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Examining the Impact of Interscholastic State Activity Association Athletics Expansion at the Middle School Level in a Large Urban School District

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by

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A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the degree of

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of the requirements for the degree of

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Dr. Brad Hanson, Dissertation Chair	March 10, 2021 Date
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Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

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Abstract

Few studies have been conducted to investigate the educational benefits of participation in extracurricular activities during middle school (Hughes et al., 2016; Knifsend & Graham, 2012). This mixed-methods study involved elicitation of athletic directors' perceptions and analysis of secondary data to determine the impact of interscholastic athletics participation on school connectedness. The qualitative portion of the study involved an analysis of the perceptions of athletic directors. The quantitative portion of the study involved an analysis of grade-point average (GPA), attendance, and discipline data of middle school students who participated in intramural athletics during the 2016–2017 school year and those who competed in interscholastic athletics between the school years of 2016–2017 through 2019–2020. The qualitative data revealed the following themes: interscholastic athletics participation positively impacts GPA, attendance, and discipline, and students participating in interscholastic athletics experience greater school connectedness. Following analysis of secondary quantitative data both overall and by gender for each year, it was concluded that while there was no significant difference in GPA, there was a significant difference in attendance and discipline; therefore, the null hypothesis was rejected. The qualitative and quantitative data directly support the theory of students being more connected to school through interscholastic athletics participation (Finn, 1989; Gowing, 2019; Marsh, 1993).

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Chapter One: Introduction

According to Blum (2005), students are more likely to succeed when they feel connected to school. Gowing (2019) emphasized young people's relationship with school is a significant element in their lives and can be highly influential in terms of the overall school experience. The longer students are connected to school, starting at middle school, the greater the chances of being academically successful (Sampasa-Kanyinga et al., 2019). School connection impacts students' mental health, future aspirations, and educational outcomes, making it an essential area for research (Frostick et al., 2018).

The main purpose of this study was to measure the impact of interscholastic athletics expansion on school connectedness at the middle school level in an urban school district. The urban school district in this study recently moved to a more stringent participation model with more requirements placed on student-athletes (S. Spence, personal communication, 2019). Students who previously had few to no minimum requirements to participate now had to meet the standards set forth by the state sanctioning body (S. Spence, personal communication, December 6, 2019). This move by the district led to a discussion of whether more students would be connected to school as measured by grade point average (GPA), attendance, and discipline rates (S. Spence, personal communication, December 6, 2019).

While many studies have been conducted regarding school connectedness and the future success of high school students, little research is available about middle school students. This is especially true regarding the impact of interscholastic activity participation on school connectedness (Im et al., 2016). This study provides valuable research as students are more likely to perform better academically, attend school more

frequently, and avoid risky behaviors when experiencing a greater sense of school connectedness (American Psychological Association [APA], 2019a).

Background of the Study

Recent research on school connectedness has been focused on the multiple aspects of belonging in school, especially regarding the impacts of school features (e.g., location, program offerings), the learning community, and relationships among students and between students and staff (Bouchard & Berg, 2017). In order to increase a student's sense of school belonging, extracurricular activity participation may be a key factor (Seow & Pan, 2014). The nature of interactions within and during activities may heighten a sense of belonging at school (Knifsend et al., 2018). A higher level of school connectedness in middle school is predictive of adolescents staying enrolled in school (Tomek et al., 2017).

The advancement of researching school belonging is essential for schools and policymakers who advocate for primary preventive measures to foster both academic and well-being outcomes in students (Allen et al., 2018). Knifsend et al. (2018) found, "Positive interactions with school staff, teachers, and peers in school-affiliated activity settings are likely to promote a sense of identification with and belongingness at school in general, but this explanation has not been explicitly tested" (p. 1208). Participation in extracurricular activities has been associated with improved academic performance, but additional research is needed to further explore, test, and build on the ideas materialized from this analysis (Malin, 2015).

Extracurricular activities play a key role in whole-person education (Chan, 2016). Extracurricular activity participation has also been identified as a strategy to promote

school connectedness (Centers for Disease Control and Prevention [CDC], 2009). Furthermore, according to Martinez et al. (2016), “Extracurricular activities provide students with different developmental opportunities” (pp. 71–72). Korpershoek et al. (2019) associated a greater sense of belonging at school with higher levels of academic engagement and performance. Knifsend et al. (2018) suggested close ties to the school established and maintained through activities foster a greater sense of school connectedness.

School engagement, or students’ behavioral and emotional connectedness with school, is a reliable indicator of high school graduation and college attendance (Anderson & Mezuk, 2015). School connectedness has been identified as a key protective factor to help students avoid the multiple behaviors associated with risk for adverse health and educational outcomes (CDC, 2009). Participation in school-based extracurricular activities also plays a direct role in positive student-teacher relationships and school behaviors (Zaff et al., 2017).

Conceptual Framework

Examination of the impact of interscholastic state activity association athletics expansion at the middle school level in a large urban school district was conducted based upon two frameworks: Marsh’s (1993) identification/commitment model and Finn’s (1989) participation-identification model. According to Marsh’s (1993) identification/commitment model, participation in school athletics enhances school identification and involvement, and commitment benefits academic outcomes. The participation-identification model focuses on student involvement in schooling in terms of both behavioral and emotional components (Finn, 1989).

Marsh (1993) argued, “Participation in extracurricular activities has typically been found to facilitate academic outcomes rather than detract from them” (p. 27). Additionally, Marsh (1993) noted, “Participation in extracurricular activities enhances self-concept, and the improved self-concept has positive effects on other outcomes” (p. 27). This model relates to the overall study, as participation in extracurricular activities produces an increased identification with academic pursuits (Marsh, 1993). Marsh’s (1993) framework also assisted in supporting this study, as student commitment to the school through extracurricular participation often leads to the growth of school-related values such as higher GPAs and lower delinquency rates.

The participation-identification model is of value to school connectedness (Finn, 1989). As Finn (1989) stated, “Participation in school activities may provide a handle through which increased levels of identification may become accessible” (p. 127). Additionally, Finn (1989) reasoned, “The failure of a youngster to participate in the school and class activities or to develop a sense of identification with school, may have deleterious consequences” (p. 117). Through his research, Finn (1989) noted:

> Students who identify with school have an internalized conception of belongingness—they are discernibly part of the school environment, and school constitutes an essential part of their own experience. And secondly, these individuals value success in school-relevant goals. (p. 123)

Finn (1989) also argued problem behaviors, such as truancy and disruptive behavior in the classroom, are associated with poor academic performance; the lack of bonding with the school increases problem behaviors.

Statement of the Problem

Middle school serves as a time of transition as students prepare for high school while attempting to find their place in the school environment (O'Donnell, 2020). Some students struggle, act out, or show a decline in academic performance and motivation during the middle school years (APA, 2019b). According to Blum (2005), "While connecting students to school is important at all grade levels, it's especially crucial during the adolescent years" (p. 16). Relationships fostered by students and teachers are important and serve as a protective factor for students during middle school (APA, 2019b).

While extracurricular activities have been linked to positive educational outcomes in elementary and high school students, little research has focused on middle school students and whether activities play an essential role (National Alliance for Youth Sport, 2015). According to Im et al. (2016), "Despite a large body of research documenting benefits of participation, few studies have investigated the benefits of participating in extracurricular activities during the critical middle school years on academic outcomes" (p. 2). Grades reflect multiple factors valued by teachers, and this multidimensional quality makes grades good predictors of important outcomes (Easton et al., 2017). According to Blum (2005), critical accountability measures, including academic performance, absenteeism, and negative behaviors (e.g., fighting or bullying), can be influenced positively through increased school connectedness.

Marsh and Kleitman (2002) found school-based extracurricular activities are more beneficial than out-of-school activities. Furthermore, Marsh (1993) argued extracurricular school activities increase school identification and commitment. School-based activities,

while allowing for the fostering of greater school identification and commitment (connectedness), benefit other academic outcomes such as absenteeism and academic achievement (Marsh & Kleitman, 2002).

Purpose of the Study

The purpose of this study was to examine the impact of the expansion of middle school interscholastic athletics in a large urban school district in Missouri based on the perceptions of two district-level and 11 site-level athletic directors from nine middle schools and five high schools. Secondary data were also analyzed to determine if there is a significant difference in school connectedness factors of GPA, attendance, and discipline between students participating in interscholastic athletics and students participating in intramural athletics at the middle school level. The activities used for this study were the Missouri State High School Athletic Association (MSHSAA)-recognized interscholastic activities of football, basketball, volleyball, track and field, cross country, sideline cheerleading, and wrestling, as these have the highest rates of participation in the district at both the high school and middle school levels (District Information, 2019).

An email conversation in late 2019 with one of the aforementioned high school athletic directors regarding the most pressing issues facing the district athletics department brought forth the idea for this study (S. Spence, personal communication, December 6, 2019). The discussion centered on how middle school student-athletes entering high school have been affected by the eligibility requirements set forth by the MSHSAA (S. Spence, personal communication, December 6, 2019). Prior to the 2017–2018 school year, the school district did not have state-sanctioned interscholastic sports at the middle school level but instead ran an intramural athletics program operated by the

district (S. Spence, personal communication, December 6, 2019). This discussion led to the question of whether student-athletes who have transitioned from middle school to high school have notable differences in student achievement, attendance, and discipline (S. Spence, personal communication, December 6, 2019). The athletic director noted during the conversation these topics had been mentioned at meetings, but there was no study or data to determine what, if any, impact the expansion of MSHSAA interscholastic athletics had on the district (S. Spence, personal communication, December 6, 2019).

Research Questions and Hypotheses

The following research questions and hypotheses guided the study:

1. What is the perceived impact of interscholastic state activity association athletics expansion at the middle school level on school connectedness factors of grade point average (GPA), attendance, and discipline from the perspective of middle school athletic directors?
2. What is the perceived impact of interscholastic state activity association athletics expansion at the middle school level on school connectedness factors of grade point average (GPA), attendance, and discipline from the perspective of high school athletic directors?
3. What differences, if any, exist in grade point average (GPA), attendance, and discipline between students participating in middle school intramural athletics and students participating in state-sanctioned interscholastic middle school athletics?

$H3_0$: There is no difference in GPA, attendance, and discipline between students participating in middle school intramural athletics and students participating in state-sanctioned interscholastic middle school athletics.

$H3_a$: There is a difference in GPA, attendance, and discipline between students participating in middle school intramural athletics and students participating in state-sanctioned interscholastic middle school athletics.

Significance of the Study

The MSHSAA (2020b) requires student-athletes in grades seven and eight to be enrolled in a typical course load for their grade. The students cannot fail more than one class in the previous grading period and must have been promoted to a higher grade prior to the first day of school to be eligible (MSHSAA, 2020b). Additionally, students must meet specific citizenship requirements to participate (MSHSAA, 2020b). For example, if a student misses class(es) without being excused by the principal, the student shall not be considered eligible on said date, just as a student who violates a local school policy is ineligible until completion of the prescribed school penalties (MSHSAA, 2020a). These requirements do not apply to intramural sports. When no eligibility requirements are tied to intramurals, sports can take on enough importance for some students to the point they ignore their academic responsibilities (Marsh, 2020).

This study also furthered the research of Kohl (2017), who examined the academic and behavioral impacts of multiple sport participation in high school athletes. While Kohl (2017) researched the effects of participation at the high school level, he did not investigate the impact of participation and school connection for middle school students. The impact of participation and school connection for middle school students is vital, because extracurricular settings are considered meaningful contexts for development in school and the real world (Im et al., 2016).

Delimitations, Limitations, and Assumptions

The scope of the study was bounded by the following delimitations:

Time Frame

Quantitative data for GPA, attendance, and discipline were collected based upon the designated time frame of the school years 2016–2017 through 2019–2020. Qualitative data collected through interviews occurred during the fall semester of the 2020–2021 school year.

Location of the Study

An urban school district in southwest Missouri, comprised of five high schools and nine middle schools, was chosen as the site for this study.

Sample

For the interviews, participants were selected from a population of 16 athletic directors: two district-level athletic directors, five high school athletic directors, and nine middle school athletic directors. Student data comprised of GPA, attendance, and discipline from all district middle school students involved in intramural athletics in 2016–2017 and middle school students participating in interscholastic athletics for the 2017–2018 through 2019–2020 school years were collected and analyzed.

Criteria

Only participants who worked as athletic directors in the chosen district were considered when selecting the sample for interviews, and only student data from participants in district middle school intramural athletics in 2016–2017 and those in interscholastic athletics from 2017–2018 through the 2019–2020 school year were analyzed.

The following limitations were identified in this study:

Sample Demographics

The sample consisted of 13 athletic directors from one school district. Secondary data included the student GPA, attendance, and discipline data from one school district.

Instrument

The instrument was a set of interview questions designed by the researcher, and therefore must be considered a limitation.

The following assumptions were accepted:

1. The responses of the participants were offered honestly and willingly.
2. The sample was representative of the general population of athletic directors of MSHSAA member schools.

Definition of Key Terms

For the purposes of this study, the following terms were defined:

Interscholastic Athletics and Activities

Interscholastic athletics and activities are sporting or academic competitions between teams or individuals representing their school communities (National Federation of State High School Associations [NFHS], 2019b).

Missouri State High School Activities Association (MSHSAA)

The MSHAAA (2020b) is responsible for the formulation of standards to guide interscholastic athletics and activities in Missouri.

School Connectedness

School connectedness is a belief held by students that adults in school care about their learning and about them as individuals (CDC, 2009). Other common terms in the

literature for school connectedness include school attachment and school belonging, but school connectedness was the primary term used for this study (APA, 2020b).

Summary

The middle school years are crucial for connecting students to schools (Blum, 2005). Few studies have been conducted to investigate the educational benefits of participation in extracurricular activities during middle school (Hughes et al., 2016). The purpose of this study was to examine impact on school connectedness factors via the expansion of middle school interscholastic athletics in a large urban school district in Missouri. The school connectedness factors consisted of GPA, attendance, and discipline incidents.

Marsh's (1993) identification/commitment model served as one of two conceptual frameworks guiding the study. According to Marsh (1993), participating in school athletics benefits both students and schools. The participation-identification model (Finn, 1989) was the other framework utilized in this study. Finn (1989) determined participation in school activities leads to greater identification within the school. This study furthers the previous research of Kohl (2017) by expanding on the impact of school connectedness due to interscholastic competition at the middle school rather than the high school level.

The following chapter includes a review of literature regarding school connectedness. The conceptual frameworks are discussed in more detail. The chapter includes topics relating to school connectedness, such as GPA, absenteeism, and student discipline, as well as the role of state and national athletics associations.

