is imperative for social workers to establish potential predictors of bullying victimization in order to eliminate them among at-risk populations, such as students who have disabilities. Adolescent and teenage students who have disabilities are an oppressed population that is at risk of experiencing higher levels of bullying victimization. In addition, this population also experiences harsher socio-emotional outcomes because of bullying. The purpose of this study is to synthesize past literature relating to the direct relationship between extracurricular involvement and bullying victimization. Studies and articles were retrieved across eight databases in order to assess past research and literature published on this topic. Due to the limited numbers of articles examining this topic, two separate analyses are provided. The first analysis assesses literature specific to students with disabilities. The second analysis includes literature not specific to students with disabilities. Implications for future social work practice and research based on the results are provided.

Keywords: school social work, bullying, extracurricular activities, disabilities, review of literature

Background

Social issues related to bullying are widespread topics gaining ample attention across the United States (Dupper, 2013). The U.S. Department of Justice (2015) estimates that there were approximately 5.0 million bullying cases filed among students 12 and older during the 2013 to 2014 school year. The bullying epidemic occurring in U.S. school systems resulted in 49 states passing legislation in an attempt to combat the high rates of bullying victimization occurring in schools (Cornell & Limber, 2015). Unfortunately, legislative actions have not been enough to eliminate the bullying prevalence that is being experienced among adolescent and teenage students. It is imperative for social workers to assess the potential predictors of bullying victimization in order to address them among at-risk populations.

When specifically analyzing marginalized populations, students who have disabilities are an oppressed student group facing higher rates of bullying in comparison to other student groups (Rose, Espelage, & Monda-Amaya, 2009). Past studies have attributed the high frequencies of bullying victimization experienced among students with disabilities to having lower levels of social connectedness and fewer friends at their school (Reiter & Lapidot-Lefler, 2007). The participation in extracurricular activities has shown to increase friendships and social connectedness among student populations (Brooks, Floyd Robins, & Chan, 2014). Due to the social benefits of participating in extracurricular activities, it is theorized that extracurricular activity involvement could also potentially mitigate the bullying victimization effecting students who have disabilities. To promote social justice, it is imperative for social work researchers to assess bullying literature to determine if past studies have thoroughly examined the relationship between bullying victimization and extracurricular involvement among students who have disabilities.

Bullying

Recent studies found approximately 1 out of 3 adolescent and teenage students report being a victim of bullying (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014). Conceptually, bullying is portrayed as unwanted physical or verbal gestures (Hicks, Jennings, Berry, & Green, 2018; Gladden et al., 2014). The American Bar Association states the operational definition of bullying for legal purposes is: “Bullying is unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance” (American Bar Association [ABA], 2013). In addition to the legal definition, the Department of Education identifies four different categories bullying can be perpetrated through. These categories include (1) verbal, (2) physical, (3) indirect, and (4) sexual remarks and/or acts (Cornell & Limber, 2015). Within these four categories, bullying can occur in various forms including verbal harassment, name-calling, physical gestures, physical attacks, and unsolicited electronic/cyber communication (Bradshaw, Waasdorp, & Johnson, 2014).

Consequences of Being Bullied

Bullying perpetration causes several academic consequences among adolescent and teenage students who experience it. In a study conducted by Barber and Olsen (2004), it was estimated that each day, there are approximately 160,000 middle and high school students who skip school in fear of being bullied. As a result, students who are bullied experience academic decline. Since then, several additional studies have indicated bullying victimization results in several academic consequences including as lower grades, decrease in school participation, and increased psychological distress in the classroom (Dupper, 2013; Hicks et al., 2018; Hymel & Swearer, 2015).

Contemporaneous with academic consequences faced by students who are bullied, bullying victimization also manifests in several socio-emotional facets of a student’s life. When

explicitly assessing the psychological consequences caused by bullying, bullying victimization can lead to anxiety, depression, self-harm, and suicidal ideation (Hicks et al., 2018; Hymel & Swearer, 2015). All of which have detrimental consequences for adolescent and teenage students across all student populations. This holds especially true among underrepresented populations who experience bullying victimization at a greater magnitude, such as students with disabilities.

Bullying Victimization and Disabilities

Bullying victimization rates are more prevalent among minority groups; however, they are not equal across all minority groups. In comparison to other oppressed populations, adolescents and teenagers who have disabilities are at a higher risk of experiencing bullying in comparison to any other underrepresented population (Rose, Espelage, Monda-Amaya, Shogren, & Aragon, 2015; Hicks et al., 2018; Farmer, Petrin, Brooks, Ham, Lambert, & Gravelle, 2012). In a recent study conducted by Farmer et al. (2012), findings demonstrated females with disabilities are 4.8 times more likely to be bullied, and males with disabilities are 3.2 times more likely to be bullied in comparison to students who do not have a disability. Supporting these results, Rose et al. (2015) also indicated adolescent and teenage students with disabilities were two times more likely to be bullied than other student populations.

Higher bullying victimization rates among students with disabilities are often described as having communication deficits, delayed social skills, emotional regulation difficulties, social isolation, and being portrayed as “different” (Blake, Lund, Zhou, Kwok & Benz, 2012). Due to their diverse differences and needs, students who have disabilities are less likely to be included in social groups and activities (Blake et al., 2012; Rose et al., 2015, Reiter & Lapidot-Lefler, 2017; Cumming, Marsh, & Higgins 2017). This makes students with disabilities more prone to bullying due to having fewer opportunities to establish a sense of social connection with peers (Kahn & Lindstrom, 2015).

Social Connection in Relation to Bullying

Several studies have demonstrated schools that exhibit higher levels of social connectedness across diverse student populations have less bullying instances and reports among underrepresented demographics (Bradshaw, Waasdorp, Debnam, & Johnson, 2014; Ruzek, Hafen, Allen, Gregory, Mikami, & Pianta, 2016). When students establish common bonds and meaningful relationships with their peers, they are more likely to form more meaningful relationships, ultimately decreasing their likelihood of being bullied (Kahn & Lindstrom, 2015). Meaning, it is important to implement activities in schools that promote a stronger sense of social connectedness for students who are a part of minority populations in order to decrease bullying outcomes. In order to establish stronger senses of social connection, students must be actively involved in activities that increase socialization.

Social Connection and Disabilities

Several studies reveal students with disabilities have less access to inclusivity in school settings in comparison to their non-disabled counterparts. A lack of inclusivity can unintentionally occur due to the physical or intellectual barriers imposed by their disability. Often times, students with disabilities spend substantial amounts of time in a special education setting, separated from the rest of their peers (Gavish, 2017). This lack of integration into the general student population often results in a lack of social connection (Palmer, Heyne, Montie, & Abery, 2011; Amado, Stancliffe, & McCarron, 2013). Not only is this observed in classroom settings, but the lack of mainstream integration can also be observed in school-base extracurricular settings. The lack of inclusivity in school extracurricular activities causes students with disabilities to be isolated from their non-disabled peers, hindering their chances of generating peer relationships (Cumming et al., 2017). These limited social opportunities account for one of the primary reasons students who have disabilities are victimized at higher rates than

other student populations (Reiter & Lapidot-Leffler, 2007; Palmer et al., 2011). In order to decrease bullying and victimization among students with disabilities, it is vital to implement methods to increase their socialization opportunities. One way to achieve this is through extracurricular activity participation.

Establishing Social Connection Through Extracurricular Activities

School extracurricular activities can include athletics, clubs, volunteer work, student government, and other interest groups. Participating in school extracurricular activities generate several benefits for adolescent and teenage students. These benefits include increased physical and psychological health (Eime, Young, Harvey, Charity, & Payne, 2013; Feldman & Matjasko, 2005). Concurrent with physical and mental health benefits, key advantages of participating in school extracurricular activities are increased social benefits and opportunities (Brooks et al., 2014; Anderman, 2011).

When only analyzing socialization, studies indicate students involved in sports and clubs demonstrate an increased social connectedness among their peers (Brooks et al., 2014; Anderman, 2011; Kahn & Lindstrom, 2015). Students who were involved in extracurricular activities exhibited having more friends and having a better quality of relationships than students who were not involved in extracurricular activities. Students participating in extracurricular activities also conveyed feeling more socially and emotionally safe from bullying (Martinez, Coker, McMahon, Cohen & Thapa, 2016). In addition, Spriggs, Iannotti, Nansel, and Haynie (2007) demonstrated students who did not participate in extracurricular activities did not feel their school promoted a sense of social connectedness. Consequently, emphasizing participation in extracurricular activities is a way to help students establish a sense of social connection to their school environment.

Extracurricular Activities and Disabilities

Students with disabilities are limited to extracurricular options due to accessibility barriers (Cumming et al., 2017; Blake et al., 2012; Rose et al., 2015). Many extracurricular activities offered in schools are not inclusive or accommodating for students who have varied needs in relation to their disability (Norma & Heumann, 2008). This makes it difficult for students with disabilities to find extracurricular activities that they can excel at and gain a sense of belonging. Since social connectedness and bullying victimization have an inverse relationship, it is vital to analyze the potential impacts extracurricular activities could have on students with disabilities experiencing bullying.

In a study conducted by Brooks, Floyd, Robins, and Chan (2014), children who had intellectual or learning disabilities demonstrated an increase in social competence when participating in structured extracurricular activities. The participants who exhibited an increase in social competence, reported having more classmates they identified as friends (Brooks et al., 2014). Supporting this finding, other studies have indicated students who participate in extracurricular activities develop longer lasting friendships than students who did not participate in extracurricular activities (Shaefer, Simpkins, Vest, & Price, 2011). This finding emphasizes how extracurricular activity involvement is critical to the foundation of formulating social connection for students who have disabilities.

Exploring the Direct Relationship Between Extracurricular Activities and Bullying

It has been revealed that establishing a sense of social connection is vital in attempting to decrease bullying victimization across multiple student populations. It has also been revealed that one way to generate higher levels of social connection among students is through the use of extracurricular activity participation. The purpose of this systematic review of literature is to determine if the bullying literature suggests a direct relationship between extracurricular

involvement and bullying victimization experiences. Since students with disabilities are a population experiencing lower levels of social connectedness and have fewer opportunities to participate in extracurricular activities, this study intends to employ a focus specifically on articles analyzing students with disabilities.

Purpose

The purpose of the systematic review is to explore the literature discussing the relationship between extracurricular involvement and bullying victimization outcomes.

Additionally, the purpose of this review is to assess the quality and the quantity of prior literature examining this topic. This review will explore studies analyzing the general population and studies that specifically analyze students with disabilities. An overall consensus of the article findings, gaps in the literature, and the study methodologies used will also be identified. The results derived from the systematic review of literature will attribute to formulating implications for future school social work practice and research pertaining to students with disabilities. The results will also create a conceptual foundation for Chapters II and Chapter III of this dissertation.

Methods

Research Questions

Using the University of Tennessee library databases, a systematic review of literature was conducted. The following research questions were tested:

R₁: Has a direct relationship between extracurricular activity participation and bullying victimization among adolescent and teenage students been established?

R₂: Do past studies adequately reveal a relationship between extracurricular involvement and bullying victimization specifically among students who have disabilities?

Data Analysis

A systematic review of literature was applied in order to assess the impacts extracurricular activity involvement may have on bullying among adolescent and teenage students. The target population of interest for this study was adolescents and teenage students who have disabilities. In order for an article to be included in this study, the article must have met the following criteria: (a) be published in the English language; (b) be included in the following databases: PsychINFO, Academic Search Complete, Education Source, Social work Abstracts, Sociology Abstracts, EBSCO, CINAHL, and Scopus; (c) Study must be conducted between 2008 and 2018; (d) discuss the direct relationship between extracurricular involvement and bullying victimization rates; (e) studies must analyze students between the ages of 12 and 18; and (f) articles did not need to be published by a peer-reviewed journal. Articles that were excluded from this review met the following criteria: (a) article was not written in the English language; (b) article did not analyze the direct impact extracurricular involvement has on bullying victimization; (c) article was not about adolescent students ranging from ages 12 to 18; and (d) article was published within the past ten years (before the year 2008). Various types of bullying that fit inclusion criteria included unwanted verbal (e.g. name calling, yelling at, making fun of, etc.) physical, sexual, and cyber attacks.

Justification for Search Criteria

Search criteria had to include articles written in the English language in order to attain research conducted in areas that are culturally similar to the United States and ensure language interpretation. Due to the lack of literature found about this specific topic, articles did not have to be specific to only students who have disabilities. Originally, only articles published within the past five years were going to be included. However, due to the lack of literature, this criterion was expanded to articles written within the past ten years. Quantitative, qualitative, literature

review, opinion pieces, and theoretical overview studies were included to represent varied research methods. In order to ensure specificity, articles must analyze the direct relationship between extracurricular involvement and bullying outcomes.

Conducting Search

Phase one. During the first phase of this study, databases that were searched included PsychINFO, Academia Search Complete, Social Work Abstracts, ERIC, CINAHL, Education Source, Scopus, and Sociology Abstracts. During the first search phase, terms used were, “Extracurricular AND bullying AND students AND adolescents AND disability OR disabilities.” Time periods used for this search were between the years 2008 and 2018. Using these terms, 0 studies were found among all eight databases.

Phase two. During the second phase, the search terms were broadened by removing the keyword “adolescents.” Using the broadened search terms, 18 studies were uncovered that met the full inclusion criteria. These articles derived from PsychINFO ($n = 3$), Academic Search Complete ($n = 1$), Education Source ($n = 3$), Social Work Abstracts ($n = 1$), ERIC ($n = 8$), CINAHL ($n = 1$), Scopus ($n = 1$), and Sociology Abstracts ($n = 0$). The total number of articles retrieved during phase two was ($N = 18$).

Phase three. Due to the limited number of literature found on this topic, an additional analysis was added to the study during a third phase. In order to capture more articles, the study was expanded to include articles that were not specific to students with disabilities. The additional boolean phrase for this portion was, “Extracurricular AND bullying AND students.” The timeframe and the databases remained the same. During this expansion, the articles derived from PsychINFO ($n = 13$), Academic Search Complete ($n = 17$), Education Source ($n = 24$), Social Work Abstracts ($n=0$), ERIC ($n=26$), CINAHL ($n = 4$), Scopus ($n = 16$), and Sociological Abstracts ($n = 7$). The total number of articles retrieved during phase two was ($N =$

107). The combined total number of articles found at the end of all searches was ($N = 125$).

Distillation

A distillation of the articles retrieved during search phase one and phase two was applied. During this phase, all of the articles that appeared in the search were individually examined to determine if they met inclusion criteria. Out of the 125 articles that were retrieved, 102 of the articles were discarded due to the following reasons: duplicates (33), were not in English (3) did not examine the direct relationship between extracurricular activities and bullying (43), did not examine adolescent students (6), and were not articles (17). At the end of the distillation, ($N = 23$) articles met the full inclusion criteria and were used for this analysis. Out of the 23 articles being used for this analysis, 13 provided results that were specific to adolescent students with disabilities and 10 did not provide results specific to adolescent students with disabilities.

