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A Review of Literature on the Benefits of Sport Education on Secondary Physical Education

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A Review of Literature on the Benefits of the Sport Education on Secondary Physical
Education

A Synthesis Project

Presented to the

Department of Kinesiology, Sport Studies, and Physical Education

The College at Brockport

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In Partial Fulfillment

of the Requirements for the Degree

Master of Science in Education

(Physical Education)

By

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Chapter 1

INTRODUCTION

Those who teach or are part of an educational environment know that teaching is a very rewarding career but also know that it can present many challenges. This is especially true in teaching physical education to secondary school students. Teachers are taught and expected to incorporate different teaching methods, differentiate instruction, plan thoughtfully, take students' needs into account and assess students in order to effectively educate the student body of a school. Even the most experienced physical education teachers can struggle with these important aspects of teaching and look for ways to grasp student attention, increase motivation, and to keep them actively engaged in meaningful and educational activities.

Many of these tasks can be achieved through the use of a Sport Education model (Siedentop, 2011). Sport Education is and can be a curriculum, unit, or method of teaching that is used in physical education programs from elementary to high school. Its developer Daryl Siedentop, created this model in hopes to provide children with a more authentic and enjoyable sport experience in physical education. This model was constructed with three major goals in mind; to increase competency, literacy and enthusiasm among students (Siedentop, 2011). Student competency is typified by skill and knowledge gained in a variety of sports. Literacy components are increased through a greater understanding of rules, rituals and traditions of sport. Enthusiastic players show enjoyment in, and value sport and physical activity. To aid in success of these goals, Sport Education has ten unique features that can be adjusted due to teaching experience, resources, and time.

According to Siedentop (2011), what makes Sport Education different from other variants of teaching sports in physical education, are the ten main “features”. One of the most unique and important features of Sports Education, is that seasons are used rather than traditional units. Another feature of Sport Education is that students are organized into mixed-ability teams that they stay with throughout the season. Within these teams, students can assume different roles throughout the season. These roles can be, but are not limited to, player, coach, scorekeeper, referee, journalist, sports caster, team captains, etc. Through these roles and responsibilities, modes of learning and application of knowledge can be seen in the psychomotor and cognitive domain as scores, records, statistics, and standings are kept (Siedentop, 2011).

Other features include, modified activities that often are small sided games, gradual introduction to the activity or sport for the seasons, and a series of competitions for competitive play. Typically, organization of Sport Education lessons includes, teams who compete with one another and the non-playing teams acting as the “duty teams”. Additionally, other features include season records and/or statistics that are kept and often made public. A seasonal champion is determined based on a point system that includes wins/losses and other areas of interest. For example, fair play, sportsmanship, and duty team responsibilities can contribute to these standings. Finally, a festive season ends in a culminating event or celebration (Siedentop, 2011). The following shows how the goals, features, and set up of Sport Education can positively impact students in secondary physical education classes.

Through the use of the Sport Education model, student activity levels in a secondary physical education class can also increase above NASPE's (Now SHAPE AMERICA) recommendation of a minimum of 50% moderate to vigorous physical activity in a given class segment (Pritchard et al., 2015). This is an important outcome achieved by a Sport Education model in a secondary school physical education class as obesity rates among adults have risen to 36.5% as students in secondary schools are reaching adult age (CDC, 2016). Other positive effects that teaching in the Sport Education model can have is an increase in enjoyment and certain types of motivation (Cuevas et al., 2016).

According to Siedentop (2011), Sport Education models allow students to not only apply their knowledge of physical education through the use of their physical body, but also through discourse and other means of communication. This style of teaching allows students to apply their knowledge through other roles seen in sports such as referee, coach, sports caster, news writer, and others. Other valuable lessons can skills can be learned through the use of this method such as building teamwork, sportsmanship, leadership, and cooperation (Siedentop, 2011).

Teachers must be ready to apply different teaching methods to their classes in order to better service their students. More specifically, a properly planned and applied Sport Education unit may be able to facilitate positive outcomes that are desired by educators and students.

