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COACHES' PERCEIVED BENEFITS OF SCHOOL-SPONSORED ADAPTED

SPORT FOR STUDENTS WITH DISABILITIES

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Degree of Master of Science in Exercise and Sport Science

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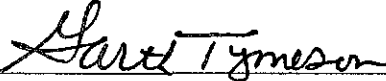
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We recommend acceptance of this thesis in partial fulfillment of the candidate's requirements for the degree of Master of Science in Exercise and Sport Science-Physical Education Teaching-Adapted Physical Education Teaching Concentration

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ABSTRACT

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Although laws require equal opportunities for all students, few students with disabilities (SWD) participate in school-sponsored extracurricular sport compared to nondisabled peers. Recently, more school-sponsored adapted sport (AS) programs have started around the country. Due to recent development there is minimal research on AS and the effects on SWD. This study examined coaches' perceived benefits of participation in AS. Questions included demographics, rating and ranking of benefits, and questions on coaching efficacy. Paired sample t-tests found a significant difference in social skills compared to other benefit categories. Personal skills and PA/fitness had significant differences compared to sport-specific skills, but not significantly different from each other. Triangulation of an opened ended question found similar results. Social skills were perceived more important than all other benefit categories. A one-way ANOVA found no significant difference in the rating of benefits based on coaches' gender. Multiple regressions found that motivation coaching efficacy had a significant impact on social skills, PA/fitness, and sport-specific skills. Game strategy coaching efficacy had a significant effect on sport-specific and personal skills. Multiple regressions found that as coaches gained more experience they valued social skill and PA/fitness more. Coaching experience did not affect coaches' ratings of sport-specific or personal skills.

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INTRODUCTION

According to the U.S. Government Accountability Office (GAO), participation on sport teams and being physically active are important to children's health and social well-being (U.S. GAO, 2010). The U.S. Department of Health and Human Services (2008) recommends that children be physically active for 60 minutes or more daily. Participating on a sport team is one method for children to meet these physical activity health guidelines. There are many physical, lifestyle, affective, social, and cognitive benefits that sport can provide an individual (Bailey, 2006). These benefits include: a longer and better quality of life, reduced risks of disease, increased self-esteem, fair play, sportsmanship, personal responsibility, and increased mental alertness. The benefits clearly show how valuable sport programs can be for children. Many families are aware of these benefits since more than 44 million children participate in youth sport (Dorsch, Smith, Wilson, & McDonough, 2015).

It has been estimated that 18-73% of students in various states participate in school-sponsored extracurricular athletics (U.S. GAO, 2010). Unfortunately, only 6-25% of students with disabilities (SWD), individuals whose disabilities are defined by the Individuals with Disabilities Education Act (IDEA) (U.S. Department of Education, 2006), are on sport teams with participation rates ranging from 10-56 percentage points lower than nondisabled students (GAO, 2010). These numbers are significantly less than nondisabled students participating on sport teams each year. Section 504 of the Rehabilitation Act of 1973 requires school districts to provide students with and without

disabilities equal opportunities to participate in extracurricular activities. These percentages of participation rates demonstrate the lack of opportunities provided to SWD. The GAO report (2010) stated that the benefits of sport participation may be even more important for SWD.

Physical inactivity and obesity are more prevalent among SWD compared to their nondisabled peers (U.S. Department of Health and Human Services, 2008). Inactivity and obesity can be more problematic for SWD because they can lead to secondary health conditions (U.S. Department of Education, 2011). Providing extracurricular sport opportunities for SWD may assist to prevent these health risks. Students with disabilities are also significantly behind their nondisabled peers in performing object control skills (Westendorp, Hartman, Houwen, Smith, & Visscher, 2011). By participating on sport teams, SWD have the opportunity to improve these and other motor skills, which often lead to more physical activity participation. Students with disabilities also derive social and emotional benefits from sport such as increased self-esteem, self-perceived quality of life, self-efficacy, and motivation to continue participating in physical activity (Blauwet & Willick, 2012).

Neely and Holt (2014) discussed life skills, such as respecting authority and cooperating with others, as some of the social benefits that children receive from sport participation. Students with disabilities will often have difficulty forming relationships. Being a member of a sport team provides the opportunity to interact with and make new friends that can also lead to improved self-esteem (Martin & Smith, 2002). Martin and Smith contend that sport is important for providing positive peer relations as these friendships can transfer from sport to the classroom as well as to contexts outside of

school. Sport participation decreases health risks while increasing an individual's overall quality of life through the development of friendships and community involvement. This can result in an increased success in post school outcomes (Ryan, Katsiyannis, Cadorette, Hodge, & Markham, 2014). All of these benefits can increase the likelihood that SWD become contributing members of society. Despite legal mandates and recognized benefits, SWD are still limited in extracurricular opportunities (Ryan, et al., 2014).

School-sponsored adapted sport programs are designed specifically for SWD and meet the legal mandates of equal opportunity. These programs provide SWD opportunities to receive all of the previously mentioned benefits while also meeting the intent of equal opportunity special education and disability mandates. Maryland's Corollary Sports are an example of a program that was designed to provide students equitable opportunity while simultaneously meeting legal mandates (Maryland's Adapted Physical Education Consortium, 2015).

Adapted sport has not come close to reaching its full potential in the U.S., especially in school settings. Therefore, advocates for SWD need to introduce these programs to more school administrators, teachers, coaches, and parents in all states. Advocates include adapted and general physical education teachers, special education staff, coaches, and parents. Parents of SWD are important participants in educational and extracurricular sport opportunities for SWD. Holland (2015) found that the development of social skills was the highest priority in terms of goals parents had for their SWD that participated in adapted sport. Physical activity and fitness was the second most important priority and sport-specific skills was third. Coaches of adapted sport should be aware of parent goals when implementing these programs.

Coaches should be highly qualified and have the knowledge, skills, and attitudes to implement extracurricular athletic programs for SWD (Silliman-French & French, 2013). In the 2010 GAO report, officials from several states noted that many sport coaches do not receive training specifically related to SWD. In ideal situations, the adapted sport coaches are the school district's adapted physical educators. Having this background makes them highly qualified for the position. These teachers and coaches spend much time with SWD and know their cognitive, social, motor and physical abilities.

Adapted sport coaches and adapted physical educators are most familiar with SWDs' ability levels because of their expertise and the amount of time they spend working with these students. Because adapted sport is becoming more popular, further research is needed to determine the effects of sport participation on SWD. Research can add to the growing knowledge base in adapted sport and may increase the likelihood of advocates developing more programs throughout the country. This could assist to close the gap of participation rates in extracurricular activities for SWD compared to their nondisabled peers.

Therefore, the purpose of this study was to examine adapted sport coaches' perceived benefits that are derived by SWD. The following research questions (RQ) were investigated:

RQ1a. How do adapted sport coaches rate the benefits of adapted sport participation?

RQ1b. How do adapted sport coaches rank the benefits of adapted sport participation?

- RQ1c. What do adapted sport coaches believe are the top three most important benefits of adapted sport participation?
- RQ2. How do adapted sport coaches rate the four main benefit categories (social, sport-specific, physical activity/fitness, and personal)?
- RQ3. How does the amount of years of adapted coaching experience affect the rating of perceived benefits of adapted sport participation?
- RQ4. Does the coaches' gender impact the rating of benefits derived by SWD from adapted sport participation?
- RQ5. Does coaching efficacy affect the rating of perceived benefits of adapted sport participation (Feltz, Chase, Moritz, & Sullivan, 1999)?

METHOD

Participants

Coaches of school-sponsored adapted sport teams from across the country participated in the study. Participants were coaches for SWD as categorized by the Individuals with Disabilities Education Act (IDEA) (US Department of Education, 2006). Coaches had experienced at least one season with a school-sponsored adapted sport team. Questions on the survey pertained to adapted sport programs such as Adapted Sport Leagues, Corollary Sports, Special Olympics Unified Sports, and Paralympic Programs, along with other adapted sports programs. Coaches of all other sport programs that were not school-sponsored, such as YMCA and Park and Recreation leagues were eliminated from this survey. Approval for the study was granted by the UW-La Crosse Institutional Review Board for the Protection of Human Subjects prior to surveying participants (See Appendix A).

Of the 501 participants that responded to the survey, 246 were eliminated since they did not coach school-sponsored adapted sport. Of the remaining participants, the majority were from Maryland (n = 90), Minnesota (n = 24), Wisconsin (n = 21), Texas (n = 18), and California (n = 15). A total of 32 states were represented in this study. Sport programs most frequently represented were Special Olympics Unified (n = 126), Adapted Sports Leagues (n = 67), and Corollary Sports (n = 30). There were 100 males and 155 females that started the survey. Age ranges of coaches were 48-53 years old (n = 48), 36-41 years old (n = 37), and 54-59 years old (n = 36). Participants averaged 10.31 years of

coaching experience, and were generally the adapted physical educators (n = 112) or special education classroom teachers (n = 48) in the school district where they coached.

Operational Definitions

The following terms were used in this study:

Adapted Sport Leagues (ASLs): An interscholastic sport league that is specifically designed for SWD and sponsored by a school district. ASLs provide sport experiences for SWD in the same manner they are provided for their typically developing peers and are just as competitive in nature (Minnesota Adapted Athletics Association).

Corollary Sports: A sport program that is directly related to Maryland Public Secondary Schools Athletic Association (MPSSAA) and is in compliance with the 2008 Fitness and Athletic Equity Act for students with disabilities. Corollary Sports primary objective is to increase interscholastic athletic participation opportunities for all students, in particular students with disabilities. Corollary Sports focuses on providing equitable opportunities through inclusive sports where all athletes have the equal opportunity to earn and defend points for their team (Maryland's Adapted Physical Education Consortium, 2015).

Paralympic Programs: Sport programs for those with Paralympic-eligible impairments including physical disabilities and visual impairments to increase and sustain physical activity opportunities (U.S. Paralympics).

Personal skills: Skills that allow an individual to express and manage themselves.

Physical activity/fitness: The ability and desire to perform a variety of physical activities and maintain a healthy level of physical fitness.

Special Olympics Unified Sports: Special Olympics is dedicated to promoting social inclusion through shared sports training and competition experiences. Unified Sports

joins people with and without intellectual disabilities on the same team. It was inspired by a simple principle: training together and playing together is a quick path to friendship and understanding (Special Olympics).

Social skills: Skills used to communicate and interact verbally and nonverbally with others.

Sport-specific skills: Skills (motor and affective) that are used when participating in sport.

Development of the Survey

For this study, the Survey for Coaches of School-Sponsored Adapted Sport (See Appendix B) was developed using Qualtrics. The survey was primarily forced-choice design. Demographic questions were used to determine where coaches were from, what sports they coached and in what type of program, gender and age, the amount of seasons they have coached, their position at the school where they coached, and if they had any coaching experience in nondisabled sport. An open-ended question asked participants what they believe were the three most important benefits of adapted sport participation. A section related to coaching efficacy used a 10-point Likert scale to rate their confidence in coaching areas. This section was adapted from Feltz et al. (1999). This coaching efficacy concept comprises four dimensions: game strategy, motivation, teaching technique, and character building. Each dimension has multiple subcomponents. The purpose for including this was to determine if coaches' coaching efficacy aligned with their perceived benefits of adapted sport participation.