Chapter Two: Review of Literature

Students experience connections through the relational, activity-based, and academic opportunities available to them at school (Gowing & Jackson, 2016). Middle schools provide students the opportunity to become more connected as they transition to high school (O'Donnell, 2020). The positive impacts of increasing connection to school are obvious, including higher GPAs, decreased absenteeism, and increased high school graduation rates (Gerdy, 2014).

Extracurricular activities have long been recognized for playing an important role in the social, emotional, and cognitive development of youth (Bang et al., 2020b). One way to keep students accountable and in school is through school-affiliated sports and activities programs (Byl, 2004; Eccles, 2008; Marsh, 1993; Marsh, 2020; Overman, 2019). School district accountability measures include such items as tracking students' standardized test scores, GPAs, attendance rates, discipline infractions, and persistence to graduation (Lang, 2018; Marsh, 2020).

The GPA is an important indicator because it measures a wide variety of skills and behaviors needed for success (Allensworth & Clark, 2020). Lang (2018) additionally noted, "GPA measures are still used to some extent in nearly all public and private United States secondary schools" (p. 16). Attendance is also a valuable measure, as absenteeism is associated with a multitude of adverse academic outcomes (Jacob & Lovett, 2017). Cuffe et al. (2017) noted:

> While the consequences of student absenteeism are not yet well understood in the literature—and seem to not have been considered at all among athletes—there is

> evidence supporting that instructional time may itself be an important factor in educational achievement and other outcomes. (p. 1967)

Blum (2005) suggested a greater connection to school promotes positive behaviors and decreases disciplinary actions, including violence, bullying, and vandalism.

A history of school connectedness research is included in the review of the literature, as it forms the foundation of the study. The review of literature also includes information on the role of state and national high school athletics associations, as well as the differences between interscholastic and intramural sports. Finally, the impacts of interscholastic athletics participation on school connectedness factors of GPA, attendance, and discipline are reviewed.

Conceptual Framework

Verhoeven (2019) asserted schools play an important role in an adolescent's identity development. In his identification/commitment model, Marsh (1993) asserted identification with school values is created through sports participation at school. Participation in sports then steers the student to a heightened sense of school commitment in a manner encouraging more identifiable academic and non-academic results (Marsh, 1993). Students are more apt to become engaged at school because they identify with activities that appeal to their interests (Marsh, 2020).

Rubincam (2019) predicted students who participate in sports would have higher grades and educational expectations compared to those who do not. According to Verhoeven et al. (2019), students experience a greater sense of school connection when participating in school-related activities, such as sports, due to the impact of supportive adults and like-minded peers. Identifying with sports or athletics programs allows

students to connect with both the school and the greater school community (Furness et al., 2017).

Finn (1989) determined participation in extracurricular activities increased commitment to the school, provided a greater sense of belonging, and decreased the chances of dropping out of school. In addition, Finn (1989) contended students who participate in sports and activities at school seek higher educational attainment compared to non-participants, as they have a more significant commitment to the school and surround themselves with more academically minded peers. Participating in sports programs offers students more chances to create positive relationships with peers, teachers, and coaches (Pantzer et al., 2018).

Connecting kids with schools and keeping them engaged is essential because a loss of engagement can eventually lead to dropping out of school (Finn, 1989). In a 2019 study supporting Finn's (1989) research, participation in school-based athletics and activities reduced the chances of delinquency behaviors, lowered rates of discipline referrals, and decreased withdrawal from school (Chan, 2019). Furthermore, increased at-risk behaviors, absenteeism, and dropping out result in a loss of future employment and increase the chance for poverty among students with low levels of participation and engagement (Gubbels et al., 2019).

Both the identification/commitment and participation-identification models support the idea that school connectedness is increased through sports participation (Finn, 1989; Marsh, 1993). Overman (2019) supported this idea through his research and stated, "The opportunity for students to embed their identity in various extracurricular contexts and to experience multiple competencies facilitates attachment to school and enhances

personal adjustment" (p. 14). According to Pantzer et al. (2018), "Extracurricular activities also provide a safe social setting in which students can develop social skills and establish peer-group identification" (p. 664). Students are provided a protected time and safe space to develop their identities at school through extracurricular athletics (Marsh, 2020).

Bohnert et al. (2013) studied the impact of sports participation and peer relationships in students transitioning from eighth to ninth grade. Bohnert et al. (2013) noted students who participate in sports are able to adjust more efficiently by developing more friendships and experiencing fewer depressive symptoms by the end of ninth grade. Gerdy (2014) asserted if extracurricular athletics and activities serve no purpose to the physical and emotional development of students, they would be eliminated from the school system.

Gowing (2019) recognized students with greater feelings of belonging with peers do not experience as many issues at school and achieve better academically than those who do not. Knifsend and Graham (2012) also argued, "A greater sense of belonging at school may promote adolescents' academic motivation, engagement, and achievement" (p. 380). Increasing school connection for middle school students is a difficult task as many activities, clubs, and sports are voluntary and take place outside of the regular school day (Marsh et al., 2019). Eccles (2008) argued middle school students who are not connected to schools are just as likely to disengage from school during the high school years and have higher rates of dropping out. Further supporting Finn's (1989) research, participation in school-based athletics and activities also reduces the chances of

delinquency behaviors, receiving discipline referrals, and withdrawing from school (Meyers, 2019).

Policies governing state eligibility requirements strengthen the connection between participation in interscholastic sports and academics (Overman, 2019). Brown (2016) claimed eligibility policies promote increased student focus on academics as they continue to maintain eligibility during their school careers. Zayas (2018) argued longer sports seasons and increased opportunities to work with coaches and sponsors during the school year also strengthen the correlation between sports participation and academics.

School Connectedness

School connectedness is a belief held by students that the adults in school care about their learning and about them as individuals (APA, 2019b; Blum, 2005; CDC, 2009). There has often been confusion regarding the definition, as some researchers have studied school engagement, school attachment, or school bonding, but all of these terms refer to the same idea (Blum, 2005). Pantzer et al. (2018) found there is an increasing interest in connecting students to school and achieving satisfaction with the school experience.

School connectedness has attracted increasing research interest over the past two decades (Gowing, 2019). The idea of school connectedness came to the forefront when it was described in a study as being protective against risk behaviors in adolescence (Resnick et al., 1993). In a similar study, Kim et al. (2020) asserted school connectedness

is a protective factor against multiple negative aspects students face in school, including suicide.

According to Blum (2005), school connectedness can have a substantial impact on the measures of student achievement for which schools are currently being held accountable. Blum suggested, "Increasing the number of students connected to school is likely to improve critical accountability measures" (p. 1). Measuring school connectedness is difficult because there is no encompassing standard instrument to obtain results (Marsh et al., 2019).

According to Allen et al. (2018), schools offer rare chances for school-aged children to find where they belong. Yanik (2018) stated, " Engagement of students at school is parallel with their sense of belonging to school" (p. 2) Battistich et al. (2004) recognized, "Connected students appear to be more involved in school, and positive youth activities and less involved in negative behaviors than comparison students during middle school, as well as more of their friends are similarly engaged" (p. 247). Students with low levels of school connectedness struggle with the completion of school work, are absent more often and are at increased risk for school discipline (Marsh et al., 2019). Students who are school-connected are more able to establish their school identity and are more concerned with educational and professional goals (Verhoeven et al., 2019).

Gowing (2019) described young people's relationship with their school as significant and highly influential, as this compulsory feature of their lives shapes the quality of their overall school experience. Crownover and Jones (2018) stated, "Relationships are central to all aspects of human existence. Construction and maintenance of positive teacher-student relationships have implications not only for the

regular, unstructured social interactions at school but on academic instruction as well" (p. 19). Organically-created relationships with teachers and peers can lead to an increase in positive school experiences (Pantzer et al., 2018). Students with stronger connections at school have better educational outcomes (Peguero et al., 2016).

School connectedness gives students the courage to succeed, the courage to fail, the courage to face rejection, and, most importantly, to keep trying (Barrow, 2015). Eccles (2008) emphasized students "will be most likely to continue in school and engage fully in learning if they have confidence in their ability to do well and place a high value on doing well in school" (p. 4). Gerdy (2014) recognized a student's engagement with school is better-realized by simply participating in a school-related activity or sport.

According to Crownover and Jones (2018), school connectedness is fostered through an educational system that values students as human beings and increases their involvement in various activities and sports. Zayas (2018) expanded, "Having a sense of belonging and being a part of a team provides students with a core group of friends they can rely on and identify with" (p. 110). Although a myriad of ways exists to promote school connectedness, participation in school activities and sports significantly increases the chances of being connected at school (Kamau et al., 2015).

Students who become more connected to school at an earlier age are at a lower risk of feeling isolated from others (APA, 2019b). Shulkind and Foote (2009) asserted the

importance of fostering a school connection at the middle school level because the roots of alienation take hold during early adolescence. Eccles (2008) explained:

> If one has had many failure experiences during the early years of school and one's parents and teachers express low confidence in one's academic abilities, then it is unlikely one will move into secondary school with sufficiently high confidence in one's own academic abilities to overcome the stresses such a transition entails. (p. 4)

When a connection to school is lacking or is in its early stages at the middle school level, it is easy to undermine due to the multitude of challenges faced by middle school students (Loukas et al., 2016).

Facilitating relationships and providing the proper structures allow schools to better create connectedness for students (Shulkind & Foote, 2009). When no such relationships or structures exist, students perceive the number of opportunities to connect and be successful in school to be in decline (Eccles, 2008). Contrasting from the prevailing research, a recent study, Jones et al. (2019) recognized "an association between sport participation and school belonging may be more beneficial for high-performing than low-performing students in an interscholastic policy context" (p. 928). This is concerning, as middle school students have a great need to be accepted and to fit in, especially at school, and will look for outlets to conform when no others exist, including engaging in negative behaviors (Pantzer et al., 2018).

State and National High School Athletics Associations

Before the formation of a state association, many schools formed conferences or leagues and conference agreements governing eligibility and regulations (Pruter, 2013).

According to Overman (2019), “Over the course of the twentieth century, comprehensive high schools expanded their curriculum and instituted a range of programs and activities to serve their students. Sports became a major part of the extracurriculum” (p. 9). Illinois was the first state to form a state athletics association when it was founded on December 27, 1900 (Illinois High School Association, 2020).

According to Lang (2018), the first decade of the twentieth century in Missouri saw an increased interest in secondary-school athletics. Missouri, when compared to other states, formed its state athletic association much later (MSHSAA, 2020a). School administrators were concerned about the negative aspects of school sports and sought to create leagues and conferences (Lang, 2018). According to MSHSAA (2020a), these leagues and conferences were organized as a way to “attempt to control abuses creeping into the interscholastic program in Missouri” (para. 6). The Missouri State High School Athletics Association was then created on December 12, 1925, leaving only three other states, excluding Alaska and Hawaii, yet to form state athletic associations (MSHSAA, 2020a).

The NFHS (2019b) noted sports are usually neither extracurricular nor co-curricular except in the United States and Canada. Ironically, the "notion that organized, competitive athletics could be used by schools to supplement educational development of youth originated with a group of English schoolmasters in the 1800s" (Stoll & Beller, 2000, p. 18). Most countries around the world focus on community-based or club sports rather than those attached to schools (Loh, 2019).

The NFHS (2019a), based in Indianapolis, Indiana, has 51 member state associations (including Washington, DC) and serves more than 19,500 high schools and

12 million students (para. 1). Being a member of a professional athletic association gives athletic administrators, coaches, and students access to a number of benefits such as better organization, scholarship opportunities, and access to industry-specific publications (Ohio University, 2020b). The NFHS (2019a) is the national leadership organization for interscholastic sports and performing arts activities in the United States.

The formation of high school associations was initially focused in the Midwest (Pruter, 2013). As high school sports became more popular in the United States during the early 1900s, states began forming governing bodies for high school athletics (Pruter, 2013). The NFHS (2019d) was born out of the need to create eligibility standards for student-athletes in 1920 when it was initially organized as the Mid-West Federation of State High School Athletic Associations.

As more states came on board, the organization changed its name to the National Federation of State High School Athletic Associations in 1923, before dropping the term *Athletic* in 1970 to reflect increasing involvement in fine arts programs (NFHS, 2019d). Balboni (2016) maintained, "As time as progressed sports have become increasingly organized with ever-growing rules and regulations" (pp. 1–2). For over 100 years, the NFHS has been instrumental in writing rules and participation requirements for high school sports and performing art activities (NFHS, 2019d).

Although most requirements have been accepted universally by high schools around the nation, "school administrators are finding themselves spending precious time in court and in the statehouse, defending long-established academic eligibility rules for student-athletes" (Reeves, 2019, Challenging Authority section, para. 4). In addition to writing rules and requirements for eligibility, the NFHS (2019a) also provides

educational resources for coaches, officials, students, parents, and performing arts directors. These resources are of great educational value and set high expectations for all involved (Gerdy, 2014).

Middle School Sports

McEwin and Dickinson (2019) recognized the appropriate function of sports in middle schools is a controversial topic for school administrators. Similarly, Armstrong (2016) emphasized the middle school years as critical for sports as student-athletes have greater interactions with coaches and teammates, which can then, in turn, impact physical and emotional development through the rest of their time in school. If schools want sports to make a positive contribution to the development of students during the crucial middle years, it is imperative athletics programs are structured as such (Stoll & Beller, 2000).

In a 2012 study, Knifsend and Graham found it essential for schools to offer a number of extracurricular activities to garner interest from a diverse student population. Pantzer et al. (2018) argued, “Schools are considered one of the most critical organizations for providing youth with the opportunity for and education about the importance of physical activity” (p. 662). Im et al. (2016) emphasized, “Diverse extracurricular activities such as sports, music, and clubs share certain features that distinguish them from many of the adolescent’s other contexts” (p. 2). In order to connect more students with school, Marsh (2020) asserted it is important to create a strategic plan to expand athletics at the middle school level. Overman (2019) summarized several empirical studies supporting the sponsorship of extracurricular activities and athletics at the secondary level, beginning with middle school.

Eccles (2008) concluded if academic motivation, school engagement, and academic performance are not strongly established by the conclusion of middle school, persistence to graduation at the high school level is thoroughly compromised. Education-based athletic programs have become one tool, frequently used by administrators, to create a sense of pride in the community and schools while teaching life-long lessons that ultimately complement educational achievement within the classroom (NFHS, 2019b). Additionally, according to Marsh (2020), athletics programs enrich individuals' lives; thus, they should not only be supported and protected but should also be expanded to meet the diversified needs of students in middle school buildings. These views are also shared by Sherman (2017), who advocated for more athletic programs to increase student participation and school connection.

