

7-30-2015

# The effects of Unified Sports on attitudes of college students towards students with intellectual disabilities

William Moylan

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THE EFFECTS OF UNIFIED SPORTS ON ATTITUDES OF COLLEGE  
STUDENTS TOWARD STUDENTS WITH INTELLECTUAL DISABILITIES

by  
William Moylan

A Thesis

Submitted to the  
Department of Language, Literacy and Special Education  
College of Education  
In partial fulfillment of the requirement  
For the degree of  
Master of Arts in Special Education  
at  
Rowan University  
July 10<sup>th</sup>, 2015

Thesis Chair: S. Jay Kuder, Ed. D.

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## **Dedications**

*This thesis is dedicated to my parents, James and Lorraine, for their never-ending love and support for everything I do. I also dedicate this thesis to my sister, Annie, for always being a positive influence on my life.*

## **Acknowledgments**

I would like to acknowledge Professor S. Jay Kuder for his guidance and expertise in completing this thesis. I would like to thank the Rowan Unified Sports program and everyone involved, for your participation and consistent support throughout this process.

## **Abstract**

William J. Moylan

### **THE EFFECTS OF UNIFIED SPORTS ON ATTITUDES OF COLLEGE-STUDENTS TOWARD STUDENTS WITH INTELLECTUAL DISABILITIES**

2014/15

S. Jay Kuder, Ed.D.

Master of Arts in Special Education

The purpose of this study was to examine the effects of a college Unified Sports program on the attitudes of college-aged students towards students with intellectual disabilities. A pre-and posttest research design was used in the study. A total of 40 college students participated in the Unified Sports sport club at an institute located in the southern area of New Jersey. Data was collected after a six-week program that played games once a week for an hour. The independent variable in this study was the interactions and education of college students to people with intellectual disabilities. The dependent variable was the attitudes towards people with intellectual disabilities. Overall, the results yielded that the attitudes of the participants were positive throughout the program. Due to the high positive attitudes in the pre-test, there was no major changes in the post-test that could dictate a change in attitude either positive or negative.

## Table of Contents

Abstract	v
List of Figures	viii
List of Tables	ix
Chapter 1: Introduction	1
Chapter 2: Review of Literature	4
Attitudes toward Individuals with Intellectual Disabilities	4
Changing Attitudes toward Individuals with Intellectual Disabilities	8
Impact on the Community Integration	13
Summary	15
Chapter 3: Methodology	17
Setting and Participants	17
Procedure	17
Variables	19
Experimental Design	19
Chapter 4: Results	20
Summary	20
Group Results	20
Individual Results	25
Chapter 5: Discussion	27
Review	27
Limitations	27
Practical Implications	28

## Table of Contents (Continued)

Future Studies	29
Conclusion	29
References	31

## List of Figures

Figure	Page
Figure 1. Male and Female First Survey	23
Figure 2. Male and Female Follow-up Survey	24
Figure 3. Female vs. Female First and Follow-up Surveys	25
Figure 4. Male vs. Male First and Follow-up Surveys	25

## List of Tables

Table	Page
Table 1. First Survey and Follow-up Survey Results	22

## **Chapter 1**

### **Introduction**

Unified Sports is a program sponsored by Special Olympics (SO) that combines students with Intellectual Disabilities, or “athletes”, with students without intellectual disabilities, or “partners”, on the same team to compete together. The program is growing in the United States for young children, as well as college-aged students. “There are three models of Unified Sports: Unified Sports Competitive, Unified Sports Player Development, and Unified Sports Recreation. In the competitive model, athletes and partners of similar age and athletic ability compete side-by-side, which allows for equality among competitors that is ideal for creating social inclusion and mutual understanding. Unified Sports Player Development consists of approximately equal numbers of Special Olympics athletes and partners of similar age competing in team sports. Athletes and partners need not be of similar abilities, and teammates of higher abilities serve as mentors to assist teammates. Finally, Unified Sports Recreation allows athletes and partners who are not of similar age and athletic ability to participate together in sport. These models provide flexibility for Special Olympics Programs to adapt their Unified Sports experience to the needs and demographics of their athletes and partners. In all three models, social inclusion is promoted through a shared sports experience for people with and without intellectual disabilities” (Haas, 2012).