A 5-point Likert scale, ranging from 1 "Not at all Beneficial" to 5 "Extremely Beneficial", was used to rate the perceived benefits of adapted sport participation. The

portion of the survey regarding the ranking of perceived benefits was adapted from Holland (2015) who examined parent goals of SWD who participated in adapted sport leagues. Holland's survey was created using previous research and an expert panel. There were three main dimensions regarding perceived benefits: social skills, physical activity/fitness, and sport-specific skills, and each dimension had subcomponents. An additional dimension was added to this portion of the survey related to personal benefits. This dimension was created due to results Holland (2015) found regarding goals that parents reported in open-ended questions. Further, previous research by Neely and Holt (2014) found similar personal benefits of sport participation in young children through parent interviews. The additional benefits of "develop leadership skills" and "improve academic performance" were added to the personal skills category due to feedback provided during the pilot study. Finally, to assure coaches expressed all perceived benefits, there were two open-ended questions where they could expand their opinions. One asked for the participants' top three perceived benefits and other requested perceived benefits that were not in the forced-choice portion.

Coaches Survey on Benefits of School-Sponsored Adapted Sport Participation for Students with Disabilities

The survey consisted of 18 questions. Demographic questions asked the adapted sport coaches about the program they coached, the state they coach in, and their age and gender. Participants were asked how many years they had been coaching adapted sport, the amount of years they coached each specific sport, the sports they were currently coaching, and if they coach school-sponsored sport for typically developing students. Adapted sport coaches were also asked what they believe to be the top three most

important benefits of school-sponsored adapted sport gained by SWD in an open-ended question, and their professional position at the school where they coach. There were 24 coaching efficacy items that comprised four dimensions: game strategy, motivation, teaching technique, and character building (Feltz et al., 1999). In addition, 19 benefit items were used to cover the four themes of benefits: social skills, physical activity/fitness, sport-specific skills, and personal (Holland, 2015; Neely & Holt, 2014). At the end of the survey participants were asked if they would like to receive the results from the study. If they selected “yes”, it brought them to Question 18, where they provided their email address.

Pilot Study

A pilot study was conducted to increase clarity and completeness of the survey. Higher education faculty members from the University of Wisconsin-La Crosse, Texas Woman’s University, and Slippery Rock University (PA) reviewed the survey. In addition, adapted physical education specialists evaluated the survey. Changes were made to the survey based on their feedback. The definition used for adapted sport was expanded to include any adapted sport program that was school-sponsored. Originally, Special Olympic and Paralympic programs were not in the definition. After feedback was provided, it was found that some areas of the country have these programs as school-sponsored offerings. For this reason, the definition was expanded. As a result of this finding during the pilot study, a question was added to the survey asking participants what type of program they coach. Two benefit items were also added, “develop leadership skills” and “improve academic performance”. The measurement of coaching experience was changed from seasons to years. The following sports were added: bocce,

cycling, outdoor soccer, and track and field. These were added due to the amount of feedback received regarding the programs available in several different states.

Distribution of Surveys

The survey was distributed via e-mail to PK-12 adapted and general physical educators, higher education faculty, high school athletic directors, as well as state and national professional and adapted sport organizations across the country. The state and national organizations included: Wisconsin Health and Physical Education (WHPE), Society of Health And Physical Educators (SHAPE America), the Minnesota Adapted Athletics Association (MAAA), American Association of Adapted Sport Programs (AAASP), Great Lakes Adapted Sport Organization (GLASA), Illinois and Wisconsin Special Olympics Programs, and the National Consortium for Physical Education for Individuals with Disabilities (NCPEID). The e-mail contained the information regarding informed consent and provided the participants with the survey link (See Appendix C). Within the e-mail participants were asked to forward the survey to other potential participants.

Statistical Analysis

IBM Statistical Package for the Social Sciences (SPSS version 23.0) was used to analyze the data from the survey. Research question 1a and 1b required descriptive statistics to determine how experienced coaches rated and ranked the benefits of participation in adapted sport. Question 1c required the use of triangulation to analyze the open-ended question regarding the top three most important benefits of adapted sport participation.

To analyze question two, paired sample t-tests were run to determine if there were significant differences between the ratings of benefit categories (sport-specific skills, PA/fitness, social skills, and personal skills). Question two also required descriptive statistics to analyze how coaches rated each benefit category. Research question three involved using multiple regressions and observing if a change in rating of benefit categories occurred as coaches gained more years of coaching experience. Research question four included a one-way ANOVA to determine if the coaches' gender impacted their rating of benefits. Finally, multiple regressions were used for research question five. Multiple regressions were used to determine if there was a relationship between coaching efficacy dimensions (game strategy, motivation, technique, and character building) and the benefit categories (sport-specific skills, PA/fitness, social skills and personal skills).

RESULTS

Research Question One

The first research question had three parts and examined the benefits of participation in school-sponsored adapted sport. Question 1a asked experienced coaches to rate the benefits of adapted sport participation using a 5-point Likert scale, one being not at all beneficial and 5 being extremely beneficial. Table 1 provides the average ratings for each benefit. The highest rated benefit was 'gain confidence', which was under the personal skills benefit category. The second highest rated benefit was 'develop social skills', and the third highest was a tie between 'play as part of a team' and 'have fun playing sport'. There was a tie among the lowest rated items. They were 'improve academic performance' and 'develop sport-specific skills'. The second lowest rated benefit was 'learn new sport skills' and third was 'gain experience in competition'.

Question 1b asked coaches to rank the top five most important benefits using the list shown in Table 1, with one being the most important and five being the least important. Table 1 provides the frequencies and percentages of rankings of benefits. 'Develop social skills' was ranked the most amount of times (144) and ranked the number one most important benefit the most amount of times (65). 'Gain confidence' was ranked the second most amount of times (135) and ranked the number one most important benefit 39 times. The third most ranked item was 'play as part of a team' was ranked 105 times and ranked number one 26 times. The least ranked items included 'develop sport-specific skills' which was ranked five times and never ranked number one.

'Learn new sport skills' was ranked nine times, and not ranked number one or two at all, and 'gain experience that help create communication within the family' was ranked 17 times, with one time being ranked number one most important benefit.

Table 1. Means, Frequencies, and Percentages of Benefit Factors

Benefits	Mean	Rank					
		1	2	3	4	5	
Social Skills	Develop social skills	4.79	65 (45.1)	29 (20.1)	25 (17.4)	12 (8.3)	13 (9.0)
	Play as part of a team	4.78	26 (24.8)	30 (28.6)	13 (12.4)	16 (15.2)	20 (19.0)
	Gain experience that help create communication within the family	4.51	1 (5.9)	5 (29.4)	1 (5.9)	5 (29.4)	5 (29.4)
	Have fun playing sport	4.78	20 (20.8)	14 (14.6)	18 (18.8)	26 (27.1)	18 (18.8)
	Develop friendships outside of school setting	4.74	5 (6.0)	16 (19.3)	22 (26.5)	27 (32.5)	13 (15.7)
	Active participation and recognition within the school community	4.66	18 (19.1)	17 (18.1)	16 (17.0)	21 (22.3)	22 (23.4)
Physical Activity/Fitness	Gain physical fitness skills for lifelong use	4.56	13 (17.1)	17 (22.4)	19 (25.0)	17 (22.4)	10 (13.2)
	Develop passion for physical activity	4.45	4 (14.8)	4 (14.8)	7 (25.9)	3 (11.1)	9 (33.3)
	Engage in exercise	4.65	4 (11.8)	6 (17.6)	8 (23.5)	10 (29.4)	6 (17.6)
	Improve physical fitness	4.55	5 (18.5)	5 (18.5)	9 (33.3)	5 (18.5)	3 (11.1)

Table 1. Continued

Benefits	Mean	Rank					
		1	2	3	4	5	
Sport-Specific Skills	Develop sport-specific skills	4.18	0 (0)	3 (60.0)	1 (20.0)	0 (0)	1 (20.0)
	Gain experience in competition	4.36	2 (9.1)	4 (18.2)	1 (4.5)	2 (9.1)	13 (59.1)
	Develop sportsmanship skills	4.72	2 (3.2)	16 (25.8)	16 (25.8)	12 (19.4)	16 (25.8)
	Learn new sport skills	4.24	0 (0)	0 (0)	1 (11.1)	3 (33.3)	5 (55.6)
Personal Skills	Gain confidence	4.82	39 (28.9)	30 (22.2)	34 (25.2)	19 (14.1)	13 (9.6)
	Develop socially acceptable behaviors	4.75	12 (13.0)	10 (10.9)	19 (20.7)	27 (29.3)	24 (26.1)
	Develop leadership skills	4.49	5 (16.1)	5 (16.1)	4 (12.9)	6 (19.4)	11 (35.5)
	Improve academic performance	4.18	0 (0)	4 (22.2)	2 (11.1)	4 (22.2)	8 (44.4)
	Increase personal responsibility	4.64	5 (9.6)	11 (21.2)	10 (19.2)	11 (21.2)	15 (28.8)

Frequency (Percentage), n = 240

Question 1c pertained to the open-ended question asking adapted sport coaches what they believe are the top three most important benefits of participation in adapted sport programs. Triangulation was used to analyze the results. Three experts in adapted physical education and sport independently reviewed the data and coded each benefit

using the operational definitions for benefit categories. Benefits that did not fit into one of the four categories were coded as 'other'.

Social skills was overwhelmingly more important than all other categories with a total of 285 of the 738 benefits listed. Benefits that were listed by participants include, 'a sense of accomplishment', 'a sense of importance', 'being proud of themselves', 'belonging', 'communication', 'socialization', experiences gained that may not be gained without sports', and 'it gives something for students to feel passionate about or look forward to outside of school'. These results are consistent with the rating and ranking of benefits that found 'developing social skills' to be the most important benefit. Personal skills was the second most important category with 135 of 738 benefits. This is also consistent with the rating and ranking of benefits and benefit categories.

The "other" category consisted of a few important themes. Inclusion, equal opportunity, and awareness were listed many times as one of the most important benefits of adapted sport participation. Examples for the theme inclusion included: 'bringing together our adaptive community with our non-adaptive community', 'included in school activities', 'included as a varsity athlete in an official sport', and 'social inclusion'. Equal opportunity included benefits such as: 'appropriate after school athletic opportunity', 'being able to participate in a sport, just like any other kid', 'opportunity for participation', and opportunity to participate without feeling different'. Finally, examples of benefits from the awareness theme included: 'awareness and an understanding of the population with disabilities', exposure with students from other schools with disabilities', 'learning for general population', and 'school population being more accepting of each other's differences'.

Research Question Two

The second research question observed how experienced adapted sport coaches rated the four main benefit categories (social skills, sport-specific skills, physical activity/fitness, and personal skills). Table 2 presents the means and standard deviations of each benefit category. The highest rated benefit category was social skills ($M = 4.71$) and the second highest was personal skills ($M = 4.58$). The third was PA/fitness ($M = 4.56$), and last was sport-specific skills ($M = 4.37$).