Wang et al. (2017) reported a decrease in middle school participation rates among both team and individual sports programs. Involvement in school sports during the middle school years can shield many of the negative effects that occur during the transition to middle school (Balboni, 2016). This differs from findings by McEwin and Dickinson (2019) regarding the middle school years as the most dangerous time for youth to participate in organized sports.

According to Yanık (2018), student engagement can be increased at the youth level by drawing more attention to middle school sports participation and its impact on preventing negative behaviors during adolescence. In 2019, Jones et al. suggested it is "especially critical for middle school administrators to consider the development needs of youth during the transitional period between childhood and early adolescence" (p. 9). Furthermore, Eccles (2008) argued, "disengagement from school during the middle

school years can lead to a student dropping out in high school, exacerbating the need for student participation in sports and activities during this time" (p. 16). Zayas (2018) advocated for further research on sports participation prior to high school, believing it could provide a broader picture of the types of students who participate at the high school level and beyond. Logan et al. (2020) found students who participated in athletics in middle school tend to participate through high school and are more physically active as adults.

In order to reach as many students as possible in middle school, there should be a combination of intramural and interscholastic sports (Overman, 2019). Byl (2004) declared a balanced athletics program involving intramural and interscholastic sports provides more opportunities for students at a time when their physical and emotional development varies drastically. Middle school students also see increased physical activity benefits when presented with a multitude of intramural and interscholastic athletics offerings (Furness et al., 2017; Gerdy, 2014; Marsh, 2020; Overman, 2019).

Intramural Sports

Between 40 and 50 million youth, high school age and younger, play organized sports each year in the United States (Balboni, 2016). Gerdy (2018) believed athletics should be used to complement the educational opportunities for children while also advancing a school's mission and vision. According to Pantzer et al. (2018), "Participation in intramural sports programs can provide students more opportunities to develop positive peer relationships, enhance self-esteem, create better relationships with teachers, and form a sense of belonging within their teams" (p. 663). Campbell (2004) asserted, "Intramurals provide a healthy complement to the academic aspect of students'

education; as with interscholastic sports at their best, participation in intramurals can enhance students' feelings of belonging to the school community" (p. 16). Additionally, Clark wrote:

> Intramurals provide cocurricular value by contributing to overall community satisfaction, involvement, and learning within a diverse setting, improving student recruitment and retention by adding to the quality of community life, and creating a venue for social interaction, integration, and leadership activities, which positively affect spirit, mind, and body. (p. ix).

Intramural sports include team and dual/individual activities, tournaments, meets, and/or special events limited to participants and teams from within a specific school or institutional setting (National Association for Sport and Physical Education, 2001).

Even though many students desire to participate in interscholastic sports, they are often excluded because they lack the skill, eligibility, or resources required to participate (Pantzer et al., 2018). Powelson (2015) stated, "students who decide to participate in extracurricular activities enjoy the activity, feel confident in the task, and appreciate the socially supportive environment" (p. 21). According to Overman (2019), "Intramurals are all-inclusive, not restricted to elite athletes, and don't have limited rosters. There are no cuts. Everyone who signs up makes the team, and all are assured of significant and meaningful playing time" (p. 16). Competitive and recreational sports programs are an integral part of the educational process and experience (Clark, 2019).

Colabianchi et al. (2012) observed intramural sports programs provide opportunities for all students to participate in sports, regardless of skill level. Also, Pantzer et al. (2018) determined:

> Few schools offer intramural programs and most only offer interscholastic sports, which are less inclusive. Students can experience not only physical benefits from intramural participation but also, as the results from this study suggest, improvements in self-esteem, improvements in their ability to socially interact, and feelings of belonging at school. These factors can help make middle schoolers' experiences positive and can contribute to their overall development. (p. 676)

Furness et al. (2017) contended, "Participants obtain skills such as goal setting, teamwork, problem-solving, and leadership" (p. 14). According to Pantzer et al. (2018), the growth of skills such as leadership and teamwork can lead to a more positive school experience as students grow and learn through participation.

McEwin and Dickinson (2019) suggested schools should maintain a balanced approach to physical education, intramural sports, and interscholastic athletics. This observation was reinforced by the National Association for Sports and Physical Education (2001), who noted every student has an opportunity to participate in athletics no matter the physical ability. In a follow-up study, the National Association for Sports and Physical Education (2008) found intramural programs elevate physical activity levels in students when other opportunities may not arise.

While not at the competitive level of interscholastic sports, intramurals provide an opportunity for students to identify activities they enjoy and might engage in the long term (Overman, 2019). Pantzer et al. (2018) explained participating in activities for enjoyment via intramurals can lead to more additional positive experiences in school. Students with lower self-efficacy tend to see more growth than students with higher self-

efficacy when able to participate in activities without the added stress to succeed (Furness et al., 2017).

Traditionally, more boys participate in intramural sports than girls (Colabianchi et al., 2012; Pantzer et al., 2018). Overall participation in sports declines significantly among both boys and girls during their middle school years (Casper et al., 2011). Additionally, Pantzer et al. (2018) noted intramural participation in middle schools is higher among sixth-grade students, as these students are not afforded the opportunity to compete in interscholastic competitions prior to seventh grade. Colabianchi et al. (2012) found middle school students are more apt to participate in intramural sports in higher socioeconomic areas than in lower socioeconomic areas, which contradicts the idea of intramurals being for all students.

Intramural sports do have some costs attached, even though they are more localized than interscholastic sports (Marsh, 2020). Zayas (2018) observed, “Since school budgets are constantly being scrutinized, the impact participation has on students may justify the funding, or lack of funding, for future participation opportunities” (p. 106). While not as expensive as interscholastic sports, according to Overman (2019):

> Intramural programs do require money: schools must provide support for staffing, schedules, facilities, and equipment. Directors have to be creative in fundraising and frugal in spending, although parent councils may be willing to sponsor some aspects of the program. School intramural programs may have to compete with interscholastic athletics for the use of facilities and seek out alternative facilities in the community. (p. 18)

Byl (2004) acknowledged a viable way to reduce expenditures is to use the equipment provided in physical education classes. Some school districts charge an activity fee at the beginning of the school year in order to cover the costs of intramural programs (Marsh, 2020).

In addition to budgetary concerns, intramural sports face issues with staffing (Marsh, 2020). As Eccles (2008) noted, “Cost can also be conceptualized in terms of the loss of time and energy for other activities” (p. 20). Scheduling, running clocks, officiating, supervising, and other tasks associated with running intramural sports programs take time (Byl, 2004). Byl (2004) recommended, “To run effective intramurals, it is critical for schools to develop a group of students to help organize and run the program” (p. 25). Zayas (2018) noted another way to assist with staffing and budgetary concerns is to develop relationships within the surrounding community by recruiting parent volunteers and creating partnerships with local businesses.

While students may benefit from participating via intramural sports, researchers need to determine whether intramural participation can benefit middle school students in terms of school connectedness (Pantzer et al., 2018). Jones et al. (2019) suggested intramural sport policies offer additional opportunities to promote school belongingness among the overall student body. According to Jones et al. (2019), “If promoting school belongingness among all students is truly one of the primary aims of school sport, administrators should consider intramural sport as an equally viable approach to interscholastic sport” (p. 9). Logan et al. (2020) also called for further research to determine the benefits of recreational sports participation among students.

Interscholastic Sports

Overman (2019) concluded interscholastic sports are the most popular extracurricular activity for students, particularly team-based sports. Gerdy (2014) explained, “The primary justification for our educational and societal investment in extracurricular activities such as sports is they provide learning and educational benefits and impacts that last a lifetime” (p. 115). Schools are unique settings to provide athletic and performing arts activities, and education-based activities can maximize the benefits gained through sports and performing arts activities (NFHS, 2019d). The University of Missouri (2020) maintained, “Perseverance and goal setting-skills learned through sports are transferred to the classroom” (para. 6). The NFHS (2019b) expanded:

> While some of these principles can be learned merely through involvement in these programs, others require the intentional focus of coaches, administrators, and other school leaders. Learning the concepts of sportsmanship, playing by the rules, teamwork, and perseverance will pay huge dividends throughout these students’ lives. (para. 9)

The concepts of sportsmanship, following the rules, and teamwork provide a platform for students to be better prepared for life outside of sports (Kerr, 2018).

Merriam-Webster (2019) defined interscholastic sports as those existing or carried on between schools. The NFHS (2019b) stated interscholastic athletics are an extension of the classroom, providing teaching and learning experiences for all involved. According to Gerdy (2014), interscholastic sports contribute to the development of academic and non-academic skills if conducted in a positive and nurturing manner.

Bohnert et al. (2013) also claimed interscholastic activities provide a context where adolescents can interact with like-minded peers, potentially proving beneficial in numerous ways. Overman (2019) claimed, “Sports in the context of the school setting most prominently take the form of interschool competition in the nation’s middle/junior high and high schools” (p. 19). The association between sports participation and school belongingness is stronger in interscholastic schools compared to intramural schools (Jones et al., 2019).

Overman (2019) asserted four out of five middle schools and 98% of high schools in the United States have interscholastic sports (p. 8). In addition, Overman (2019) noted, “Athletics is the largest non-academic school program in which students participate. Thus, it is crucial that school administrators keep sports in perspective and assure that students’ participation in sports constitutes positive learning experiences and promotes personal development” (p. 8). In a 2018 study, Yanık found:

> School teams provide students with the opportunity to represent their own schools outside school. Being part of such events outside school makes it possible for students to increase their sense of ownership of the organization that they represent and to make themselves feel more like they belong there. (p. 2)

Stucko (2018) suggested interscholastic sports participation can be used to influence students to achieve academic success while also experiencing other positive consequences such as becoming better school citizens.

Nearly eight million students participated in school-sponsored interscholastic athletics in 2018–2019 (NFHS, 2019b, p. 54). More than a million more boys than girls actively participate in school sports (Overman, 2019, p. 20). Participation in high school

sports dropped for the first time in over 30 years (Bogage, 2019, para. 1). However, the percentage of students playing team sports increased for the third consecutive year (Solomon, 2019). Lang (2018). also reported an increase in extracurricular school activities participation nationally.

The data from the NFHS (2019d) show the state of Missouri ranked 17th in participation, with 171,925 male and female participants (p. 55). The number of participants is highest in football for boys and track and field for girls, according to both state and national data (MSHSAA, 2020b; NFHS, 2019d). Researchers have recommended finding more options for females to participate in interscholastic sports (Marsh, 2020).

Interscholastic sports are not without controversy (Yanık, 2018). McEwin and Dickinson (2019) emphasized school administrators have passionately debated over what should be the proper function of interscholastic sports for adolescent youth. Overman (2019) asserted the balance between academics and other responsibilities associated with sports participation (e.g., citizenship) could present a challenge to educators.

Another controversy associated with interscholastic sports is the cost to run a school athletic program (Knifsend & Graham, 2012; Marsh, 2020; Overman, 2019). Yeung (2015) argued, “The fiscal stress on schools and school districts has placed an increasing emphasis on the question of whether high school sports serve as a compliment or substitute for academics in schools” (p. 362). Pruter (2013) claimed, “The very term interscholastic sports inherently poses a contradiction in an educational institution sponsoring sports for high school students, having them play before spectators, charging admission, and financing expensive programs with seemingly no educational purpose” (p.

327). At the middle school level, McEwin and Dickinson (2019) pointed out, “The preponderance of resources is bestowed on the interscholastic program, which serves only a small portion of young adolescents” (Keeping a Balance section, para. 2). Overman (2019) argued funding athletics creates an institutionalized economic bias that affects smaller, rural schools more than larger urban schools.

Additionally, sports specialization is very controversial in the realm of interscholastic sports (Gerdy, 2014). Student-athletes from larger schools are often forced to specialize in one or two sports due to limited roster sizes and greater competition (Bell et al., 2016). Bell et al. (2016) also noted students who specialize in one sport are more prone to overuse injuries. Kohl (2017) indicated as student-athletes decrease multi-sport participation and increase specialization, the greater the chance their GPAs, attendance, and rates of discipline suffer negatively.

Interscholastic Sports Impact on GPA

Previous researchers have associated interscholastic athletics participation with higher GPAs (Finn, 1989; Kohl, 2017; Marsh, 1993; Marsh & Kleitman, 2002; Zayas, 2018). Using student GPAs or test scores as the measure, a significant amount of studies has been carried out investigating the relationship between interscholastic sports and academic achievement (Marsh, 1993; Meyers, 2019; Streb, 2009; Stucko, 2018; Women’s Sports Foundation, 2018). Zayas (2018) further supported the relationship between interscholastic sports and academic achievement when he stated, “A large portion of the research conducted on the impact sport participation has investigated the relationship between sport participation and student achievement, as measured by standardized tests and student GPAs” (p. 28). High school student-athletes have been

thoroughly documented for years to receive better grades than those not participating in interscholastic athletics (Aspen Institute, 2020; Kohl, 2017; Marsh, 1993).

Coe et al. (2006) examined academic performance and physical activity and found students who participate in some sort of strenuous physical exercise perform 10% better in core subjects than students who do not (p. 1518). Specifically, Coe et al. (2006) observed a majority of the students who report a higher level of physical activity are involved in interscholastic team sports such as basketball, football, and soccer. Cuffe et al. (2017) realized students' transcripts suggest continual participation in athletics shows up in educational improvements—the longer an athletic season continues, the better the student-athlete performs academically.

The Women's Sports Foundation (2018) also discovered students who participate in multiple interscholastic sports are more likely to receive an A or A- grade than those who do not participate. Lang (2018) reported an increase in student GPA when the student is involved in more than one sport. This coincided with the findings of Kohl (2017) and Zayas (2018), who similarly found multi-sport student-athletes have higher GPAs compared to single-sport or non-participating students.

Streb (2009) researched the impact of extracurricular sports on academic achievement and found participants have higher GPAs and ACT scores than non-participants. Through the use of longitudinal data for students in grades 8–12, Streb's (2009) study included a sample of 492 graduates from a large high school in the Midwest (p. 9). Similarly, Wretman (2017) reported higher academic performance among students competing in interscholastic athletics than those not participating.

While many studies show the positive impact of interscholastic sports on GPAs, there has been rising concern regarding students who participate in interscholastic sports and do not perform well academically (Yarkwah & Agyei, 2020). Bishop (2018) concluded, “Playing a sport is something that requires many hours of practice and dedication which can take away from their studies” (para. 1). Powelson (2015) also specified:

> Students may assign sports a higher priority than academics because of this influence on their decision-making or may prefer sport to academics because of enjoyment, popularity, health, or fitness, and may be challenged by a lack of time or family influences. (p. 4)

Pestana et al. (2018) also found evidence of sports being prioritized over academics, resulting in a loss of interest in learning and time dedicated to studies.