Results

There were a total of 23 articles ($N = 23$) that met the full criteria of this systematic review. In order to expand the results, there are two separate analyses. The first analyses of the systematic review focuses on articles specifically analyzing adolescent and teenage students with disabilities. In the analyses that only reviewed studies specifically students who have disabilities, there were thirteen articles retrieved ($n = 13$). The second analysis in the systematic review is broadened to include articles analyzing this topic among all student demographics. The number of articles retrieved in the supplemental analyses is ($n = 10$).

Analysis One Results: Specific to Students with Disabilities

Overview of articles. There were a total of ($n = 13$) articles that discussed the relationship between extracurricular activity participation and bullying victimization among adolescent students with disabilities. The 13 articles included peer-reviewed journal articles ($n = 7$), unpublished dissertations/thesis's ($n = 2$), book chapters ($n = 1$), government documents ($n =$

1), University articles ($n = 1$), and articles that were published in journals that were not peer-reviewed ($n = 1$). Study methodologies included quantitative ($n = 4$), qualitative ($n = 3$), literature review ($n = 1$), theoretical overview/application ($n = 3$), and opinion pieces ($n = 2$). Empirical evidence supporting the conclusion of findings was provided in nine of the articles. The locations of the studies included United States ($n = 10$), New Zealand ($n = 1$), and United Kingdom ($n = 2$) (See Table 1.1).

Quantitative article consensus. The overall findings conveyed that extracurricular involvement would decrease bullying victimization instances among adolescent students with disabilities (Brooks, 2013; Rose et al., 2015; Rose et al., 2018). All of the quantitative findings revealed significant results when analyzing the direct impact extracurricular involvement had on decreasing bullying victimization. In the two quantitative studies that compared students with disabilities to students without disabilities, it was indicated students with disabilities were more likely to be bullied and less likely to participate in extracurricular activities (Rose et al., 2018; Brooks, 2013). Based on this finding, researchers assumed this demonstrated a relationship between extracurricular involvement and bullying victimization (Rose et al., 2018; Brooks, 2013).

Quantitative methodology critique. When assessing the data analysis of the quantitative studies, most researchers used restricted sample sizes within a secondary dataset to represent students with disabilities. This caused a lack of a comparison group in the analysis. A critique in methodology for the quantitative studies to combat the disproportioned sample sizes would be to use disabilities as a moderating variable, rather than employing a restricted sample size. This would have provided researchers with a better insight on how extracurricular activities impact the bullying among students with disabilities in comparison to the mainstream population.

The quantitative articles did not define what they considered to be an extracurricular

activity. It is possible that different extracurricular activities (e.g. clubs, athletics, student government, etc.) may have differentiating bullying victimization outcomes. Given students who have disabilities are often limited to their access to extracurricular activities, it is imperative to analyze the different categories of extracurricular activities separately.

An additional critique observed among the quantitative studies was many of the studies were not derived from peer-reviewed journals. Out of all of the quantitative studies uncovered in the analysis, only two of them were published in a peer-reviewed journal. The other three included articles analyzed were not published in peer-reviewed journals.

Qualitative article consensus. The consensus among the qualitative articles supported the findings observed among the quantitative articles. Theoretical themes across studies suggested students with disabilities felt safer from bullying victimization when they were involved in extracurricular activities. Specifically, students with disabilities who were involved in sports voiced that they felt they were less likely to be bullied due to the social bonds they formed outside of the classroom (Danes-Staples, Lieberman, Ratcliff, & Rounds, 2013). Even though the qualitative studies used a different approach to studying extracurricular activities and bullying victimization, the overall consensus was the same as the quantitative studies.

Qualitative methodology. Across the three of the qualitative studies, the sample sizes were small in comparison to the quantitative articles ($n = 7$, $n = 11$, $n = 49$). Due to the smaller sample sizes in the qualitative articles, all of them focused on one type of disability. This approach allowed researchers to gain an in depth perception of the specific types of experiences that are unique to that disability category.

Table 1.1: Articles Analyzing Adolescent Students With Disabilities

| Authors | Study Location | Type of Article | Method of Research | Sample Size | Measures Used | Mention of Disabilities | Key Findings Related to Bullying |
|---|----------------|-------------------------------|-------------------------|--|-----------------------|-------------------------|--|
| Beresford, Clarke, Borthwick, Morris, & Bergeron (2010) | United Kingdom | Peer-Reviewed Journal Article | Review of Literature | N=65 Studies | Review of literature | Yes | <ul style="list-style-type: none"> • Across studies, students with disabilities felt their access to extracurricular activities was limited. Studies felt bullying could have been attributed to lack of inclusivity. • Being segregated due to a lack of activity involvement made students feel negatively perceived by peers. |
| Brooks (2013) | United States | Master's Thesis | Quantitative | N=95 Adolescents with disabilities and | Mean comparison | Yes | <ul style="list-style-type: none"> • Students with disabilities were less likely to participate in extracurricular activities and more likely to be bullied by peers. • A direct correlation was not established. |
| Carter, Biggs, & Blustein (2016) | United Kingdom | Peer-Reviewed Journal Article | Theoretical Application | Not Applicable | Application of theory | Yes | <ul style="list-style-type: none"> • Interaction outside of the classroom can result in stronger social bonds and less social isolation. • Stronger social bonds and less social isolation often lead to less bullying victimization among students with disabilities. • No empirical analysis was provided. |

Table 1.1 (continued)

| Authors | Study Location | Type of Article | Method of Research | Sample Size | Specific Measures | Mention of Disabilities | Key Findings Related to Bullying |
|---|----------------|-------------------------------|--------------------|--|---|-------------------------|--|
| Danes-Staples, Lieberman, Ratcliff, & Rounds (2013) | United States | Peer-Reviewed Journal Article | Qualitative | N=49 adults with disabilities who recounted past experiences | Semi-Structured Interviews; thematic analysis | Yes | <ul style="list-style-type: none"> • There were only two participants who did not experience bullying. Both of those participants were involved in sports. • Athletes were less likely to report bullying. In the athlete sample, 76.6% experienced bullying, while 94.7% of non-athletes experienced bullying |
| Kahn & Lindstrom (2015) | United States | Peer-Reviewed Journal Article | Qualitative | N=8 Adolescents with disabilities who were also LGBTQ | Semi-Structured Interviews; thematic analysis | Yes | <ul style="list-style-type: none"> • Students who were apart of a special interest club for LGBTQ youth felt safer from bullying victimization when being around peers who were also involved in the club. • Even though students reported being bullied outside of the club, they eluded that the club helped them gain social connections that allowed them to feel safer at school. |
| MacArthur (2012) | New Zealand | Peer-Reviewed Journal Article | Qualitative | N=11 Adolescents with disabilities | Semi structured interviews; thematic analysis | Yes | <ul style="list-style-type: none"> • Although the students who were involved in extracurricular activities experienced less bullying than students who were not involved, they still felt bullied by their peers. • Students were bulled less activities were inclusive. If they were limited in their capabilities with that activity, then they were bullied more often. |

Table 1.1 (continued)

| Authors | Study Location | Type of Article | Method of Research | Sample Size | Specific Measures | Mention of Disabilities | • Key Findings Related to Bullying |
|---------------------------------------|----------------|---------------------------------|--------------------------------|----------------|--|-------------------------|--|
| Montie and Abery (2011) | United States | Informational | Theoretical Application | Not Applicable | Application of Theory | Yes | <ul style="list-style-type: none"> • Social theories suggest adolescents with disabilities will have greater access to inclusivity, have more positive reputations, and expanded self-advocacy if they participate in extracurricular activities. Thus, resulting in less bullying and victimization experiences. • No empirical analysis was provided to support claim. |
| Norma and Heumann (2008) | United States | Department of Education Article | Opinion Piece | Not Applicable | Application of Theory | Yes | <ul style="list-style-type: none"> • Students with disabilities are more likely to be bullied and victimized due to the lack of inclusive extracurricular and social involvements • No empirical analysis was provided to support claim. |
| Palmer, Heyne, Montie, & Abery (2011) | United States | Non Peer-Reviewed Article | Opinion Piece | Not Applicable | Opinion based on theoretical framework | Yes | <ul style="list-style-type: none"> • Authors convey students with disabilities are less likely to be involved in extracurricular activities. Thus, resulting in high levels of social isolation and bullying victimization No empirical analysis was provided. |
| Petrenchik, King, & Batorowicz (2011) | United States | Published Text Book Chapter | Theoretical Framework Overview | Not Applicable | Application of Theory | Yes | <ul style="list-style-type: none"> • Students with disabilities are more likely to be marginalized by their peers due to not participate in extracurricular activities. This can result in bullying victimization. • No empirical analysis. |

Table 1.1 (continued)

| Authors | Study Location | Type of Article | Method of Research | Sample Size | Specific Measures | Mention of Disabilities | Key Findings Related to Bullying |
|---|----------------|--|--------------------|---|--|--|---|
| Rose, Espelage, Monda-Amaya, Shogren, & Aragon (2015) | United States | Peer-Reviewed Journal Article | Quantitative | N=360 students without disabilities and N=83 students with disabilities. | Structural Equation Modeling (SEM); Confirmatory Factor Analysis (CFA) | Yes, but only 23% of the sample included students with disabilities. | <ul style="list-style-type: none"> • Students who had disabilities were twice as likely to be bullied than non-disabled students. • Participation in extracurricular activities had a direct influence on peer social support. The increase in peer social support decreased bullying victimization among students. |
| Rose, Stomont, Wang, Simpson, Preast, & Green (2018) | United States | Peer Reviewed Journal Article | Quantitative | N=1,055 Students with disabilities and N=1,055 students without disabilities. | Mean Comparison; One-Way ANOVA; MANOVA | Yes | <ul style="list-style-type: none"> • Students with disabilities who were in the least restrictive environments were less likely to be bullied • Least restrictive environments resulted in more access to extracurricular activities, thus demonstrating how extracurricular activity involvement may be a deterrent for bullying victimization among students with disabilities. |
| Shamel (2013) | United States | Doctoral School Psychology Dissertation (Not Peer-Reviewed or Published) | Quantitative | N=74 adolescents with disabilities | Linear Regression | Yes | <ul style="list-style-type: none"> • Extracurricular involvement was not a significant predicting variable of being a victim of cyber bullying. However, results were determined to be inconclusive for extracurricular activity participation due to the small number of students involved in extracurricular activities. |

Analysis Two Results: Articles for General Student Population

Overview of article characteristics. Due to the lack of literature analyzing the relationship specifically among students who have disabilities, a second systematic literature review analysis was conducted in order to capture more articles. If a relationship is established between extracurricular activity involvements and bullying among a sample of the general student population as a whole, it is possible the same theory can be applied to students who have disabilities. Studies in this analysis still discussed extracurricular participation in relation to bullying victimization, but were broadened to adolescent students without disabilities. The total number of articles included for this analysis was ($n = 10$).

All 10 articles included in the analysis were peer-reviewed journal articles. Study methodologies included quantitative studies ($n = 8$) and literature reviews ($n = 2$). The locations of the studies included United States and United Kingdom ($n = 1$). It is also important to mention the same author wrote three of these studies. This author also used the same dataset to formulate three different papers (See Table 1.2).

Consensus of article findings. Overall, the consensus of the second review of articles that was not specific to disabilities supported the analysis of the previous set of articles that were specific to students with disabilities. Out of the ten articles examined in the second analysis, nine of them demonstrated that participating in extracurricular activities decreased the bullying victimization outcomes among the observed student populations. One article found that extracurricular activity participation increased bullying and victimization among Hispanic/Latino populations. Lehman (2016) explained that this finding was attributed to Hispanic/Latino students having more exposure to majority students due to their extracurricular activities. The additional exposure essentially led to the students being victimized more due to their

extracurricular involvement. A study conducted by Peguero (2008) displayed mixed results by examining classroom based activities from athletic activities in the analysis. When separating classroom activities from athletic activities, Peguero (2008) found students involved in sports were less likely to be bullied; however, students involved in classroom based extracurricular activities were more likely to be bullied.

Methodology critiques. A critique of the overall methodology observed across all of these studies is researchers did not differentiate the different types of extracurricular activities in their analysis. The majority of the studies identified extracurricular activities as one category in the form of a dichotomous variable. Other studies only examined one form of extracurricular activities. A few of the articles focused only on clubs, while others focused on athletics. The articles that focused specifically on clubs had different results than the articles that only focused on sports. This indicates that it is possible that the different types of extracurricular activities may influence the results.

Given this observation, past studies revealed in the review of literature failed to recognize that different forms of extracurricular activities (e.g. athletics verses non-athletic activities) may reveal varied results. Since two of the studies demonstrated varied results dependent on the type of extracurricular activities that the student participated in, it is possible the other studies contained skewed or inaccurate results due to not separating the extracurricular activity types in their analysis. Similar to the articles that specifically focused on students who have disabilities, a predominant methodology critique would be to incorporate a method that allows different extracurricular types to be measured separately. Due to these findings, it is imperative for social work researchers to employ a methodology that analyzes each category of extracurricular category separately.

Table 1.2: Articles that Do Not Mention Disabilities

| Authors | Study Location | Type of Article | Method of Research | Sample Size | Specific Measures | Mention of Disabilities | Key Findings Related to Bullying |
|-------------------|----------------|-------------------------------|--------------------|--|---|-------------------------|--|
| Basch (2011) | United States | Peer Reviewed Journal Article | Literature Review | None provided | Criteria fit; Review of literature | No | <ul style="list-style-type: none"> Overall, studies demonstrated higher levels of extracurricular activities reduced bullying and aggression among adolescent students |
| Driesse ns (2015) | England | Peer-Reviewed Journal Article | Quantitative | N=48,904 adolescent students | Secondary dataset analysis of the Longitudinal Study of Young People in England (LSYPE); Maximum likelihood estimates, and correlation matrix | No | <ul style="list-style-type: none"> Students involved in sports and clubs moderated the likelihood of participating in bullying activity or being a victim of bullying. |
| Lehman (2018) | United States | Peer-Reviewed Journal Article | Quantitative | N=13,461 adolescent students who are ethnic minorities | Secondary dataset analysis using Education Longitudinal Study (ESL); Multilevel modeling | No | <ul style="list-style-type: none"> Extracurricular activity involvement and achievement were predominating predictors of bullying victimization among minority students. Ethnic minority students were less likely to be involved in extracurricular activities, which resulted in higher rates of bullying victimization. Students who were academically successful had a tendency to be involved in more extracurricular activities. This may have also attributed to their decreased bullying victimization rates. |

Table 1.2 (continued)

| Authors | Study Location | Type of Article | Method of Research | Sample Size | Specific Measures | Mention of Disabilities | Key Findings Related to Bullying |
|------------------------|----------------|-------------------------------|--------------------|---|---|---|--|
| Lehman (2016) | United States | Peer-Reviewed Journal Article | Quantitative | N=1,793 Hispanic/Latino Adolescent Students | Secondary dataset analysis using Education Longitudinal Study (ESL); Multilevel modeling; Ordinal Logistic Regression | No | <ul style="list-style-type: none"> • Among Latino students, increased extracurricular involvement resulted in an increase of bullying victimization. It is assumed that this is because extracurricular activities result in increased exposure to other students. • Latino students involved in extracurricular activities who immigrated to the United States were more likely to be bullied than Latino students who were not immigrants. |
| Lehman & Dumais (2017) | United States | Peer-Reviewed Journal Article | Quantitative | N=8,377 adolescent females | Secondary dataset analysis using Education Longitudinal Study (ESL); Multilevel modeling; Ordinal Logistic Regression | No, but disabilities was a covariable in one analysis | <ul style="list-style-type: none"> • As the number of extracurricular activities increase for both females and males, the number of verbal bullying instances decreased. • Bullying victimization decreased when females participated in extracurricular activities, it did not decrease as much as it did for males. Author attributed this to the lack of gender inequality. • Females participating in extracurricular activities felt that they were bullied at higher rates in comparison to the males who participated in extracurricular activities. |