Table 2. Benefit Categories Means and Standard Deviations

Benefit Category	Mean	SD
Social Skills	4.71	.36
Personal Skills	4.58	.50
PA/Fitness	4.56	.58
Sport-Specific Skills	4.37	.62

n = 240

Paired sample t-tests were performed to determine if there were significant differences between benefit categories. Significant differences were found between social skills and all other benefit categories (sport-specific skills, PA/fitness, and personal skills) ($p < .001$). Additionally, there were significant differences between PA/fitness and sport-specific skills ($p < .001$) and personal skills and sport-specific skills ($p < .001$). There were no significant differences between PA/fitness and personal skills ($p = .519$).

Research Question Three

Research question three determined if years of adapted sport coaching experience affected the rating of perceived benefits of adapted sport participation. Multiple regressions were completed with the four benefit categories serving as the criterion variables and years coached as a predictor. The relationship between social skills and

years coached was significant ($p = .032$). The more coaching experience a participant had, the more they valued how beneficial social skills are for SWD that participate in adapted sport. The relationship between physical activity/fitness and years coached was significant ($p = .050$). There was no significant difference between sport-specific and years coached ($p = .094$) or personal skills and years coached ($p = .079$).

Research Question Four

The impact of the coaches' gender on their rating of benefits of adapted sport participation was examined. A one-way ANOVA was conducted to determine if there were significant differences based on gender. Table 3 presents the means and standard deviations for each benefit category based on gender. There were no significant differences between genders when ranking any of the benefit categories.

Table 3. Mean Scores of Benefit Categories by Gender

Benefit Category	Male (n = 93)	Female (n = 147)	<i>p</i>
Social Skills	4.68 (.40)	4.73 (.34)	.250
Personal Skills	4.57 (.50)	4.58 (.50)	.984
PA/Fitness	4.53 (.62)	4.57 (.55)	.549
Sport-Specific Skills	4.36 (.66)	4.38 (.58)	.784

Mean (SD), n = 240

Research Question Five

Finally, research question five determined the effect coaching efficacy had on the rating of perceived benefits of adapted sport participation. Multiple regressions were performed using coaching efficacy dimensions (game strategy, motivation, technique, and character building) and benefit categories (sport-specific skills, PA/fitness, social skills, and personal skills). Table 4 provides the Standardized Betas for benefit categories and coaching efficacy dimensions.

Table 4. Standardized Betas for Coaching Efficacy and Benefit Categories

Coaching Efficacy Dimensions	Social Skills β	Personal Skills β	Sport-Specific Skills β	PA/Fitness β
Game Strategy	.144	.310**	.006**	.030
Motivation	.236*	.098	.010*	.328**
Technique	-.156	-.140	.098	-.064
Character Building	.047	.019	.151	-.089

* $p < .05$; ** $p < .01$; $n = 240$

Motivation coaching efficacy and social skills were significant ($p = .040$). Social skills was not significant with game strategy ($p = .214$), technique ($p = .168$), or character building ($p = .609$) efficacies. Physical activity/fitness and motivation coaching efficacy were significant ($p = .005$). PA/fitness was not significant with game strategy ($p = .796$), technique ($p = .577$), or character building ($p = .337$) efficacies. Game strategy coaching efficacy was significant with sport-specific skills ($p = .006$). Motivation coaching efficacy and sport-specific skills were also significant ($p = .010$). Sport-specific skills benefits were not influenced by technique coaching efficacy ($p = .098$) or character building efficacy ($p = .151$). Personal skills benefits were effected by game strategy coaching efficacy ($p = .008$). Personal skills were not influenced by motivation ($p = .393$), technique ($p = .213$), or character building ($p = .834$) efficacies.

DISCUSSION

The purpose of this study was to determine what adapted sport coaches perceived as benefits of participation in school-sponsored adapted sport programs for SWD. Further, this study researched the effect that the coaches' characteristics, such as gender, amount of coaching experience, and coaching efficacy, had on the perceived benefits for their student athletes. Four benefit categories were used to determine what benefits coaches perceived as most important, these included: social skills, physical activity/fitness, sport-specific skills, and personal. Coaching efficacy dimensions included: game strategy, motivation, technique, and character building.

Benefits of Participation in School-Sponsored Adapted Sport

The first question of this study was to determine what school-sponsored adapted sport coaches perceived as the most important benefits of SWD participating in school-sponsored adapted sport. The results reveal that social skills were significantly more beneficial than the other benefit categories (PA/fitness, personal skills, and sport-specific skills). Additionally, personal skills and PA/fitness were significantly more important than sport-specific skills. Personal skills and PA/fitness were not significantly different from each other. Lesyk and Kornspan (2000) had similar findings in a study where coaches were asked the most important outcomes of participating in youth sport. Their results included: having fun, learning life skills, being part of a team, and developing confidence. All of these benefits are similar to sub-components of the social skills and personal skills categories.

Social skills had the highest average score ($M = 4.71$) and personal skills had the second highest average ($M = 4.58$). Additionally, 'develop social skills' was the most ranked benefit; 144 coaches believed it was one of the most important benefits of adapted sport participation. Of those 144 coaches, 65 ranked it as the number one most important benefit. Social skills are extremely important for all individuals that participate in sport, but may be even more important for SWD that are not provided as many opportunities to socialize with same-aged peers. Holland (2015) examined the most important goals parents had for their SWD that participate in adapted sport. Similarly, social skills had the highest average and were significantly more important than sport-specific goals. These results are also supported by Camire and Trudel (2010) who found that high school student-athletes believed social values to be the most important values developed in sport participation. Benefits derived through adapted sport can have a lasting effect. Long-term positive outcomes from participation in school-sponsored sport include increased involvement in social and community activities during early adulthood (Vinoski, Graybill, & Roach, 2016).

The subcomponent 'gain confidence' from the personal skills category was the second highest rated ($M = 4.82$) benefit by adapted sport coaches. Further, it was the second most ranked benefit with 135 of 255 coaches ranking it as one of the top 5 most important benefits of school-sponsored adapted sport participation. Slutzky and Simpkins (2009) found that participation in team sport positively related to sport self-concept in children. Providing SWD the opportunity to participate in team sport can influence their sport self-concept and in turn their self-esteem. Students with disabilities are at risk for developing mental health disorders such as depression, anxiety, and social withdrawal

(Shapiro & Martin, 2010). Adapted sport is one way to provide SWD the opportunity to improve social and personal skills and avoid mental health disorders.

Physical activity/fitness had the third highest average ($M= 4.55$). Typically, the physical benefits of sport are overlooked. However, SWD have an increased risk of becoming obese (U.S. Department of Health and Human Services, 2008). Participation in sport increases activity levels and reduces the risk of secondary health conditions among SWD. Sport-specific goals was the least important benefit category ($M= 4.37$). Further, 'develop sport-specific skills' was ranked the least amount of times as one of the top five most important benefits. These results are consistent with Holland (2015) who found that parents believed social skill and PA/fitness were significantly more important goals than sport-specific goals they had for their SWD in adapted sport. Therefore, adapted sport coaches and parents of SWD have similar beliefs regarding outcomes SWD receive from participation in adapted sport programs.

Coaching Experience Effect on Perceived Benefits

Multiple regressions found a statistically significant relationship between years coached and social skills ($p = .032$) as well as years coached and PA/fitness ($p = .050$). The more experience coaches had in adapted sport, the more they valued the social and physical benefits that SWD derive from participation in adapted sport programs. Coaches may have underestimated these benefits when they began their adapted sport coaching careers. As adapted sport coaches gain more experience in these programs they are able to see the importance of social and physical benefits that SWD receive from participation.

There was no significant relationship between years coached and sport-specific skills ($p = .094$). Adapted sport coaches may have begun coaching already believing that

social skills or PA/fitness were more important for SWD than developing sport-specific skills. There also was not a significant relationship between years coached and personal skills ($p = .079$). The reason for this could have been coaches were already aware of how beneficial the development of personal skills are for SWD that participate in adapted sport.

Coaches' Gender and Perceived Benefits

A one-way ANOVA found no significant differences in the rating of perceived benefits SWD receive from participating in school-sponsored adapted sport. Male and female coaches had extremely close ratings of all benefit categories. The average rating using the 1-5 Likert scale for social skills was 4.68 for males, and 4.73 for females. PA/fitness averaged 4.53 for males and 4.57 for females. On average, males rated sport-specific skills at 4.36 and the average for females was 4.38. Finally, personal skills were rated almost exactly the same with males on average rating it at 4.57 and females at 4.58.

In regards to all benefit categories, female coaches rated all categories higher than males. An explanation as to why coaches rated all benefit categories similarly, regardless of gender, may be because the majority of participants were adapted physical education teachers in the district that they coach. Adapted PE teachers spend an extensive amount of time with SWD and may have been more aware of benefits derived from participation than coaches from other career backgrounds such as general PE teachers or classroom teachers.

Coaching Efficacy and Perceived Benefits

Feltz et al. (1999) created four dimensions of coaching efficacy including game strategy, motivation, teaching technique, and character building. Multiple regressions

were computed to observe if coaching efficacy had an effect on how coaches rated the four benefit categories. There was a statistically significant relationship between motivation coaching efficacy and social skills ($p = .040$). Subcomponents of the motivation efficacy include factors such as 'build team cohesion', and 'build team confidence'. Coaches that had confidence in their ability to motivate athletes believed social skills to be an important benefit for SWD. By creating a positive atmosphere, SWD are able to benefit from the social components of participating in sport such as having fun and developing friendships.

Motivation coaching efficacy also had a statistically significant impact on PA/fitness ($p = .005$). Coaches that were confident in their ability to motivate athletes had an effect on PA/fitness. The more a coach motivates athletes the more likely athletes are to push themselves in conditioning and completing team workouts. Sport-specific skills had a significant relationship with game strategy coaching efficacy ($p = .006$) and motivation coaching efficacy ($p = .010$). The more confident coaches were in their ability to teach game strategy, the more they believed sport-specific skills to be beneficial. Lastly, game strategy coaching efficacy had a statistically significant relationship with personal skills ($p = .008$). One may assume that in regards to personal skills, motivation or character building efficacies would have a larger effect. However, in this study that did not occur. Subcomponents of the game strategy coaching efficacy include, 'adjust your game/meet strategy to fit your team's talent' and 'maximize your team's strengths during competition'. Personal skills subcomponents include, 'gain confidence' and 'develop leadership skills'. A coach may depend on a certain athlete during a close game to bring

the team together or to make a final shot or goal. When this occurs, the athlete automatically becomes a leader and may increase in confidence because of it.

Implications

There are multiple implications for adapted sport coaches, adapted physical educators, special and general education school administrators, athletic directors, parents, and advocates for SWD from this study. First, there are many benefits for SWD participating in school-sponsored adapted sport. The most important benefit category found in this study by coaches was social skills. Extracurricular activities facilitate SWD socializing with same-aged peers. During practice and competition there are interactions with peers and development of socially acceptable behaviors.

Through participation in these programs SWD are provided recognition among the school and community. This creates a sense of belonging that would not exist otherwise. School-sponsored adapted sport provides the opportunity to work as part of a team and learn the type of behavior and attitudes that are expected after winning or losing. Further, this is a time that SWD are able to have fun and develop friendships that can continue outside of the school setting. There are also personal benefits derived by SWD that participate in adapted sport, including gaining confidence, developing leadership skills, and improve academic performance.