Statement of the Problem

Children are naturally filled with an inner desire and intrinsic motivation to move, learn, and navigate their environment (Haywood, Getchell, 2014). As children age,

physical activity levels drop and their motivation to move and learn are more dependent on their peers versus their own inner desire (Ayers, Sariscsany, 2011). Students are often disinterested, unmotivated, and less active in physical education classes that are taught the same way day in and day out. Due to this lack of or decrease in motivation to learn and move, physical educators are searching for ways to positively affect this phenomenon.

Purpose

The purpose of this synthesis is to review the literature on the effects Sport Education can have on secondary school physical education. More specifically, this synthesis will review research on the benefits that Sport Education can have on secondary school physical education students in terms of enjoyment, activity time and participation, skill increase, content knowledge, and motivation.

Operational Definitions

The following presents the operational definitions used in this synthesis:

- 1. Secondary School Physical Education:** In the context of this synthesis, this refers to a middle school or junior high school containing 6th to 8th grade students, a high school containing 9th to 12th grade students or a junior/senior high school containing 6th to 12th grade students.
- 2. Sport Education:** In the context of this synthesis, this refers to a model or method of teaching that incorporates roles for students that can include but are not limited to the use of a player, coach, score keeper, referee, journalist, sports caster, team captains, etc. This model uses seasons where students take part in but

are not limited to competitions/games where scores are kept, standings are kept, statistics are kept, etc.

Assumptions

The following assumptions were used in this synthesis:

1. The Literature review was exhaustive and comprehensive.
2. Participants were reflective of the population under study.
3. Results reported were reflective of the population under study.

Delimitations

The following delimitations were used in this synthesis:

1. Studies that examine the benefits of sport education with secondary students in physical education.
2. Secondary students, both male and female in grades 6th through 12th.

Limitations

The following limitation were used in this synthesis:

1. Available research on the use of Sport Education in secondary school physical education classes.
2. Available research on motivation in secondary school physical education classes.
3. Available research on physical activity time in secondary school physical education classes.

Chapter 2

METHODS

The purpose of this chapter is to review the methods and procedures used to synthesize the benefits of Sport Education on secondary physical education. More specifically, to review research on the benefits Sport Education can have on secondary school physical education students in terms of enjoyment, activity time and participation, skill increase, content knowledge, and motivation. The studies collected for this synthesis were located using the EBSCO database from the College at Brockport Drake Library. Within the EBSCO database the following databases were searched: Academic Search Complete and SPORTDiscus. From these searches a total of ten articles met the criteria for inclusion in this literature review. Criteria for selection included full text articles and scholarly/peer reviewed articles. A date range of the year 2000 to 2017 was used in this search. All other articles or sources selected as part of this literature review provided context about the topic, background information and supplemental information to complete the review. All sources are cited in the reference section of this paper.

In order to yield appropriate articles for this synthesis, key words and phrases were used to narrow selection. The phrases “Sport Education model”, “Sport Education model + Motivation”, “Physical education + Sport Education model”, and “Physical education + Sport Education model + activity time” were used to search for and select articles. The phrase “Sport Education model” in conjunction with the aforementioned search criteria yielded 4,378 hits on the database. The phrase “Sport Education model + motivation” yielded 364 hits on the database. The phrase “Physical education + Sport Education model” yielded 3,634 hits on the database. The phrase “Physical education +

Sport Education model + activity time” yielded 451 hits on the database. “Secondary physical education” was another key word used to narrow down the large number of hits per search. It was important to sift through the article hits to make sure each article used included only secondary physical education students. It was important that each article had to do with the main topics of this literature review which were the benefits in regards to enjoyment, activity time and participation, skill increase, content knowledge, and motivation.

Specific criteria were used in order to be a part of this literature review. First, the articles reviewed the benefits of Sport Education in secondary physical education. Second, secondary students that fell into grades 6-12, both male and female, were subjects in the study.