Table 1.2 (continued)

| Authors | Location | Type of Article | Method of Research | Sample Size | Specific Measures | Mention of Disabilities | Key Findings Related to Bullying |
|---|---------------|-------------------------------|--------------------|------------------------------|---|-------------------------|---|
| Martinez, Coker, McMahan, Cohen, & Thapa (2016) | United States | Peer-Reviewed Journal Article | Quantitative | N=15,004 adolescent students | Multi Level Regression Modeling | No | <ul style="list-style-type: none"> Students who were involved in sports reported higher levels of safety and security from bullying victimization than students who were not involved in sports. |
| Mehta, Cornell, Fan, & Gregory (2013) | United States | Peer-Reviewed Journal Article | Quantitative | N=7,058 adolescent students | Hierarchical Linear Modeling | No | <ul style="list-style-type: none"> Students who perceived higher levels of bullying at school reported less involvement in extracurricular school activities HLM analyses showed bullying climate accounted for a significant proportion of variance in the student's commitment to school and school involvement more so than the proportion of variance demonstrated by gender, race, and school enrollment size. |
| Peguero (2008) | United States | Peer-Reviewed Journal Article | Quantitative | N=7,990 adolescent students | Secondary dataset analysis using Educational Longitudinal Study of 2002; Logistical Binary Regression | No | <ul style="list-style-type: none"> Students who were involved in intramural sports were less likely to be bullied. Students involved in classroom based extracurricular activities were more likely to be bullied than students who did not participate in classroom based extracurricular activities. Participating in clubs resulting in higher bullying rates. |

Table 1.2 (continued)

| Authors | Study Location | Type of Article | Method of Research | Sample Size | Specific Measures | Mention of Disabilities | • Key Findings Related to Bullying |
|----------------------------------|----------------|-------------------------------|--------------------|------------------------------|--|-------------------------|--|
| Peguero (2012) | United States | Peer-Reviewed Journal Article | Literature Review | Not Specified | Criteria Fit; Review of literature | No | <ul style="list-style-type: none"> The review of literature indicated schools that have less extracurricular activities have higher levels of bullying victimization. Studies indicate schools that have extracurricular activities that are not inclusive to minority populations have higher levels of bullying victimization. |
| Riese, Gjelsvik, & Ranney (2015) | United States | Peer-Reviewed Journal Article | Quantitative | N=95,677 adolescent students | Secondary Dataset analysis using National Survey of Children's Health; Mean comparison; Correlation Matrix | No | <ul style="list-style-type: none"> Significantly less students who were involved in extracurricular activities reported being bullied (11%) in comparison to the students who did not participate in extracurricular activities (22%). Students who were involved in both a sport and a club had less reports of bullying in comparison to students who were only involved in one extracurricular activity. |

Discussion

When synthesizing past literature about the relationship between extracurricular activity participation and bullying outcomes among students who have disabilities, there were limited studies that adequately demonstrate this relationship. Much of the literature analyzes the positive impact extracurricular activities can have on increasing social connectedness, thus suggesting extracurricular activities could decrease bullying. Since social connectedness decreases bullying rates, many researchers assume extracurricular activity participation also impacts the bullying outcomes experienced among students (Cumming et al., 2017; Deci & Ryan, 2015; Eime et al., 2013). Although the indirect relationship was theorized, few studies tested for a direct relationship between extracurricular activities and bullying (Eime et al., 2013). Even fewer tested this direct relationship among students who have disabilities. In order to validate this theory presented by past research, more empirical studies observing direct relationships between extracurricular activity participation and bullying are needed.

To encompass more studies, two separate literature review analyses were incorporated to assess the relationship between extracurricular involvement and bullying. The first review was specific to students with disabilities. Due to small article counts specific to students who have disabilities, a second literature review was incorporated that was not specific to students with disabilities. A possible explanation for the lack of literature could be attributed to the limited inclusive extracurricular activities that are available to students with disabilities (Palmer et al., 2011; Amado et al., 2013; Cumming et al., 2017). Although the two analyses observed two different student populations, it is assumed similar findings could also be applicable to students who have disabilities.

Synthesis One: Articles Specific to Disabilities

Theoretical articles. In the first synthesis, which only analyzed articles related to students who have disabilities, there were a total of 13 articles ($n = 13$). Of these 13 articles, many of them were theoretical application articles that did not provide empirical evidence of the direct relationship between extracurricular involvement and bullying victimization. In these articles, the authors theorized that the social and emotional advantages of extracurricular involvement would have an impact on a student's experience with being bullied. Although the theoretical application of these articles support a direct relationship between extracurricular involvement and bullying victimization, the lack of empirical evidence supporting these claims demonstrates the need for more studies quantitatively testing this relationship.

Systematic review articles. The majority of the peer-reviewed studies that tested the relationship between extracurricular involvement and bullying outcomes were systematic reviews of literature. All of the literature reviews obtained from the search concurred with the findings of this systematic review analysis. Every study demonstrated that extracurricular involvement is a possible solution to reducing bullying among students with disabilities due to the social benefits derived from extracurricular activities. Although the studies established an indirect relationship, they did not establish a direct relationship between extracurricular involvement and bullying experiences. Additionally, the conclusions of these studies supported the findings of this review by emphasizing the need for more empirical studies in order to establish a direct relationship between extracurricular activity participation and bullying outcomes for students who have disabilities.

Empirical studies. When analyzing the empirical studies obtained from the scope of literature search, all of the results of both the qualitative and quantitative studies demonstrated an

inverse relationship between extracurricular involvement and bullying instances. Particularly, increased extracurricular activity participation decreased bullying victimization rates among students with disabilities. However, it is important to recognize that all of the empirical studies uncovered in the search had very small sample sizes, thus they were not representative of the disability population. Additionally, the small sample sizes could have potentially have unreliable results due to a lack of statistical power. Lastly, it is also important to note that none of the articles looked at athletic extracurricular activities and non-athletic extracurricular activities separately. It is possible that different categories of extracurricular activities would produce different results. Overall, results concluded that there is a substantial need for more studies specifically analyzing the direct relationship between extracurricular participation and bullying victimization among students who have disabilities.

Synthesis Two: Articles Not Specific to Disabilities

When expanding the review of literature search to include studies that were not disability specific, there were ten additional articles found ($n = 10$). Across all of the articles synthesized in the second analysis, most demonstrated similar findings to the studies that were specific to students with disabilities. However, there were a few studies indicating opposite results of the ones used in the first review of literature assessment.

Although the majority of non-disability specific articles signified similar results as the analysis that assessed the disability specific articles, there were two articles that conveyed extracurricular involvement resulted in more bullying among certain student groups. Peguero (2008) found students involved in classroom-related activities experienced higher rates of bullying victimization in comparison to the students who participate in athletic-related activities. Hence, indicating bullying victimization rates depend on the type of extracurricular activity

being observed. Lehman (2016) also indicated conflicting results by demonstrating Hispanic/Latino students who participated in extracurricular activities faced higher rates of bullying victimization due to having more exposure to majority student populations. These two articles emphasize the need for more related studies to determine if bullying rates differentiate depending on the type of extracurricular activity and student population being observed.

Implications for Social Work Practice

Since students who have disabilities are a vulnerable population facing higher rates of bullying victimization in comparison to other school populations (Rose et al., 2009), it is imperative for social workers to promote social justice by advocating for methods to help decrease bullying in school. If researchers are able to observe if participating in extracurricular activities lessens bullying outcomes among students with disabilities, social workers must advocate for inclusive school-based activities. Since prior literature demonstrates that extracurricular activity involvement can improve social outcomes for students, students with disabilities must be provided with the same access.

Additionally, a relationship has not been established between the different categories of extracurricular activity involvement (e.g. clubs verses sports) and their impact on bullying. It is possible that athletic extracurricular activities and non-athletic extracurricular activities have different benefits. Since the inclusivity of athletic extracurricular activities differ from non-extracurricular activities, it is important to explore if different categories of extracurricular activities impact bullying at different magnitudes. If social workers are able to establish a direct relationship between different categories of extracurricular activity participation and bullying, then advocating for more inclusivity across all extracurricular categories may be a possible solution to combat bullying outcomes among students who have disabilities.

Implications for Social Work Research

The more predominate implication to social work research is expanding social work literature to include more studies pertaining to students with disabilities. Out of the 23 articles used in this analysis, only one article came from a social work database. None of these articles were found in a social work journal. Although, students with disabilities are an oppressed population served by social workers, the majority of the literature is found in education and psychology journals. Implications to social work research include having more studies related to disability issues in social work journals and databases.

Despite uncovering 23 articles found analyzing the direct relationship between extracurricular participation and bullying victimization, only 13 of them provided information specific to disabilities. Even though these 13 articles included disability related analyses, only seven were empirical studies. When assessing the seven empirical studies, all of them had very small sample sizes and only looked at one type of disability. This could have potentially caused the results to not provide a broad scope on how extracurricular involvement impacts bullying victimization among students with disabilities. In order to establish this relationship, social work researchers must use a large sample of students with disabilities.

Lastly, two studies in the second analysis conveyed a possibility that the different types of extracurricular involvement may have influenced bullying victimization rates. None of the studies specific to disabilities employed a method that allowed the different types of extracurricular activities to be examined separately. Since students with disabilities are limited to the types of extracurricular activities available to them (Beresford et al., 2010), this is an important topic to further examine. Implications for future social work research include

implementing a regression that separates the categories of extracurricular activities as co-independent variables, rather than condensing them into one category.

References

- Amado, A. N., Stancliffe, R. J., McCarron, M., & McCallion, P. (2013). Social inclusion and community participation of individuals with intellectual/developmental disabilities. *Intellectual and developmental disabilities, 51*(5), 360-375. doi:10.1352/1934-9556-51.5.360
- American Bar Association [ABA]. (2013). *Anti-bullying initiative*. Retrieved from https://www.americanbar.org/groups/crsj/projects/anti_bullying_initiative/parents.html
- Barber, K. & Olsen, A. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research, 19*, 3-30. doi:10.1177/0743558403258113
- Basch, C. E. (2011). Aggression and violence and the achievement gap among urban minority youth. *Journal of School Health, 81*(10), 619-625. doi:10.1111/j.1746-1561.2011.00636.x
- Beresford, B., Clarke, S., Borthwick, R., Morris, M., White, K., & Bergeron, C. (2010). Improving the wellbeing of disabled children and young people through improving access to positive and inclusive activities. *Disability Knowledge Review, 2*, 1-65. Retrieved from <http://eprints.whiterose.ac.uk/73549/1/Document.pdf>
- Blake, J. J., Lund, E. M., Zhou, Q., Kwok, O. M., & Benz, M. R. (2012). National prevalence rates of bully victimization among students with disabilities in the United States. *School Psychology Quarterly, 27*(4), 210-222. doi:10.1037/spq0000008
- Bradshaw, C. P., Waasdorp, T. E., & Johnson, S. L. (2015). Overlapping verbal, relational, physical, and electronic forms of bullying in adolescence: Influence of school context. *Journal of Clinical Child & Adolescent Psychology, 44*(3), 494-508. doi:10.1080/15374416.2014

- Brooks, B. A., Floyd, F., Robins, D. L., & Chan, W. Y. (2015). Extracurricular activities and the development of social skills in children with intellectual and specific learning disabilities. *Journal of Intellectual Disability Research*, 59(7), 678-687. doi:10.1111/jir.12171
- Carter, E. W., Biggs, E. E., & Blustein, C. L. (2016). Relationships matter: Addressing stigma among students with intellectual disability and their peers. In K. Scior and S. Werner (Eds.), *Intellectual disability and stigma: Stepping out from the margins* (pp. 149-164). London, UK: Palgrave MacMillan
- Cornell, D., & Limber, S. P. (2015). Law and public policy on the concept of bullying at school. *American Psychologist*, 70, 333–343. doi:10.1037/a0038558
- Cumming, T. M., Marsh, R. J., & Higgins, K. (2017). *School Connectedness for Students with Disabilities: From Theory to Evidence-based Practice*. Routledge.
- Danes-Staples, E., Lieberman, L. J., Ratcliff, J., & Rounds, K. (2013). Bullying experiences of individuals with visual impairment: The mitigating role of sport participation. *Journal of Sport Behavior*. doi:10.1177/0264619616678651
- Deci, E. L., & Ryan, R. M. (2014). Autonomy and need satisfaction in close relationships: Relationships motivation theory. *Human Motivation and Interpersonal Relationships* (pp. 53-73). Springer, Dordrecht. doi:10.1007/978-94-017-8542-6_3
- Dupper, D. R. (2013). *School bullying: New perspectives on a growing problem*. Oxford University Press.
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 98. doi: 10.1186/1479-5868-10-135

- Farmer, T. W., Petrin, R., Brooks, D. S., Hamm, J. V., Lambert, K., & Gravelle, M. (2012). Bullying involvement and the school adjustment of rural students with and without disabilities. *Journal of Emotional and Behavioral Disorders, 20*(1), 19-37.
doi:10.1177/1063426610392039
- Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research, 75*(2), 159-210. doi:10.3102/00346543075002159
- Gavish, B. (2017). Four profiles of inclusive supportive teachers: Perceptions of their status and role in implementing inclusion of students with special needs in general classrooms. *Teaching and Teacher Education, 61*, 37-46. doi:10.1016/j.tate.2016.10.004
- Gladden, R. M., Vivolo-Kantor, A. M., Hamburger, M. E., & Lumpkin, C. D. (2014). Bullying surveillance among youths: Uniform definitions for public health and recommended data elements, Version 1.0. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, and U.S. Department of Education.
Retrieved from <https://www.cdc.gov/violenceprevention/pdf/bullying-definitions-final-a.pdf>
- Hicks, J., Jennings, L., Jennings, S., Berry, S., & Green, D. A. (2018). Middle School Bullying: Student Reported Perceptions and Prevalence. *Journal of Child and Adolescent Counseling, 1-14*. doi:10.1080/23727810.2017.1422645
- Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *American Psychologist, 70*(4), 293. doi:10.1037/a0038928
- Lehman, B. (2018). Academic and Extracurricular Predictors of Peer Victimization: Evidence of Similarities Across Diverse Racial and Ethnic Categories. *Journal of Aggression, Maltreatment & Trauma, 27*(4), 425-443. doi:10.1080/10926771.2017.1382635

- Lehman, B. (2016). Latino students in new destinations: Immigration, extracurricular activities, and bullying victimization. *Education and Youth Today*, 20(1), 123-144.
doi:10.1108/S1537-466120160000020005
- Lehman, B., & Dumais, S. A. (2017). Feminization of arts participation and extracurricular activities? Gender differences in cultural capital and bullying victimization. *Poetics*, 61, 26-38. doi:10.1007/s11218-017-9373-2
- MacArthur, J. (2013). Sustaining friendships, relationships, and rights at school. *International Journal of Inclusive Education*, 17(8), 793-811. doi:0.1080/13603116.2011.602526
- Martinez, A., Coker, C., McMahon, S. D., Cohen, J., & Thapa, A. (2016). Involvement in extracurricular activities: Identifying differences in perceptions of school climate. *The Educational and Developmental Psychologist*, 33(1), 70-84. doi:10.1017/edp.2016.7
- Mehta, S. B., Cornell, D., Fan, X., & Gregory, A. (2013). Bullying climate and school engagement in ninth-grade students. *Journal of School Health*, 83(1), 45-52.
doi:10.1111/j.1746-1561.2012.00746.x.
- Montie, J., & Abery, B. (2011). Social and emotional well-being of children and youth with disabilities: A brief overview. *Impact*, 24(1), 2-3.
- Palmer, S., Heyne, L., Montie, J., & Abery, B. (2011). Feature issue on supporting the social well-being of children and youth with disabilities. *Impact*, 24 (1). Retrieved from <https://ici.umn.edu/products/impact/241/default.html>
- Peguro, A. A. (2008). Bullying victimization and extracurricular activity. *Journal of School Violence*, 7(3), 71-85. doi:10.1080/15388220801955570
- Peguro, A. A. (2012). Schools, bullying, and inequality: Intersecting factors and complexities with the stratification of youth victimization at school. *Sociology Compass*, 6(5), 402-412. doi: 10.1111/j.1751- 9020.2012.00459.x.