The single most important benefit revealed in this study by coaches was gaining confidence, a personal skills benefit, which is important to one's self-concept. Once individuals have confidence they are more willing to engage with their peers and try new activities. The more opportunities SWD have to socialize and improve on personal skills, the more likely those skills will transfer to other areas of their life including in the

classroom, at home, and in the community. Students with disabilities may begin to answer questions in the classroom or be willing to try new activities in the community due to the confidence that they gained through participating on a school-sponsored adapted sport team.

In addition, SWD benefit through increasing physical activity levels and developing sport-specific skills. Although these benefit categories were found to be secondary to social and personal benefits, they may influence SWD's overall quality of life. Physical activity can improve an individual's physical and mental health. Additionally, SWD have a higher risk of developing obesity and other health conditions. Through developing a variety of physical and motor skills SWD are able to transfer this learning to other activities. This can increase exercise levels and allow SWD to maintain a healthy lifestyle once they are out of school. Further, SWD are typically delayed in performing motor and object control skills compared to their typically developing peers. Participating on an adapted sport team provides extra opportunities to further develop these skills, which in turn can lead to more physical activity.

Benefits that were noted by many adapted sport coaches include inclusion, awareness, and equal opportunity. School-sponsored adapted sport creates a more inclusive environment for SWD. It allows them to be student-athletes similar to their typically developing peers. Without these programs that would not be possible. During competition typically developing peers, general education teachers, administrators, parents, and the community are able to see what SWD can do, rather than what they are not able to do. Adapted sport programs shed light on the disability community in a positive way. It makes typically developing students realize that they are more alike than

different from their peers with disabilities. Most importantly, it provides equal opportunity. Adapted sport coaches believed this to be a top benefit of school-sponsored adapted sport. Equal opportunity should be provided to SWD in extracurricular sport, not only because it is the law, but because of the important benefits it provides.

Adapted physical educators, parents, and others can use this information to advocate for SWD in school districts that do not have adapted sports programs. These individuals can present the many benefits derived by SWD that participate in adapted sport programs and express the need for more programming. The majority of the participants in this study were adapted physical education teachers. These teachers play an important role in the development of these programs because they work with the SWD and are educated in physical education and sport.

There were a variety of school-sponsored adapted sport programs that were present in this study including but not limited to: Adapted Sport Leagues, Corollary Sports, Special Olympics- Unified and Traditional, and Paralympics Sport Programs. School districts can use information from these programs to successfully begin similar programs that fit the needs of their students and geographic location. As a result, this will increase equal opportunities for SWD in school-sponsored extracurricular athletics.

Limitations

There were several limitations to this study. The survey did not go through a formal validation process. However, it was reviewed by higher education faculty and adapted sport coaches. Further, a pilot study was completed. It is also important to note that the qualitative data collected from the open ended question asking adapted coaches the top three most important benefits aligned with the benefit categories that were used in

this study. In addition, portions of the survey have been used in previous research where the instruments used went through a formal validation process.

An additional limitation was that there were possible misinterpretations by respondents about what “school-sponsored” adapted sport meant. It was the intent of the study to limit responses to those who coach only in school-sponsored programs as opposed to community based programs. A variety of organizations and individuals assisted in the distribution of the survey. It would have been helpful to have a question on the survey asking participants how they received the survey. In doing this, a second or third distribution could have been targeted for those organizations or individuals that had a high number of respondents.

Suggestions for Future Research

Adapted sport programs are relatively new and there is still much research needed to learn more about how programs are conducted and how they relate to sport for typically developing students. Future research could examine what SWD believe are the benefits of participating in adapted sport programs. Holland (2015) researched parent goals and this current study examined coaches’ perceived benefits. In asking the SWD it would further the information known about these programs.

Benefit categories for this survey were implemented from Holland’s study as well as other previous research. The qualitative data that were collected aligned with the benefit categories used. However, it is suggested that future researchers consider making ‘active participation and recognition within school community’ its own category and separating it from the social skills. There were many individuals that believed recognition to be one of the most important benefits and this can be better examined by being its own

category. There were also a few important themes that occurred in the qualitative data. Equal opportunity, inclusion, and awareness were discussed many times as top benefits derived through SWD participating in adapted sport. These topics should be considered when conducting future research.

One program type that was present in this study was Special Olympics. Responses focused solely on the benefits SWD receive from participating. Future research could examine the benefits derived by typically developing students that participate in Special Olympics Unified Sport. Further, researchers could compare the benefits derived through Special Olympics Unified and Special Olympics Traditional. There may be different benefits derived through participation in programs that involve typically developing peers and those that are segregated. Once more, this research could be done by asking coaches, athletes, or parents what they believe the benefits are from participating.

A portion of respondents to this survey included athletic directors. Research could be conducted to study what athletic directors believe are the benefits of participation in adapted sport. Other personnel that could be surveyed are special education directors, related service personnel, and administrators. Since these are the staff that typically approve such programs, it would be beneficial to have their opinions and feedbacks regarding adapted sport.

CONCLUSION

Equal opportunity in extracurricular athletics is required by law for SWD. School-sponsored adapted sport programs are one way districts can meet legal mandates. As more research is completed, more information can be learned about these programs and their effect on athletes, families, schools, and the community. Students with disabilities that participate on school-sponsored adapted sport teams develop social skills, gain confidence, and attain many other personal, social, physical, and sport-specific benefits. As this study indicated, adapted sport coaches are often the adapted physical education teachers. These coaches are extremely knowledgeable in regards to sport, skill development, and the students' individual strengths and needs.

Results from this study reveal that there are many types of school-sponsored adapted sport programs that can provide equal opportunity and allow SWD to benefit from participating by developing personal and social skills. Further, they are increasing physical activity and improving sport-specific skills. Advocates can use this information to justify the need for additional programming that allows SWD the opportunity to participate in sport.

Further research regarding school-sponsored adapted sport programs can aid adapted physical educators, coaches, administrators, parents, and special education personnel in the development of such programs in other areas around the country. As

these programs expand more information can be gathered on the benefits and effects school-sponsored adapted sport has on its participants.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD RESEARCH APPROVAL LETTER

UNIVERSITY of WISCONSIN
LA CROSSE

To: Cadi Baldwin

From: Bart Van Voorhis, Coordinator
Institutional Review Board (IRB) for the
Protection of Human Subjects
bvanvoorhis@uwlax.edu
5-6B92

Date: January 15, 2016

Re: RESEARCH PROTOCOL SUBMITTED TO IRB

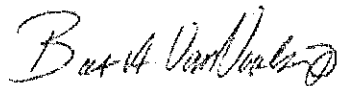
The IRB Committee has reviewed your proposed research project entitled: *"Coaches' Perceived Benefits of School-Sponsored Adapted Sport Leagues for Students with Disabilities."*

The Committee has determined that your research protocol will not place human subjects at risk. The attached protocol has been approved and is exempt from further review per 45CFR46, 46.101(b)(2).

However, it is strongly suggested that Informed Consent always be used. Remember to provide participants a copy of the consent form and to keep a copy for your records. Consent documentation and IRB records should be retained for at least 3 years after completion of the project.

Since you are not seeking federal funding for this research, the review process is complete and you may proceed with your project.

Good luck with your project.



cc: IRB File
Garth Tymeson, Faculty Advisor

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APPENDIX B
ONLINE SURVEY:
SURVEY FOR COACHES OF SCHOOL-SPONSORED ADAPTED SPORT

Coaches Survey on Benefits of School-Sponsored Adapted Sport
Participation for Students with Disabilities

The purpose of this study is to examine what school-sponsored adapted sport coaches perceive as benefits gained by students with disabilities (SWD) who participate in school-sponsored adapted sport. The term adapted sport is used throughout the survey. For this survey, adapted sport means only school-sponsored programs. These programs may include, but are not limited to, Adapted Sport Leagues, Special Olympics Unified Sports, Paralympics Programs, or Corollary Sports. All other adapted sport programs that are not school-sponsored (YMCA or Parks and Recreation Leagues) should not be considered when answering the following questions.

1. Are you now or have you ever coached **school-sponsored** adapted sport (not including programs such as YMCA, Parks and Recreation and other community based adapted sport programs)

- Yes
- No

Survey Completion
0% 100%

>>

2. Which of the following type of school-sponsored adapted sport program will you be referring to when answering the questions on this survey?

- Adapted Sport Leagues
- Corollary Sports
- Paralympic Programs
- Special Olympics Unified Sports
- Other (please list)

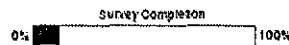
3. In what state do you currently coach school-sponsored adapted sport?

4. What is your gender?

- Male
- Female

5. What is your age?

- 18-23 years
- 24-29
- 30-35
- 36-41
- 42-47
- 48-53
- 54-59
- 60+



6. How many years have you coached school-sponsored adapted sport?

7. How many years of school-sponsored adapted sport have you coached **in the past**? (complete all sports that apply). If you have no experience, please click on "0" or the survey may not let you continue.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

Total years per sport

Bocce

Bowling

Cycling

Indoor baseball

Indoor floor hockey

Indoor soccer

Outdoor soccer

Track and Field

Wheelchair basketball

Wheelchair football

Wheelchair handball

8. If there are school-sponsored adapted sports you have coached **in the past** that are not mentioned above, please list all below, with the amount of years (i.e. Football- 2 years).

9. What school-sponsored adapted sports are you **currently coaching** this school year? (check all that apply)

- Bocce
- Bowling
- Cycling
- Indoor baseball
- Indoor floor hockey
- Indoor soccer
- Outdoor soccer
- Track and field
- Wheelchair basketball
- Wheelchair football
- Wheelchair handball

Wheelchair handball

Others (please list all)

10. Please list what you consider to be the top 3 most important benefits of school-sponsored adapted sport gained by students with disabilities.

1

2

3

11. Do you coach school-sponsored sports for **typically developing/general education** students?

No

Yes (if yes, what school-sponsored sports do you coach for typically developing/general education students)?

12. What is your position at the school where you coach school-sponsored adapted sport?

Adapted Physical Education Teacher

General Physical Education Teacher

Special Education Classroom Teacher

General Education Classroom Teacher

Physical Therapist

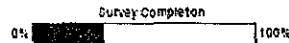
Occupational Therapist

Paraprofessional/Teacher Assistant

Coach only

Not a school employee

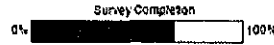
Other (if other, please specify)



13. Think about how confident you are as a coach in school-sponsored adapted sport. Please rate your confidence for each of the items below regarding school-sponsored adapted sport coaching.

	0- Not at all confident	1	2	3	4	5	6	7	8	9- Extremely confident
Maintain confidence in your athletes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize opposing team's strengths during competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Demonstrate the skills of your sport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instill an attitude of good moral character	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understand competitive strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mentally prepare athletes for games/meet strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	0- Not at all confident	1	2	3	4	5	6	7	8	9- Extremely confident
Build the self-esteem of athletes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adapt to different game/meet situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coach individual athletes on technique	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instill an attitude of fair play among your athletes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop athletes' abilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promote good sportsmanship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	0- Not at all confident	1	2	3	4	5	6	7	8	9- Extremely confident
Motivate your athletes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize opposing team's weakness during competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognize talent in athletes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instill an attitude of respect for others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Build team cohesion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make critical decisions during competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	0- Not at all confident	1	2	3	4	5	6	7	8	9- Extremely confident
Detect skill errors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	0- Not at all confident	1	2	3	4	5	6	7	8	9- Extremely confident
Detect skill errors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Build the self-confidence of your athletes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maximize your team's strengths during competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teach the skills of your sport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Build team confidence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjust your game/meet strategy to fit your team's talents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



14. Using the scale below, please select how beneficial you think each factor is for students with disabilities that participate in school-sponsored adapted sport.