For this synthesis and review of literature, a total number of ten articles were used to compile data and relevant research. The critical mass of all participants in this study were 1,471 students in secondary physical education classes. There were 773 girls and 698 boys included in the ten articles. An abundance of journals were used that provided sufficient data. The Journal of Sports Science and Medicine provided two articles for this study. The Physical Educator provided two articles for this study. The Journal of Teaching n Physical Education, Research Quarterly for Exercise and Sport, Asia-Pacific Journal of Health Sport and Physical Education, Physical Education and Sport Pedagogy, Kinesiology , and the Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte all provide one article for this synthesis and literature review. To acquire data, each article was read over multiple times.

Every subject/participant in this synthesis all fell into groups with specific categories. Students in every article had to be part of a secondary physical education class. This means each student fell between the grade range of 6th grade and 12th grade. Both males and females were being taught and part of each articles study. Each class in the articles studies had to be physical education teachers. Finally, each study included a class that was being taught using Sport Education.

Chapter 3

REVIEW OF LITERATURE

The purpose of this chapter is to present a review of literature on the benefits Sport Education on secondary physical education. Specifically, the next chapter will cover the following benefits and topics of enjoyment, activity time and participation, skill increase, content knowledge and motivation.

Enjoyment

A major necessity in education and especially so in physical education, is that students should enjoy their educational experiences. According to Wallhead, Garn, & Vidoni (2014) previous evidence explains that a major predictor of physical activity for older adolescents in physical education is enjoyment.

One of the benefits of a Sport Education program is that students enjoy their time participating in this method of education. Siedentop specifically created this unit to have a festive theme where students would typically enjoy physical education (Siedentop, 2011). To support this notion, a study conducted by Wallhead, Garn, and Vidoni (2014) looked at the effects that a Sport Education model curriculum had on their high school students' motivation for physical education and leisure-time activity. Though this study looks into motivational factors, results show the importance of enjoyment and the role it played in physical activity in physical education. This study compares two teaching methods, the Sport Education model and a multi-activity model. Two classes were used, with one class being taught using the Sport Education model and the other using the multi-activity model. In this study, the Sport Education class was taught four sports and

twenty-five lessons per sport. The multi-activity model is described as having a greater breadth of sports being taught with units that consist of four to nine lessons each, which is more consistent with a traditional approach.

To measure the enjoyment aspect of this study a questionnaire was used. More specifically, two subscales from a version of the Intrinsic Motivation Inventory were used and reworded for use in the physical education settings by McAuley et al. (1989). Results of this study show that the Sport Education class reported greater increases in enjoyment of the required physical education program, than the students being taught using the multi-activity model. When compared to the multi-activity model who had stable levels of enjoyment, the Sport Education group reported an increase in enjoyment in physical education throughout the implementation of the program.

Enjoyment in physical education through the use of Sport Education is supported in another study conducted by Wallhead, Garn, and Vidoni (2013). Wallhead et al. (2013) once again looked into the effects that Sport Education could have on secondary physical education students, but this time in specific relation to enjoyment, relatedness and leisure-time physical activity. More specifically, Wallhead et al, (2013) looks into the role that socialization in Sport Education can play. The participants for this study were 363 10th grade students who had completed a yearlong mandatory high school physical education program and were all taught using Sport Education. To measure socialization and connection to enjoyment, three social goals that included affiliation, recognition, and status were assessed through The Social Motivational Orientations in Sport Scale (Allen, 2005). To specifically measure enjoyment, a questionnaire that used five items from a

reworded physical education version of the Intrinsic Motivation Inventory (Ryan, 1982) was administered.

After the season was completed, the questionnaires were administered and data was then analyzed. To measure relatedness between the social aspects of Sport Education and enjoyment, correlations were calculated as a means to explore simple associations among the variables. Statistics revealed that these students had achieved higher than average scores on all the social aspects which include affiliation, recognition, and status. Findings also indicated higher than average scores of enjoyment which exceed the mid-point of their scales. According to Wallhead et al (2013), these findings suggest that prolonged exposure to the features of Sport Education helped to develop student's social bonds and helped to create a positive environment that promotes peer to peer approval. It is also suggested that these positive social increases heavily contributed to students enjoyment of physical education. To summarize, the direct set up of Sport Education and the socialization that naturally occurs within directly contributed to high student enjoyment in physical education.