Interscholastic Sports Impact on Attendance

School attendance is required for student-athletes to participate in interscholastic activities (MSHSAA, 2020a). Cuffe et al. (2017) reaffirmed, “Sports in school tend to bundle participation with human-capital investments: to participate, the student must maintain minimum attendance, for example, and show up for classes, particularly on game days” (p. 1967). Member schools can often set more stringent policies than what is required by the state association (MSHSAA, 2020a). For example, in North Carolina, state attendance rules recommend students be in attendance on the day of competition, but one school has made attendance mandatory to compete (North Carolina High School Athletics Association, 2020; Wake County Public School System, 2020).

Extracurricular activity participation has been positively linked with increased attendance (Morris, 2016). According to Cuffe et al. (2017), “Indeed, with daily student-level records of attendance, we find that active, athletic participation in high school reduces absenteeism, with truancy reductions as the primary mechanism” (p. 1984). The North Carolina High School Athletics Association (2017) contended participating in athletics missed an average of 6.3 days of school per year as compared to students who did not participate, who average 11.9 missed days per year (para. 10). Moreover, the Minnesota State High School League observed students participating in interscholastic athletics miss an average of 7.4 days of school in a year, while those who do not participate average 8.8 days missed (Born, 2007).

Kohl’s (2017) study of multi-sport participation yielded findings to confirm student-athletes have fewer school absences as measured by hours than students who do not participate. In fact, the more sports a student engages in, the greater the chance the student will attend school more regularly (Kohl, 2017; Zayas, 2018). Based on the findings of Cuffe et al. (2017), students participating in athletics are usually the same students with higher attendance. As students are at school more often, they are provided with more opportunities to further their school connectedness (Gowing, 2019; Gowing & Jackson, 2016). Similarly, Eccles (2008) determined improved school attendance can be achieved as a greater sense of bonding with school is created through participation in sports or school activities and clubs. A more recent study by Gubbels et al. (2019) also found students with better support systems provided by school connections are less likely to be at-risk for absenteeism or dropout.

Interscholastic Sports Impact on Discipline

Students with higher discipline rates tend to miss more instructional time, are exposed to negative influences more often, and are more apt to drop out of school (Noltemeyer et al., 2015). Latimore et al. (2018) maintained school discipline could negatively affect the educational outcomes of students. Overman (2019) asserted, "It is reasonable to believe that participation in most extracurricular activities has some effect on student behavior" (p. 14). Sadik and Ozturk (2018) noted, "Disciplinary problems or unwanted behaviors are behaviors that affect teaching and learning, make it difficult to achieve success, or impede success" (p. 730). In a study by Baumann and Krskova (2016), lower discipline rates coincided with better academic achievement and contributed to everyday school operations to operate more effectively.

A 2020 study by Froehlich identified a positive relationship between high school athletics participation and academic success, including lower rates of discipline for student-athletes. Ohio University (2020a) backed up the findings of Froehlich (2020) in a study which found interscholastic athletics participation at the secondary resulted in fewer discipline incidents. Participation in interscholastic athletics teaches valuable lessons and promotes positive citizenship behavior (Garcia & Subia, 2019). Valuable leadership and self-management skills developed through interscholastic athletics allow students to be more self-disciplined in both academic and non-academic situations (Yeung, 2015).

Student-athletes are inclined to be more invested in school and maintain eligibility by performing well at school and not receiving school discipline, which may endanger their playing time (Pestana et al., 2018). Supporting secondary school students through

school sports programs is likely to have a positive effect on their academic achievement (Bang et al., 2020a). Umeh et al. (2020) reported students who receive school discipline are less likely to participate in school clubs, activities, and athletics.

The North Carolina High School Athletics Association (2001) found significant differences among students in terms of discipline referrals, with 33% of athletes receiving referrals compared to 41.8% of non-athletes (para. 11). In a 2018 study by Zayas, students participating in athletics were more likely to display positive prosocial behaviors and characteristics than those not participating. Similarly, Kohl (2017) identified lower rates of discipline as student-athletes increased their rates of participation.

When researching sports participation and juvenile delinquency, Spruit et al. (2016) determined no significant differences in discipline between students who participate in sports and those who do not. The findings of Spruit et al. (2016) agreed with the findings of Rubincam (2019), who also found no significant differences in school discipline between students who participated in interscholastic athletics compared to students who do not participate. Latimore et al. (2018) conveyed lower rates of discipline for white students involved in athletics, but results were mixed in regards to minority students. Spruit et al. (2016) contradicted the findings of Kohl (2017) and Zayas (2018), who found sports participation results in fewer discipline referrals and a reduction in classroom time lost, especially as students participate in multiple sports.

Summary

School connectedness research came to prominence during the end of the twentieth century (Resnick et al., 1998). Many other terms have been used for school connectedness, such as school engagement, school attachment, or school bonding, but all

of these terms refer to the same idea (Blum, 2005). Creating a greater sense of school connectedness is vital for student success (APA, 2019b; Blum, 2005; Gowing, 2019; Gowing & Jackson, 2016; Kamau et al., 2015).

According to several researchers, one way to accomplish connecting more students to school is through participation in interscholastic sports, which provides many benefits, including achieving better in the classroom as measured by GPA, higher rates of school attendance, and lower risk for school discipline (Bohnert et al., 2013, Finn, 1989; Garcia & Subia, 2019; Marsh, 1993; Marsh & Kleitman, 2002). While most researchers have agreed participation results in increased academic achievement and attendance, findings are mixed with regard to discipline and interscholastic sports participation (Kohl, 2017; Spruit et al., 2016).

Intramural athletics allow students to participate in a less-competitive environment (Gerdy, 2014; Overman, 2019; Zayas, 2018). Middle school students are more likely to participate in intramural athletics than any other group (Pantzer et al., 2018). Intramural athletics provide many of the same benefits as interscholastic sports, but research is mixed on their effects (Byl, 2004; Gerdy, 2014; Marsh, 2020; Overman, 2019).

Also discussed in Chapter Two were the histories of state and national sports federations. Illinois was the first state with a state athletics association in 1900 (Illinois High School Association, 2020). Missouri did not create its own association until 1925 (MSHSAA, 2020a). The NFHS, located in Indianapolis, IN, has members from all 50 states as well as the District of Columbia and provides guidance and rules for its members (NFHS, 2019a).

In Chapter Three, information is provided related to the design and methodology of the study. The processes of the creation of the research questions, selection of the population and sample, and the instrumentation are discussed in detail. Finally, an explanation is provided of the processes for the collection and analysis of data as well as the ethical considerations.

Chapter Three: Methodology

Problem and Purpose Overview

The purpose of this study was to determine the impact of middle school interscholastic athletics expansion on school connectedness in a large urban school district in Missouri. The urban school district, comprised of five high schools and nine middle schools, was chosen as the site for this study because the district expanded MSHSAA-sanctioned athletics at the middle school level prior to the 2017–2018 school year (District Information, 2019). Middle schools were chosen, because connecting students to school is especially crucial during the adolescent years (Sudlow et al., 2019). Blum (2005) emphasized the importance of school connectedness during these years, because "by the time they are in high school, as many as 40 to 60 percent of all students— urban, suburban and rural—are chronically disengaged from school" (p. 4).

The impact of the expansion on school connectedness was analyzed through interviews with district athletic directors as well as analysis of publicly available and requested secondary data including GPA, attendance, and discipline incidents to determine if there is a significant difference in these school connectedness factors based upon participation in interscholastic athletics. Participation in extracurricular activities has been linked to desirable student outcomes such as increased GPA, illustrating the need to build connectedness to school (Sudlow et al., 2019). The middle school years are important for developing healthy study habits, embracing learning, and valuing the importance of grades during this time of transition (O'Donnell, 2020).

Increased student connection to school promotes improved school attendance (Blum, 2005). School connectedness is also a robust protective factor to decrease school

absenteeism (Healthy Schools Campaign, 2016). Student attendance affects school progress, and poor attendance can lead to failure to graduate (National Collaborative on Education and Health, 2015).

An analysis of discipline incidents provides insight into school connectedness, as there is a strong correlation between the number of suspensions a student experiences and academic engagement (González et al., 2019). Additionally, connection to school and positive relationships with teachers can prevent or reduce adolescents' involvement in risk behaviors (Garcia-Moya et al., 2019). Longobardi et al. (2016) found lower rates of school misconduct associated with higher levels of student connectedness to school through relationships with teachers.

Research Questions and Hypotheses

The following research questions and hypotheses guided the study:

1. What is the perceived impact of interscholastic state activity association athletics expansion at the middle school level on school connectedness factors of grade point average (GPA), attendance, and discipline from the perspective of middle school athletic directors?
2. What is the perceived impact of interscholastic state activity association athletics expansion at the middle school level on school connectedness factors of grade point average (GPA), attendance, and discipline from the perspective of high school athletic directors?
3. What differences, if any, exist in grade point average (GPA), attendance, and discipline between students participating in middle school intramural athletics and students participating in state-sanctioned interscholastic middle school athletics?

$H3_0$: There is no difference in GPA, attendance, and discipline between students participating in middle school intramural athletics and students participating in state-sanctioned interscholastic middle school athletics.

$H3_a$: There is a difference in GPA, attendance, and discipline between students participating in middle school intramural athletics and students participating in state-sanctioned interscholastic middle school athletics.

Research Design

The methodology for this study was a mixed-method design. The mixed-method design provides a realistic link between quantitative and qualitative studies (Almalki, 2016). The value in mixed design studies "accrues from both qualitative findings and quantitative results, and the integration of the two in a thoughtful way leads to greater mining of the data and enhanced insights" (Levitt et al., 2018, p. 43). Interviews with district and site-level athletic directors were conducted in-person, via telephone, or via video chat. The interviews were recorded and transcribed to provide for the collection of qualitative data. Publicly reported secondary district student GPA, attendance, and discipline data were collected for the quantitative portion of the study to analyze the impact of interscholastic sports participation on school connectedness.

Population and Sample

The qualitative analysis included interviewing athletic directors at each level within the school district regarding their perceptions of the impact of interscholastic athletics expansion at the middle school level on school connectedness factors of GPA, attendance, and discipline. The population considered for this study consisted of 16 athletic directors: two athletic directors at the district level, one at each of the five high

schools, and one at each of the nine middle schools. The sample was comprised of 13 athletic directors (two district athletic administrators, four of the five high school athletic directors, and seven of the nine middle school athletic directors).

In qualitative research, having a sample size as little as 10 can be extremely fruitful and still yield applicable results (Shetty, 2018). The interview participants were selected using purposeful sampling. Purposeful sampling is "a nonrandom technique that does not need underlying theories or a set number of participants" (Etikan et al., 2016, p. 2). Additionally, to best answer the clearly articulated research questions, sampling decisions should be purposeful (Luciani et al., 2019).

The quantitative population of the study included attendance, GPA, and discipline incident data for all district middle school students involved in intramural athletics during the 2016–2017 school year and for middle school students participating in interscholastic athletics for the 2017–2018 through 2019–2020 school years. The interscholastic sports used for the study included boys and girls basketball, boys and girls cross country, boys and girls track and field, 11-man football, sideline cheerleading, girls volleyball, and wrestling. A census method was used for this portion of the study, as all members of the population were counted (Fraenkel et al., 2019). The total number of middle school students and the total number of students who participated in intramural or interscholastic sports are presented in Table 1.

Table 1

Middle School Intramural and Interscholastic Sports Participants

School Year	Intramurals	Interscholastic	Student Population
2016–2017	2,539	-	5,390
2017–2018	-	1,534	5,441
2018–2019	-	1,520	5,514
2019–2020	-	1,505	5,590

Instrumentation

A research instrument is a tool used to collect, measure, and analyze data (Duquesne University, 2020). The survey instrument utilized, consisting of a set of interview questions, was created by the researcher (see Appendix A). The interview questions for this study were designed to elicit the perceptions of athletic directors about the effect of interscholastic and intramural sports participation on the school connectedness factors of GPA, attendance, and discipline. The frameworks of Marsh (1993) and Finn (1989) were also considered in the development of the interview questions.

Interview question one was designed to obtain information from the athletic directors about their perceptions of the effect of interscholastic athletics on GPA compared to students who participated in intramural athletics. According to Easton et al. (2017), “Grades reflect multiple factors valued by teachers, and it is this multidimensional quality making grades good predictors of important outcomes” (p. 1). Interview question two was created to gather perceptions of the effect of interscholastic athletics on attendance compared to students who participated in intramural athletics. Students are often more successful academically because of less time lost academically

(Christensen et al., 2019). Kohl (2017) believed the more students participate in sports, the better their rates of attendance will be.

Interview question three was designed to examine the athletic directors' perceptions of the effect of interscholastic athletics on discipline compared to students who participated in intramural athletics. Student-athletes tend to have fewer discipline problems and usually graduate from high school (NFHS, 2019c). Students participating in sports tend to avoid discipline issues, especially during the season (Marsh, 2020).

Interview questions four, five, and six were designed to gather perceptions of student school connectedness since the shift was made from intramural athletics to state-sanctioned interscholastic athletics at the middle school level. A student's sense of belonging within the academic community has been shown to be an indicator of academic success (Zabriskie et al., 2018). Implementing programs to promote school connectedness has a considerable impact on academic success (Lemkin et al., 2018).

The researcher-created instrument was initially developed through a series of edits between the researcher and the dissertation chair. The interview questions were pilot-tested in a mock interview session with a high school principal, a middle school principal, and a high school athletic director from non-participating school districts to ensure the questions were clear and easily understood. According to Ruel et al. (2016), pilot-testing allows researchers to ensure all questions are clearly articulated, relevant, and comprehensive for both the researcher and the respondents. Pilot-testing for interviews is integral and useful in the process of conducting qualitative research as it is helpful in improving the interview processes (Majid et al., 2017).

Data Collection

To collect data for this study, a permission letter to participate was sent to the district superintendent (see Appendix B). Approval was granted by the school district on March 20, 2020. Lindenwood University Institutional Review Board approval was granted on September 18, 2020 (see Appendix C). After receiving approval from the Institutional Review Board, the interview participants were recruited by contacting the publicly-listed, primary telephone number for the school district athletics office. Afterward, the athletic directors were contacted via email, which included the interview questions and a copy of the research information sheet (see Appendix D).

An attempt was made to reach the entire population of 16 athletic directors. 13 athletic directors responded to be interviewed. The interviews were conducted in person, via telephone, or via video chat. All interviews were recorded and then transcribed for further analysis.