	Not at all beneficial	Slightly beneficial	Somewhat beneficial	Very beneficial	Extremely beneficial
Develop social skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gain experience in competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Play as part of a team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop sportsmanship skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gain confidence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gain physical fitness skills for lifelong use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop sport specific skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop socially acceptable behaviors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gain experiences that help create communication within the family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have fun playing sport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop passion for physical activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop friendships outside of school setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engage in exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve physical fitness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learn new sport skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active participation and recognition within the school community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase personal responsibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop leadership skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve academic performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. In addition to the above benefits, what other benefits do you believe students with disabilities gain from participating in school-sponsored adapted sport? If any, please list.



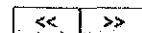
16. Using your mouse, please click and drag the items on the left to the appropriate rank in the box on the right side of the screen to indicate your ranking of perceived benefits of participation in school-sponsored adapted sport for students with disabilities. **Please rank only your top 5 benefits.**

- Items**
- Develop social skills
 - Gain experience in competition
 - Play as part of a team
 - Develop sportsmanship skills
 - Gain confidence
 - Gain physical fitness skills for lifelong use
 - Develop sport specific skills
 - Increase personal responsibility
 - Gain experiences that help create communication within the family
 - Have fun playing sport
 - Develop passion for physical activity
 - Develop friendships outside of school setting
 - Engage in exercise
 - Improve physical fitness
 - Learn new sport skills
 - Active participation and recognition within the school community
 - Develop socially acceptable behaviors
 - Develop leadership skills
 - Improve academic performance

#1 (Top priority) to #5 (Lowest priority)

17. Would you like to receive the results of this study?

- Yes
- No



18. To receive the results from this study, please enter your email below.



Thank you for completing this survey.
Your response has been recorded.



APPENDIX C
EMAIL COVER LETTER

Dear Adapted Sport Coaches:

Your assistance and expertise is requested regarding school-sponsored adapted sport for students with disabilities (SWD). The purpose of this study is to determine what benefits you perceive are gained by SWD who participate in school-sponsored adapted sport. Information gathered from this study will assist advocates to promote development of more programs. Completion of this survey will require only **5 minutes** of your time.

When completing this survey, YMCA, Parks and Recreation, and other community-based or sponsored sport programs should **not be considered**. The focus of this research is on **school-sponsored adapted sport programs** - those supported and provided by a school district. These programs may include, but are not limited to, Adapted Sport Leagues, Special Olympics Unified Sports, Paralympics Programs, or Corollary Sports.

Participation in this study is voluntary. You may stop participation at any time without penalty. All responses to this survey are anonymous and your identity will not be known. Completion and submission of this survey represents your informed consent. **In addition, please forward this email message and survey link to other adapted sport coaches you know.** We are trying to get many adapted sport coaches to assist. The results of this study will be provided upon request.

Please follow the link below to complete the survey:

Survey Link

If there are any questions regarding this survey, please contact Cadi Baldwin at 518-260-2387(baldwin.cadi@uwlax.edu) or Garth Tymeson at 608-785-5415 (gtymeson@uwlax.edu).

Thank you very much for your time, expertise, and participation.

Sincerely,

Cadi Baldwin
Adapted Physical Education Graduate Student

Garth Tymeson, Ph.D., Director
Adapted Physical Education Program

APPENDIX D
REVIEW OF RELATED RESEARCH LITERATURE

REVIEW OF RELATED LITERATURE

Introduction

Today more than 44 million children participate in organized sport (Dorsch, Smith, Wilson, & McDonough, 2015). The U.S. Government Accountability Office (GAO) states that participation on sports teams and being physically active are important to children's health and social well-being (U.S. GAO, 2010). There are many benefits children receive through sport participation in all aspects of their life. A few of these benefits include: building relationships, creating a healthy self-concept, and maintaining one's physical health (Bailey, 2006). The 2010 GAO report states that sport participation may be even more important for students with disabilities (SWD). However, participation rates of SWD in extracurricular sport activities range from 10-56 percentage points lower than their nondisabled peers.

According to the Rehabilitation Act of 1973 (Section 504) school districts are required to provide students without disabilities and SWD equal opportunities to participate in extracurricular activities (U.S. Department of Education, 1973). However, the GAO (2010) report found that as few as 6-25% of SWD eligible under the Individuals with Disabilities Education Act (IDEA, 2004) participated on school-sponsored sport teams. These numbers are significantly lower compared to students without disabilities participating on sport teams each year (18-73%). Barriers that contribute to SWD's lack of opportunity and participation for sport participation include: inaccessibility, bullying, school budgets, and administrative support (Law, Petrenchik, King, & Hurley, 2007).

Despite possible barriers, SWD are required by law to have equal opportunities. Having school personnel that advocate for the rights of SWD can help eliminate these barriers. Adapted physical educators, general physical educators, special education teachers, and parents are just a few who can advocate for SWD's participation in sport.

The benefits derived through participating in sport are important for SWD (U.S. GAO, 2010). By participating on sports teams SWD have the opportunity to improve their motor skills and self-concept, increase their physical activity levels, build relationships amongst their peers, and increase personal responsibility (Bailey, 2006; Neely & Holt, 2014). This experience will better prepare SWDs for their future as contributing members of society. School staff and parents should advocate for SWD's right to this experience.

School-sponsored adapted sport programs are becoming more popular as school district extracurricular activity options (Davis, 2013). Adapted sport programs assist school districts to meet legal mandates and allow SWD to participate in sport with their peers. These leagues are designed specifically for SWD, and sometimes may include their typically developing peers. Highly qualified coaches are needed for these leagues due to the population that participates (Silliman-French & French, 2013). It is common for the adapted sport coaches to be the adapted physical educator for the district. These adapted physical education professionals are experts in motor development, fitness, sport, and the needs or modifications that SWD require to be successful in sport. Adapted physical educators teach the SWD during school hours, working towards special education goals, and after school in adapted sport practices and games. It is common for adapted physical educators to also be in the general physical education setting. This allows them to build

relationships with the nondisabled students that may also be participating in an adapted sport program with their peers that have disabilities.

Adapted sport has recently gained popularity and needs further research to determine its impact on the athletes with disabilities, parents, and others. This review of literature includes topics of the benefits of sport participation, the influence that coaches have in sport and how their coaching efficacy effects their coaching, parent roles in sport, and SWD in sport.

The Benefits of Sport Participation

Participation in extracurricular activities, specifically in sport, has been shown to have many benefits. With youth sport participation rates being higher than 44 million, it is clear that families in the U.S. value the benefits of sport (Dorsch et al., 2015). Lesyk and Kornspan (2000) completed a study to determine what coaches believe to be the benefits of youth sport. Their study researched coaches' expectations of the benefits children receive from sport participation and coaches' beliefs about the extent to which these benefits are actually experienced. Coaches in the study were attending a training program and were asked to complete a survey. Approximately 90% of those that attended the training completed the survey. There were 23 women and 86 men that participated. The sports represented included football, baseball, gymnastics, and volleyball.

Coaches ranked the expectations about what children should be gaining through participating on a sports team. There were 15 benefits that were ranked. All of the ranks were summed and averaged. This study found that coaches believe having fun, learning life skills, being part of a team, developing confidence, and the excitement of competition are the most important outcomes children receive from participation in sport (p.401).

These outcomes help children grow into contributing members of society. Through youth sports children learn how to cooperate when working with others, as well as how to behave after winning or losing.

It is important to ask coaches the perceived benefits of sport participation because they spend the most time in that setting with children. Coaches are the individuals that work with students to improve their skill levels and assist in building the team atmosphere. This holds true in adapted sport programs since the coaches are often the athletes' adapted physical or special education teachers as well.

The previous study focused solely on coaches beliefs. In another study researchers collected data from multiple groups of individuals, including: children, their parents, and teachers. Slutzky and Simpkins (2009) examined sport self-concept and if it mediated the relations between time spent in sport activities and self-esteem. To complete this longitudinal school-based study data were collected as part of the Childhood and Beyond Study (p.383). Three cohorts of children and their families were included as participants. Four different Waves of data were collected over a period of several years. Wave 1 was completed in 1987 when the children were in kindergarten. Wave 2 was completed when children were in grades 1, 2, and 4. Wave 3 data were collected when children were in grades 2, 3, and 5 and in grades 3, 4, and 6 for Wave 4. There were 987 children in the study; 502 girls and 485 boys. Data were also collected from the children's parents and teachers. Families involved in the study were primarily middle-class, English-speaking European-American. Approximately half of fathers and mothers had attained at least a college degree, 98% had completed high school (p. 383). Slutzky and Simpkins used information from teachers at Waves 1 and 2.

At Wave 3 parents indicated their children's participation in sport activities over the past year. Only those that reported organized sport were included in the study. These sports were divided into two categories; team sports and individual. Participation in the study represented the average number of hours per week per year that children spent in organized sport activities and organized individual activities (p. 383).

Children's sport self-concept was measured at Waves 3 and 4. At Waves 3 and 4 children's self-esteem was also measured using Harter's 7-item-self-esteem scale. Children chose which statement best described themselves and received a score from 1-4 on each of the seven items (p. 383). During Wave 3 mothers reported their opinion of their children's sport ability using a 1-7 scale on four items. Finally, during Wave 3 children also completed a 4-item scale which assessed how the child valued sport.

Slutzky and Simpkins found that on average children spent more time per week in team sport than in individual sport activities. Boys comprised 66% of participants in the team sports and 48% of the individual sports (p. 384). Participants showed high levels of sport self-concept and value of sport. The participants also had above-average peer acceptance and self-esteem ratings. Another result was that time spent in team sports positively related with sport self-concept, whereas time in individual sports and sport self-concept had no relationship (p. 384). Participants that believed they had a higher level of competency in sports also reported higher self-esteem compared to their peers.

When considering SWD these results are extremely important. SWD are at risk for mental health disorders such as depression, anxiety, lack of motivation, and social withdrawal (Shapiro & Martin, 2010). If given the opportunity to participate in sport they may increase their sport self-concept and self-esteem. One's self-esteem influences not

only how they participate in sport, but how they interact with others in school, the work place, and in the community. Another implication from this study is that team sports provide the positive self-concept which relates to positive self-esteem; individual sports did not have a relationship with sport self-concept. Many school districts use individual sports, such as cross country and track/field, as a way to provide SWD the opportunity to participate in sport. Students with disabilities may benefit more from team sports where they are able to increase their sport self-concept and in turn their self-esteem. In order for SWD to value sport they need to be provided the opportunity to play. By incorporating adapted sport opportunities into the extracurricular activities that school districts provide to their students it would increase the likelihood that SWD value sport and in turn continue playing as adults.