Rowan University was one of the first Universities on the East Coast to have a Unified Sports program. There, it is considered a Sport Club and is funded through the Recreation Center. The club started in January of 2012, brought to the campus by Gary Baker, previous Assistant Director of Sport Clubs and Youth Programs and his wife

Kalee Baker who was an advisor to the club. Their goal was to bring a “Unified” atmosphere to the college campus.

Since the program began, the program has expanded and now has over 120 participants, which includes Partners, Athletes, Coaches, and Volunteers. In the Fall semester, the club plays Unified Soccer. In the Spring semester, the club plays Unified Basketball. Each semester, there is a registration process for the Athletes and Partners, which is how they cap their numbers for each season. After the registration process is complete, everyone is assessed based on specific skills for the respective sport. The Executive Board of the club usually runs the assessments and then makes the teams according to the assessment scores. Once teams are made, the schedule is generated and sent out via email and Facebook to participants and their families.

According to Haas (2012), this program benefits children with disabilities by giving them a different atmosphere in which they can develop social relationships, and creating an environment that both athletes and partners can be competitive in a level of playing field. It is found that in the beginning weeks, the games are a bit competitive and there is some shyness between athletes and partners. By the end of the season both athletes and partners are teamed to demonstrate their commitment to each other and the team.

In such a team, partners are exposed to a different type of person than most have previously encountered- one with an intellectual disability. This experience teaches the partners how to communicate and interact with people who are different with low intellectual abilities, but similar in competitiveness. Often, partners keep coming back to the program because of the relationships developed through the club.

The purpose of this study is to examine the effects, if any, of participation in a Unified Sports program on typically developing college student partners. Specifically, this study will examine whether there are changes in the partners' understanding, beliefs about, and attitudes toward individuals with intellectual disabilities following their participation in a Unified Sports program.

The hypothesis is that partners will increase their understanding and have more positive attitudes toward individuals with intellectual disabilities.

It assumes that this study may impact Rowan University and the nation. To Rowan, it will reflect the atmosphere of inclusion that the University has accepted for years. Rowan University has always been on the forefront of inclusion and community acceptance, and Unified Sports is prime example of the kind and warm atmosphere the Unified program welcomes. Nationwide, it will show the atmosphere of inclusion and social acceptance that Unified Sports brings to a University and a community.

## **Chapter 2**

### **Review of Literature**

Reviewing previous research methods on different populations will help determine the research methods used in this study. For this research the focus is on different attitudes towards people with intellectual disabilities and changes in attitudes towards people with intellectual disabilities.

#### **Attitudes toward Individuals with Intellectual Disabilities**

Siperstein, Norins, Corbin, and Shriver (2003) completed a study that measured the attitudes towards individuals with disabilities. Over 800 people in 10 different countries participated in this study. The survey instrument was tested and piloted in 2001, and the final survey was administered in 2003. The study was conducted by the Center for Social Development and Education at the University of Massachusetts Boston. The survey was developed with support from the Center for Survey Research and Gallup Organization International to have appropriate cultural meanings to the different countries that it was administered in, whether by phone or in person. As expected, there were different results for the different countries that participated in this study. Each country had a different perception of an individual with a disability. Some would visualize an individual with a mild disability, whereas others would envision a severely impaired person. This impacted how each country viewed the capabilities for the differences of what an individual with a disability was capable. There are three main capabilities that Siperstein, Norins, Corbin, and Shriver (2003) was able to generalize about how the public perceives individuals with intellectual disabilities. One perception is that individuals with disabilities are capable of completing simple task such as getting

dressed and making friends, but less capable of the more complex tasks such as handling emergency situations. The second is that individuals with intellectual disabilities are only somewhat capable of making their own decisions about work, school, and living. A third perception states that individuals with disabilities are mostly capable of playing sports with other players with intellectual disabilities, with few believing they are capable of playing an inclusive sport. This study also focused on where people with ID should live, work and go to school. Siperstein, Norins, Corbin, and Shriver found that a majority of the responses were that the people with ID should live at home with their parents. Very little decided that an institution or group home were the proper place. Also, a large population came to an agreement that a non-mainstream workplace would benefit them the most. As for schools, it was a large percentage of the respondents that said the people with ID should be in special schools. They also went on to conclude that the perception of the severity of the disability impacts the perception of the living, working, and learning capabilities of individuals with disabilities.