- Petrenchik, T., King, G., & Batorowicz, B. (2011). Children and youth with disabilities: Enhancing mental health through positive experiences of doing and belonging. *The American Occupational Therapy Association*, 189-205.
- Reiter, S., & Lapidot-Lefler, N. (2007). Bullying among special education students with intellectual disabilities: Differences in social adjustment and social skills. *Intellectual and Developmental Disabilities*, 45(3), 174-181. doi:10.1352/1934-9556(2007)45[174:BASESW]2.0.CO;2
- Riese, A., Gjelsvik, A., & Ranney, M. L. (2015). Extracurricular activities and bullying perpetration: results from a nationally representative sample. *Journal of School Health*, 85(8), 544-551. doi:10.1111/josh.12282.
- Rose, C. A., Espelage, D. L., Monda-Amaya, L. E., Shogren, K. A., & Aragon, S. R. (2015). Bullying and middle school students with and without specific learning disabilities: An examination of social-ecological predictors. *Journal of Learning Disabilities*, 48(3), 239-254. doi:10.1177/0022219413496279
- Rose, C. A., Stormont, M., Wang, Z., Simpson, C. G., Preast, J. L., & Green, A. L. (2015). Bullying and students with disabilities: examination of disability status and educational placement. *School Psychology Review*, 44(4), 425-444. doi:10.17105/spr-15-0080.1
- Ruzek, E. A., Hafen, C. A., Allen, J. P., Gregory, A., Mikami, A. Y., & Pianta, R. C. (2016). How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learning and Instruction*, 42, 95-103. doi: <https://dx.doi.org/10.1016/j.learninstruc.2016.01.004>
- Schaefer, D. R., Simpkins, S. D., Vest, A. E., & Price, C. D. (2011). The contribution of extracurricular activities to adolescent friendships: new insights through social network analysis. *Developmental Psychology*, 47(4), 1141. Doi: 10.1037/a0024091

Shamel, K. A. (2013). *The relationships between cyber bullying, academic constructs, and extracurricular participation among middle schoolers* (Doctoral dissertation, Capella University).

Chapter II: The Relationship Between Extracurricular Involvement and Bullying Occurrence Rates

This manuscript has not been published. Reviewers included my dissertation committee, Drs. David Dupper (Chair), Stacia Martin-West, Shandra Forrest-Bank, and Mitsunori Misawa

Abstract

Past studies have indicated students who have disabilities are at a higher risk of experiencing bullying victimization in comparison to other student groups. Extracurricular activity participation has shown to establish better social outcomes for students. These positive social outcomes indirectly decrease the amount of times a student is bullied. The following exploratory study uses the National Crime Victimization Survey – School Crime Supplement (NCVS/SCS) to analyze the bullying occurrence rates experienced among students, with disabilities being a focal variable. To explore the relationship between extracurricular involvement and bullying occurrence rates, this study employs a binary logistic regression to determine if athletic and non-athletic extracurricular activities have an impact on the number of times a student with disabilities experiences bullying. Implications for future social work practice and research are discussed.

Keywords: disabilities, extracurricular activities, school bullying

Background

Bullying is a pervasive issue observed across all student groups. Although most students have experienced or witnessed bullying at school, bullying victimization does not impact all student populations equally. Students who identify as being a member of a minority group are more likely to be victimized in comparison to other student groups (Lehman, 2016). A minority population that is most vulnerable to experiencing higher rates of bullying is students who have disabilities (Rose, Espelage, Monda-Amaya, Shogren, & Aragon, 2015; Hicks Jennings, Berry, & Green, 2018). Since students who have disabilities are at a higher risk of being bullied more often than other student populations, it is imperative for social work researchers and practitioners to explore different factors that can help decrease bullying rates. Exploring ways to decrease bullying can help school social workers determine appropriate methods to combat bullying victimization occurrences among students who have disabilities.

Studies have indicated that extracurricular involvement in school-based activities such as athletics, clubs, student government, and volunteer groups have multiple social benefits for children and adolescents. Students who are involved in school-based extracurricular activities often have more friends and feel a greater sense of social connection to their school (Brooks, Floyd Robins, Chan, 2014). Studies have also shown that having more friends and a greater sense of social connection to their school often leads to a decreased likelihood of being a victim of bullying (Bradshaw, Waasdorp, Debnam, & Johnson, 2014). Given the potential social benefits of extracurricular activities that prevent bullying victimization (Brooks et al., 2014; Montie & Abery, 2011; Kahn & Lindstrom, 2015), it is possible that participating in extracurricular activities may directly decrease the number of times a student with a disability experiences bullying victimization.

Purpose

The purpose of this exploratory study was to determine if participating in extracurricular activities decreases the bullying rate experienced among students with disabilities. Few studies have established a direct relationship between extracurricular participation and bullying victimization rates among various student groups. There has yet to be a study that establishes a direct relationship between extracurricular activity participation and bullying victimization occurrence among students who have a disability. It is predicted that participation in athletic or non-athletic extracurricular activities will have direct relationships with the bullying frequency occurrences reported among students who have disabilities.

Methods

Research Questions

Using the School Crime Supplement (SCS) survey obtained from the National Crime Victimization Survey (NCVS) public dataset, the following research questions were tested:

R₁: Do students who have disabilities experience bullying at a higher occurrence rate in comparison to other student populations?

R₂: Does participating in extracurricular activities decrease the number of occurrences students with disabilities experience bullying during an academic year?

It was hypothesized that participating in extracurricular activities will decrease the number of times a student experiences bullying on the bullying occurrence scale.

Exploratory Research Design

The National Crime Victimization Survey – School Crime Supplement (NCVS/SCS) is a nationally representative secondary dataset used in order to explore if there is a direct relationships between extracurricular involvement and bullying victimization occurrence

frequencies reported by students. The NCVS employed a random sampling design to interview several households across the United States every six months over the course of three years. All of the interviews were conducted in either a face-to-face setting or over the phone through the use of close ended-questions. Middle school and high school students living in the households were interviewed about their school related experiences for the SCS data collection. Many of the experiences that were inquired about in SCS related to the participants' bullying victimization in schools and school-based activities.

Sample

Inclusion criteria required participants to be ages ranging from 12 to 18 years old. Subjects for this study were restricted to participants who stated they were victims of bullying when participating in the SCS of the NCVS longitudinal study. Participants also had to be students who were currently enrolled in a public or private school and on track to earn a high school diploma. Children that were homeschooled, completed with their high school requirements, or on a non-diploma track were excluded from the final dataset (U.S. Department of Justice, 2008). Since many students who have a moderate to severe disabilities are non-diploma track students, the exclusion of non-diploma track students was vital to this study. This indicates that all of the participants with disabilities were at similar functioning level in regards to their academics (Gaumer-Erickson, Kleinhammer-Tramill, & Thurlow, 2007). Thus, this allowed for a better consistency in school experiences and extracurricular activity access faced by participants.

Sample demographics. The SCS survey from the 2015 wave contained a sample of 1,980 students who reported being bullied during the 2013 to 2014 school year ($N = 1,980$). Out of that sample, there were 728 students who were identified as having a disability ($n = 728$). The

gender representation of the sample was male 59% and female 41%. Ethnicity demographics of the sample included 21% identified as Hispanic/Latino/a and 78% 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%. The average age of the participants was approximately 15 ($M = 14.73$, $SD = 1.95$)

Measures

Independent variables. Participants were asked closed-ended survey questions pertaining to student characteristics, extracurricular activity participation, and bullying victimization frequency (See Table 2.1). The independent variable of interest was a yes/no dichotomous variable to determine the participants extracurricular activity involvement. The extracurricular activities included athletic teams, spirit groups, performing arts, academic clubs, student government, and community service groups. Due to small cell sizes of the number of participants who were a part of non-athletic activities, all of the non-athletic extracurricular activities were combined to form a non-athletic dichotomous variable. To differentiate the non-athletic activities from athletic extracurricular activities, the athletic activity variable remained its own category for the analysis. This allows the data analysis to differentiate athletic extracurricular activities and non-athletic extracurricular activities in order to determine if they impact the bullying frequency outcome variable differently. The extracurricular activity variables were coded 0 = No and 1 = Yes).

The dichotomous disability variable was used as a moderating variable to determine if having a disability impacted the relationship between extracurricular involvement and the bullying victimization frequency reported by students. To explore the impact of having a disability has on this relationship, an interaction effect between participating in extracurricular

activities and having a disability was also applied. Additional covariates controlled for in the logistic regression included age (12-18), gender (0 = male; 1 = female), race (0 = white; 1 = not white), and ethnicity (0 = Hispanic/Latino/a; 1 = not Hispanic/Latino/a) (See Table 2.1).

Outcome variable. The dependent variable was an ordinal variable using a likert-scale to determine the occurrence rate of how often the student was bullied during that academic year (0 = once or twice a year, 1 = once or twice a month, 2 = once or twice a week, 3 = almost everyday). This is the scale that has been utilized by the U.S. Department of Justice since the 2007 data collection of the NCVS/SCS (U.S. Department of Justice, 2008). Due to small cell sizes, the ordinal bullying occurrence rate outcome variable was collapsed by combining answers 0-1 and 2-3 (See Table 2.1). This left a final dichotomous outcome variable (0 = once or twice a month or more, 1 = once or twice a week or more).

Control variables. Additional control variables in the study included age, gender, and ethnicity. Age was a continuous variable ranging from 12 to 18. Gender was a dichotomous variable in which participants classified as 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, Island Pacifier, or two or more races. Due to small cell counts, each race could not be analyzed separately in the logistic regression. This variable was then collapsed to non-minority and minority. Minority was classified as white and non-minority was classified by all other races.

Analysis

In order to test for association between variables of interest, Chi-square testing was applied. Next, a binary logistic regression was applied in order to further explore the relationship between both athletic and non-athletic extracurricular involvement and bullying victimization

frequency among students, while controlling for demographic variables (See Figure 2.1). In order to specifically investigate how having a disability impacted this relationship, a dichotomous disability variable was employed as a moderating variable and an interaction effect. Since this study was exploratory, each relationship in the Chi-Square testing, binary logistic regression, and the overall model fit was tested for statistical significance using a significance level of $p < .05$ (Cohen, 1968; Harlow, 2016). Nagelkerke R^2 was tested to determine the variance of the overall model.

Results

Chi-Square Tests

Having a disability and bullying occurrence frequency. An ordinal scale with four levels was used to determine bullying occurrence frequency (0 = bullied once or twice a school year, 1 = bullied once or twice a month, 2 = bullied once or twice a week, 3 = bullied once or twice a day). Using the original bullying occurrence rate four level scale, Chi-square testing was run to determine if there was a relationship between bullying frequency and having a disability. Results indicated a statistically significant relationship ($\chi^2(3) = 172.867, p < .001$) (See Table 2.2).

Due to small cell counts for response 0 = once or twice a school year, and response 3 = bullied once or twice a day, the bullying occurrence variable was collapsed by combining answers 0, 1 and 2, 3 (See Table 2.1). Using the new collapsed outcome variable, Chi-square testing was run to determine if there was a relationship between bullying occurrence frequency and disability when using the dichotomous bullying occurrence scale (0 = bullied once a month or less, 1 = bullied once or twice a week or more). Results indicated a statistically significant relationship between having a disability and the bullying occurrence rate outcome variable (χ^2

(1) = 114.144, $p < .001$). Students with disabilities were significantly more likely to experience a higher frequency of bullying. When comparing the two groups, 5.7% of students without a disability were bullied on a weekly basis or more, in comparison to 21.6% of students with disabilities being bullied on a weekly basis or more (See Table 2.3). These findings indicate the participants with disabilities were bullied at a higher frequency than the participants without disabilities.

Extracurricular involvement and bullying occurrence frequency. Since extracurricular activity involvement is the independent variable of interest, Chi-square testing was also conducted to explore the direct relationship between bullying occurrence frequency and extracurricular involvement. Using the dichotomous bullying occurrence outcome, athletic extracurricular involvement had a statistically significant relationship with bullying occurrence frequency ($\chi^2(1) = 4.724, p = .033$). In percentages, 10.6% of students who did not participate in athletic extracurricular activities experienced bullying more than twice a week, while 14.3% of students who participated in athletics experienced bullying more than once or twice a week. These results demonstrated that the students who participated in athletic extracurricular activities reported higher bullying frequencies than the students who did not (See Table 2.4).

Non-athletic extracurricular involvement also had a statistically significant relationship with bullying occurrence frequency ($\chi^2(1) = 21.046, p < .001$). When viewing the percentages associated with the Chi-square test, 9.1% of students who did not participate in athletic extracurricular activities experiences bullying more than twice a week, while 16.0% of students who participated in athletics experienced bullying more than once or twice a week. This indicates students who participated in non-athletic extracurricular activities reported higher bullying frequencies than students who did not participate in non-athletics (See Table 2.5).

Control Variables. Additional covariates included race, ethnicity, and gender. Chi-square testing was conducted on each of these variables separately in order to determine if they had a relationship with bullying occurrence frequency. Race did not have a statistically significant relationship with bullying occurrence frequency ($\chi^2(1) = 3.412, p = .065$). Ethnicity did not have a statistically significant relationship with bullying occurrence frequency ($\chi^2(1) = 3.489, p = .062$). Lastly, gender did not have a statistically significant relationship with bullying occurrence frequency ($\chi^2(1) = 2.308, p = .133$).