Activity Time and Participation

One of the main purposes of physical education is to teach children in the physical domain. Through this, there should be natural participation in physical activity in any given lesson. Often, teachers might spend too much time in instruction, classroom management, and other aspects of teaching that takes away from activity time and student participation. According to NASPE (now SHAPE AMERICA), there should be a minimum of 50% of class time dedicated to moderate to vigorous physical activity in any

given class. Through the use of Sport Education, high levels of activity time and increased participation in a secondary physical education class can be achieved.

A study conducted by Pritchard, Hansen, Scarboro, and Melnic (2015) alludes to the fact that Sport Education can help to achieve NASPE's standard of a minimum of 50% of class time dedicated to moderate to vigorous physical activity in any given class. In this study, two high school classes took part in Sport Education in physical education. During these lessons, students learned about fitness education with an aim to measure and increase scores in fitness levels, knowledge, and physical activity. To measure the physical activity of the students, each student was fitted with Actigraph GT3X triaxial accelerometer. Accelerometer data were downloaded using the computer software Actilife in order to determine the amount of time the students in the classes were in moderate to vigorous activity, and vigorous activity. Through the analysis of this data, it was determined that students spent well over the 50% recommendation. In fact, students in these classes spent an average of 60.47% of the lesson in the moderate to vigorous physical activity zone. To break this down even further, the data shows that 50.11% of the lesson was spent in the moderate zone and 10.36% was spent in the vigorous zone.

Though these numbers show favorable data, the numbers could have been even higher in the moderate to vigorous zones. The authors allude to the fact that accelerometers may have not measured the activity levels as well as they could have due to the placement. Placement of the accelerometers were on the right hips of the participants and some activities in class required students to keep their body steady such as Dyna-Band curls. In order for the accelerometers to measure physical activity, the hips must be engaged in movement. The amount of time spent in moderate to vigorous

physical activity zones show that Sport Education can help to contribute to activity time in class as well as the level of activity.

Though quantitative data shows how students can participate and be more active in class through Sport Education, first-hand accounts and comments by students in a study conducted by Perlman (2012) prove its usefulness even further. In Perlman's (2012) study, research looked into the effects that a Sport Education class could have on unmotivated students (those with low levels of motivation). Through one on one semi-structured interviews and questionnaires, the unmotivated students who perceived themselves as being low skilled started to find roles within the team outside of playing in which they could contribute to team success. The unmotivated and self-perceived low skilled students also had increased opportunity to participate without scrutiny and fear of being scolded for missing a shot or dropping a pass, which led to increased opportunity to practice and execute skills. This study shows the positive effects that Sport Education had on the secondary students who are unmotivated and usually dislike participation in physical education.

Skills

One of the reasons Daryl Siedentop created the Sport Education model was in hopes to make students more competent in terms of skill development (Siedentop, 2011). Once again, the physical domain is emphasized through Sport Education. One of the most important benefits of Sport Education implementation is that there can be a noticeable increase in physical skill. To support this fact, a study conducted by Pereira et al. (2015), examined 6th grade student's technical performance improvements in three track and field

during a physical education class. Two classes, totaling 47 sixth-grade students took part in a track and field unit with one class being taught using Sport Education and the other using direct teaching.

The three track and field skills that were analyzed were the shot put, triple jump, and hurdles. To analyze the performance of students, videos of students performing the skills were filmed and then viewed searching for specific criteria. When analyzing the videos, researchers looked for nine technical components of skill in the shot put event, ten technical components of skill in the triple jump event, and nine technical components of skill in the hurdle events. A pre-test was used to measure student skill prior to the implementation of both Sport Education and direct teaching groups. After analysis of skills during the pre-testing period, students were clustered into two groups, higher skilled and lower skilled. During the post-testing, the data also compared students by gender. Finally, retention tests were also used to analyze the effectiveness of each teaching method in regards to retaining skills after each unit/season was complete.