Ouellette-Kuntz, Burge, Brown, and Aresenault (2010) conducted a similar study in Canada, in which 625 community members responded to the instrument used to measure attitudes on social distance of individuals with disabilities. Social distance describes the non-physical distance between two individuals and their attitudes toward one another. The lower the social distance, the more likely the two individuals would be social with one another. The instrument they used was the Social Distance Subscale of the Multidimensional Attitude Scale on Mental Retardation. Over the phone, they administered the survey as well as a longer interview about attitudes towards individuals with intellectual disabilities (Ouellette Kuntz, Burge, Brown, and Aresenault, 2010).

Their results were quite interesting, since they had a variety of people answer this survey and interview. If the participant was older and less educated, the attitude was more negative regarding social distance. When the participant had a close family member with an intellectual disability and those who perceived the intellectual disability to be mild, expressed less social distance. Many of the results were favoring greater social distance, which is similar to the previous study. There were no differences found in the responses between male and female respondents. Similar to Siperstein *et al.* (2003), the participants who perceived the disabilities as more severe were more adept to a greater social distance than those who perceived the disabilities as mild. The results indicate that, overall, attitudes towards individuals with intellectual disability were positive. On the survey questions with low social distance, the respondents would either agree or strongly agree with the statement.

Storey, Stern, and Parker (1990) completed an interesting study that measured the attitudes of two separate classes views on a woman with disabilities. In one class, they were shown a slide show of 20-year-old intellectually disabled woman participating in multiple Special Olympic events. The other class was shown the same woman as depicted in the first, but she was participating in typical recreational activities (Storey et al., 1990). The first class contained 61 college students with 20 males and 41 females; the second class contained 155 students with 76 males and 79 females. Each participant was told that they were going to fill out a survey, watch the slideshow, and then fill out a second questionnaire. The first survey instrument is the Attitude Toward Disabled Persons Scale (ATDP). The second questionnaire was 13-item which had demographic questions about the participant, as well as questions about the woman that ranged from her IQ to her

school and living situations. All but one question (age) in the second survey was a 5-point Likert-type scale. The ATDP survey was used to see similarities or differences between the two classes. The results of this comparison showed that both classes had no significant difference in pre-existing attitudes towards individuals with disabilities. The comparison of the second questionnaire indicates that each class gathered different perceptions of the abilities of the woman and what her lifestyle should be (Storey et al., 1990). Although the differences were small, they were consistent. The group who was shown the woman in the Special Olympic setting may have been influenced to respond more negatively than the other group due to the actions of the woman not being age appropriate. Since the differences are smaller than expected, no conclusions can be drawn on the social impact that one had over the other. It's also hard to tell the behavior differences in the viewers of the different slide shows due to the closeness of the data (Storey et al., 1990).

Daruwalla and Darcy (2005) studied personal and societal attitudes to disability. Daruwalla and Darcy (2005) found that attitudes were changed for a longer period of time if they had physical contact with an individual with a disability. Positive experiences involving the nature and perspective of disability are more likely to achieve positive attitude change and overcome 'cognitive dissonance' in the nondisabled (Daruwalla and Darcy, 2005). To complete their study, they looked at attitudes in four different categories, behavioral, consistency, information integration, and function theory. Daruwalla and Darby (2005) found that behavioral theories are a response to environmental stimuli. Consistency theories refer to the need for persons to maintain balance or consistency in interpersonal relationships and cognitions through their beliefs,

feelings, and actions. Information integration theories deal with the concept that a person's attitudes are a reflection of their knowledge and belief about an object and that it is possible to change these through introduction of new information. Function theory is subdivided into four categories based on the purpose served; knowledge function, social adjustment function, value expressive function, and ego defensive function (Daruwalla and Darby, 2005). Using this research, they used two surveys that they distributed to students. They gave different intervention to the two groups to see whether or not the attitudes would change and which method would be the most effective in changing attitudes towards people with disabilities. While results from the analysis of both instruments indicated changes in attitudes, some significant disparities arose, indicating that personal attitudes tended to be more affected by the type of intervention and immediately after the intervention (Daruwalla and Darcy, 2005). The implications of this for education are that constant reinforcement and refreshers are needed if attitude change is to become internalized and persistent (Daruwalla and Darcy, 2005).