Publicly available secondary student data regarding GPA, attendance, and discipline were obtained from the district for quantitative analysis. Publicly released data were collected through district annual reports (District Information, 2019). Data not publicly available were requested and granted through district data request procedures. Once collected, the data were organized for comparison between students who participated in intramural sports in 2016–2017 and students who competed in interscholastic sports from 2017–2018 through 2019–2020.

Data Analysis

For the qualitative portion of the study, an interview instrument created by the researcher was utilized. Qualitative data were collected and transcribed, and open coding

was used to discover prevalent themes. Open coding is the part of data analysis focused on the conceptualization and categorization of phenomena through an intensive analysis of the data (Vollstedt & Rezat, 2019). After the initial open coding process, axial coding was used. Axial coding develops "a category by grouping/sorting/reducing the number of codes generated from the first cycle of coding" (Onwuegbuzie et al., 2016, p. 134).

The quantitative portion of the study consisted of the collection and analysis of GPA, attendance, and discipline data of middle school students involved in intramural athletics during the 2016–2017 school year, and middle school students who participated in interscholastic athletics from the 2017–2018 through 2019–2020 school years. The comparison of two independent population means is very common and provides a way to test the hypothesis that the two groups differ from each other (Holmes et al., 2017). Independent *t*-tests were conducted to determine if there were significant differences in GPA, attendance, and discipline incidents of students who participated in intramural activities compared to students who participated in MSHSAA-sanctioned events. The *t*-test is used to test the difference between two independent samples (Bluman, 2018). The level of significance for the study was set at 95% with an alpha level of 0.05.

Ethical Considerations

Safeguards were in place to protect participant confidentiality and to maintain anonymity. Each participant received a copy of the Research Study Consent Form explaining the purpose of the study and any associated risks.

Confidentiality

The researcher did not and will not share any identifying information in any publication or presentation. Any information collected was stored by the researcher in a

secure location. The only people who viewed the data were members of the research team, qualified staff of Lindenwood University, and representatives of state or federal agencies.

Anonymity

Approximations or slight modifications were utilized when discussing identifiable statistics regarding specific schools. Non-identifying pseudonyms were assigned to the participants and the participating school district to avoid identification. Before interviews began, participants were advised comments made could lead to identification, regardless of approximations and modifications utilized. Once interviews were transcribed, the results were sent to the participants to review for accuracy and clarity and to provide an opportunity for questions.

Summary

The purpose of this study was to determine the impact of middle school interscholastic athletics expansion in a large urban school district in Missouri. The methodology of this study was a mixed-methods design, as both qualitative and quantitative data were analyzed. Purposeful sampling was selected as an appropriate method to identify participants, because they are able to answer the clearly articulated interview questions (Etikan et al., 2016; Luciani et al., 2019).

Qualitative data were collected and transcribed, and the responses were coded to discover prevalent themes. Quantitative data were obtained from publicly available data from the urban school district. A census method was used for the quantitative portion of the study, as all middle school students who participated in interscholastic sports during the 2016–2017 school year and those who participated in interscholastic athletics from

2017–2018 through 2019–2020 were counted. To determine if there were significant differences in GPA, attendance, and discipline incidents among students who participated in intramural activities and students who participated in MSHSAA-sanctioned events, independent *t*-tests were conducted. Ethical considerations were presented regarding confidentiality and anonymity both during and after this study.

Chapter Four includes a presentation of the data collected. The qualitative data are related to research questions one and two. The quantitative data for research question three conclude the chapter.

Chapter Four: Analysis of Data

The purpose of this study was to determine the impact of middle school interscholastic athletics expansion on school connectedness in a large urban school district in Missouri. Connecting students to school via extracurricular activities is a factor in reducing negative behaviors in adolescence (CDC, 2009). Extracurricular activities have the potential to create additional opportunities of connecting with school for students who need it most (Berger et al., 2020). Students' academic success increases as they become more connected to school through extracurricular activities (Wilson, 2018).

This research was completed via a mixed-method methodology. According to Regnault et al. (2017), "Mixed-methods research allows a research question to be studied from different perspectives" (p. 2). This mixed-method approach included interview data for the qualitative portion of the study and secondary GPA, attendance, and discipline incident data from the selected district for the quantitative portion of the study.

The qualitative data were collected through interviews of two district athletic directors, four high school athletic directors, and seven middle school athletic directors. Participants were interviewed, and responses were recorded digitally. After the interviews were completed, recordings from the interviews were transcribed. Open coding was used multiple times to label similar words and phrases in the transcripts to organize them into broad thematic domains (Williams & Moser, 2019). Once the open coding was complete, the data were sorted using axial coding to organize the transcripts into distinct themes (Williams & Moser, 2019). The data collected are presented in Chapter Four.

Research Question One and Two

To investigate the perceptions of athletic directors regarding the impact of state activity association athletics expansion on school connectedness at the middle school level, interviews were conducted to address the first and second research questions of the study. The interview participants included two district athletic directors, four high school athletic directors, and seven middle school athletic directors from a large, urban school district in Missouri. The athletic directors were selected using purposeful sampling.

Interview participants were asked six questions regarding perceptions of the impact of state-sanctioned interscholastic athletics expansion on school connectedness as measured by GPA, attendance, and discipline rates. Interviews lasted approximately 15–30 minutes. Participants were assigned alphanumeric codes to ensure anonymity for the district and personnel. For example, participants from the middle schools were referred to as Participant MS1 through Participant MS7. High school participants were assigned a number code corresponding from Participant HS1 through Participant HS5. District-level participants were assigned codes of Participant D1 and Participant D2. Data regarding the perceived impact of interscholastic athletics expansion on school connectedness of GPA, attendance, and discipline by all interview participants are presented in Table 2.

Table 2

Perceived Impact of Interscholastic Athletics on School Connectedness

Participant Name	Higher GPA	Increased Attendance	Decreased Discipline
MS1	Y	Y	Y
MS2	N	Y	N
MS3	N	Y	Y
MS4	Y	Y	Y
MS5	Y	Y	Y
MS6	Y	Y	N
MS7	N	Y	N
HS1	Y	Y	Y
HS2	Y	Y	Y
HS3	Y	Y	Y
HS4	Y	Y	Y
D1	Y	Y	Y
D2	Y	Y	Y

Participant Interview Question One

Do students who participate in interscholastic athletics have better GPAs than students who participate in intramural athletics at the middle school level? Why or why not?

Four out of seven middle school interview participants expressed belief that students participating in interscholastic athletics have better GPAs than students participating in intramural athletics at the middle school level. According to Participant MS1, one reason is because of the emphasis on being a student-athlete. Participant MS1 added, “When they know it takes a certain level to participate, they rise to that occasion. One reason they have grades is so they can be held accountable.” Additionally, Participant MS7 and Participant MS5 responded GPAs are higher under the

interscholastic model because the “extra accountability leads to a better team atmosphere.”

There were, however, three middle school interview participants who were not convinced the interscholastic model had an impact on GPA. Participant MS3 provided the following context:

> I don’t think it necessarily makes a difference. If they don’t have a parent pushing them to make As and Bs, they don’t care. They do just what they have to do to get by at the middle school level because they know they’re not going to be held back.

According to Participant MS2, “Students must now conform to the MSHSAA standards, and a lot of schools don’t have to at middle school. With intramurals, we could let anyone participate. I don’t think it matters one way or the other.” Participant MS6 was also unsure whether or not there is a difference in GPA between students participating in intramural athletics or interscholastic athletics because “different students have different motivators.”

High school athletic directors all agreed regarding the impact of interscholastic sports participation on GPA. Participant HS2 noted the MSHSAA requirement regarding minimum GPAs or credits earned is black and white, which leads to interscholastic participants having higher GPAs. Participant HS1 explained, “There is a GPA requirement, along with our credit requirement, for them to meet in order to keep eligibility. Sometimes there has to be that dangling carrot for them to accomplish that goal.” Similarly, Participant HS3 noted, “Overall, I would say they do have a higher GPA

if they are participating in interscholastic athletic as compared to those who are not or are competing at the intramural level."

At the district level, both interview participants felt as though involvement in athletics is a strong factor in keeping students connected to school. Participant D1 explained, "I do not know that we have compared students that are feeding in now with MSHSAA compared to intramurals. I think the involvement, whether it is intramurals or MSHSAA, is the critical component." Additionally, the district interview participants perceived the data would show GPAs being similar regardless of the athletics model in which students participate. Participant D2 asserted, "I would probably side on the fact that there is not a positive correlation between athletics or activities versus the intramural. I would think they would probably read pretty closely to the same."

Participant Interview Question Two

Do students who participate in interscholastic athletics have better attendance than students who participate in intramural athletics at the middle school level? Why or why not?

All middle school interview participants agreed students participating in interscholastic athletics have better attendance than those participating in intramurals at the middle school level, but reasons varied. Similar to interview question one, Participant MS5 and Participant MS7 perceived student-athletes having higher attendance because they were doing it for a greater cause, which was the team aspect. Participant MS7 specified, "Not letting down one's teammate is a good motivator for participation." Participant MS5 further explained, "The kids who want to be here are going to be here. They're going to find a way to be at school so they can be a part of this team." Participant

MS2 also agreed, “Coaches hold their players accountable, and teachers lean on those coaches to make sure that their kids that have an attendance problem get going.”

High school interview participants were unanimous in their assessment that students participating in interscholastic athletics have better attendance at the middle school level than those who participate in intramural athletics. Participant HS2 mentioned, “There is the MSHSAA piece that ties in with being present on the day of a contest. And I think that is the thing that is hanging over their head.” Furthermore, the high school interview participants suggested middle schools being under the rules set by the MSHSAA increases attendance among athletes. According to Participant HS3, “There are coaches who are monitoring them being in school. I think that has contributed quite a bit to those kids who had lower attendance rates.” Participant HS4 added, “You would think that their attendance would be better. There is some connection to school when they are there, especially during the season when they go to practice, go to games, etc.”

Both district-level athletic directors had similar views regarding student-athlete attendance being higher for participants than their non-participating peers. Participant D2 expanded on the importance of connecting students to school athletics and activities regarding student attendance:

> I think what matters is the relationships with the coach and sport. Kids will attend things where they feel like a coach cares about them, or they feel like a person will miss them if they’re not there. This is where an organized sport could have a greater impact. I think you could make that connection.

Participant D1 added, “As kids are more engaged, the more apt they are to come to school and further their involvement.” Participant D1 noted it was more about being engaged at school overall rather than the type of athletic program.

Participant Interview Question Three

Do students who participate in interscholastic athletics have fewer discipline incidents than students who participate in intramural athletics at the middle school level? Why or why not?

Middle school interview participants were mixed in responses regarding discipline incidents. While they agreed students involved in athletics have fewer discipline incidents, there was disagreement as to whether or not there was a difference between intramural and interscholastic athletic participants. Participant MS4 stated, “We are able to handle discipline a little differently in athletics and try to handle a lot of issues in the classroom or at practice. It depends on the student.” Participant MS1 has introduced more stringent measures beyond what is required by MSHSAA. According to Participant MS1, “If a student is suspended out of school, they are off the team and finished for the season. We start by letting our kids know they have one opportunity to get it right.”

Participant MS3 shared, “I do think it helps discipline. I think there are fewer referrals just because there are consequences if they are in trouble, such as not playing. I do think students are impacted positively in this aspect.” Similarly, Participant MS4 explained athletes have “more hanging over their head” regarding participation and discipline, but had not noticed a difference between intramural and interscholastic athletic participants.

High school interview participants agreed middle school students involved in athletics are impacted positively regarding discipline. According to Participant HS3, student-athletes at the high school level are now coming in prepared for the MSHSAA requirements and behave accordingly to prevent loss of eligibility after having requirements at the middle school level. This sentiment was furthered by Participant HS4: "I think most schools have some sort of a citizenship agreement that the kids are required to sign and adhere to, and have since middle school." Participant HS1 shared this view but also had an additional reason why discipline might be impacted positively regardless of the program:

> I used to teach at a middle school building, and if the kid was acting out in class, rather than go through the process of writing a referral or making anything formal, I would let their coach know and handle it at practice. They did not want to get in trouble with their coach. That connection matters.

Much like Participant HS1, Participant HS2 believed the connection to the team "keeps students out of trouble" and helps maintain eligibility.

Similar to their responses to interview question two, district-level participants responded it is the connection to the team, coach, or both that impacts discipline. Participant D2 suggested, "Just like with attendance, the people in control of the programs are the reason kids come and participate. When that connection is there, most things take care of themselves." Participant D1 felt students behave better, especially during their respective sports seasons, because they have a relationship with various individuals on the team.

Participant Interview Question Four

Do you see more school connectedness with participating students since the shift was made from intramural athletics to state-sanctioned interscholastic athletics at the middle school level? Please explain your response.

Five middle school interview participants commented the shift to the interscholastic model from intramurals was positive in its impact on students. For example, according to Participant MS1, interscholastic athletics "helps give students a sense of being connected with their peers." Another positive, according to Participant MS1, is the opportunity to further connect students to school through "the relationships with teachers and our coaches." Participant MS3 responded:

> I work really hard at having a team atmosphere and unity and loyalty to your team and building each other up. With so many kids with borderline mental health issues and family issues I feel like that because we have more opportunities now to build on the team aspect. Being part of the team is almost like a little second family.

Participant MS4 added, "When we went to the MSHSAA model, we brought on more sports, and that has contributed to the fact that there are more kids connected." Participant MS6 commented, "I think our kids are finding that we are having success playing these equal opponents now. I think that is turning more students to participate and be a part of our programs."

Two middle school interview participants had views differing from their peers. Participant MS7 said, "I do not think I would see a difference. We had a little bit better system for the kids before the MSHSAA expansion, because we could control it."

Participant MS2 mentioned new problems resulted from the shift, such as competition for facility usage, the overlapping of seasons, and some students getting rundown due to not having any time off between seasons.

High school interview participants perceived students are more connected to school because of the shift to interscholastic athletics. Participant HS3 elaborated, "I would say there has been an improvement for students transitioning from middle school and high school as far as students being connected to school." Participant HS2 also explained students are more connected, because "these kids now have some sort of idea of what is expected and what they need to do [to stay eligible]." Similarly, Participant HS4 asserted the student body is more educated on what they need to do to be eligible, and it is keeping more kids connected.

District-level interview participants were positive in their views of the impact of interscholastic athletics expansion on school connectedness at the middle school level. As Participant D2 stated, "We're going to start to do things a little bit differently than in the past and connect students in that way to our schools." Participant D1 agreed and mentioned by changing the way things are done, students can now have more opportunities in the future to engage and connect with school. Data regarding the perceptions of student school connectedness are presented in Table 3.