After analysis, results showed that both boys and girls who took part in the Sport Education class showed statistically significant improvement from the pre-test to the post-test. Interestingly so, only boys showed statistically significant improvement from the pre-test to the post-test in the direct instruction class, while girls showed slight but no statistically significant improvement in skill.

Finally, results showed favorable increases in skill in regards to both low and high skilled classified students in the Sport Education class. High skilled students showed improvement in the triple-jump, hurdles and the sum of the scores of all three events. Lower skilled students improved in all the events and the sum of the scores for all three

events. There were no improvements found from post-test to retention-test for the Sport Education class. In the direct instruction class, higher skilled students improved in the triple jump, hurdles and in the sum of the scores for the three events. Interestingly so, no improvements were found for lower skilled students from pre-test, post-test- and retention-tests. This again makes a case for the Sport Education model as the results show the importance that this method of teaching can have on the overall class development in regards to both gender and skill level (Pereira et al., 2015). Low skilled students and girls showed exceptional improvements while taking part in Sport Education.

The benefits of skill development through the use of Sport Education was backed by research that analyzed skill development of students enrolled in a Sport Education volleyball season. Cho et al. (2012) specifically looked at the development of two volleyball passes, the forearm pass and overhead set after the implementation of Sport Education. Pre and post tests were used to measure difference in skill. 66 6th grade students and 64 7th grade students were assessed in these skills following a 6 to 8 week season. Specific form of the forearm pass and overhead set were assessed using a scale of success. Level 3 on the scale consists of viewing a student successfully completing the skill with correct form 75% of the time or more, Level 2 50-74% of the time, Level 1 15-49% of the time, and Level 0 less than 15% of the time. After analyzing results, average form of skills increased from 1.26 to 1.44 for 6th grade students and 1.25 to 1.77 for 7th grade students. This data shows the positive effects that can occur when teaching Sport Education to secondary students.

Along with statistical representations of skill benefits, students often describe a self-perceived feeling of improved skill and ability. One study that looks into amotivated

students (those with low levels of motivation) explores the benefits a Sport Education class can have on motivation (Perlman, 2012). Through the discoveries of this study, it was found that students who were amotivated and often did not participate, blamed their lack of skill or ability to contribute in class as a primary factor. After implementation of sport education, a total of 30 of the 33 amotivated students commented that their self-perception of ability and affect in class improved while participating in the Sport Education classes.

Content Knowledge

In regards to Sport Education, Siedentop (2011) describes a competent sports person as one who “has developed sufficient skill to participate in games and activities satisfactorily, understands and can execute strategies appropriate to the complexity of the activity and is a knowledgeable game player” (Pg.5). Siedentop also describes a literate sports person as one who “understands and values the rules, rituals, and traditions of sports and other physical activities and has learned to distinguish between good and bad practices within those activities, whether in children sport, youth sport, school sport, or a professional sport (Pg.5). As stated previously, competence and literacy are two of the major Sport Education goals. Content knowledge and the use of the cognitive domain are clearly stressed in these statements through the words of “understands” and “executes”. According to Blooms Taxonomy of higher thinking, understanding is a level in which learners can exhibit cognitive processing. Executing strategies appropriate to the complexity of the activity falls under the category/level of apply/application in Blooms taxonomy.

Content knowledge is genuinely addressed and improved in Sport Education as is evident in a study done by Pereira et al. (2016). In this study, the researchers looked into the knowledge development of two sixth-grade physical education classes in the area of track and field. Each class, that totaled in 47 students/participants was either placed and taught in the Sport Education class or the direct instruction class. There were 20 total lessons for both the Sport Education and direct instruction class, with 45 minutes dedicated to each lesson. As typified by Sports Education, the Sport Education class consisted of teams while the direct instruction was teacher-directed and was non-team based. This study was conducted in conjunction with the aforementioned study by Pereria et al. (2015) that measured the technical improvement of 6th grade students in track and field events. Data consisted of students' knowledge of the rules and technical execution in three different track events. These events were the shot put, triple jump, and hurdles. To measure knowledge of rules and technical execution of the three track and field events, a 25 item test was administered. Pre and post tests were used in order to measure differences in knowledge from the start of the unit to the end. Students' scores were also compared by sex and skill level. Results by sex shows that both boys and girls showed statistically significant improvements in content knowledge for the shot put, triple jump, and in the total scores of the three events in the Sport Education class. In the direct instruction unit, girls showed statistically significant improvement in content knowledge for the shot put and hurdles events and in the total scores of the three events. Boys showed significant improvement in only the triple jump event and in the total scores of the three events. According to Pereira et al. (2016), sex was not a differentiating factor in improved content knowledge for either Sport Education or Direct Instruction. This can be