Binary Logistic Regression

A binary logistic regression was performed to ascertain the relationship that participating in extracurricular activities and having a disability had on the outcome variable of bullying occurrence frequencies. Additional control variables included age, gender, race, and ethnicity. The overall model for the binary logistic regression was statistically significant ($\chi^2(9) = 124.291, p < .001$). The regression model explained 12.1% (Nagelkerke R^2) of the variance in bullying occurrence frequencies. Having a disability indicated a positive statistically significant relationship with bullying occurrence frequencies when used a moderator ($p < .001, OR = 4.368$). Thus, students who had a disability were approximately 337% or 4.36 times more likely to experience being bullied on a weekly basis or more (See Table 2.6).

When testing the interaction effect between having a disability and participating in athletic extracurricular activities, there was not a statistically significant relationship with bullying occurrence frequency ($p = .381, OR = .725$). When testing the interaction effect between having a disability and participating in non-athletic extracurricular activities, there was also not a statistically significant relationship with bullying occurrence frequency ($p = .791, OR = 1.100$). The results failed to reject the null hypothesis and participating in either athletic or

non-athletic extracurricular activities did not have an impact on the frequency in which students with a disability experience bullying. Other significant variables in the model that increased the likelihood of being bullied at a higher rate included age ($p = .017$, OR = .910), gender ($p = .039$, OR = 1.360), and ethnicity ($p = .046$, OR = 1.488). Older students, female students, and Hispanic/Latino/a students were bullied at higher frequencies (See Table 2.6).

Discussion

Disability and Bullying Rates

Consistent with past literature (Rose et al., 2015; Hicks et al, 2018), the findings of this study demonstrate that children with disabilities experience higher rates of bullying victimization than students who do not have a disability. The outcomes of the Chi-square test and the binary logistic regression were most consistent with the findings of Farmer et al. (2012). Using a general linear model, Farmer et al. (2012) found that students with disabilities were 4.8 times more likely to be bullied, while the findings of the binary logistic regression employed in this study found students with disabilities were 4.3 times more likely to be bullied than their peers. Although Farmer et al. (2012)'s results derived from a different sample and used a different statistical approach than those applied in this study, both methodological approaches resulted in similar outcomes demonstrating students who have disabilities are more than 4 times more likely to be bullied. The consistencies between Farmer et al. (2012) and this analysis further conclude the need to focus attention on students with disabilities when studying social issues related to bullying.

Several past studies demonstrate that students who are apart of minority or oppressed populations are at a higher risk of being bullied than students who are not apart of a minority or oppressed group (Barlett & Wright, 2017; Lehman, 2016; Kowalski et al., 2014; Misawa, 2018)

However, the findings of this study add to past findings by demonstrating that students who have a disability are at an even higher risk of experiencing bullying victimization than any other minority student population. In support of the findings of Rose et al. (2009), the significance values in these results indicated the students who had a disability experienced bullying at higher occurrence rates than the other minority demographics included in the logistic regression.

When examining the results of this analysis, having a disability resulted in a stronger relationship with bullying victimization than the student's gender, age, race, and ethnicity. The students who had disabilities were more likely to be bullied on a weekly basis, as apposed to a monthly basis, in comparison to other demographic characteristics. Chi-square testing revealed that approximately 26% of students in this study who had a disability were bullied at least once a week, while only 5% of students without a disability were bullied once a week. Overall, these findings conclude that having a disability not only puts students at a higher risk for experiencing an instance of bullying, but it also puts them at higher risk of experiencing those bullying instances at higher frequencies.

Extracurricular Activities and Bullying Rate

Although past studies have indicated that the benefits of participating in extracurricular activities has an indirect relationship with bullying victimization, results from this analysis indicate that there was not a direct relationship between extracurricular activity involvement and bullying victimization occurrences for students who have disabilities. Past studies have found that extracurricular activity involvement increases socialization outcomes among students with and without disabilities, resulting in an indirect relationship bullying rates (Martinez et al., 2016; Rose et al., 2015). The positive benefits associated with participating in extracurricular activities (e.g. higher levels of social connectedness and having better relationships with peers) resulted in

less bullying instances. Montie and Abery (2011) also provided a theoretical framework explaining how the social benefits of being included in extracurricular activities would reduce bullying among students with disabilities.

Using the theoretical framework presented by Montie and Abery (2011) and past empirical studies, it was hypothesized that participating in extracurricular activities would have direct relationship with bullying victimization frequencies. Specifically, it was predicted that participating in extracurricular activities would decrease the number of bullying victimization instances experienced by the students in this sample. However, the results of the binary logistic regression revealed that there was not a direct relationship between participating in extracurricular activities and the frequency the students reported bullied over the course of one school year. Both of the p-values of the non-athletic and athletic extracurricular activity independent variables indicated that there was a not statistically significant relationship with bullying victimization frequency outcomes.

Limitations

As all studies, this study was not without limitations. One predominate limitation is the varied disability categories were not differentiated. Although, the students in this study were on diploma track, meaning they all had mild to moderate disabilities, it does not account for diversity presented of each disability cluster. Since a student who has a physical disability would have unique experiences in comparison to students who have an intellectual or learning disability, it is possible that these varied disability categories would be impacted by extracurricular activities and their relationship with bullying occurrences at different levels.

Small cell size of answers 0 and 3 in the ordinal variable presented an additional limitation. To eliminate small cell sizes, answers 0,1 and 2,3 were combined and a binary logistic

regression was ran in lieu of an ordinal logistic regression. By combining answers, this could have potentially interfered with the internal validity of the analysis because the answers were not the exact answers provided by the participants.

Conclusion and Future Directions

Although extracurricular involvement has demonstrated relationships with bullying in past literature, the direct relationship between extracurricular involvement and bullying experiences has yet to be determined for students who have disabilities. As the number of activities being offered to students with disabilities increases, the more vital it is observe how extracurricular involvement impacts bullying occurrences. Since students with disabilities face higher bullying victimization rates than any other student group, it is crucial that social work researchers continue investigating this relationship.

Implications for Social Work Practice

As demonstrated by this study and several past studies, students who have disabilities are at the highest risk for experiencing bullying in comparison to all other student populations. Given this bullying risk, it is possible that the bullying experienced by students with disabilities is occurring in their extracurricular activity setting. Implications for social work practice include providing bullying prevention education to teachers and students in order help eliminate bullying. Since it is possible that bullying is occurring in extracurricular activity settings, as well as the classroom, school social work practitioners must ensure the individuals running the activities are providing a safe and inclusive environment for the students who have disabilities.

Additionally, this study was a school-based study that derived data pertaining to school-based extracurricular activities. The extracurricular activities examined were not specific to disability accommodations and inclusivity. It is possible that students with disabilities would be

bullied less if school-based activities promoted inclusive practices that are tailored specifically for students who have disabilities. In support of Lehman (2016), minority students participating in extracurricular activities that are designed for the majority populations may cause the minority populations to be bullied more often. Implications for future social work practice include advocating for activities that are more inclusive for students who have special needs. It is imperative for school social workers to advocate for a universal design approach for the extracurricular activities offered to general student populations.

Implications for Future Social Work Research

Past studies have demonstrated concurring results related to the bullying victimization frequencies experienced by students who have disabilities (Rose et al., 2015; Farmer et al., 2012). To decrease bullying rates, several studies have demonstrated that extracurricular activities are a possible solution to help eliminate bullying occurrences among oppressed populations due to their social benefits (Basch, 2011). However, contrary to the theoretical frameworks presented in past findings, this study determined that participating in extracurricular activities did not have a significant relationship with bullying frequency when used as an interaction effect with having a disability. Therefore, a direct relationship between extracurricular activity participation and bullying occurrence rates was not established by this study. Due to the null findings derived from this analysis, it is possible that more inclusive extracurricular activities designed specifically for children who have disabilities would be needed in order to decrease bullying.

Given the null results of this study, it is important to recognize that this study only analyzed school-based extracurricular activities. The activities analyzed included the integration of both students with disabilities and students without disabilities. Many school-based

extracurricular activities are not designed specifically to meet the needs of all disability related accommodations, thus making it possible that they do not benefit students with disabilities in the same way they benefit the general student population. Inclusive extracurricular activities that use specific integration tactics tailored for students with disabilities may produce different bullying outcomes than the activities provided among the general student population. It is possible that activities tailored specific to special needs populations would influence the results. Implications for future social work research include examining activities that are specifically designed for students with disabilities.

Since previous research has indicated several indirect relationships with extracurricular involvement and bullying victimization (Lehman, 2018; Basch, 2011), it is possible that there are other direct relationships between extracurricular involvement and bullying victimization. Based on prior research, extracurricular participation has several social, relational, physical health, and academic benefits for students who have disabilities (Eime, Young, Harvey, Charity, & Payne, 2013; Feldman & Matjasko, 2005). Prior research has also demonstrated that bullying victimization results in negative impacts related to social, health, and academic outcomes (Hicks et al, 2018; Hymel & Swearer, 2015; Dupper, 2013). This study explored if extracurricular involvement can directly decrease bullying; however, it did not explore how extracurricular involvement can moderate the negative outcomes faced by students with disabilities who have been bullied. Implications for future research include exploring how extracurricular involvement can the impact social, health, and academic outcomes among students with disabilities who are a victim of bullying.

References

- Barlett, C. P., & Wright, M. F. (2017). Longitudinal relations among cyber, physical, and relational bullying and victimization: comparing majority and minority ethnic youth. *Journal of Child & Adolescent Trauma*, 1-11. doi:10.1007/s40653-017-0175-7
- Basch, C. E. (2011). Aggression and violence and the achievement gap among urban minority youth. *Journal of School Health*, 81(10), 619-625. doi:10.1111/j.1746-1561.2011.00636.x
- Bradshaw, C. P., Waasdorp, T. E., & Johnson, S. L. (2015). Overlapping verbal, relational, physical, and electronic forms of bullying in adolescence: Influence of school context. *Journal of Clinical Child & Adolescent Psychology*, 44(3), 494-508. doi:10.1080/15374416.2014
- Brooks, B. A. (2013). Extracurricular activities and the development of social skills in children with intellectual and learning disabilities. *Scholar Work at Georgia State University*, Retrieved from https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1107&context=psych_theses
- Cohen, J. (1968). Multiple regression as a general data-analytic system. *Psychological bulletin*, 70(6p1), 426. doi:10.1037/h0026714
- Dupper, D. R. (2013). *School bullying: New perspectives on a growing problem*. Oxford University Press.
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport.

- International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 98. doi: 10.1186/1479-5868-10-135
- Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75(2), 159-210. doi:10.3102/00346543075002159
- Gaumer Erickson, A. S., Kleinhammer-Tramill, J., & Thurlow, M. L. (2007). An analysis of the relationship between high school exit exams and diploma options and the impact on students with disabilities. *Journal of Disability Policy Studies*, 18(2), 117-128. doi:10.1177/10442073070180020201
- Harlow, L. L. (2016). Significance testing introduction and overview. In *What if there were no significance tests?* (pp. 51-66). Routledge.
- Hicks, J., Jennings, L., Jennings, S., Berry, S., & Green, D. A. (2018). Middle School Bullying: Student Reported Perceptions and Prevalence. *Journal of Child and Adolescent Counseling*, 1-14. doi:10.1080/23727810.2017.1422645
- Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *American Psychologist*, 70(4), 293. doi:10.1037/a0038928
- Kahn, L., & Lindstrom, L. (2015). "I just want to be myself": Adolescents with disabilities who identify as a sexual or gender minority. In *The Educational Forum*, 79(4), 362-376. Routledge. doi:10.1080/00131725.2015.1068416
- Kowalski, R., Giumetti, G. W., Schroeder, A., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073-1137. doi:10.1037/a0035618

Lehman, B. (2016). Latino students in new destinations: Immigration, extracurricular activities, and bullying victimization. *Education and Youth Today*, 20(1), 123-144.

doi:10.1108/S1537-466120160000020005

Misawa, M. (2018). Investigating the Perceptions and Characteristics of the Undergraduate and Graduate Students on Cyber-Mobbullyism in Higher Education. Retrieved from:

<https://newprairiepress.org/aerc/2018/papers/18/>

Montie, J., & Abery, B. (2011). Social and emotional well-being of children and youth with disabilities: A brief overview. *Impact*, 24(1), 2-3. Retrieved from:

<https://ici.umn.edu/products/impact/241/241.pdf>

Rose, C. A., Espelage, D. L., Monda-Amaya, L. E., Shogren, K. A., & Aragon, S. R. (2015).

Bullying and middle school students with and without specific learning disabilities: An examination of social-ecological predictors. *Journal of Learning Disabilities*, 48(3), 239-

254. doi:10.1177%2F0022219413496279

Chapter II Appendix

Table 2.1: School Crime Supplement (SCS) Survey Questions Used

| Student Demographics | |
|--|--|
| Do you have a disability? | 0 = No 1 = Yes |
| What is your gender? | 0 = Male 1 = Female |
| Are you Hispanic/Latino/a? | 0 = No 1 = Yes |
| What is your race? | 1 = White 2 = Black 3 = Native American 4 = Asian 5 = Native Hawaiian/Island Pacifier 6 = Two or more races |
| What is your age? | 12-18 years (<i>Continuous</i>) |
| Athletic Extracurricular Activity Participation | |
| During this school year, have you participated in any of the following activities? | Athletic Teams: 0 = No, 1 = Yes |
| Non-Athletic Extracurricular Activity Participation | |
| During this school year, have you participated in any of the following activities? | Spirit Groups: 0 = No, 1 = Yes Performing Arts: 0 No, 1 = Yes Academic Clubs: 0 No, 1 = Yes Student Government: 0 No, 1 = Yes Community Service: 0 No, 1 = Yes |
| Bullying Occurrence Rate (<i>Original</i>) | |
| How often did bullying incidents occur? | 0 = Once or twice a year, 1 = Once or twice a month, 2 = Once or twice a week, or 3 = Almost everyday |
| Bullying Occurrence Rate (<i>Collapsed; Combining 0, 1 & 2, 3</i>) | |
| How often did bullying incidents occur? | 0 = Once or twice a month or less 1 = More than Once or Twice a Month |

Table 2.2: Chi-Square Test - Having a Disability and Bullying Occurrence Rates

| | | Bullying Occurrence Rate | | | | | |
|-------------|---------------|--------------------------|--------------------------|-------------------------|---------------------|--------|--------|
| | | Once or twice a year | Once or twice a month | Once or twice a week | Almost every day | Total | |
| Participant | No Disability | Count | 1037 | 144 | 67 | 4 | 1252 |
| Disability | | | 82.8% | 11.5% | 5.4% | 0.3% | 100% |
| Status | Disability | Count | 556 | 15 | 105 | 52 | 728 |
| | | | 76.4% | 2.1% | 14.4% | 7.1% | 100.0% |
| Total | | Count | 1593 | 159 | 172 | 56 | 1980 |
| | | | 80.5% | 8.0% | 8.7% | 2.8% | 100% |
| | | | 100.0% | 100.0% | 100.0% | 100.0% | 100% |