In a similar study researchers examined psychological effects from sport participation. Camire and Trudel (2010) studied high school athletes' perspectives on character development. To complete this study, 20 student athletes were recruited (10 male and 10 female) from a top academic high school in Quebec, Canada. These student athletes participated in basketball, volleyball, soccer, or badminton. To collect data, the researchers interviewed the participants. During the interviews the researchers asked if the athletes knew their school's mission statement and if they believed that those characteristics were achieved through sport participation. Following this, the researchers asked athletes using three words related to social values: teamwork, perseverance, and loyalty. Next, athletes were asked about moral values: honesty, sportsmanship, and respect. The participants were asked if they believed these values were achieved through sport participation and to provide examples of their experiences in sport to support their

answers. An additional part of the interview asked athletes about gamesmanship and their experience with aggression and cheating.

There were multiple findings from the study. First, none of the athletes were aware of their school's mission statement. A majority of the participants, with the exception of badminton players, believed that teamwork was one of the most important values developed in sport participation (p. 203). The participants stated that learning about good team chemistry, communicating, and encouraging others were important experiences from sport participation. Team sport athletes emphasized social values whereas individual sport athletes emphasized moral values (p. 203). A final finding was that aggressive behaviors seemed to be common in high school sports, especially in contact sports.

The values that athletes stated they learned are all extremely important life skills. The values that athletes originally learn in sport are transferred to other areas of life. Knowing how to work with others, communicating, and honesty are all characteristics that allow an individual to be a contributing member of society. Adapted sport is one way that SWD can learn and practice using these life skills.

The Influence of Coaches in Sport Participation

Coaches play vital roles in children's physical, mental, and social development through sport participation. These individuals teach life skills to children through sport that allow them to be successful in various environments. Chan, Lonsdale, and Fung (2012) conducted research to assess the influences of coaches, parents, and peers on an athlete's motivational patterns. Participants included 408 swimmers, ages 9-18 years, who had swimming experience ranging from 1-5 years (p. 560). Participants completed a

15 minute questionnaire. The researchers found that social influences from mothers was more important for children than for adolescents, and social influences from peers were important for adolescents but less important for children (p. 564). The social influences of coaches were more important for athletes' enjoyment and effort during childhood and once into adolescence the influences were more important for competence (p. 564). The researchers discussed that coaches' influence on enjoyment and effort during childhood may be due to children receiving positive feedback. Further, once athletes become older the feedback becomes more skill related. Coaches having a positive impact on children in youth sport is important because it effects their physical activity levels later in life. When an individual is confident and enjoys an activity they continue participating in it.

The findings from this study are important to consider when working with SWD. Often, parents play a large role in determining the activities in which SWDs participate. Adapted sport coaches need to work with parents of SWD to create opportunities in sport that meet the parent expectations. Further, coaches should be aware of the influence that they have on athletes' participation in physical activity. This would hold true with SWD. In unified sport, when nondisabled students and SWD are on a team together, nondisabled students may have a significant impact on the SWD. For these reasons, it is evident that parents, peers, and coaches would have an effect on SWD and their participation in sport.

An additional study discussed a high school coach that played a role in his athletes learning a variety of life skills. Holt, Tink, Mandigo, and Fox (2008) interviewed and collected data from 12 male high school soccer players and the head coach. The high school soccer team was selected due to its good reputation and the coach being viewed as

effective (p. 285). Data were collected over one season, during the months of April-June. Fieldworkers received training to prepare them for this study. A total of 10 games and 10 practices were attended. Formal interviews were completed at the end of the season and asked about life skills that are learned through sport (p. 287). Further, athletes were asked what life skills they learned through participating on the soccer team.

During the fieldwork, documents were collected that demonstrated the school promoting sport as an extension of the classroom (p. 290). Values such as friendship, sportsmanship, and respect were displayed in the school's code of ethics. The school's athletic program also valued respect, responsibility, and integrity. Posters and signs demonstrated these values and were hung near locker rooms where athletes would see them daily. The coach's philosophy was also noted in this study. He wanted his athletes to appreciate being part of a tradition of excellence (p. 291). The coach also discussed that the sport of soccer can teach an individual many things. Fieldworkers described the coach as an individual that went out of his way to create relationships with each athlete. They also mentioned that he never raised his voice at his athletes and was focused on behaviors that provided the players with high levels of sport enjoyment. These characteristics can have a positive impact on athletes' personal development.

Life skills that were associated with participation on the team included initiative, respect, and teamwork/leadership. Nine of the athletes discussed attitudes that demonstrate taking initiative. Examples of initiative were setting realistic goals, learning to manage time, and taking responsibility for oneself (p. 293). Players discussed taking responsibility for getting to games and practices on time and being prepared. Fieldworkers noted their belief that the coach created an environment for the athletes to

display initiative rather than teaching these qualities (p. 294). Eleven out of the 12 athletes discussed respecting opponents and the importance of shaking hands after games. One athlete mentioned the coach and his ability to demonstrate respect to opponents regardless of their success. A fieldworker documented the coach disciplining an athlete for being disrespectful. The coach was able to teach his athletes respect through his actions.

All of the athletes reported that they had learned about teamwork and leadership through their experience on the soccer team (p. 296). One athlete discussed cooperation being a life skill that he learned through participating on team. Another believed his teammates looked up to him and as a result he started to act as a leader. Although the coach did not directly teach the students about these life skills, he did create an environment that allowed them to take initiative, respect others, and experience the positive effects of teamwork.

Although the participants in this study were typically developing, the life skills learned through sport participation can also be learned through participation in adapted sport. It is important for SWD to learn the same life skills as their typically developing peers, such as cooperation, respect, and personal responsibility.

In the previous studies, coaches were part of sport for individuals without disabilities. Falcao, Bloom, and Loughhead (2015) completed a study that involved coaches in Paralympics and their views on team cohesion. The participants were 7 male head coaches of summer and winter Paralympic sport teams. Of the 7, 4 coached individual sports and 3 coached team sports. The average age of the coaches was 42.67 years and their average years of experience coaching elite athletes with a disability was

11.28 (p. 209). All participants had completed college degrees as well as the National Coaching Certification Program offered by the Coaching Association of Canada. Among the participants, 5 of the 7 had a specialization in kinesiology or physical education. These participants were recommended by a panel of experts as being among the best coaches in their region. Semi-structured open-ended interviews were completed with the coaches regarding descriptions of their team, their understanding of cohesion, their role in building cohesion, and examples of activities used to build cohesion (p. 209). Other questions asked about the coaches' experiences.

Results of the study revealed that the coaches had an extensive background in competitive sports, ranging from varsity to national levels. The coaches discussed ways that they had become involved in disability sport. Some originally coached sport for typically developing students, others chose disability sport for personal reasons. All participants believed that Paralympic athletes should be coached in the same manner as nondisabled Olympic athletes.

The results of the second portion were split into two themes- team dynamics and cohesion. The subcomponents of team dynamics were team makeup and personal coach interactions. In team makeup, goals was the most discussed topic. Coaches mentioned setting goals with their athletes, individually and collectively (p. 213). The participants stressed the importance of keeping in contact with athletes, parents, and support staff. Support staff included technicians, trainers, and professionals that assist athletes with disabilities to participate in sport.

Due to athletes being all over the country, technology was used to build and increase cohesion. Coaches described cohesion as a group with similar goals, good

personal relationships, and good communication, which as a result has a direct impact on team performance (p. 215). Other elements that coaches said affect cohesion are confidence and respect. The Paralympic coaches' definition of cohesion matches the definition coaches of nondisability sport used as well. The participants emphasized the importance of treating their athletes in the same way that other elite athletes are treated (p. 217). This should hold true at the high school level as well. Athletes that participate in school-sponsored adapted sport should be treated or held to the same standards as other high school athletes.

As the Holt et al. (2008) study found, a coach's behaviors and attitudes can strongly influence the athletes. Coaching efficacy is defined by Feltz, Chase, Moritz, and Sullivan (1999) as the extent to which coaches believe they have the capacity to affect the learning and performance of their athletes; performance including psychological, attitudinal, and teamwork skills of athletes (p. 765). The researchers sought to present a coaching efficacy model along with an instrument that measures it.

Feltz et al. included four dimensions of coaching efficacy: game strategy, motivation, teaching technique, and character building (p. 766). Game strategy efficacy is the confidence coaches have in their ability to coach during competition and lead their team to a successful performance (p. 766). Motivation efficacy is the confidence in one's ability to affect the psychological skills and states of their athletes. Technique efficacy involves the confidence in one's instructional and diagnostic skills. Finally, character building efficacy is an individual's confidence in influencing the personal development and positive attitude towards sport in their athletes (p. 766). These dimensions were designed from a 5-week seminar involving 11 coaches with different coaching

experiences. Feltz et al. discussed that coaching efficacy is affected by past experience and performance, the perceived skill or talent of one's athletes, and perceived social support from the school, community, and parents. Coaching efficacy may effect athletes' performance, attitudes, and views of the coach.

Research was completed in two phases. The first phase was the designing of the instrument and phase two involved testing a selected set of hypothesized predictor and outcome variables of coaching efficacy (p. 770). These phases addressed the validity of the Feltz et al. model. Coaching efficacy influences the effectiveness of a coach and athletic performance. Although this study involved coaches of nondisabled sport, coaching efficacy also influences the effectiveness of coaches in adapted sport.

Parental Roles

Parent involvement is extremely important in youth sport. Initially, parents are the most influential factors in a child's life and the deciding factor if they are enrolled into sport programs. This holds true for children with and without disabilities. Because of this, parent opinions are valuable. Neely and Holt (2014) completed a study that researched parents' perspectives regarding benefits of sport participation for their children.

Participants in the study consisted of 22 parents of children aged 5-8 years old that were involved in organized youth sport. Interviews were conducted using a guide that covered three main areas. The first section was designed to build a rapport with the person, the second included questions that addressed the main concerns of the study, and the final portion provided the participants with an opportunity to discuss any issues that may have come up during the interview (Neely & Holt, 2014). The questions in the second portion

of the interviews focused on the benefits related to sport, factors that were associated with acquiring those benefits, and the role of the parents (p. 258).

The results of this research are divided into three types of benefits: personal, social, and physical. The personal benefits that parents felt their child received were positive self-perception, personal responsibility, and sportsmanship. Friendship, cooperation, learning to respect authority, and engagement in school were among the social benefits. The physical benefits that parents mentioned were development of fundamental sport skills and health and well-being (p. 262).

These benefits influence an individual's emotional, social, and physical well-being. When an individual with a disability is exposed to sport they learn ways to be active and improve health, increase self-esteem and personal responsibility, create friendships, and learn how to cooperate with others. Successful participation may diminish some of the gap of ability levels between the individual with a disability and their typically developing peers.

In similar research completed by Dorsch et al. (2015), data were collected through parents about the goals they had for their children in sport, and how they aligned with the parents' sideline behavior during organized youth sport. There were four participants. Two female and two male parents that were first-time youth sport parents. Parent goals were developed based on personal experiences and their perceptions of the expectations of others (p. 21). The researchers recorded verbal sideline behaviors of parents throughout the study. Semi-structured interviews, parent journals, and observations were ways that data were collected.