Table 3

Perception of Student School Connectedness After Shifting to Interscholastic Athletics

Participant	More/Less Connectedness
MS1	More
MS2	Less
MS3	More
MS4	More
MS5	Less
MS6	More
MS7	More
HS1	More
HS2	More
HS3	More
HS4	More
D1	More
D2	More

Participant Interview Question Five

Do you see any other benefits of interscholastic athletics associated with school connectedness that have not been mentioned? If so, please explain.

Middle school interview participants mentioned many benefits of interscholastic athletics associated with school connectedness outside of GPA, attendance, and discipline. School pride was mentioned by all middle school interview participants as a benefit. Participant MS1 mentioned, “There is school pride with athletics that we are starting to see more, and that is very important.” The views of Participant MS7 were very similar to those of Participant MS1. Participant MS7 responded, “I just think about pride in the school, and that’s something that we always talked about. You are also representing our community and our school.”

Participant MS5 also viewed the expansion as a benefit for a reason other than school pride. Specifically, Participant MS5 asserted, “They are going places they have never been to and seeing schools they would not normally have, which is really great for our kids to see so many different schools at events.” Participant MS6 was also in agreement the “opportunity for students to compete against different towns and schools” is a benefit of the expansion of interscholastic athletics at the middle school level.

School pride was also mentioned frequently by the high school interview participants. Participant HS2 emphasized there is “a greater sense of school pride because these student-athletes have bought into the process both physically and mentally, which strengthens the bond to the greater school community.” Participant HS4 expanded on the importance of school pride by stating, “School pride allows for a greater connection both in the school community and greater community itself. We try to make participation in athletics and activities a big deal for everyone.”

District interview participants also mentioned school pride as a major benefit of the shift to interscholastic athletics. According to Participant D1, “I think it is creating school pride because they are competing against people outside of their city that probably did not exist prior to the expansion.” Participant D2 explained the expansion has benefitted students in the district, because it allows them to see and do things many have not done before. Participant D2 stated, “Many of our students never leave their neighborhood, let alone the city. This is a big deal that many take for granted.” Both district-level participants also believed more students can benefit from the interscholastic model as the programs continue to grow. The most frequent responses for interview question five are presented in Table 4.

Table 4

Most Common Perceived Benefits of Interscholastic Athletics Expansion on School Connectedness Factors

Perceived Benefit	Frequency of Responses
School Pride	11
Better Competition	8
Family Atmosphere	6
Mentor/Role Model	5
Travel Out of City	5

Participant Interview Question Six

Do you see any negatives effects on school connectedness from middle school sports shifting from intramurals to an interscholastic model sanctioned by MSHSAA? In other words, are there any benefits intramural sports provide that interscholastic sports do not? Please explain your response.

A majority of the middle school interview participants reported they like the new model, but with a few caveats. Participant MS7 described "having more control" in the old model. Participant MS7 continued, "We could do what we felt was best for our student populations because we had more flexibility." Participant MS6 explained how the intramural model provides more freedom for schools:

> You could play as many games as you like. You could have an A team, a B team, and a C team, for example, in basketball and volleyball. We offered more activities, such as soccer and archery. You can really have a lot of freedom to do what you want, which you cannot do with the MSHSAA model.

Similarly, Participant MS3 enjoyed being able to have more local control via the intramural program, because “we didn’t have the constraints of MSHSAA on our programs.” Participant MS3 explained, “We did not have to worry about things like transfer students sitting out due to waiting on paperwork. Kids could play immediately, and that does not happen with MSHSAA because of their guidelines.” Participant MS4 also said the flexibility of intramurals is positive, because seasons are not set as they are with the MSHSAA. According to Participant MS4, students are faced with hard choices such as “choosing one sport over the other,” because there is no flexibility with the MSHSAA calendar.

Each of the high school interview participants responded the intramural model is beneficial because more students can participate, but the model also does not provide enough for athletes to compete at the high school level. According to Participant HS1, “It is basically like a participation trophy. We should be prepping these kids for high school, and it should be a little more intense.” Participant HS3 noted, “Once students got to high school, many faced a harsh reality of getting cut from a team because they were measured by their athletic talents rather than their desire to participate.” Similarly, Participant HS4 responded, “I want all kids to be able to play, but high school is a different level. Our sports are MSHSAA-sanctioned, and the rules are the rules.”

District interview participants were very clear in their responses and understood the merits of both models. Participant D2 stated:

> It is a lot easier to get a teacher to stay and work a clock if the game is at 3:45 when school gets out at 3:30. Management-wise, I feel like it’s easier when it’s an

intramural or an inner-city program. That's not the best thing for the kids. The best thing for our kids is to experience that outside-of-district competition.

Participant D1 reflected on the benefits of the intramural model by stating, "We could create some rules as we went, which provided some more flexibility." Ultimately, according to Participant D1, the district "had to go to the MSHSAA model because we had such a diverse skill level of competition and capabilities among our middle school programs."

While both agreed intramurals and interscholastic athletics models are good for students in general, the interscholastic model was determined the best for the district as it includes more competition around the state. According to Participant D2, "The goal is not to be the best in the city anymore. The goal is to be the best in the state." The most frequent responses for interview question six are presented in Table 5.

Table 5

Most Common Perceived Negatives of Interscholastic Athletics Expansion on School Connectedness

Perceived Benefit	Frequency of Responses
Fewer Participants	9
Less Flexibility/More Rules	7
Fewer Options	5

Research Question Three

To answer research question three, independent sample *t*-tests were conducted to determine if there were significant differences in GPA, attendance, and discipline

incidents between students who participated in intramural athletics and those who participated in interscholastic athletics. Student GPA was measured using a four-point scale, attendance was measured by average attendance percentage, and discipline was measured by number of incidents per student. An independent sample *t*-test was conducted for all interscholastic student-athlete GPA, attendance, and discipline incidents for each school year from 2017–2018 through 2019–2020 and then compared to the data of all student-athletes who competed in intramurals during the 2016–2017 school year. After, the same comparisons were disaggregated and analyzed by gender.

GPA

An independent sample *t*-test was conducted to test for significant differences in GPA between all students who participated in intramural athletics in 2016–2017 and all students who participated in interscholastic athletics in 2017–2018. With α set at .05, a value of $p = .666$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 6).

Table 6

Comparison of Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,554	3.12	.559	.666
Intramurals	2,539	3.12	.628	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = .223$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 7).

Table 7

Comparison of Male Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	820	3.06	.570	.223
Intramurals	1,416	3.08	.734	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = .107$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 8).

Table 8

Comparison of Female Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	734	3.17	.541	.107
Intramurals	1,123	3.14	.577	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = .356$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in attendance between the two groups (see Table 9).

Table 9

Comparison of Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,505	3.12	.541	.356
Intramurals	2,539	3.12	.628	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during

the 2018–2019 school year. With α set at .05, a value of $p = .470$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 10).

Table 10

Comparison of Male Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	786	3.09	.556	.470
Intramurals	1,416	3.08	.734	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = .390$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 11).

Table 11

Comparison of Female Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	734	3.15	.524	.390
Intramurals	1,123	3.14	.577	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = .368$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 12).

Table 12

Comparison of Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,505	3.13	2.07	.368
Intramurals	2,539	3.12	.628	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = .056$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 13).

Table 13

Comparison of Male Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	809	3.13	.521	.056
Intramurals	1,416	3.08	.734	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in GPA between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = .346$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in GPA between the two groups (see Table 14).

Table 14

Comparison of Female Student GPA in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	696	3.13	.577	.346
Intramurals	1,123	3.14	.516	

Note. Statistical significance is noted at $p < .05$.

Attendance

An independent sample *t*-test was conducted to test for significant differences in attendance between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 15).

Table 15

Comparison of Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,554	96.61	1.87	<.001
Intramurals	2,539	93.83	6.18	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 16).

Table 16

Comparison of Male Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	820	96.58	2.03	<.001
Intramurals	1,416	92.65	5.89	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 17).

Table 17

Comparison of Female Student Attendance in Intramurals (2016-2017)and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	734	96.64	1.66	<.001
Intramurals	1,123	95.31	6.21	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = <.001$ was reported. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 18).

Table 18

Comparison of Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,521	96.24	2.07	<.001
Intramurals	2,539	93.83	6.18	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 19).

Table 19

Comparison of Male Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	786	96.90	1.76	<.001
Intramurals	1,416	92.65	5.89	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 20).

Table 20

Comparison of Female Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	734	96.30	1.60	<.001
Intramurals	1,123	95.31	6.21	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 21).

Table 21

Comparison of Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,505	96.24	2.07	<.001
Intramurals	2,539	93.83	6.18	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 22).

Table 22

Comparison of Male Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	809	96.18	2.18	<.001
Intramurals	1,416	92.65	5.89	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in attendance between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = <.001$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in attendance between the two groups (see Table 23).

Table 23

Comparison of Female Student Attendance in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Intramurals	696	96.31	1.93	<.001
Interscholastic	1,123	95.31	6.20	

Note. Statistical significance is noted at $p < .05$.

Discipline

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = .013$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in discipline incidents between the two groups (see Table 24).

Table 24

Comparison of Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,505	.414	.732	.013
Intramurals	2,539	.362	.731	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = .018$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there

was a statistically significant difference in discipline incidents between the two groups (see Table 25).

Table 25

Comparison of Male Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	820	.453	.774	.018
Intramurals	1,416	.386	.700	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2017–2018 school year. With α set at .05, a value of $p = .130$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in discipline incidents between the two groups (see Table 26).

Table 26

Comparison of Female Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2017–2018)

Group	*N*	*M*	*SD*	*p*
Interscholastic	734	.371	.680	.130
Intramurals	1,123	.331	.767	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = .003$. was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in discipline incidents between the two groups (see Table 27).

Table 27

Comparison of Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1,521	.422	.654	.003
Intramurals	2,539	.361	.731	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = .025$ was reported. The mean of the intramural group was significantly higher than the mean of the interscholastic group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in discipline incidents between the two groups (see Table 28).

Table 28

Comparison of Male Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	786	.044	.666	.025
Intramurals	1,416	.386	.700	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2018–2019 school year. With α set at .05, a value of $p = .026$ was reported. The mean of the interscholastic group was significantly higher than the mean of the intramural group. Therefore, the null hypothesis was rejected, and it was concluded there was a statistically significant difference in discipline incidents between the two groups (see Table 29).

Table 29

Comparison of Female Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2018–2019)

Group	*N*	*M*	*SD*	*p*
Interscholastic	734	.398	.642	.026
Intramurals	1,123	.331	.767	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline between all students who participated in intramural athletics during the 2016–2017 school year and all students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = .057$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in attendance between the two groups (see Table 30).

Table 30

Comparison of Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	1505	.400	.768	.057
Intramurals	2539	.361	.731	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between male students who participated in intramural athletics during the 2016–2017 school year and male students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = .078$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in discipline incidents between the two groups (see Table 31).

Table 31

Comparison of Male Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	809	.431	.755	.078
Intramurals	1,416	.386	.700	

Note. Statistical significance is noted at $p < .05$.

An independent sample *t*-test was conducted to test for significant differences in discipline incidents between female students who participated in intramural athletics during the 2016–2017 school year and female students who participated in interscholastic athletics during the 2019–2020 school year. With α set at .05, a value of $p = .183$ was reported. Therefore, the null hypothesis was not rejected, and it was concluded there was not a statistically significant difference in discipline incidents between the two groups (see Table 32).

Table 32

Comparison of Female Student Discipline in Intramurals (2016-2017) and Interscholastic Athletics (2019–2020)

Group	*N*	*M*	*SD*	*p*
Interscholastic	696	.365	.782	.183
Intramurals	1,123	.331	.767	

Note. Statistical significance is noted at $p < .05$.

Summary

In Chapter Four, the data collected as part of this mixed-methodology study were presented. The qualitative data presented in this chapter were comprised of interview data collected from seven middle school athletic directors, four high school athletic directors, and two district athletic directors from a large urban school district in Missouri. The interview responses were recorded and transcribed, and representative excerpts were presented in Chapter Four. The interview responses were analyzed to develop major themes and findings reported in Chapter Five.

The quantitative portion of the study was designed to determine the impact of middle school interscholastic athletics expansion on school connectedness after the district shifted from an intramural athletics model to a state-sanctioned interscholastic model. School connectedness was measured by comparing GPA, attendance, and discipline incident data between all students who played intramural athletics during the 2016–2017 school year and all students who competed in interscholastic athletics in school years 2017–2018 through 2019–2020. The data were then used to compare GPA, attendance, and discipline incidents between students who played intramural athletics in 2016–2017 and students who competed in interscholastic athletics in school years 2017–2018 through 2019–2020 by gender. The quantitative data were reported in tables.

Chapter Five includes the findings from the data and an explanation of athletic director perceptions of the impact of interscholastic athletics expansion at the middle school level on school connectedness factors of GPA, attendance, and discipline. Major themes developed from the interview responses are presented in the conclusions section.

Also presented in Chapter Five are implications for practice and recommendations for future research.

Chapter Five: Summary and Conclusions

This mixed-methods study was conducted to examine the impact of the expansion of middle school state-sanctioned interscholastic athletics on school connectedness in a large urban school district in Missouri. Quantitative data were collected in the form of secondary data, including GPA, attendance, and discipline incidents of students who participated in intramural athletics during the 2016–2017 school year and students who participated in interscholastic athletics for each year during the 2017–2018 through 2019–2020 school years. Interview participants included middle school, high school, and district-level athletic directors. During the interviews, participants discussed their perceptions of the impact of middle school state-sanctioned interscholastic athletic expansion on school connectedness.

In this chapter, the findings from the research questions are presented. Detailed are the conclusions and implications for practice. Finally, recommendations for future research are presented.

Findings

The findings were based on analyzing both qualitative and quantitative data. Research questions one and two were utilized to analyze the qualitative data. Research question three was utilized to analyze the quantitative data. The findings are then separated into four sections: GPA, attendance, discipline, and school connectedness. Instead of reporting the qualitative and quantitative findings separately, each is discussed within the four sections.

Research Question One

What is the perceived impact of interscholastic state activity association athletics expansion at the middle school level on school connectedness factors of grade point average (GPA), attendance, and discipline from the perspective of middle school athletic directors?

Research Question Two

What is the perceived impact of interscholastic state activity association athletics expansion at the middle school level on school connectedness factors of grade point average (GPA), attendance, and discipline from the perspective of high school athletic directors?