### **Changing Attitudes toward Individuals with Intellectual Disabilities**

Wong (2006) examined the effects of mainstreaming on individuals without disabilities toward individuals with disabilities. The study stretched the span of a secondary school year, with a 47-item Students' Attitudes toward People with a Disability Scale to measure the attitudes of students without disabilities. A total of 406 students took part in the survey. There were 10 mainstream classes, of which only 4 classes contained a student with a disability, and only 5 with a disability. The pre-test was administered in the beginning, and the post-test at the end of the school year and participation was voluntary. Throughout the school year, some students were not given

any information about students with disabilities; they were solely coexisting in a mainstream classroom. Other students participated in educational programs that focused on the social acceptance of students with disabilities. In comparison, the student group that did not participate in the educational programs but were in mainstream classrooms had no attitude change from the pre-test to the post-test. Those who participated in the educational programs had a significantly more positive attitude towards students with disabilities. Their results indicate that students need to learn and act upon the social acceptance of students with disabilities. By just placing them in the same classroom does not impact the attitude of students without disabilities. More social contact and educational programs about students with disabilities is necessary to change the attitudes towards those students with disabilities.

McConkey, Dowling, Hassan, and Menke (2013) completed a study on the impact toward social inclusion of Youth Unified Sports. The study spanned across 5 different countries and consisted of 156 Special Olympic athletes, 106 Unified partners, and 65 coaches. Serbia, Poland, Ukraine, Germany, and Hungary were the countries that participated in this study and totaled 55 teams in all. They gathered their information through face-to-face interviews with questions that were researched and tested on a pilot program of Youth Unified Sports. Since this was a large study conducted over multiple countries, each interview was translated from English into the local language by a researcher from a local university that was familiar with disability research and fluent in reading and writing English. Once the interview was complete, the researchers would then translate the interview back into English, leaving out names and identifying details to keep the anonymity of the respondents. The core members of the study provided face-

to-face training for the individuals administering the interviews in proper qualitative interviewing. The interviews were taken during a 1-day competition of multiple teams. During rest periods before and after games the coaches, teams, parents, individuals on the teams would be interviewed. Each interview lasted around 15 minutes and was held in a separate room and the audio was recorded for each. Having the interviews on the same day as the competition gave the researchers a chance to see Unified Sports in action and to see the enjoyable experience the teams were having. Each respondent signed a consent form prior to the interviews and they were assured their interviews would remain anonymous throughout the research. The study found four main themes to promote social inclusion with Unified Sports. The first is personal development of athletes and partners. This includes the skill level of the individuals in sports, the interpersonal skill level, and access to places to play. Another theme is inclusive and equal bonds. A focus on teamwork, the role of the coach, and the friendships made strongly influence the bond between partner and athlete on and off of the field. The third theme is positive perceptions of people with intellectual disabilities. The change of attitude from negative to positive due to the alliances built and growth of partners and athletes together changes the perception of individuals with intellectual disabilities. The last theme is building alliances with families, schools, and community organizations. This helps promote the positive perception of individuals with disabilities by educating and including individuals with intellectual disabilities.

Ozer, Baran, Aktop, Nalbant, Aglamis, and Hutzler's study (2012) focused on the psychosocial effects of the Unified Sports on youth with and without intellectual disabilities. The instruments used were the Friendship Activity Scale, the Adjective List,

and the Children Behavior Checklist. Each was filled out prior to the program starting and then filled out again after the program for eight weeks. A total of 76 male youth with and without intellectual disabilities involved for three times a week and 90 minutes each to learn how to play soccer. In the beginning of the program, they would warm-up and learn the fundamentals of soccer together such as conditioning, kicking the ball, and defending. Strategy and tactics were explained in the later sessions after the foundation of skills was completed. At the last session, a tournament was held in which the parents could watch and cheer for their children. In the study, there was a control group without participation in any of these activities to compare. The results yielded positive social competence, reducing problem behaviors, and positive attitudes in both students with and without intellectual disabilities. The students with intellectual disabilities had higher social competence than their control group counterparts showing more social confidence with their peers. As for the students without intellectual disabilities, there was no change in their social competence. The problem behaviors of students with and without disabilities were significantly less than the time they entered the program as shown by the post-test results. It is concluded that the Unified Sports program positively impacted the attitudes of both students with and without intellectual disabilities.