There were 43 goals created among the 4 participants that related to their children's sport participation. The subcategories of instrumental goals included: avoid negative sport outcomes, develop as an athlete, grow as an individual, and enjoy sport experience (p. 23). The two subcategories of identity goals were to maintain a positive image as a parent and manage others' perception of their child. Finally, two subcategories of relational goals were to enhance family relationships and build relationships with others. Findings suggested that parents are aware of their children's athletic ability in youth sport. For example, one mother changed their goal for their child from becoming an athlete to growing as an individual through sport (p. 32). These goals and behaviors were of parents with typically developing children. A study completed by Holland (2015) involved parent goals of children with disabilities.

Holland studied parent goals of students with disabilities (SWD) in adapted sports leagues. There were 40 participants in this study. The participants were parents of SWD that participated in school-sponsored adapted sports leagues in Wisconsin and Minnesota (Holland, 2015). Participants completed a survey containing 14 questions that covered three main themes: social skills goals, physical activity/fitness goals, and sport-specific goals. There were 15 goal items used. The survey was distributed through adapted sport coaches in Wisconsin and Minnesota.

There were 5 research questions in the study. The first asked which goals parents perceived as the most important for their SWD participating in school-sponsored adapted sport. Social skills received the highest average score, physical activity/fitness had the second highest, and sport-specific skills had the lowest average (p. 12). The second research question asked whether or not disability categories had an effect on goal

importance. Parents of children with intellectual disabilities provided the highest score among participants for social skills. Parents of students with speech or language impairments had the highest score for physical activity/fitness. Further analysis determined that there was not a significant difference between the three goals themes based on disability categories.

The third research question asked if the parent's perception of their child's ability level impacted the importance of goals. Parents that perceived their child to have a higher level of ability recorded the highest score for social skills goals. Parents that perceived that child to have the same or similar level of ability as their peers reported the same score for social skills and physical activity/fitness (p. 14). The fourth research question determined if parent goals changed over time. There were significant differences between the beginning score and current score of all three goal themes, meaning that goals changed over time. Social skill goals increased over time, physical activity/fitness goals decreased over time, and sport-specific goals increased over time. The fifth research question asked how parent goals differ between their children with and without disabilities who participate in sport. There were no significant differences between physical activity/fitness goals between the SWD and their typically developing sibling. However, there were significant differences between social skills and sport-specific skill goals. The social skill goal was scored higher for SWD and sport-specific goals were scored higher for children without disabilities. A theme that was found from the open-ended question regarding goals parents had for the SWD was "development of mature and acceptable behavior patterns". The theme that was found when asking parents why their goals changed over time was that their child and/or the program that the child

participated in exceeded the goals, so they needed to create new ones. Advocates for SWD can use this information when creating adapted sport programs to ensure that parent's concerns and desired outcomes for their children are met.

Shapiro and Malone (2016) completed research that also involved parents. Athletes were also participants in the study. The purpose of their research was to examine the perceptions of quality of life among athletes ages 8 to 21 years old with physical disabilities from two perspectives, the athletes themselves and their parents. Additionally, they examined the impact of a sport practice on the athletes' feeling states. Finally, they viewed the relationship between athletes' feeling states and perceived quality of life. The athletes in the study were 47 males and 23 females with physical disabilities. Disabilities included cerebral palsy, spina bifida, spinal cord injury, and other (p. 386). Athletes participated in one of the following sports: swimming, wheelchair basketball, wheelchair handball, and a weekend multi sports program.

Research was completed using the Pediatric Quality of Life Inventory and Subjective Exercise Experiences Scale (p. 387). The Pediatric Quality of Life Inventory had four subscales including physical functioning, emotional functioning, social functioning, and school functioning. Participants rated how much difficulty they have with specific items using a Likert scale, 0 being "never a problem" and 4 being "almost always a problem." The Subjective Exercise Experiences Scale involved three subscales: positive well-being, psychological distress, and perceived fatigue. Participants rated how strongly they experienced each feeling using a 7-point Likert scale, 1 being "not at all" and 7 "very much so" (p. 387).

Results revealed that athletes reported positive perceptions regarding quality of life across all subscales. There were significant differences between athlete and parent scores for physical, emotional, and social functioning. Across all subscales, athletes rated the quality of life higher than parents. Athletes did not have a significant difference in the Subjective Exercise Experiences Scale from pre to post practices in regards to the positive well-being and psychological distress subscales. There was a statistically significant difference for perceived fatigue, meaning students experienced more fatigue after a practice (p. 388). Correlations found relations between the following subscales: positive well-being and physical function, emotional function and school function, psychological distress and perceived fatigue. The results from this study indicate that individuals with disabilities that participate in sport have positive views on their quality of life. Due to the higher risk of mental health disorders among individuals with disabilities, this information can be beneficial when promoting equal opportunities in sport.

Students with Disabilities in Sport

The U.S. Government Accountability Office (GAO) 2010 report discussed that SWD may receive more benefits from participating in sport than their nondisabled peers. As previously mentioned, there are many benefits that individuals receive through sport participation, including physical fitness, cooperation, respect, increased self-efficacy, and the ability to create friendships. Students with disabilities receive additional benefits through sport participation. These students have a higher risk of becoming obese and developing hypokinetic diseases compared to same-aged peers. By participating on a sport team it could decrease those risks by increasing physical activity levels. Wilhite and

Shank (2009) completed a study that researched how participating in sport impacted a person with a disability's ability to achieve and maintain health and the health-related components of well-being. The authors retrieved the data from a secondary analysis using the International Classification of Functioning, Disability, and Health (ICF) framework (p. 118). Participants were interviewed with guiding questions regarding involvement in sport. There were 12 participants; 5 women and 7 men. Ages ranged from 29-58 years old (p. 119).

The research found that sport for individuals with disabilities had many benefits. The benefits included: enhanced functional capacity, health promotion, relationship development, increased optimism, and inclusion in meaningful life activities and roles (p. 120). Each individual had a story about how physical activity influenced their life in a positive way. This was their reason for continued participation in recreation or sport. Even though the participants in this study were adults, the concepts can be applied to individuals with disabilities in general.

Unlike the previous study where researchers reviewed sport participation in general, Goodwin, Johnston, Gustafson, Elliot, Thurmeier, and Kuttai (2009) examined one specific sport - wheelchair rugby. Goodwin et al. explored the social experience of these athletes. All 11 participants in this study had spinal cord injuries and participated in sport prior to their injuries (p. 105). Of the 11 participants, 10 were male and 1 was female. These athletes were all competing in the 2005 Canadian National Wheelchair Rugby Championship. Data were collected through group interviews and artifacts (p. 106). For the interviews the players were divided into two groups of four and one group of three. This allowed participants to have opportunity for input, allowed athletes to

elaborate on ideas shared by teammates, and minimized the athletes' time away from the tournament (p. 106).

Three themes evolved from these interviews: 1. It's Okay to be a Quad, 2. Don't Tell Us We Can't, and 3. The Power of Wheelchair Rugby (p. 107). Being part of a team allowed the athletes to feel a sense of belonging through similar life experiences. Athletes discussed that it created a sense of community. Through this sense of belonging athletes were able to share stories about medical professionals advising them not to participate in the sport. Doctors advised against the sport to multiple players stating that it may hurt their shoulders. A player discussed the amount of independence that the sport provided him (p. 110). An additional athlete discussed his increase in self-confidence after being part of a community of individuals similar to himself (p. 110).

Adapted sport allows individuals with disabilities to collaborate and compete against those with similar abilities. These programs provide the sense of belonging, increase in self-confidence, and ability to work towards common goals that are not provided in other areas. Adapted sport leagues are similar to these programs in that they are designed specifically for individuals with disabilities. School-sponsored adapted sport provides SWD similar opportunities that nondisabled students receive to compete and create friendships along with a sense of team membership.

The research completed by Goodwin et al. (2009) related to individuals with physical disabilities. Shapiro and Martin (2014) completed a study on athletes with similar disabilities. The purpose of their study was to determine if the quality of friendships, physical self-perceptions, and general self-worth predicted close friendship, loneliness, and social acceptance (p. 42). There were 46 athletes with physical disabilities

that participated. Of the 46, 35 were female and 11 were male; 23 were African American, 19 Caucasian, 1 Hispanic American, and 3 Asian American. Ages ranged from 12-21 years old. The athletes' disabilities included: cerebral palsy, spina bifida, traumatic brain injury, spinal cord injury, muscular dystrophy, and other. The other category included amputations, spinal muscular atrophy, and scoliosis. Participants for this study were recruited from 5 wheelchair basketball and wheelchair football teams in the American Association of Adapted Sports Program (AAASP) (p. 44). All of the teams were co-ed.

Four instruments were used to collect data. The first was a demographic questionnaire which collected information on gender, age, ethnicity, and disability. The Sport Friendship Quality Scale (SFQS) was used to assess the quality of youth sport friendships (Goodwin et al., 2009). The Loneliness Rating Scale was used to assess the athletes' feelings of loneliness. The final instrument used was the Self-Perception Profile for Adolescents (SPPA) which measures adolescent's self-perceptions related to nine subdomains (p. 44). The results found that athletes rated the positive aspects of friendship quality outside of sport higher than the positive aspects of friendship quality in sport.

A total of 15% of the participants in the study stated that it's "always true" or "true most of the time" that they "feel left out of things" (p. 45). Loneliness was negatively related to athletic competence, physical appearance, and self-worth. Social acceptance was positively related to self-worth, physical appearance, and positive aspects of sport friendship quality. Additionally, close friendships were positively related to athletic competence and self-worth. Athletes that had the strongest perceptions of their athletic abilities and self-worth reported being the least lonely as well as having stronger

perceptions of close friendships, compared to participants who had weaker perceptions of their athletic ability and self-worth. Therefore, athletes that are confident in their abilities also have close friendships and low levels of loneliness. These findings are extremely important for advocates of adapted sport. School-sponsored adapted sport participation can assist SWD to increase opportunities to build friendships as well as increase their confidence in their athletic abilities.

Harada and Siperstein (2009) examined the sport experience for athletes with intellectual disabilities that participated in Special Olympics (SO). The participants in this study involved family members randomly selected from 17 different state SO programs. Telephone interviews were completed with family members regarding the athletes. Whenever possible, athletes were also interviewed. A total of 1,307 family members were interviewed, with 555 of those families currently having an athlete participating in SO (p. 70). The remaining 752 were no longer participating. Of the 1,307, 36% of athletes were female, 64% were male, and the average age of all athletes was 25 years. No information on the athletes' race or ethnicity was collected. In order to obtain a national sample of SO athletes and their families in this study, a total population data were collected for each of the 50 states from the 2000 U.S. Census. This information was entered into a database that also included state SO athlete population data from 2003 and 2004 Special Olympics Inc. Program 2004 Census (pg. 71). The 20 sample states represented the geographical regions of SO. Of these, 17 states were able to provide contact information for athletes. For this reason, 17 states were used in the study.

The Special Olympics Athlete Participation Survey was used to collect data regarding four groups: active athletes, family members of active athletes, inactive

athletes, and family members of inactive athletes (p. 71). The questionnaire involved one part for athletes and another for family members. Through a pilot study and previous research, nine categories were created for motivation, fun, friendship, achievement, health/fitness, competence/skill development, influence of significant others, welcoming environment, school-oriented activity, and having something to do. The 7 categories for motivation to leave SO included interest, injury/health, opportunity for competition, program access, relocation, transportation, and social pressures/stigma. Telephone interviews were completed with family members and athletes using The Gallup Organization and 13 trained interviewers. A scripted protocol was used when completing interviews. In approximately half of the interviews, families had to assist the athlete through prompting to answer interview questions.