Pearson Chi-Square: $\chi^2(3) = 172.867^a, p < .001$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Table 2.3: Chi-Square Test - Having a Disability and Bullying Occurrence Rates (Collapsed)

| | | Bullying Occurrence Rate Collapsed | | | Total |
|--|-----|---------------------------------------|-----------------------------------|-------|-------|
| | | Bullied once a month or less | Bullied once a week or more | | |
| Does participant have a disability? | No | Count | 1181 | 159 | 1252 |
| | | No Disability | 94.3% | 5.6% | 100% |
| | Yes | Count | 571 | 157 | 728 |
| | | Disability | 78.4% | 21.6% | 100% |

Pearson Chi-Square: $\chi^2(1) = 114.144^a$, $p < .001$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Table 2.4: Chi-Square Test - Participating in Athletics and Bullying Occurrence Rate

| | | Bullying Occurrence Rate | | | Total |
|--|-----|---------------------------------------|--------------------------------|-------|-------|
| | | Collapsed | | Total | |
| | | Bullied once a month or less | Bullied once a week or more | | |
| Did student participate in extracurricular activities? | No | Count | 1337 | 159 | 1496 |
| | | % Did not participate in athletics | 89.4% | 10.6% | 100% |
| | Yes | Count | 415 | 69 | 484 |
| | | % Did participate in athletics | 85.7% | 14.3% | 100% |

Pearson Chi-Square: $\chi^2(1) = 4.724^a$, $p < .033$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Table 2.5: Chi-Square Test - Participating in Non-Athletics and Bullying Occurrence

| | | Rate | | | |
|---|-----|--|---------------------------------|--------------------------------|--------|
| | | Bullying Occurrence Rate Collapsed | | | |
| | | | Bullied once a month or less | Bullied once a week or more | Total |
| Did student participate in non-athletic extracurricular activities? | No | Count | 1176 | 118 | 1294 |
| | | % Did not participate in non- athletics | 90.9% | 9.1% | 100.0% |
| | Yes | Count | 576 | 110 | 686 |
| | | % Did participate in non- athletics | 84.0% | 16.0% | 100.0% |

Pearson Chi-Square: $\chi^2 (1) = 21.046^a$, $p < .001$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Table 2.6: Binary Logistic Regression Results

Students who Reported being bullied - N = 1,980

| Predictor | B | S.E. | Wald | df | Sig. | OR |
|---|--------|------|--------|----|-------|-------|
| Age | -.095 | .040 | 5.649 | 1 | .017* | .910 |
| Gender (ref. female = 1) | -.307 | .149 | 4.260 | 1 | .039* | 1.360 |
| Race (ref. minority = 1) | -.398 | .204 | 3.819 | 1 | .051 | .672 |
| Ethnicity (ref. Hispanic/Latino/a = 1) | .397 | .199 | 3.999 | 1 | .046* | 1.488 |
| Disability (ref. yes = 1) | 1.474 | .215 | 47.069 | 1 | .000* | 4.368 |
| Athletic Extracurricular (ref. yes = 1) | .241 | .309 | .607 | 1 | .436 | 1.272 |
| Non-Athletic Extracurricular (ref. yes = 1) | -.018 | .308 | .003 | 1 | .953 | .982 |
| Disability*Athletic Extracurricular Interaction (ref. 1) | -.321 | .366 | .769 | 1 | .381 | .725 |
| Disability*Non-Athletics Extracurricular Interaction (ref. 1) | .096 | .360 | .070 | 1 | .791 | 1.100 |
| Constant | -1.514 | .628 | 5.806 | 1 | .016 | .220 |

Omnibus Test of Model Coefficients: $\chi^2(1) = 124.291^a$, $p < .001$

Nagelkerke $R^2 = .122$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

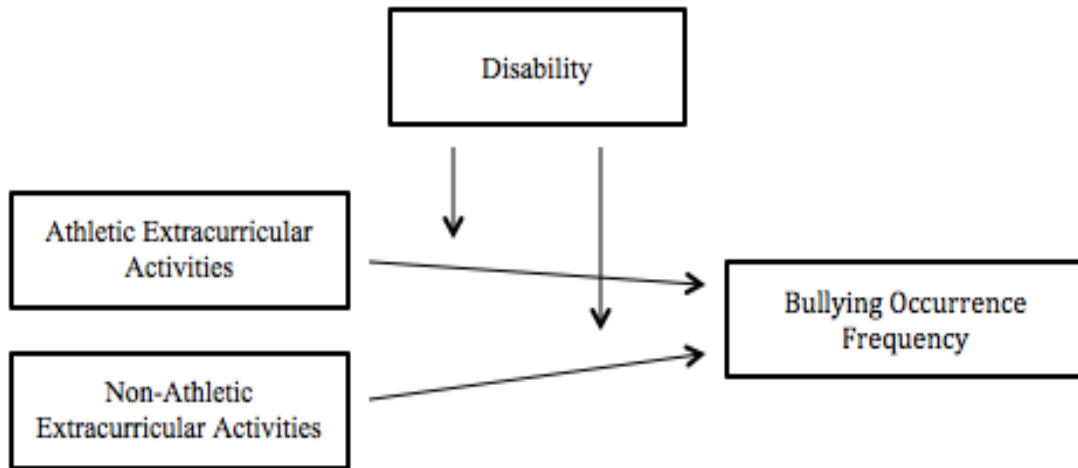


Figure 2.1: Binary Logistic Regression Model

Study Two IRB Letter



THE UNIVERSITY OF
TENNESSEE
KNOXVILLE

June 14, 2018

Kaycee Lynn Bills,
UTK - College of Social Work - College of Social Work
Henson Hall 1618 West Cumberland Avenue Knoxville, TN 37996-3300

Re: UTK IRB-18-04527

Study Title: Extracurricular activities in relation to bullying victimization among adolescent students with disabilities.

Dear Kaycee Bills,

Thank you for submitting your application to the IRB. The data set you wish to access, the National Crime Victimization Survey, is included in the Inter-University Consortium for Political and Social Science Research (ICPSR) data set which has been included by the UT Knoxville IRB on its Inventory of Public Use Data Sets found at <https://irb.utk.edu/public-use-data-sets/>.

Your proposed project meets the criteria listed as part of the inventory; therefore, neither IRB review nor certification as exempt from review is required, and you may begin.

The IRB wishes you well with your project!

Sincerely,

Colleen P. Gilrane

Colleen P. Gilrane, Ph.D.
Chair

**Chapter III: Examining the Influence Extracurricular Activity Participation
has on the Outcomes Experienced by Students with Disabilities who are
Bullied**

This manuscript has not been published. Reviewers included my dissertation committee, Drs. David Dupper (Chair), Stacia Martin-West, Shandra Forrest-Bank, and Mitsunori Misawa

Abstract

Students who have disabilities are a marginalized student population facing higher bullying rates in comparison to other underrepresented student groups. These increased bullying rates often lead to socio-emotional consequences such as decreased school performance, decreased self-esteem, decreased friendships, and decreased physical health. Since school-based extracurricular activities may have positive socio-emotional benefits for students with disabilities, it is possible that extracurricular activity involvement can also mitigate the negative impacts bullying has on students with disabilities. The following study uses the National Crime Victimization Survey – School Crime Supplement (NCVS/SCS) to determine if extracurricular involvement lessen the negative impacts bullying has on schoolwork, self-esteem, friendships, and physical health among students with disabilities who are victims of bullying.

Keywords: school bullying, bullying outcomes, disabilities, extracurricular activities

Background

Chapter II explored the direct relationship between participating in extracurricular activities has on bullying victimization frequencies. Although a direct relationship between extracurricular activity participation and the number of times a student experienced bullying victimization was not observed, results did demonstrate that students with disabilities experienced bullying at a higher rate than all other student populations. Given the findings of Chapter II, it is possible that extracurricular involvement can mitigate the negative consequences faced by students who have disabilities after being a victim of bullying. Using the National Crime Victimization Survey – School Crime Supplement (NCVS/SCS), Chapter III will explore the influence that extracurricular participation has on the negative outcomes experienced by students with disabilities who are bullied. These outcomes include the negative impact bullying has on school performance, friendships, self-esteem, and physical health.

Consequences of Bullying Victimization

Common socio-emotional symptoms experienced by victims of bullying include anxiety, depression, isolation, loneliness, self-harm, and suicidal ideation (Hicks et al., 2018; Hymel & Swearer, 2015; Dupper, 2013; Barber & Olsen, 2004). These consequences often manifest in several facets of a student's life, resulting in a detrimental impact on the student's school performance, self-esteem, and friendships, and physical health. Students who have a disability are already at a higher risk of experiencing these socio-emotional consequences due to the barriers presented of their disability (Espelage, Rose, & Polanin, 2015). Since students with disabilities are already prone to these socio-emotional consequences, being a victim of bullying impacts their schoolwork, self-esteem, friendships, and physical health at a more severe rate in comparison to their peers who do not have a disability (Dupper, 2013; Hicks et al., 2018; Hymel

& Swearer, 2015). It is possible that the benefits of participating in extracurricular activities can also lessen the severity of the negative impacts faced by students with disabilities that impacts their schoolwork, self-esteem, and friends among students who have disabilities.

Benefits of Extracurricular Activities

School-based extracurricular activities can include athletics, clubs, spirit groups, volunteer work, student government, and other interest groups. A key advantage to participating in school-based extracurricular activities is the increased socialization opportunities by being among like-minded peers (Brooks et al., 2015; Knifsend & Juvonen, 2017). Participating in school extracurricular activities may generate several benefits for adolescent and teenage students such as better academic performance, increased psychological health, and increased friendships (Eime, Young, Harvey, Charity, & Payne, 2013; Feldman & Matjasko, 2005). In addition, Spriggs, Iannotti, Nansel, and Haynie (2007) demonstrated that students who did not participate in extracurricular activities did not feel they had a sense social connectedness within their school environment. This resulted in several academic, self-esteem, and relational consequences. Since participating in extracurricular activities have several socio-emotional benefits, it is possible that they can also assist in dimensioning the negative outcomes students with disabilities experience after being bullied.

Since students who have disabilities are a population most vulnerable to the detrimental impacts bullying can have on students, they are often encouraged to participate in extracurricular activities (Brooks, Floyd, Robins, and Chan, 2015). Extracurricular activity participation has been used as a principal method to increase academic performance, friendships, self-esteem, and physical health among students with disabilities. In a study conducted by Brooks et al. (2015), children who had intellectual and developmental disabilities demonstrated an increase in social

competence when participating in structured extracurricular activities. As a result, Brooks et al. (2015) found the participants who exhibited the increase in social competence, also reported having more classmates that they identified as friends. Supporting the findings of Brooks et al. (2015), other studies have indicated that the students who participate in extracurricular activities were able to develop longer lasting friendships in comparison to the students who did not participate in extracurricular activities (Schaefer, Simpkins, Vest, & Price, 2011). Thus, emphasizing how extracurricular activity involvement is critical to the foundation of formulating socio-emotional benefits for students who have disabilities. Given the results of past studies, it is possible that the benefits of extracurricular activities can combat the negative outcomes derived from being a victim of bullying.

Purpose

The purpose of this study is to Determine if participating in extracurricular activities influences the negative outcomes students with disabilities experience after being bullied. Since participating in extracurricular activities has demonstrated several benefits to students who have disabilities, it is possible that extracurricular activities also assist in mitigating the negative outcomes of being bullied. Specifically, it is possible that students with disabilities who participate in extracurricular activities will not be as severely impacted by the negative consequences bullying has on their schoolwork, self-esteem, friendships, and physical health.

A nationally representative secondary dataset was used to explore if there is a relationship between extracurricular activity involvement and the influence bullying has on students with disabilities. A few studies have determined relationships between extracurricular participation and bullying victimization patterns among various student populations. However, there has yet to be a study that establishes a direct relationship between extracurricular activity

participation and its impact on the negative outcomes faced by students who are bullied. It is predicted that participation in athletic or non-athletic extracurricular activities will have a moderating effect on the magnitude of how much bullying negatively impacts the students. The specific negative outcomes associated with bullying that will be examined in this study include schoolwork, self-esteem, friendships, and physical health.

Methods

Research Questions

Using the School Crime Supplement (SCS) survey obtained from the National Crime Victimization Survey (NCVS) public dataset, the following research question was tested:

R₁: Does participating in extracurricular activities moderate the negative impacts bullying has on schoolwork, friendships, self-esteem, and physical health experienced among students with disabilities who are bullied?

It was hypothesized that participating in extracurricular activities will result in lower negative bullying impact scores among students who have disabilities.

Exploratory Research Design

Chapter III used the same dataset that was analyzed in Chapter II. Data from the NCVS/SCS survey was analyzed using SPSS v24 Software.

Sample

Chapter III uses the same sample used in Chapter II. The sample for this study included participants who were enrolled in school and stated that they were victims of bullying. Children that were under the age of 12 and non-diploma track were excluded from the NCVS study (U.S. Department of Justice, 2008). Similar to Chapter II, the exclusion of non-diploma track students allowed for a better consistency in the analysis.

There were a total of 728 students who were identified as having a disability that were bullied ($N = 728$). 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

Participants were asked closed-ended survey questions related to student demographics, extracurricular activity participation, and the impact bullying had on their schoolwork, friendships, self-esteem, and physical health (See Table 3.1). The independent variable of interest was a yes/no dichotomous variable to determine the participants extracurricular activity involvement. The extracurricular activities included athletic teams, spirit groups, performing arts, academic clubs, student government, and community service groups (See Table 3.1). Due to small cell sizes of the number of participants who participated in non-athletic activities, all of the non-athletic extracurricular activities were combined to form the non-athletic dichotomous variable. The dichotomous athletic extracurricular activity variable remained its own category for all models.

The dependent variable was the negative impact bullying had on students' schoolwork, friendships, self-esteem, and physical health. These were four separate outcome variables that were measured using the same an ordinal scale. In four separate questions, the students were asked, "How much did bullying negatively impact your schoolwork, friends, self-esteem, and physical health?" The answers on the scale ranged from 0 to 3 (0 = Not at all, 1 = Not very

much, 2 = Somewhat, 3 = A lot). This is the scale that has been utilized by the U.S. Department of Justice since 2007 (U.S. Department of Justice, 2008).

Control variables used in III were the same control variables used in Chapter II. Control variables included age, gender, ethnicity and race. Age was a continuous variable ranging from 12 to 18. Gender was a dichotomous variable in which participants classified as 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, Island Pacifier, or two or more races. Due to small cell counts among the race variable, racial demographics could not be analyzed using the six original categories. The race variable was collapsed to non-minority and minority. Minority was classified as all of the participants who answered white and non-minority was classified by all of the other races.

Analysis

Four separate ordinal logistic regression models were applied in order to further explore the relationship between both athletic and non-athletic extracurricular involvement and the negative outcomes experienced among students with disabilities who are bullied, while controlling for demographic variables (See Figure 3.1). Since this study was exploratory, all of the ordinal logistic regressions and the overall model fit was tested for statistical significance using a significance level of $p < .05$ (Cohen, 1968; Harlow, 2016). A test of parallel lines was applied to all four regressions in order to determine if the regression models met proportional odds assumptions.

Results

Logistic Regression One: Bullying Impact on Schoolwork Outcomes

The independent variables in logistic regression model one included athletic extracurricular involvement, non-athletic extracurricular involvement, gender, race, ethnicity, and age. The outcome variable was the level of negative impact bullying had on the student's schoolwork. Results of the overall model were statistically significant ($\chi^2(6) = 18.107, p = .006$) (See Table 3.2).