Sullivan and Glidden's study (2014) measured a change in attitudes of college-aged swimmers towards Special Olympic athletes. A pre and post-test used including the Medical Student Attitudes toward Persons with Disabilities Scale. With the permission of the individuals on the team, the college swim team was divided into two different groups, the intervention group and the control group. The control group did not participate in the intervention process learning about intellectual disabilities, viewing videos and letters

from individuals with intellectual disabilities, and playing inclusion games in the pool with the Special Olympic Athletes. The study continued throughout a 6-week program. In the first week, the students were presented with information about different intellectual disabilities and their characteristics. The students also viewed videos that expressed the importance of belonging and the true meaning of inclusion according to the perspective of individuals with intellectual disabilities. Information about their partner of Special Olympic athletes was also shared, such as letters they wrote and videos they made to help the college students become familiar with the Special Olympic athletes before even meeting them. A majority of the other sessions were spent in the water with the students and the Special Olympic athletes. The games focused on the teams finding a common goal and striving to complete that goal. Diving for pennies, water polo, and relays were a few examples that Sullivan and Glidden (2014) provided in their analysis. These were common games that are seen in many swimming instruction clinics, however the objectives and common goal for each were designed toward the intervention. The results were similar to that of Ozer et al. (2012), which yielded that although the control group and intervention group started out with similar attitudes, the intervention group gained more positive attitudes towards individuals with intellectual disabilities. Differences between males and females were not significant in the pre-test for both the intervention and control groups. In comparison with the post-test, the control group did not have any significant changes in attitudes, while the intervention group had a significant change in attitude towards individuals with disabilities.

## **Impact on the Community Integration**

Ittenbach, Bruininks, Thurlow, and McGrew's study (1993) was on the integration of individuals with disabilities into the community. A multivariable approach as to how individuals with disabilities could be better integrated into their communities was examined. A total of 105 young adults with mild to severe intellectual disabilities were chosen randomly from a larger population of 239. They were grouped into three categories of 35 participants each in the mild, moderate, and severe. The ages ranged from 19 to 23 with the same number of males as females. Two instruments were provided to the participants, or to an informed respondent. Ittenbach et al. (1993), explained the first instrument was the Inventory for Client and Agency Planning (ICAP) that assesses the services needed and the level of functionality of the individual. The second instrument was a 142-item questionnaire, which detailed different areas of community adjustment (Ittenbach et al. 1993). Each of the items on the second instrument was developed based on previous extensive research on how to adjust to communities. The results yielded 5 variables that are major contributors to community inclusion. These included the number of support services, number of limiting factors, earned income, daytime activities, and living arrangement. It is assumed that individuals with disabilities would be more included in the community if there were more support services, less limiting factors, more earned income, more daytime activities, and better living arrangements. All factors are obvious, but more research is needed on the combination of these variables. It is found that these variables need further research due to the several limitations that may restrict the generalization of each of these for all individuals with disabilities.

Kleinert, Miracle, and Sheppard-Jones's study (2007) surveyed 252 teachers of students with moderate and severe intellectual disabilities. The purpose of the study was to measure the community involvement of students with mild and severe intellectual disabilities. The teachers completed the survey online and their results were in accordance to the previous study by Ittenbach et al. (1993). According to the responses, the teachers encouraged becoming involved with community programs to improve the social skills of individuals with disabilities. It is suggested that Unified Sports, church-related youth groups, local YMCA activities, and school-sponsored social activities should be provided to involve more students with disabilities. These activities were listed in the top-10 ways to get students with intellectual disabilities involved with the community. Barriers involved such as lack of transportation, insufficient parental resources, and lack of options in the community, which were also indicated (Ittenbach et al., 1993). In addition, Kleinert, Miracle, and Sheppard-Jones (2007) compiled a list of potential strategies to combat the barriers for community participation. These strategies were a part of the survey responses they received from programs that were successful and could be duplicated keeping the barriers in mind. It is also found that families and teachers, both special education and general education, were the most mentioned support groups for individuals with disabilities. The general education teachers in support for the students with intellectual disabilities shows that the comfort level of these teachers is rising in teaching students with intellectual disabilities.