The data for the qualitative portion of the study were collected via interviews of athletic directors at the middle school, high school, and district levels. Research questions one and two were developed to examine the perceptions of athletic directors regarding the impact of interscholastic athletics expansion at the middle school level on school connectedness. The participants were interviewed, and their responses were recorded on a digital recorder.

After interviews were completed, the recordings were transcribed. The written transcriptions were then coded using open coding, during which "the researcher needs to sift through informant's responses and organize similar words and phrases, concept-indicators, in broad initial thematic domains" (Williams & Moser, 2019, p. 4). Once the open coding was complete, axial coding was used to identify the relationship between the open codes and to develop themes from the participant responses.

Research Question Three

What differences, if any, exist in grade point average (GPA), attendance, and discipline between students participating in middle school intramural athletics and students participating in state-sanctioned interscholastic middle school athletics?

Data for the quantitative portion included secondary data in the form of GPA, attendance, and discipline incidents for students who participated in intramural athletics during the 2016–2017 school year and students who participated in interscholastic athletics each year during the 2017–2018 through 2019–2020 school years. Quantitative data were collected from publicly available district data through a district data acquisition request. The sports used for participant data included boys and girls basketball, boys and girls cross country, boys and girls track and field, football, sideline cheerleading, volleyball, and wrestling. The data were organized into an Excel spreadsheet and analyzed using independent sample *t*-tests to determine whether there was a significant difference among the groups overall for each year and further disaggregated by gender.

GPA. An analysis of the qualitative data indicated GPA is impacted positively by participating in athletics regardless of the model. This coincides with past literature associating interscholastic sports participation with higher GPAs (Marsh, 1993; Meyers, 2019). All high school interview participants perceived students participating in interscholastic athletics as having higher GPAs than those participating in intramural athletics. Five out of seven middle school interview participants also perceived students participating in interscholastic athletics as having higher GPAs than those participating in intramural athletics.

Coe (2006) recognized high school athletes have better grades on average than students who do not participate. Several participants also reported student GPAs are impacted positively the more sports students play throughout the year. The more interscholastic sport seasons students participate, the greater the academic impact on GPA (Kohl, 2017; Marsh, 1993, 2020; Zayas, 2018).

Interestingly, significant differences were not found in the quantitative data between the two groups each year when analyzing GPA, both overall and by gender. Although this does not support the majority of perceptions of the interview participants, it is not unfounded based on past literature. Yarkwah and Agyei (2020) reported students who are participating in athletics are beginning to see a decline in academic performance. Furthermore, students participating in interscholastic athletics may place more importance on the sport rather than academics (Bishop, 2018; Pestana, 2018; Powelson, 2015).

Attendance. Student attendance was found to be impacted positively by participating in interscholastic athletics in both the qualitative and quantitative data. Interview participants at the middle, high, and district levels were unanimous in their perceptions regarding students who participate in interscholastic athletics having better attendance than those who participate in intramural athletics. Gowing (2019) reported as students attend school more often due to athletics participation, the greater the chance students will be more connected to the school. Several participants also reported student attendance is positively impacted because there is greater motivation to attend school. This finding backs the 2017 study by Cuffe et al., which noted students participating in athletics are more likely to attend school.

Each of the *t*-tests conducted for attendance showed a significant difference between students who participated in interscholastic athletics and those who competed in intramural athletics, both overall and by gender, as students participating in intramural athletics demonstrated higher rates of attendance. This supports the findings of Morris (2016), positively linking extracurricular athletics participation with higher attendance. The Minnesota State High School League also reported student-athletes having higher rates of attendance than non-athletes, as further evidence to back up the findings of this study (as cited in Born, 2007).

Discipline. Student discipline was impacted positively by interscholastic athletics after an analysis of the qualitative data. Nearly all middle school interview respondents cited the value of behavior requirements for student-athletes to participate in interscholastic athletics. The majority of high school interview participants also perceived students who participate in interscholastic athletics are more likely to experience less discipline than those who participate in intramural athletics. These perceptions are supported by previous research by Overman (2019), who found student behavior is positively affected by participation in extracurricular activities.

Significant differences in discipline were found overall for the 2017–2018 and 2018–2019 school years compared to students who participated in intramurals during the 2016–2017 school year. There was a significant difference in discipline between male students who participated in interscholastic athletics in 2017–2018 and 2018–2019 and male students who participated in intramural athletics during the 2016–2017 school year, where students participating in intramural athletics demonstrated higher rates of discipline. There was also a significant difference in discipline between female students

who participated in interscholastic athletics during 2018–2019 and students who competed in intramural athletics during 2016–2017, where students participating in intramural athletics demonstrated higher rates of discipline.

None of the *t*-tests conducted for discipline revealed a significant difference between students who participated in interscholastic athletics during the 2019–2020 school year, both overall and by gender, and students who participated in intramural athletics during 2016–2017. The inconsistency of these findings is not unfounded, as the literature suggested the effects of interscholastic sports participation are mixed regarding discipline (Byl, 2004; Kohl, 2017; Overman, 2019; Spruit et al., 2019).

School Connectedness. Students participating in interscholastic athletics experience more school connectedness than students participating in intramural athletics as measured by the qualitative and quantitative data. Gowing (2019) stated the increased connection of a student to school is based upon athletics participation. Students who are more connected to school via athletics participation tend to value the importance of the school and are less likely to drop out (Baumann & Krskova, 2016; Eccles, 2008; Noltemeyer et al., 2015). Middle school and district-level interview participants reported a greater sense of school pride is developed as athletes compete outside the district and the city. In addition, the experience developed through interscholastic competition better prepares student-athletes for the rigors and requirements of high school athletics, according to the perceptions of high school interview participants.

Conclusions

The following conclusions were formulated based upon triangulation of the data collected from the review of literature, the qualitative data collected via athletic director

interviews, and quantitative data from publicly available district data and data received through a district data request. Triangulation of the data is a method of employing multiple sources of data in an effort to draw conclusions and validate the findings within a study (Boudah, 2020; Johnson & Christensen, 2020).

Athletics Participation Positively Impacts GPA

Interview participants from all three levels discussed the value of interscholastic sports participation with regard to GPA. Grade point average is a valuable measure of student success and can predict many outcomes (Marsh & Kleitman, 2002). Students who participate in interscholastic athletics are more likely to receive better grades than those who do not participate (Aspen Institute, 2020; Coe et al., 2006; Stucko, 2018; Women's Sports Foundation, 2018).

During the interviews, a majority of participants perceived higher GPAs for students who compete in interscholastic athletics compared to those who compete in intramural athletics. Marsh (1993) asserted participation in athletics allows students to prioritize and promote academic outcomes, including grades. Participants consistently reported the eligibility requirements set forth by the MSHSAA as a major factor in higher GPAs. The NFHS (2019a) suggested eligibility requirements allow for schools to be further involved in the education of student-athletes.

High school interview participants all asserted students who participate in interscholastic athletics have higher GPAs than students who participate in intramural athletics. These participants reported student-athletes are better-conditioned to perform than non-participating peers. They also explained being part of the team GPA motivates students who participate in interscholastic athletics to succeed academically.

Nearly all interview participants agreed the impact of interscholastic athletics participation on GPA is greater the more often students participate throughout the year, which supported previous research (Knifsend & Graham, 2012; Kohl, 2017; Marsh, 1993; Zayas, 2018). Interview participants from all three levels recognized the value of continued participation throughout the school year on GPA. Participant MS1 viewed the amount of participation as having a significant impact on student success in the classroom because students always know what is expected of them. Participant HS3 suggested incoming freshmen are more prepared for the rigors of high school the more they participate in athletics at the middle school level. When students are more committed to school through participation, they are more likely to achieve academic success (Finn, 1989; Gowing, 2019).

Not all participants believed the type of athletics model mattered when it came to the impact of participation on GPA. Four interview participants believed student GPA was impacted positively simply by participating because students were required to maintain a GPA similar to the MSHSAA standards. An analysis of the quantitative data did not show a significant difference between students who participated in interscholastic athletics and those who participated in intramural athletics. However, all groups had mean GPAs over 3.0 on a 4-point scale, indicating a positive impact on athletics participation. Previous research by Clark (2019) and Gerdy (2014) has demonstrated students participating in either intramural or interscholastic athletics, or a combination of both, achieving better GPAs than students who are not participating.

Interscholastic Athletics Participation Positively Impacts Attendance

The positive impact of interscholastic athletics activity on attendance was a prevalent theme during the interviews. According to the MSHSAA (2020a), attendance is required for student-athletes to participate in interscholastic contests. Members are afforded the ability to make even more stringent policies regarding attendance (MSHSAA, 2020a; NFHS 2019a). Gowing (2019) declared the more students are at school, the greater their opportunity to become connected to school.

Finn (1989) recommended keeping students engaged in school to decrease the risk of dropping out. One way to keep students engaged is through participation in athletics (Finn, 1989; Marsh, 1993). All middle school interview participants reported attendance is impacted positively through interscholastic sports participation. Participants MS5 and MS7 perceived student-athlete attendance as being better because of commitment to the team. Participant MS7 stated, “They do not want to let down their teammates, and they do not want to be let down.” For some students, Participant MS3 noted the team is the closest thing to a family setting they will experience, which keeps the kids coming back to school each day.

All high school interview participants emphasized student-athlete attendance is positively impacted by the shift to interscholastic athletics. Participant HS1 explained, “They have to be here the day of to participate. They have to be at practice to participate in a game. It makes more sense and is easier for athletes to attend than not.” Both Participants HS3 and HS4 reported student-athletes have more accountability because their attendance is monitored each day by the attendance office, individual teachers, and the respective coaching staff of each sport in which students are participating.

District interview participants identified the higher rates of attendance of student-athletes as a reflection of the leadership of each sport. Gowing (2019) asserted a key relationship with an adult at school strengthens the bond between student and school. Participant D2 explained time spent with an educational leader who values their time and success will keep students coming back each day. According to Participant D1, students are better served by being engaged at school than not having anything organized to do after school. Participant D1 added, "The more they are engaged, the more they are with an educational leader who can mentor and inspire them." Shulkind and Foote (2009) reported school connection is increased when structures are in place to allow for more easily facilitated relationships between students and adults at school.

The quantitative data also provided evidence as students who participate in interscholastic athletics as having higher rates of attendance than those who participated in intramural athletics. Students with higher rates of attendance experience more school connection and are less at-risk for adverse behaviors (Barrow, 2015; CDC, 2009; Gowing, 2019). Additionally, students who attend school more have more opportunities to connect with school as well as create bonding opportunities with educational leaders who provide stability and a safe environment to grow (Cuffe, 2017; Eccles, 2008; Gowing & Jackson, 2016). Based on the results of the qualitative and quantitative portions of this study, along with a review of the literature, it was concluded attendance is impacted positively through participation in interscholastic athletics.

Interscholastic Athletics Participation Positively Impacts Discipline

Various researchers have agreed decreased school discipline is a sign of students with greater school connectedness (APA, 2019b; Blum, 2005; Resnick et al., 1993).

Sadik and Ozturk (2018) found classroom operations are severely impacted by unwanted behaviors and disciplinary incidents. According to Garcia and Subia (2019), participation in interscholastic athletics reduces unwanted behaviors and promotes citizenship. Additionally, Meyers (2019) argued participation in interscholastic athletics reduces the chance of students receiving discipline referrals.

Nearly all interview participants agreed the interscholastic model impacts student discipline positively. Middle school interview participants were all in agreement athletics participation reduces discipline but were undecided if it is due to the type of athletics program. Participant MS4 reported, “Students do not want to get into trouble so they can play.” Participant MS1 added, “Our athletes know from day one that discipline will determine their playing fate quicker than anything.” Other participants noted student-athletes have a lot to lose through school discipline and often avoid getting into trouble.

Multiple high school interview participants also noted incoming freshmen are transitioning to high school with fewer discipline issues within the student-athlete population. Participants HS3 and HS4 clarified the commitment to citizenship requirements has been instilled in their heads since middle school. According to Participant HS1, “There is no excuse for not knowing what is acceptable in regards to behavior. These kids know how to behave and what is expected to participate.” Participant HS2 also elaborated that when students know their actions have consequences for themselves and their team, it carries more weight than it would otherwise.

When conducting district-level athletic director interviews, both participants explained their views on athletics participation and discipline. Participants D1 and D2 recognized when students are connected to a team or a coach, their discipline issues

decrease. According to Participant D1, students do not want to let others down, which leads to greater accountability. Participant D2 suggested most discipline issues take care of themselves or are non-existent when the connection between student and team or student and coach is strong.

The quantitative data supported students who participate in interscholastic athletics as having lower rates of discipline than students who participated in intramural athletics. As students are part of an athletic team with additional requirement for eligibility, the need to conform to the values of the team makes students less likely to get into trouble at school (Marsh, 1993). Each of the years studied showed a significant difference in discipline between interscholastic and intramural participants, with the exception of the 2019-2020 school year. Although there were no significant differences for the 2019-2020 school year, it was concluded discipline is positively impacted as based on previous years' data, perceptions of interview participants, and a review of the literature.

Students Participating in Interscholastic Athletics Experience More School Connectedness

Interest in school connectedness research has increased over the last two decades (Gowing, 2019). Students with low levels of school connectedness are more likely to struggle with grades, attendance, and discipline (Marsh et al., 2019). When students are more connected to school via participation in athletics, they are better prepared for success in the future (Barrow, 2015; Kamau et al., 2015).

Several middle school interview participants stated increased school pride is a result of students experiencing more school connectedness due to the shift from an

intramural athletics model to an interscholastic model. These participants shared they have witnessed students exhibiting more pride for their school than prior to the shift to an interscholastic model. According to Sudlow et al. (2019), school pride is fostered through positive and emotional connections to the school. Participant MS3 discussed the transformation of an athletics program that had sparsely attended games to one that is filled with members of the community cheering for their school. Participant MS7 stressed the importance that students are now representing not only their schools but the greater community.

High school and district interview participants also discussed school pride as a way students are more connected to schools since the shift to an interscholastic athletics model. Participants HS2 and HS4 noted the majority of the students coming through the system have bought into the athletics program since middle school in terms of time, effort, and even money. Participant HS3 mentioned, “These students are playing for the name on the front of the jersey.” Participant HS1 noted the community takes pride in the school, and the athletes like to repay that pride when representing the school on and off the court. According to Participant D1, there is “more motivation to succeed and represent where they came from” through competition, which has led to an increase in school pride.