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 students' schoolwork ($\chi^2(1) = 10.834, p < .001$). Students who participated in athletic extracurricular activities were more likely to have lower scores on the negative impact on schoolwork scale. This suggests that students who did not participate in athletics were more likely to report that bullying had a greater an impact on schoolwork in comparison to students who were involved in athletics. 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 schoolwork was 1.733 (95% CI, 1.249 to 2.404) times higher than students who participated in athletics.

Non-athletic extracurricular activities. When examining non-athletic extracurricular activities, results did not indicate a statistically significant relationship with the negative impact bullying victimization had on the student's schoolwork ($\chi^2(1) = .410, p = .552$). Thus, participating in athletic extracurricular activities had a greater impact on the negative outcomes students who are bullied face related to schoolwork than non-athletic extracurricular activities do.

Other control variables. Age had a statistically significant relationship with the negative schoolwork outcomes faced by students who were bullied ($\chi^2(1) = 4.122, p = .042$). Students who were younger were more likely to have lower negative outcome scores related to schoolwork. Other control variables that were not significant in the analysis included gender, race, and ethnicity.

Logistic Regression Two: Bullying Impact on Friend Outcomes

Independent Variables in Logistic Regression Two include athletic extracurricular involvement, non-athletic extracurricular involvement, gender, race, ethnicity, and age. The outcome variable was the level of negative impact bullying had on the student's friendships. Results of the overall model were statistically significant ($\chi^2(6) = 17.223, p = .008$) (See Table 3.3).

Athletic extracurricular activities. When examining the impacts bullying had on the students' relationships with friends, results of indicated a statistically significant relationship between participating in athletic extracurricular activities and the negative impacts it had on their relationships with friends ($\chi^2(1) = 6.914, p = .009$). Students who participated in athletic extracurricular activities were more likely to have lower scores on the negative impact on friendships scale. Meaning, students who did not participate in athletics were more likely to report that being a victim of bullying had a greater an impact on their relationships with friends in comparison to students who were involved in athletics. Students who did not participate in athletics were 1.619 (OR = 1.619, 95% CI, 1.130 to 2.313) times more likely to report that bullying had a greater negative impact on their relationships with friends in comparison to students who participated in athletics.

Non-athletic extracurricular activities. Similar to the impacts bullying had on the students' schoolwork, non-athletic extracurricular activities did not indicate a statistically significant relationship with the negative impacts bullying had on the student's friendships ($\chi^2(1) = .407, p = .554$). Thus, indicating that participating in athletic extracurricular activities has a greater impact on the negative outcomes related to relationships with friends after being bullied, than non-athletic extracurricular activities do.

Other control variables. Other statistically significant relationships with the negative friendship outcomes faced by students who are bullied included gender ($\chi^2(1) = 4.057, p = .044$) and ethnicity ($\chi^2(1) = 5.271, p = .022$). Controlling variables that did not have a statistically significant included age and race.

Logistic Regression Three: Bullying Impact on Self-Esteem Outcomes

Independent Variables in Logistic Regression Three include athletic extracurricular involvement, non-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. Results of the overall model were statistically significant ($\chi^2(6) = , p < .001$) (See Table 3.4).

Athletic extracurricular activities. Out of all of the negative outcomes that derive from being bullied, extracurricular activities had the most impact on self-esteem outcomes. 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 (OR = 1.947, 95% CI, 1.394 to 2.719) times higher than students who participated in athletics. This indicates 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.

Non-athletic extracurricular activities. Similar to the effects non-athletic extracurricular activities had on the victim's schoolwork and friendships, non-athletic extracurricular activities did not indicate a statistically significant relationship with the negative impacts bullying has on the student's self-esteem ($\chi^2(1) = 2.879, p = .090$). Thus, indicating that participating in non-athletic extracurricular activities does not have an impact on the negative outcomes related to their self-esteem after being bullied.

Other controlling variables. Other statistically significant relationships included age ($\chi^2(1) = 10.171, p = .001$) and ethnicity ($\chi^2(1) = 10.629, p = .001$). Controlling variables that did not have a statistically significant included gender and race.

Logistic Regression Four: Bullying Impact on Physical Health Outcomes

Independent Variables in Logistic Regression Four include athletic extracurricular involvement, non-athletic extracurricular involvement, gender, race, ethnicity, and age. The outcome variable was the level of negative impact bullying had on the student's physical health. Results of the overall model were not statistically significant ($\chi^2(6) = 9.615, p < .142$) (See Table 3.5).

Athletic extracurricular activities. Participation in athletic extracurricular activities was the only variable that was significant in moderating the relationship between the negative physical health outcomes caused by bullying. Students who participated in athletic extracurricular activities were 1.076 (OR = 1.076, 95% CI, 1.104 to 2.456) times more likely to report that bullying did not have an impact on their physical health ($\chi^2(1) = 5.66, p = .015$).

Assumption of Proportional Odds

The assumption of proportional odds was met for regressions 1-3, as assessed by a full likelihood ratio test comparing the fit of the proportional odds model to a model with varying location parameters. For regression one, which assessed the impact bullying had on the students' academic performance, the test of parallel lines met the assumption of proportional odds ($\chi^2(12) = 13.833, p = .312$). For regression two, which assessed the impact bullying had on the students' friendships, the test of parallel lines met the assumption of proportional odds ($\chi^2(12) = 19.944, p = .068$). For regression three, which assessed the impact bullying had on the students' self-esteem, the test of parallel lines met the assumption of proportional odds ($\chi^2(12) = 14.007, p = .300$). For regression four, which examined the impact on physical health, the test of parallel lines violated the assumption of proportional odds ($\chi^2(12) = 23.941, p = .021$). Therefore, results of regression four were interpreted with caution due to the inconsistency of the slopes.

Discussion

Athletic Extracurricular Activities

Students who have disabilities are a marginalized 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 proven to increase academic performance, friendships, self-esteem, and physical health among student populations (Palmer, Elliott, & Cheatham, 2017), it was predicted that athletic extracurricular activities would also diminish the impact bullying had on all four outcomes. Findings of this analysis supported past literature by demonstrating that athletic extracurricular participation had a positive influence on students. Specifically, 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' academic performance, self-esteem, friendships, and physical health.

When examining athletic extracurricular activities, the null hypothesis was rejected for all four logistic regressions. Meaning, a statistically significant relationship was observed between extracurricular involvement and the negative impact bullying had on academic performance, self-esteem, friendships, and physical health among students who have disabilities. Overall, results indicated that the students who participated in athletics were less likely to report higher scores negative outcome scores in comparison to the students who did not participate in athletics. This finding was consistent across all four logistic regression outcomes employed in the analysis: negative impact on schoolwork, negative impact on friends, negative impact on self-esteem, and negative impact on physical health. In fact, students who were involved in sports were twice as likely to answer "not at all" when asked if bullying impacted their schoolwork, friends, self-esteem, and physical health. Meaning, being bullied had less of a detrimental effect on the student's schoolwork, friendships, self-esteem, and physical health if they were involved in athletic extracurricular activities.

Non-Athletic Extracurricular Activities

Although athletic extracurricular activities had a statistically significant relationship with mitigating the negative impacts bullying had on students with disabilities, non-athletic extracurricular activities did not demonstrate to have the same impact. In fact, when examining the negative bullying outcomes related to schoolwork, friendships, self-esteem and physical health, non-athletic extracurricular activities did not approach significance for any of the four categories. Thus, the null hypothesis could not be rejected when examining the moderating relationship of non-athletic extracurricular activities among the four ordinal logistic regressions.

Based on the findings of this analysis, it is possible that non-athletic extracurricular activities do not have the same socio-emotional benefits as athletic extracurricular activities do among students with disabilities that are bullied. The findings of this study are most consistent with the findings of Peguero (2008), who found that students involved in clubs were more likely to be bullied in comparison to the students who were involved in sports. Thus, indicating different types of extracurricular involvement have varying relationships with bullying victimization and the negative consequences students experience after being a victim of bullying. Given the findings of Peguero (2008) and the findings of this study, it is possible that students with disabilities who are involved in non-athletic extracurricular activities may experience harsher consequences related to bullying because they are bullied at higher rates in comparison to students who participate in athletics.

Limitations

As all studies, this study was not without limitations. The primary limitation in this study is the specific disability categories were not differentiated in the NCVS/SCS dataset. Although, all of the students who participated in the NCVS/SCS were all on diploma track, meaning all subjects had mild to moderate disabilities, it does not account for the diversity presented within each specific disability cluster. Since a student who has a physical disability would have unique experiences in comparison to students who have an intellectual or learning disability, it is possible that participants among varied disability categories would be impacted by extracurricular involvement and bullying victimization at different rates. Thus, meaning the influence extracurricular involvement has on mitigating the negative bullying outcomes could vary among each disability category.

Violated assumptions posed additional limitations in the analysis. For better results, including students without disabilities would have strengthened the analysis. Due to missing data, students without disabilities could not be included in the analysis. Otherwise, the test for parallel lines would have been violated. Additionally, the regression that analyzed the impact bullying had on physical health also violated the test for parallel lines after restricting the analysis to disability only participants. Thus, the interpretation of regression four were preceded with caution.

Conclusion and Future Directions

Overall, athletic extracurricular activities were demonstrated to reduce the negative outcomes bullying victimization had on schoolwork, friends, and self-esteem among students with disabilities. However, non-athletic extracurricular activities did not demonstrate a significant relationship with any of the negative outcomes derived from being bullied. Thus, it imperative to further explore why non-athletic extracurricular activities are not contributing to the socio-emotional health among bullying victims with disabilities. As the number of students with disabilities who want to participate in extracurricular activities increases, it is crucial that social work researchers continue investigating relationship.

Implications for Social Work Practice

Although the promotion of inclusive extracurricular activities is a growing trend among the disability community, students with disabilities are still limited to extracurricular options due to accessibility barriers presented by their disability (Cumming, Marsh, & Higgins, 2017; Blake, Lund, Zhou, Kwok, & Benz, 2012; Rose et al., 2015). Despite the regulations set by the Americans With Disabilities Act (ADA), extracurricular activities offered in schools are not inclusive or accommodating for students who have varied needs in relation to their disability

(Murphy & Carbone, 2008; Bills, 2018). The findings of this study and several past studies emphasize the vitality that social workers advocate for more inclusive extracurricular activities that accommodate for the needs of students who have disabilities. Since students with disabilities are four times more likely to experience bullying victimization and the negative consequences stemmed from bullying (Farmer et al., 2012), it is crucial that social work practitioners ensure students who have disabilities are provided with equal accessibility to extracurricular activities in order to acquire the social-emotional benefits and bullying resilience gained from them. If students with disabilities are provided with more access to extracurricular activities, then they will be less likely to experience the detrimental impacts bullying has on their academic performance, self-esteem, friendships, and physical health.

Implications for Future Social Work Research

Due to the differentiating findings between the influence athletic extracurricular activities and the influence non-athletic extracurricular activities had on bullying impacts, it is important for social work researchers to further investigate these relationships. Although past studies indicate athletic and non-athletic extracurricular activities have the same benefits for students, it is possible that the different categories of extracurricular activities have varying benefits for bullying victims or for students with disabilities. Due to the limited extracurricular options that students with disabilities have in comparison to their non-disabled peers, it is imperative for social work researchers to continue investigating the academic, social, self-esteem, and health benefits that each category of extracurricular activity provides.

Bullying can manifest in many forms and have different levels of severity (Espelage et al., 2015; Hymel & Swearer, 2015). Each level of severity is going to have different impacts on the negative consequences students experience due to bullying (Hymel & Swearer, 2015). Since

past studies indicating that different extracurricular activities result in varying bullying severity among other marginalized student populations who are bullied (Peguero, 2008), it is possible that this relationship also exists specifically among students with disabilities. If different types of extracurricular activities result in more severe levels of bullying, this could be a possible explanation as to why non-athletic extracurricular activities did not lessen the negative outcomes experienced after being bullied. Implications for future research include investigating how different types of extracurricular involvement result in varying severity levels of bullying victimization.

References

- Bills, K. L. (2017). Maneuverability Experiences Faced by Individuals Who Use Wheelchairs in Rural Settings: A Qualitative Analysis. *Contemporary Rural Social Work*, 9(1), 10.
- Blake, J. J., Lund, E. M., Zhou, Q., Kwok, O. M., & Benz, M. R. (2012). National prevalence rates of bully victimization among students with disabilities in the United States. *School Psychology Quarterly*, 27(4), 210-222. doi:10.1037/spq0000008
- Brooks, B. A., Floyd, F., Robins, D. L., & Chan, W. Y. (2015). Extracurricular activities and the development of social skills in children with intellectual and specific learning disabilities. *Journal of Intellectual Disability Research*, 59(7), 678-687. doi:10.1111/jir.12171
- Cohen, J. (1968). Multiple regression as a general data-analytic system. *Psychological bulletin*, 70(61), 426. doi:10.1037/h0026714
- Corbin, S., & Holder, M. (2016). Special Olympics. In *Health Care for People with Intellectual and Developmental Disabilities across the Lifespan* (pp. 2187-2195). Springer, Cham.
- Cumming, T. M., Marsh, R. J., & Higgins, K. (2017). *School Connectedness for Students with Disabilities: From Theory to Evidence-based Practice*. Routledge.
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport.
- Espelage, D. L., Rose, C. A., & Polanin, J. R. (2015). Social-emotional learning program to reduce bullying, fighting, and victimization among middle school students with disabilities. *Remedial and special education*, 36(5), 299-311. doi:10.1177/0741932514564564

- Farmer, T. W., Petrin, R., Brooks, D. S., Hamm, J. V., Lambert, K., & Gravelle, M. (2012). Bullying involvement and the school adjustment of rural students with and without disabilities. *Journal of Emotional and Behavioral Disorders, 20*(1), 19-37. doi:10.1177/1063426610392039
- Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research, 75*(2), 159-210. doi:10.3102/00346543075002159
- Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *American Psychologist, 70*(4), 293. doi:10.1037/a0038928
- Knifsend, C. A., & Juvonen, J. (2017). Extracurricular activities in multiethnic middle schools: Ideal context for positive intergroup attitudes?. *Journal of Research on Adolescence, 27*(2), 407-422. doi:10.1111/jora.12278
- Murphy, N. A., & Carbone, P. S. (2008). Promoting the participation of children with disabilities in sports, recreation, and physical activities. *Pediatrics, 121*(5), 1057-1061. doi:10.1542/peds.2008-0566.
- Palmer, A. N., Elliott III, W., & Cheatham, G. A. (2017). Effects of extracurricular activities on postsecondary completion for students with disabilities. *The Journal of Educational Research, 110*(2), 151-158. Doi:10.1080/00220671.2015.1058221
- Peguero, A. A. (2008). Bullying victimization and extracurricular activity. *Journal of School Violence, 7*(3), 71-85. doi:10.1080/15388220801955570
- Rose, C. A., Espelage, D. L., Monda-Amaya, L. E., Shogren, K. A., & Aragon, S. R. (2015). Bullying and middle school students with and without specific learning disabilities: An

examination of social-ecological predictors. *Journal of Learning Disabilities*, 48(3), 239-254. doi:10.1177/1087120913496279