seen as a positive outcome as equal improvement of content knowledge for both boys and girls should be strived for as teachers need to serve all of their students.

Results in terms of skill level for the Sport Education class showed that although the higher skill-level group increased scores in all of their measures, statistically significant improvements in content knowledge were found only for the lower-skilled group. The lower-skill level group showed statistically significant improvement in content knowledge for the shot put, triple jump, and in the total score of the three events. In the direct instruction class, the higher skill-level group showed statistically significant improvements in content knowledge in the triple jump event and in the total scores of the three vents. The lower skilled group showed significant improvement in the hurdles event and in the total scores of the three vents. According to Pereira et al. (2016), these results show that Sport Education was particularly beneficial to the lower skilled students. It was also beneficial to the higher skilled students, but to a lesser extent. In the direct instruction unit, both higher and lower skilled students gained content knowledge, but with the lesser skilled students not benefiting from instruction as much as the Sport Education class.

Often, lower skilled students are left behind in physical education classes. Low-skilled students have been seen to especially benefit from Sport Education which is a very important benefit of its implementation. Again, both Sport Education and direct instruction improved content knowledge, but Sport Education showed much higher improvement when comparing the two methods.

Additionally, the aforementioned study by Pritchard, Hansen, Scarboro, & Melnic (2015) adds to and highlights the benefits Sport Education can have on content

knowledge. In this study, content knowledge changes were investigated following the implementation of Sport Education in a fitness unit. In this study, 32 high school students participated in 20 lessons of fitness education using the Sport Education model. To measure content knowledge differences, a 35 question multiple choice test was used to measure overall health-related fitness knowledge. Pre and post tests were used to measure differences that occurred after the implementation of Sports Education. Data consisted of correct answers on the fitness knowledge test with a maximum score of 35. Students on averaged scored 15.03 correct questions answered on the pre-test. Following implementation of Sport Education, students averaged 19.34 correct answers on the post-test which was a statistically significant increase in knowledge. Pritchard et al. (2015) attributed this increase to the design of the Sport Education model in that content knowledge was consistently provided to the participants. A Sport Education role, such as coach was responsible for ensuring that teams were on task and provided with accurate information from their coaching plan (Pritchard et al., 2016). This information also helps to confirm Siedentop's assertion that learning can be seen and applied in the cognitive domain through Sport Education, and in this case through the specific role of coaching.

Motivation

Motivation to participate in physical education can vary from student to student, and school to school, based upon many factors. Motivation, according to the self-determination theory (Deci & Ryan, 1985) lies on a continuum, where a student can be intrinsically motivated, extrinsically motivated, or amotivated (Vallerand, 2001). Many teachers have experienced the struggle to consistently motivate an amotivated student.

Perlman (2012) describes an amotivated student as an individual with low levels of motivation.

Another positive aspect of introducing Sport Education is that it can effect various types of motivation and different types of students. In Perlman's (2012) study, she examined the perceptions and experiences of 33 amotivated students during four consecutive seasons of Sport Education in physical education. Prior to this study, these 33 students were identified as amotivated as they scored extremely high on an amotivation scale (Academic Motivation Scale for Physical Education; Vallerand, Pelletier, Biais, Briere, Senecal, & Vallieres, 1992) and two intrinsic motivation scales (Self-regulation Questionnaire for Physical Education; Goudas, Biddle, & Fox, 1994). To study and examine perceptions and experiences, data consisted of field notes by the observers, formative semi-structured interviews with students and teachers, and reflective journals kept by the students.