School connectedness for this study was measured quantitatively by the perceptions of athletic directors at the middle school, high school, district levels. School connectedness was measured as well via analyzing GPA, attendance, and discipline data for students who participated in interscholastic athletics compared to those who participated in intramural athletics. Combined with a review of the literature, it was

concluded students participating in interscholastic athletics experience more school connectedness than students participating in intramural athletics. Students who participate in interscholastic athletics are more apt to be school connected as they exhibit higher GPAs, greater rates of attendance, and lower rates of discipline than their peers who participate in intramurals or do not participate (Kohl, 2017; Overman, 2019; Zayas, 2018).

Implications for Practice

School connectedness research has focused largely on improving the quality of relationships of students and their engagement with school (Blum, 2005; Gowing, 2019; Gowing & Jackson, 2019). Greater student engagement with peers and educational leaders prior to the secondary years allows for the organic creation of relationships and an increase in positive school experiences (Pantzer et al., 2018). Knifsend and Graham (2012) argued connecting students with school at a younger age allows for a better transition through the secondary school years. Additionally, Gerdy (2014) recognized school connectedness can be increased via the relationships created through participation in school-sponsored athletics, both at the intramural and interscholastic levels. Clark (2019) also believed competitive and recreational athletics participation is an integral part of the educational experience, and students are able to better grow when more opportunities are provided.

Provide Both Intramural and Interscholastic Athletic Programs

One way to ensure all students have a chance to participate in athletics and maintain a healthy lifestyle is to implement both an intramural and an interscholastic athletic program at the middle and high school levels. According to Haddix (2016), the

key to successful athletic programs is to keep the focus on the students and helping them become successful. For students to be more school connected, an emphasis must be placed on the value of participating in athletics, whether in an intramural or interscholastic model. Kamau et al. (2015) noted participation in school activities and sports increases the chances of being connected at school. According to Jones et al. (2019), schools with both types of athletic programs offer additional opportunities to promote school belongingness among the overall student body.

Providing a combination of both athletics models allows for districts to connect more students to school, especially at the middle school level. The National Association for Sports and Physical Education (2008) recommended intramurals for middle school students. Providing intramurals at the middle school level can be very successful as students are less mobile (i.e., cannot drive). Overman (2019) noted high schools should seek a balance in sports and offer both intramurals and interscholastic athletics. Intramurals compliment interscholastic athletics and can enhance school connectedness because intramurals are all-inclusive (Campbell, 2004).

Having a combination of intramural and interscholastic athletics programs also allows for more sports in which students can compete. Not every sport in a district athletic program is state-sanctioned, which then allows for a less competitive program to be created so students can participate. This can be used as a platform to participate in interscholastic athletics in the future or to continue the activity leisurely throughout their lifetime.

Former intramural sports, such as archery or esports, have now become recognized as emerging activities under the MSHSAA umbrella (MSHSAA, 2020b).

These activities allow students as young as sixth grade to compete, which provides an opportunity for students transitioning to middle school to participate sooner in athletics in a lower-stakes environment. Additionally, districts can now implement these activities at the elementary level in an intramural structure while providing the foundations of the requirements needed to compete at the secondary level. Schools must support students by providing them with the necessary resources to participate in programs, reducing outside stressors, and creating an environment where students can engage without fear (Barrow, 2015).

Overall, the research from this study has shown students have a greater school connection when participating in interscholastic athletics. Students who are not able to participate in interscholastic athletics can still reap many of the same benefits when participating in intramural athletics, such as better grades, increased attendance, and lower rates of discipline. With both athletics programs being offered, students are able to experience athletics at the level that best suits their needs and wants while maintaining a high level of school connectedness.

Increase the Number of Extracurricular Offerings

In addition to implementing both interscholastic and intramural athletics programs at schools, increasing the number of extracurricular offerings will allow students to have more opportunities to connect to schools and like-minded peers. Kozub and Samalot-Rivera (2020) argued there is still work to be done to provide more opportunities for all students. As the number of offerings increases, so does the number of students who can access these offerings. Additional extracurricular offerings could include academic activities such as speech and debate, theater, and music programs. Many schools also

offer student clubs where they can find more commitment and bonding to their schools in an environment where they are comfortable and supported.

Bowles and Scull (2019) attributed increased opportunities to connect with school leads to a decrease in time available to be exposed to negative factors (i.e., drugs, criminal groups) outside of school. This reinforces the research of Marsh (1993) who stated a student's increased identification within a school leads to greater commitment. The CDC (2009) also believed students will continue to become more connected to schools as they are supported by inclusive school environments and curricula, which include extracurricular activities.

Connect Students at an Earlier Age

Another implication for practice is to connect students to school at an earlier age as they are transitioning to secondary school. Programs connecting students to school at an earlier age will allow for students to be more connected as they transition through the different levels of school, as evidenced by the increased levels of school connection of middle school students participating in interscholastic athletics. According to a majority of the interview participants, earlier school connection builds school pride and greater commitment to the school. Increasing the number of students who are more connected to schools at an earlier age would assist schools in reducing the number of risk factors leading to student disengagement.

As previous research has shown, students are transitioning to the secondary level, disconnected from school and at-risk of being alienated from their peers (Knifsend et al., 2018). Resnick et al. (1993) noted school connectedness is developed in order to protect against risk factors in adolescence. Knifsend and Graham (2012) noted students are better

served the earlier they are connected to school. Adolescents who enter middle school with elevated levels of adjustment problems may be at a disadvantage in developing a connection to the school because they are more likely than their peers to report conflictual relationships with teachers (Doumen et al., 2008).

Students who become more connected to school at an earlier age are at a lower risk of feeling isolated from others (APA, 2019b). Crownover and Jones (2018) argued increasing involvement in various activities and sports provides younger students with opportunities to become more connected at school. Loukas et al. (2016) reported it is of particular importance to connect students prior to middle school because school connectedness decreases over time among students most at-risk.

Recommendations for Future Research

Future studies on the impact of participation on school connectedness should focus on participation in interscholastic activities and athletics. A qualitative investigation of participant perceptions would better provide an understanding of how participation in activities and athletics impacts school connectedness for students. In addition to participants in both activities and athletics, a qualitative investigation of the perceptions of coaches and sponsors would also provide an understanding of how activities and athletics impact school connectedness for students. The study could be designed to identify the qualities district programs should possess to promote increased school connectedness among the student population.

Another recommendation for future research would be to conduct a longitudinal case study over multiple years based upon the feeder patterns of each high school. A study conducted regarding the same district feeder patterns over multiple years would

allow the researcher to isolate specific behaviors of a student population and the impact on school connectedness. The study would also provide insight into the impact of a district athletics program on school connectedness in specific demographic regions of the district.

Finally, a similar quantitative study could be replicated comparing the GPAs, attendance, and discipline of students involved in state-sanctioned school activities, such as vocal and instrumental music, speech and debate, and scholar bowl, to students who participate in state-sanctioned athletics. This would provide further insight into student groups held to the same MSHSAA standards as student-athletes. Data from both activities and athletics may provide the researcher with stronger correlational data.

Summary

The purpose of this study was to determine the impact of the expansion of middle school interscholastic athletics on school connectedness in a large urban school district in Missouri. Secondary data, interview participant perceptions, and the review of literature were all considered and used to triangulate the impact of the expansion of middle school interscholastic athletics in a large urban school district in Missouri. This study was significant because it addressed the lack of research in the area of how state-sanctioned athletics impact school connectedness at the middle school level (Kohl, 2017; Knifsend & Graham, 2012; Zayas, 2018).

Chapter One began with a background of the study regarding the middle school years as crucial for connecting students to school (Blum, 2005). Few studies have been conducted to investigate the educational benefits of participation in extracurricular activities during middle school (Hughes et al., 2016). Marsh's (1993) identification/

commitment model and Finn's (1989) participation-identification model of teacher evaluation were introduced as the conceptual frameworks. The statement of the problem, the purpose of the study, and the research questions and hypotheses were provided. The significance of the study, which addressed a lack of research, was addressed. Also included in Chapter One were the definition of key terms, delimitations, limitations, and assumptions of the study.

Chapter Two included a review of the literature. The conceptual framework was further investigated as participation in school activities leads to greater identification and involvement within the school, which allows for greater commitment and more beneficial academic outcomes (Finn, 1989; Marsh, 1993). School connectedness was addressed in detail. The contemporary history of state and national high school athletics associations was described in detail. Intramural athletics were discussed, as well as interscholastic athletics. Finally, the impact of interscholastic athletics participation on GPA, attendance, and discipline was examined.

In Chapter Three, the problem and purpose of the study and the research questions were restated. The research design was then discussed. Next, a detailed explanation of the population and sample and instrumentation design for the study was shared. The qualitative sample included middle school, high school, and district athletic directors from a large urban school district in Missouri.

In Chapter Four, an analysis of the quantitative and qualitative data was presented. The qualitative data presented in this chapter were comprised of interview data collected from seven middle school athletic directors, four high school athletic directors,

and two district athletic directors from a large urban school district in Missouri. The interview responses were analyzed to develop major themes.

The quantitative portion of the study was designed to determine the impact of middle school interscholastic athletics expansion on school connectedness after the district shifted from an intramural athletics model to a state-sanctioned interscholastic model. School connectedness was measured by comparing GPA, attendance, and discipline incident data between all students who played intramural athletics during the 2016–2017 school year and all students who competed in interscholastic athletics during the school years 2017–2018 through 2019–2020. The data were then used to compare GPA, attendance, and discipline incidents between students who played intramural athletics during the 2016–2017 school year and students who competed in interscholastic athletics during school years 2017–2018 through 2019–2020 by gender.

Chapter Five included the findings and conclusions of this study. Implications for practice were described, including the need for connecting students to school at an earlier age. In addition, schools should implement both intramural and interscholastic athletic programs to provide opportunities for all students to participate in athletics and be more connected to school.

Recommendations for future research were also provided in Chapter Five. The first recommendation was to analyze the qualities district programs should possess in order to promote increased school connectedness among the student population based on the perceptions of participants and coaches. The second recommendation was to conduct a longitudinal study of feeder patterns of each high school over multiple years. Finally, a similar quantitative study was recommended to compare the GPAs, attendance, and

discipline incidents of students involved in interscholastic activities to students involved in interscholastic athletics.

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Appendix A

Participant Interview Questions

1. Do students who participate in interscholastic athletics have better GPAs than students who participate in intramural athletics at the middle school level? Why or why not?
2. Do students who participate in interscholastic athletics have better attendance than students who participate in intramural athletics at the middle school level? Why or why not?
3. Do students who participate in interscholastic athletics have fewer discipline incidents than students who participate in intramural athletics at the middle school level? Why or why not?
4. Do you see more school connectedness with participating students since the shift was made from intramural athletics to state-sanctioned interscholastic athletics at the middle school level? Please explain your response.
5. Do you see any other benefits of interscholastic athletics associated with school connectedness that have not been mentioned? If so, please explain.
6. Do you see any negatives effects on school connectedness from middle school sports shifting from intramurals to an interscholastic model sanctioned by MSHSAA? In other words, are there any benefits intramural sports provide that interscholastic sports do not? Please explain your response.

Appendix B

Permission to Conduct Interviews

(Date)

[redacted]

RE: Permission to Conduct Research in [redacted] Public Schools

Dear [redacted],

I am writing to request permission to conduct research in [redacted] Public Schools. I am currently pursuing my doctorate through Lindenwood University and am in the process of writing my dissertation. The study is entitled *Examining the Impact of Interscholastic State Activity Association Athletics Expansion at the Middle School Level in a Large Urban School District*. I am asking permission to conduct interviews of all athletic directors in the district.

If you agree, please sign below, scan this page, and email to me, Nathaniel Gillespie, at [redacted]. Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you may have regarding this study.

Sincerely,

Nathaniel Gillespie,

Doctoral Student at Lindenwood University

Approved by:

_____

Print name and title here

_____ _____

Signature Date

Appendix C

IRB Approval Letter

Sep 18, 2020 3:03 PM CDT

RE:
IRB-21-16: Initial - Examining the Impact of Interscholastic State Activity Association Athletics Expansion at the Middle School Level in a Large Urban School District

Dear Nathaniel Gillespie,

The study, Examining the Impact of Interscholastic State Activity Association Athletics Expansion at the Middle School Level in a Large Urban School District, has been Approved as Exempt.

Category: Category 1. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

The submission was approved on September 18, 2020.

Here are the findings:

Regulatory Determinations

- This study has been determined to be minimal risk because the research is not obtaining data considered sensitive information or performing interventions posing harm greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

Sincerely,
Lindenwood University (lindenwood) Institutional Review Board

Appendix D

LINDENWOOD

Research Study Consent Form

Interview

Examining the Impact of Interscholastic State Activity Association Athletics Expansion at the Middle School Level in a Large Urban School District

You are asked to participate in a research study being conducted by Nathaniel Gillespie under the guidance of Dr. Brad Hanson at Lindenwood University. Being in a research study is voluntary, and you are free to stop at any time. Before you choose to participate, you are free to discuss this research study with family, friends, or a physician. Do not feel like you must join this study until all of your questions or concerns are answered.

Why is this research being conducted?

We are conducting this study to examine the expansion of middle school interscholastic athletics in a large urban school district in Missouri based on the perceptions of athletic directors in the district. We will be asking about 10 other people to answer these questions.

What am I being asked to do?

During this study, you will be interviewed about your perceptions of the expansion of middle school athletics and the impact on school connectedness factors of GPA, attendance, and discipline. It will take approximately 30–60 minutes to complete this study.

There are no risks to participate in this study. You will receive no direct benefits for completing this survey. We hope what we learn may benefit other people in the future.

What if I do not choose to participate in this research?

It is always your choice to participate in this study. You may withdraw at any time. You may choose not to answer any questions or perform tasks that make you uncomfortable.

How will you keep my information private?

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are members of the research team, qualified staff of Lindenwood University, and representatives of state or federal agencies.

Who can I contact with questions or concerns?

If you have any questions or concerns about this study, please use the following contact information:

Nathaniel Gillespie email: [redacted]

Dr. Brad Hanson email: [redacted]

If you have questions about your rights as a participant in this research or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Lindenwood University Institutional Review Board Director, Michael Leary, at (636) 949-4730 or mleary@lindenwood.edu.

Vita

Nathaniel B. Gillespie obtained his Bachelor of Arts degree in Politics and Government from Drury University in 2003. He attended Lindenwood University and earned a Master of Arts in Educational Administration degree in 2014.

Nathaniel began his career in education at Spokane R-VII School District in 2009, where he taught high school Spanish for two years. In 2012, he moved to Glendale High School in Springfield, Missouri, where he taught Spanish and English for four years. Nathaniel became Coordinator of Site Interventions at Central High School in Springfield in 2014. Nathaniel currently serves as assistant principal at Ozark High School, a role he began in 2019.