Schaefer, D. R., Simpkins, S. D., Vest, A. E., & Price, C. D. (2011). The contribution of extracurricular activities to adolescent friendships: new insights through social network analysis. *Developmental Psychology*, 47(4), 1141. doi:10.1037/a0024091

Chapter III Appendix

Table 3.1: School Crime Supplement (SCS) Survey Questions Used

| Student demographics | |
|---|--|
| Do you have a disability? | 0 = No 1 = Yes |
| What is your gender? | 0 = Male 1 = Female |
| Are you Hispanic/Latino/a? | 0 = No 1 = Yes |
| What is your race? | 1 = White 2 = Black 3 = Native American 4 = Asian 5 = Native Hawaiian/Island Pacifier 6 = Two or more races |
| What is your age? | 12-18 years (<i>Continuous</i>) |
| Athletic extracurricular activity participation | |
| During this school year, have you participated in any of the following activities? | Athletic Teams: 0 = No, 1 = Yes |
| Non-athletic extracurricular activity participation | |
| During this school year, have you participated in any of the following activities? (<i>Note: These were merged to form a dichotomous non-athletic extracurricular variable</i>) | Spirit Groups: 0 = No, 1 = Yes Performing Arts: 0 No, 1 = Yes Academic Clubs: 0 No, 1 = Yes Student Government: 0 No, 1 = Yes Community Service: 0 No, 1 = Yes |
| Negative outcomes from being bullied | |
| How much did bullying negatively impact your schoolwork, friends, self-esteem, and physical health? (<i>Note: These were four separate outcome variables</i>) | 0 = Not at all 1 = Not very much 2 = Somewhat, or 3 = A lot |

Table 3.2: Ordinal Logistic Regression One - Negative Bullying Impact on Schoolwork

| Parameter | B | Std. Error | 95% Wald Confidence Interval | | Hypothesis Test | | | 95% Wald Confidence Interval for OR | | | |
|-------------------------------------|----------------|------------|------------------------------|-------|-----------------|------|------|-------------------------------------|-------|--------|--|
| | | | Lower | Upper | Wald Chi-Square | d.f. | Sig. | OR | Lower | Upper | |
| Threshold | | | | | | | | | | | |
| Negative Impact Schoolwork = 1 | -.441 | .6419 | -1.699 | .817 | .471 | 1 | .492 | .644 | .183 | 2.265 | |
| Negative Impact Schoolwork = 2 | .799 | .6429 | -.461 | 2.059 | 1.544 | 1 | .214 | 2.223 | .631 | 7.839 | |
| Negative Impact Schoolwork = 3 | 2.181 | .6568 | .894 | 3.468 | 11.026 | 1 | .001 | 8.854 | 2.444 | 32.076 | |
| Participates in Non-Athletics [No] | .099 | .1548 | -.204 | .403 | .410 | 1 | .522 | 1.104 | .815 | 1.496 | |
| Participates in Non-Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Participates in Athletics [No] | .550 | .1670 | .222 | .877 | 10.834 | 1 | .001 | 1.733 | 1.249 | 2.404 | |
| Participates in Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Gender [Male] | -.145 | .1557 | -.450 | .161 | .862 | 1 | .353 | .865 | .638 | 1.174 | |
| Gender [Female] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Race [Non-Minority] | .213 | .1998 | -.178 | .605 | 1.140 | 1 | .286 | 1.238 | .837 | 1.831 | |
| Race [Minority] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Ethnicity [Not Hispanic/Latino/a] | -.204 | .1992 | -.595 | .186 | 1.052 | 1 | .305 | .815 | .552 | 1.205 | |
| Ethnicity [Hispanic/Latino/a] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Age (Scale) | -.086 | .0423 | -.169 | -.003 | 4.122 | 1 | .042 | .918 | .845 | .997 | |
| | 1 ^b | | | | | | | | | | |

Pearson Chi-Square: $\chi^2(6) = 18.107, p = .006$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Table 3.3: Ordinal Logistic Regression Two - Negative Bullying Impact on Friends

| 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 Impact on Friends = 1 | .272 | .6971 | -1.094 | 1.639 | .153 | 1 | .696 | 1.313 | .335 | 5.148 |
| Negative Impact on Friends = 2 | 1.048 | .6987 | -.321 | 2.418 | 2.251 | 1 | .134 | 2.852 | .725 | 11.218 |
| Negative Impact on Friends = 3 | 2.497 | .7133 | 1.099 | 3.896 | 12.256 | 1 | .000 | 12.151 | 3.002 | 49.181 |
| Participates in Non-Athletics [No] | -.108 | .1696 | -.441 | .224 | .407 | 1 | .524 | .897 | .644 | 1.251 |
| Participates in Non-Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| Participates in Athletics [No] | .480 | .1827 | .122 | .838 | 6.914 | 1 | .009 | 1.617 | 1.130 | 2.313 |
| Participates in Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| Gender [Male] | -.346 | .1718 | -.683 | -.009 | 4.057 | 1 | .044 | .707 | .505 | .991 |
| Gender [Female] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| Race [Non-Minority] | .125 | .2150 | -.296 | .547 | .341 | 1 | .559 | 1.134 | .744 | 1.728 |
| Race [Minority] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| [Not Hispanic/Latino/a] | -.531 | .2313 | -.984 | -.078 | 5.271 | 1 | .022 | .588 | .374 | .925 |
| [Hispanic/Latino/a] | 0 ^a | . | . | . | . | . | . | 1 | . | . |
| Age (Scale) | -.047 | .0458 | -.137 | .043 | 1.048 | 1 | .306 | .954 | .872 | 1.044 |
| | 1 ^b | | | | | | | | | |

Pearson Chi-Square: $\chi^2(6) = 17.223, p = .008$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Table 3.4: Ordinal Logistic Regression Three - Negative Bullying Impact on Self-Esteem

| 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 | |

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

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Table 3.5: Ordinal Logistic Regression Four - Negative Bullying Impact on Physical Health

| 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 Physical Health Outcomes = 1 | 1.039 | .7698 | -.470 | 2.548 | 1.820 | 1 | .177 | 2.826 | .625 | 12.776 | |
| Negative Physical Health Outcomes = 2 | 1.817 | .7731 | .302 | 3.333 | 5.527 | 1 | .019 | 6.156 | 1.353 | 28.013 | |
| Negative Physical Health Outcomes = 3 | 3.280 | .7943 | 1.723 | 4.836 | 17.047 | 1 | .000 | 26.566 | 5.600 | 126.027 | |
| Participates in Non-Athletics [No] | .074 | .1847 | -.288 | .435 | .159 | 1 | .690 | 1.076 | .749 | 1.546 | |
| Participates in Non-Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Participates in Athletics [No] | .498 | .2041 | .098 | .898 | 5.966 | 1 | .015 | 1.646 | 1.104 | 2.456 | |
| Participates in Athletics [Yes] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Gender [Male] | -.229 | .1880 | -.597 | .140 | 1.480 | 1 | .224 | .796 | .550 | 1.150 | |
| Gender [Female] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Race [Non-Minority] | .245 | .2436 | -.232 | .723 | 1.014 | 1 | .314 | 1.278 | .793 | 2.060 | |
| Race [Minority] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| [Not Hispanic/Latino/a] | -.189 | .2403 | -.660 | .282 | .618 | 1 | .432 | .828 | .517 | 1.326 | |
| [Hispanic/Latino/a] | 0 ^a | . | . | . | . | . | . | 1 | . | . | |
| Age (Scale) | -.041 | .0504 | -.140 | .058 | .658 | 1 | .417 | .960 | .870 | 1.060 | |

Pearson Chi-Square: $\chi^2(6) = 9.615, p = .142$

Source: National Crime Victimization Survey: School Crime Supplement; Year 2015 Wave

Study Three IRB Letter



THE UNIVERSITY OF
TENNESSEE
KNOXVILLE

June 14, 2018

Kaycee Lynn Bills,
UTK - College of Social Work - College of Social Work
Henson Hall 1618 West Cumberland Avenue Knoxville, TN 37996-3300

Re: UTK IRB-18-04527

Study Title: Extracurricular activities in relation to bullying victimization among adolescent students with disabilities.

Dear Kaycee Bills,

Thank you for submitting your application to the IRB. The data set you wish to access, the National Crime Victimization Survey, is included in the Inter-University Consortium for Political and Social Science Research (ICPSR) data set which has been included by the UT Knoxville IRB on its Inventory of Public Use Data Sets found at <https://irb.utk.edu/public-use-data-sets/>.

Your proposed project meets the criteria listed as part of the inventory; therefore, neither IRB review nor certification as exempt from review is required, and you may begin.

The IRB wishes you well with your project!

Sincerely,

Colleen P. Gilrane

Colleen P. Gilrane, Ph.D.
Chair

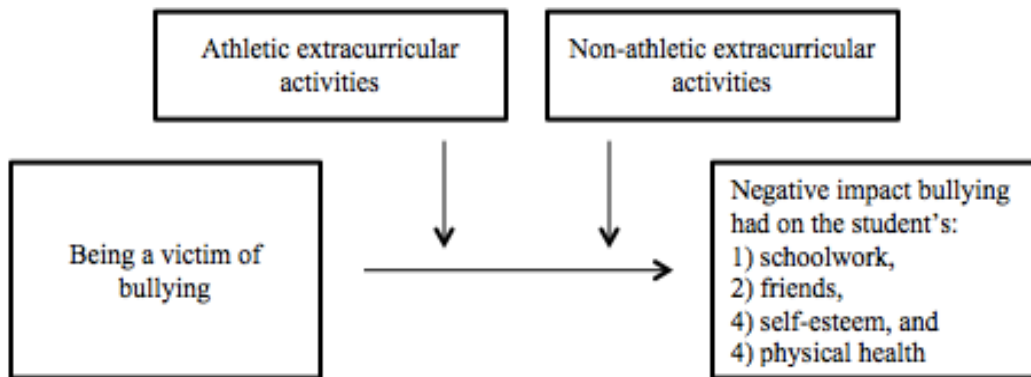


Figure 3.1: Ordinal Logistic Regression Model

Conclusion

Bullying victimization is a social issue experienced across student groups. As demonstrated in Chapter II, students who have disabilities are a marginalized population facing higher rates of bullying in comparison to other oppressed student populations. As identified in Chapter I, several past studies have theoretically shown how the socio-emotional benefits obtained from extracurricular activities can possibly lessen the bullying outcomes faced by students with disabilities. Although study two in Chapter II demonstrated that extracurricular activities did not decrease the number of instances students with disabilities experienced bullying, study three did find that extracurricular activities had other benefits for students with disabilities who were a victim of bullying.

Using a sample of 728 students who have disabilities ($n = 728$), study three in Chapter III applied the theoretical foundations discussed in Chapter I and Chapter II to explore if extracurricular activity participation mitigated the negative impact bullying had on the student's academic performance, social relationships, self-esteem, and physical health. Overall, results in study three indicated that the students who participated in athletic extracurricular activities were less likely to report that bullying had a negative impact on their academic performance, social relationships, self-esteem, and physical health. From the findings of this dissertation, future social work researchers can further explore how athletic extracurricular activities can help students with disabilities be more resilient to bullying. Further research on this topic allows for social workers to further advocate and justify for the need of inclusive extracurricular activity options for students who have disabilities.

Implications for Social Work

Since students with disabilities already experience social delays and higher rates of bullying, (Gavish, 2017; Amado et al., 2013), it is imperative that school social workers advocate for appropriate interventions that can lessen the negative impact bullying has on students with disabilities. Based on these findings, students ages 12 through 18 who have a disability may benefit from the protective factors athletic extracurricular activities provide after being bullied. Due to this finding, implications for future social work practice may involve implementing inclusive extracurricular activities for children with special needs in school settings. In order for students with disabilities to experience these benefits, schools must provide special needs athletic activities that are tailored to students who have disabilities. These can include adaptive special needs sports such as soccer, cheerleading, track, football, baseball, and other athletic teams (Corbin & Holder, 2016). Since students with disabilities are bullied at higher rates in comparison to other oppressed populations (Farmer et al., 2012), the engagement in these athletic activities can assist in mitigating the negative outcomes they experience after being bullied. In order to implement the use of special needs athletics, school social workers should advocate that school officials formulate policies that allow students with disabilities to have greater access to special needs sports. There are several promising programs that could influence students with special needs to participate in athletics, as well as help school policy makers create these teams (Corbin & Holder, 2016). Two of these promising programs are special needs athletics and integrated athletics.

Special Needs Athletics

Special needs athletic teams have emerged in order to allow students who have disabilities to experience inclusivity in athletics. These athletic teams use adaptive

implementation methods to meet the unique needs of students with disabilities. Special needs athletic teams only consist of students with special needs and only compete against other special needs teams. This allows for students with disabilities to have fair advantage when participating in sports so they can obtain the same socio-emotional benefits as individuals without disabilities. The concept of special needs athletics has been recognized by the United States Special Olympics for approximately 50 years (Corbin & Holder, 2016). Unfortunately, these special needs athletics are very limited and not offered in every region of the United States.

Since students with disabilities often have barriers that prevent them from participating in mainstream athletics (Farmer et al., 2013; Bills, 2018), it is essential for social workers to advocate for more inclusive and special needs athletics so students with disabilities can obtain the benefits derived from them. As demonstrated in Chapter III, the students with disabilities who participated in athletics were less susceptible to the harsh consequences bullying has on academic performance, relationships, self-esteem, and physical health. These findings emphasize the importance for social workers to advocate for more special needs athletic teams in the community and in schools.

Integrated Teams

A new intervention to help students with special needs acquire the benefits of athletics has been the development of integrated athletic teams. These teams differ from special needs teams because they incorporate both special needs and non-special needs members competing on the same team. This new intervention was first created by the Special Olympics and had an implementation date of the summer of 2018 (Corbin & Holder, 2016). Although there have been very few studies analyzing this inclusion method, it is theorized that this new development may possibly benefit the special needs community by integrating them among non-special needs

peers. This intervention would allow students with disabilities to increase friendships and social connection to their non-disabled counterparts.

As observed in all three chapters, students with special needs are an oppressed population that may benefit from participating in athletic extracurricular activities. Since students with disabilities are bullied at higher rates in comparison to other student populations, these research studies emphasize the potential benefit of special needs athletic teams in protecting students with disabilities from the harmful effects of bullying. These findings contribute to this effort as a way for social workers to promote equality and advance social justice for students who have disabilities.

Vita

Kaycee Bills graduated with her Bachelor of Social Work (BSW) degree from the University of Saint Francis in 2013. Upon completion of her bachelor's, she then entered an advanced standing program and completed her Master of Social Work from Hawaii Pacific University. Kaycee earned her License in Social Work and obtained professional social work experience working with children and adults who have developmental disabilities and in community mental health. Her most notable social work contribution is being the co-founder of a special needs cheerleading squad called the Whitley County Dazzlers. In 2016, Kaycee enrolled at the University of Tennessee, Knoxville to earn her PhD in Social Work. She graduated with her PhD in 2019. Additionally, Kaycee has served as a Petty Officer in the United States Navy Reserves throughout her social work and academic career.