Initial perceptions from the students in the study were predictable, with each student explaining and exhibiting behaviors supportive of the term amotivation (Perlman, 2012). Key statements point to the overall lack of valuing physical education. For example, in a follow up question asking why they believe physical education is 'stupid', a student replied by stating "we don't do anything important. It's just gym [rolling her eyes in disgust]. (Week 2)" (pg.8). Other reasons behind the students amotivation were that they did not feel a part of the group for reasons such as; lacking adequate skill or ability and/or social capital to feel included. To summarize, the amotivated students shared a common lack of valuing physical education, lack of having fun, low perceptions of skill

level/ability to contribute, and/or felt they were not popular enough to feel included, or needed.

During, and after the implementation of Sports Education, student's perceptions of physical education were positively impacted, as well as, levels of fun, self-perceptions of skill/ability to contribute, and/or not feeling popular enough to be included or needed. Students who were amotivated started to experience fun, and found value in their own participation. An example of this can be seen in a follow up question asking a student to elaborate why class is becoming fun. "Student 20: Ummm... yeah feeling like I am doing something right... like helping get some points and playing more. (Week 12) (Pg.12). Students started to perceive class as fun due to their increased participation and contributing to team success. This point leads to the overall perception that the previously amotivated students felt their skill or ability levels increased throughout participation. A total of 30 of the 33 amotivated students commented that their self-perception of ability and affect improved while participating in the Sport Education classes. The social aspect of their amotivation positively changed as well. Students pointed to the fact that they felt needed by their teammates and others with high social capital (high skilled, athletes, popular). A key aspect of Sport Education are the roles that can be used. The following quotes shows the importance of these roles and the positive effect it can have on feeling needed and wanted by classmates. "[Bill] is trying to help me play better and also makes sure I get to my field [to officiate]... this is probably the first time that someone is actually helping me. (Interview, Student 24, Week 11)" (pg11). In a follow up question asking why students felt they were not getting yelled at as much by other students a

student replied by saying “Student 11 :... maybe they [other students] can't win without me. (Week 7) (pg.11)

Overall, qualitative data shows that the students who were identified as amotivated, started to show signs typical with motivated students. Much of this student’s engagement in physical education was due to a decreased fear of failure, increased level of enjoyment to play, and improvement in ability, which were all directly associated with the implementation of Sport Education (Perlman, 2012). When tasks and activities in physical education are perceived as fun, meaningful, and relevant, students are more likely to be motivated to participate.

Though the previous study focused on amotivated students, benefits in motivation can be achieved by a broader span of students. This is proved true in a study conducted by Cuevas, García-López, & Serra-Olivares (2016). In this study, the researchers aimed to analyze the impact of Sport Education in terms of effecting self-determination and motivation in secondary physical education students. 86 students were used and split into four classes. In comparison to Perlman’s (2012) study on amotivated students, these participants were randomly selected with a larger span of students in terms of motivation. Two classes acted as the experimental group and were taught using Sport Education. The other two were the control group and were taught using “traditional physical education” methods. After assessing and analyzing data which consisted of answers to multiple questionnaires, results again showed the benefits of Sport Education.

Results and analysis pointed to statistically significant increases in intrinsic motivation for the Sport Education class when comparing pre-test scores to post-test scores. According to Cuevas et al. (2016), the results are in line with former studies that

assert that Sport Education promotes pleasure and wellbeing in physical education classes. This finding was especially important for this study, as intrinsic motivation is associated with higher levels of effort and interest among students (Ntoumanis & Standage, 2009). Overall, motivation can be positively effected in different types of students through the use of Sport Education.

Summary:

Sport Education provides a platform for physical education teachers to educate students in a unique way. The use of roles in Sport Education provides teachers with this opportunity. Teaching physical education through Sport Education, and the roles and set up included in its design, has to potential to benefit students in the areas of enjoyment, activity time and participation, skill increase, content knowledge and motivation.