Of the 1,307 families interviewed, more than two-thirds of the athletes had begun SO through elementary or middle school programs. One-third of the athletes had participated in organized sport prior to participating in SO. On average, athletes participated for 11 years in SO, however 14% of athletes participated in SO for over 20 years (p. 74). Athletes typically participated in 2 SO sports and 35% participated in 3 or more sports. The most common sports included track and field, swimming, bowling, softball, and basketball. The athletes' reasoning for participating in SO included fun (54%), friendship (24%), and achievement (13%) (p. 75). When interviewing the families about why the athletes participate, there were similar responses: friendship (35%), fun (27%), and achievement (20%).

Inactive athletes, or those that had not been involved in SO for more than one year, were asked about their reasons for leaving SO. Many athletes (38%) stated that they

had changes in personal interest. These interests ranged from academic responsibilities, jobs, and hobbies. Others (33%) stated they left SO due to a lack of access to programming. Finally, 13% of athletes left due to an injury or health program and 3% due to transportation. Families reported that the athletes no longer participated due to a lack of program access (44%), and changes in interest (25%). Overall, 42% of athletes left SO due to reasons that were out of their control, including transportation, program availability, or relocation (p. 80). Of these, 70% were interested in returning to SO.

When designing or implementing adapted sport programs it is important to consider what motivates the athletes that participate. As Harada and Siperstein's research demonstrates, this information can be collected through the athletes or their families. This information can be used to motivate individuals with disabilities to participate in sport. The athletes' reasons for leaving can also be analyzed and planned for to minimize the amount of athletes it affects in other adapted sport programs.

The previous study consisted of athletes with intellectual disabilities. A different study included individuals with spinal cord injury (SCI). Tasiemski and Brewer (2011) examined interrelationships among athletic identity, sport participation, and psychological adjustment in a sample of people with SCI. Participants included 1,743 individuals that met the inclusion criteria, which involved having a SCI at level C5 or below. Participants in the study also had to use a manual wheelchair for all daily activities, be between ages 18-50 years at the time of injury, sustain the injury at least one year before the study, be admitted into a rehabilitation center within 6 months of the injury and be a resident of Poland (p. 236). Participants were identified through the Foundation of Active Rehabilitation in Poland.

Participants were mailed an informational letter which explained the study, a booklet containing the study questionnaires, and a postage paid return envelope. The questionnaire included sections on demographics characteristics, injury characteristics, recreational activities, sport participation, the measure of athletic identity, life satisfaction, anxiety, and depression (p. 236). Individuals that did not have the ability to independently fill out the questionnaire received assistance from relatives or caregivers. There were 1,034 completed questionnaires, 173 females and 861 males, with ages ranging from 19-68 years. The average age at the time of injury was 26 years, with an average of 9.78 years post-injury. Of the 1,034, 519 participants reported paraplegia and 515 tetraplegia.

Various scales were used to collect information from the athletes. To measure athletic identity, the Athletic Identity Measurement Scale (AIMS) was used. Life satisfaction was measured using the 9-item Life Satisfaction Questionnaire, and anxiety and depression were examined using the Hospital Anxiety and Depression Scale. Results revealed that there was a positive correlation between athletic identity and life satisfactions. Further, athletic identity was negatively correlated with both anxiety and depression scores. Participants reported being involved in sport significantly more prior to injury than they did after injury (p. 242). Younger male participants had higher athletic identity scores than older females. In addition, current sport involvement rather than sport involvement prior to injury had a larger influence on athletic identity.

Of the 1,034 participants, 241 stated they participated in more sport after injury than prior to the SCI. Participants that discussed their inability to participate in their favorite sport post-SCI had lower levels of life satisfaction and higher levels or anxiety

and depression than those that believed they were able to maintain their involvement. Those that participated on team sport had a higher athletic identity than those that participated in individual sport. This is extremely important to consider when implementing adapted sport programs. The cause of this may be due to having contact with coaches and teammates, which may assist in confirming an individual's identity as an athlete (p. 245). Individuals with disabilities are typically introduced to individual sport because it is easier to coach them when they perform independently compared to team sport where an individual may need to learn plays and interact with peers. However, team sport may provide more benefits to these individuals' athletic identity, social experiences, and life satisfaction.

A study completed by Groff, Lundberg, and Zabriskie (2009) was also disability specific. Rather than SCI, these researchers examined the effect of adapted sport participation on athletic identity and quality of life for individuals with cerebral palsy (CP). Participants included elite athletes with CP that were at least 18 years old and competed in the 2005 World Cerebral Palsy Championship. Nine sports were involved: track and field, bowls, cycling, slalom, soccer, swimming, table tennis, and weightlifting (p. 320). A total of 483 athletes attended, 383 males and 100 females. Athletes were from 32 countries with the five largest teams including athletes from England/Wales, US, Australia, Canada, and South Africa. Of these athletes, 73 completed the survey. The survey involved demographic questions, Athletic Identity Measurement Scale, and the Influence on Quality of Life Scale.

The average age of participants was 27 years old and 78% were male compared to 19% female. The majority of participants (68%) were white, 17% did not identify race or

ethnicity, 5.5% were black, 4% Hispanic, and 3% Asian. The countries participants were from ranged from Australia (22%), UK (22%), Canada (18%), US (16%), Spain (6%), South Africa (4%), Finland (3%), Portugal (1.5%), and New Zealand (1.5%). The remaining 6% did not identify their country. Participants were involved in sport for eight years and nine months on average. The majority participated in track and field (37%) and soccer (33%). Others participated in swimming (10%), bowls (7%), table tennis (7%), cycling (4%) and power lifting (2%). The majority of the participants (52%) had minimal disability, other athletes used wheelchairs during competition (27%), or had moderate disabilities and spasticity (21%) (p. 321).

The main reasons athletes participated in sport were for competition and to be part of a team. Athletes were motivated to participate in sport due to having fun (45%), socialize, (33%), learn a new skill (19%), for therapy (16%), and to recreate with family members (4%). There was a significant relationship between quality of life and athletic identity. Further, a negative correlation was found between quality of life and the severity of the athlete's disability. Athletes believed adapted sport had a positive impact on several factors influencing their quality of life. The majority of participants stated that sport participation influenced their overall health, quality of family life, and social life (p. 322). This information can be used to advocate for adapted sport programs to be implemented in schools for students with disabilities that are not able to successfully participate on sports teams with their typically developing peers. Increased quality of life, overall health, and increased social opportunities are benefits that can be derived by students participating on adapted sport teams.

A different study compared athletes with physical disabilities to individuals with disabilities that did not participate in sport. Yazicioglu, Yavuz, Goktepe, and Tan (2012) compared the quality of life and life satisfaction of individuals with physical disabilities that participated in adapted sport and those that did not participate. Participants were recruited from an outpatient physical therapy clinic. Individuals were included if they were at least 18 years old, had been injured at least 12 months prior, and had a physical disability consisting of paraplegia or amputee (p. 250). A total of 60 participants were divided into 2 groups, one group had 30 elite athletes with disabilities and the second group had 30 individuals with disabilities that were not involved in sport. Adapted sports participated in included basketball (9), archery (9), air pistol shooting (4), and amputee football (8) (p. 250). The survey included four parts: socio-demographic, the short version of the World Health Organization Quality of Life Scale, Satisfaction with Life Scale, and two open-ended questions.

There was no statistically significant differences between the two groups on demographic information. The results from the World Health Organization Quality of Life Scale were significantly higher for individuals that participated in adapted sport compared to those that did not. The Satisfaction with Life Scale found the same results, scores for group one (elite athletes) were significantly higher. The most important factors contributing to participation in the community in group one or those that participated in adapted sport were sports activity (45.9%) and family support (29.5%) compared to rehabilitation (46.9%) and family support (36.9) in the control group or for those that did not participate in sport. Similarly, group 1 stated that sport activity (24.6%) and family support (23%) had the most positive effect on quality of life compared to the control

group with physical therapy and rehabilitation (54.8%) and family support (19.4%).

Similar to the previous studies discussed, quality of life and life satisfaction are significantly impacted by sport participation. Providing individuals with disabilities the opportunity to participate in sport can increase their quality of life and life satisfaction which are important benefits of sport participation.

Shapiro and Martin (2010) completed a study that also included individuals with physical disabilities. They investigated multidimensional physical self-concept of athletes with physical disabilities. Participants in this study were 36 athletes ranging from 12-21 years old with physical disabilities. The disabilities included cerebral palsy, spina bifida, traumatic brain injury, muscular dystrophy, heart condition, hip condition, and two participants whose disabilities were not identified (p. 298). All participants were athletes in the American Association of Adapted Sports Programs (AAASP) that were recruited from wheelchair basketball and wheelchair football teams. A total of 25 participants competed using manual chairs while 11 competed in power wheelchairs. Of the participants, 16 were ambulatory and 20 athletes used wheelchairs for daily living activities. The Physical Self-Description Questionnaire was used along with a demographic portion in a questionnaire.

Results from this study found that individuals with physical disabilities believed themselves to be less active and have more body fat. Additionally, participants believed that they had less endurance. There were four physical self-concepts related to self-esteem: global physical self-concept, strength, endurance, and flexibility. Only endurance and sport competence were associated with reported physical activity. Global physical self-concept had no impact on physical activity. The researchers discussed that the

negative perceptions of athletes with physical disabilities can be reversed with adapted sport (p.303). Providing athletes of all abilities equal opportunities to participate in sport can eliminate negative perceptions that are present among athletes with disabilities.

Summary and Conclusions

Sport participation is extremely valuable to the psychological, physical, and social development of all individuals. Coaches heavily influence children and adolescents' feelings towards sport and the physical skills and other benefits they receive through participating. Although there are many benefits for individuals with and without disabilities participating in sport, the percentage of individuals with disabilities involved in sport is much lower than their typically developing peers. Adapted sport programs are one way to close this significant gap in participation differences.

In order to increase the amount of opportunities for SWD in extracurricular athletics, those that advocate for them need to highlight or inform others of the many benefits that SWD receive from participating in sport. The most efficient way of identifying the benefits SWDs receive from school-sponsored adapted sport is through further research on these programs. The coaches of adapted sport spend time improving sport specific skills, building a team community, and helping the students grow socially and emotionally. For this reason, their opinions are extremely valuable and should be considered when researching adapted sport. Every program is different, but like youth sports, the benefits will be similar.

Adapted sport allows SWD to interact with same-aged peers during after-school hours. It also allows them to experience a team atmosphere and have similar experiences to those on after school sports teams such as practices, games, and traveling by bus to

sporting events. These experiences allow SWD to feel a sense of community. Adapted sport also provides SWD the opportunity to compete. Most activities that are designed for SWD emphasize participation rather than competition. By allowing it to be competition-based the students can experience winning and losing. Knowing how to manage one's behaviors after a competition is a learned behavior and adapted sport programs provide these valuable experiences. Increasing participation rates in sport also allows SWD to increase their confidence in their athletic abilities. This can influence their self-worth and development of close friendships. Further, adapted sport teaches SWD to cooperate with others. These are life skills that help SWD to eventually become participating members of society.

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