Chapter 4

RESULTS AND DISCUSSION

The purpose of this chapter is to present the results and discuss the benefits of Sport Education on secondary physical education. Benefits as part of the literature review were in the topics of enjoyment, activity time and participation, skill increase, content knowledge, and motivation. This section will discuss specific findings in relation to these topics.

The use of Sport Education has the potential to aide physical educators who are looking for new ways to reach all of their students. Often, teachers might teach the same content the same way year in and year out. This may benefit some students, but others may be left behind. Studies have shown the benefits of Sport Education and how it can reach a wide range of students participating in a secondary physical education course.

It is no secret that The United States is facing an obesity epidemic. It is especially concerning that this epidemic is affecting younger Americans. One major benefit seen from teaching Sport Education lessons to a secondary physical education class is that students have the potential to increase time spent in the moderate to vigorous physical activity zones (Pritchard et al., 2015). Through this time in heightened movement and exercise, student's heart rates will increase and in return, burn more calories, which is necessary to drop weight.

Active participation such as being in the moderate to vigorous exercise zones is one benefit, but participation as a whole class is also desirable. Another result of introducing Sport Education to a secondary physical education class is that it can help motivate amotivated students to participate in physical education. In the study done by

Perlman (2012), she discovered that the unmotivated students in her class did not participate for reasons such as self-perception of low skill, fear of ridicule, and fear of failing in front of classmates. After completing a Sport Education class, students showed signs associated with motivated students due to the roles associated with sport education and the multiple avenues of achieving. Roles such as score keeping, playing, coaching, and acting as part of the duty team provided these students with many ways to participate and contribute to team success. It reduced the fear of failing in front of others and helped them gain social acceptance from those with higher social capital.

Another important discovery from the literature review was that lower skilled students seemed to particularly benefit from Sport Education. Many times, those who participate in physical education are the higher skilled students. Through this participation, they reap the benefits of the activity and lesson. In a study that looks into skill acquisition in track and field events, it was discovered that lower skilled students were able to improve skill to a higher degree than those who just participated in a direct teaching class (Pereira et al., 2015). In another closely related study conducted by many of the same researchers, it was discovered that lower skilled students showed significant improvement in content knowledge when compared to direct style teaching (Pereira et al., 2016).

Through the common themes and topics of enjoyment, activity time and participation, skills, content knowledge, and motivation, other benefits of Sport Education were brought to light. Specifically, the literature review pointed to students who especially benefit from participating in Sport Education. It is clear that the set up of Sport Education and the roles within this way of teaching allows students who are

amotivated and/or lower skilled to increase participation, skill development, and content knowledge if taught correctly.

Chapter 5

RECOMMENDATIONS FOR FUTRE RESEARCH

The purpose of this chapter is to present recommendations for future research in relation to the benefits of Sport Education on secondary physical education. Throughout extensive reading and sifting through previously conducted research, several recommendations for future research on this topic came to mind. One area that would help contribute to the argument that Sport Education is beneficial to secondary students is to further research on whether Sport Education can help students maintain participation post completion of secondary education. A few studies in the literature review look into this area, but failed to make a connection between Sport Education participation in secondary physical education and the likelihood to participate outside of class. I would recommend research to look into if this is possible, or ways to improve Sport Education so this can be achieved. One of the goals of physical education is to make students life long learners and movers, so looking into transferability of participation would be beneficial to this argument.

A second recommendation for future research would be to look deeper into comparing Sport Education to other forms of teaching such as direct style. Specifically, I would recommend research be done on examining skill increase when comparing Sport Education to another style of teaching. Much of the research done, including some of the articles in this literature review do not include a comparison between Sport Education and another style of teaching. If more research can be conducted comparing skill increase in regards to teaching style, then it may lead to showing the benefits of Sport Education.

One final recommendation for future research would be to further research on lifetime activities in regards to Sport Education. Most Sport Education lessons are focused primarily on popular athletics. As physical education makes a shift towards lifetime activities, it would be interesting to see if researchers could see the benefits of lifetime physical activities being taught through Sport Education. In addition, it would be great to see how teaching these lifetime activities could contribute to students participating in these activities at the completion of secondary school.

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