Amado, Stancliffe, McCarron, and McCallion's research (2013) focused on social inclusion and community participation of individuals with intellectual/developmental disabilities. They hope to go beyond the physical inclusion of

individuals with disabilities and achieve true social inclusion of these individuals. Amato, Stancliffe, McCarron, and McCallion (2013) found three kinds of measures of integration. Frequency was the first, which is how frequently an individual with a disability is out in the community participating in activities or meeting their friends. The second measure is choice, the possibility of going out somewhere and having the option to, or being permitted to go out. The third measure is intensity; the quality time spent in the community being actively engaged. The interventions to help increase social inclusion were suggested. For example, in Stancliffe, Bigby, Balandin, Wilson, and Craig's study (2012), the integration of retired Australians into their community was introduced to spend one day a week in a community group or participate in a volunteering opportunity. This integration of the individuals successfully had mentors from each group help them into the community and become involved in their program. The community programs also accepted individuals with disabilities and integrated them into the community as well. Further, Amato et al. (2013) developed a series of questions to help guide future research. They concluded that true social inclusion would be difficult for individuals with disabilities due to the amount of variables that are accounted for.

### **Summary**

The purpose of the current study is to measure the attitude change in college-aged students towards individuals with intellectual disabilities. It is proposed that attitude change be measured before the intervention and then after to track any changes in attitude throughout the program. Some studies indicate that the more meaningful involvement one has with individuals with intellectual disabilities, the more positive the attitude towards them is. Existing attitudes toward individuals with disabilities is mainly negative,

however Unified Sports is a program developed by Special Olympics to help social inclusion for everyone. Changing attitudes through Unified Sports towards individuals with intellectual disabilities is possible, as shown in the previous studies by Ozer et al. (2012) and Sullivan et al. (2014). The current study will use similar strategies to these two to determine the effect that Unified Sports has on the attitudes of college students towards individuals with intellectual disabilities.

## **Chapter 3**

### **Methodology**

#### **Setting and Participants**

For this study, 40 participants were all college-aged students who are enrolled at Rowan University. They are all part of Rowan Unified Sports, which is a Sport Club in its third year of existence at Rowan University. Many students had at least one year of experience with Special Olympics before joining the club. The students became involved with the club through word of mouth, or by attending an interest meeting for the club. For this study, some partners were not included for a variety of reasons. The main reason being that they were not there the day the surveys were given, or they declined to take the survey. A majority of the participants are from the New Jersey area.

#### **Procedure**

To be a part of Rowan Unified Sports, the partners and athletes must complete a registration form. This form notifies the club of how many potential participants are interested, as well as how many partners and athletes they can take to have even teams. Once the registration process is completed the athlete and partner registration forms are totaled by the club to make sure each individual who completed the form is eligible to participate. If an athlete is too young or they do not have the physical capabilities, they may be told that they cannot participate in this program. Special Olympic employees with previous experience with these decisions aid this decision. Once all of the names have been totaled, the club sends an email out with the dates for the assessment. The assessment is constructed up of three drills and a scrimmage to determine the skill level of each athlete and partner. Once the assessments are over, the partners are trained on

intellectual disabilities and how to treat those with them. The surveys were administered once the partners came to sign in to the assessments, before any meaningful interaction with Special Olympic Athletes.

Both pre and post-surveys were constructed based on a study by Yuker, Block, and Youngg (1970). They were measuring the existing attitudes toward students with disabilities. The study focused on gaining knowledge of attitudes toward people with disabilities as a whole, rather than one specific group of individuals with a disability. The survey used in this study was formatted differently, but had the same sentence structure and scoring as the one in the study by Yuker, Block, and Youngg (1970).

The surveys were given out during the first week of games and at the end of year banquet. This was to track any changes that the participants may have had throughout their interaction with the athletes. The surveys were given to each coach, who then gave them out to the partners on the team. They were handed into the check-in table when they were completed. The process was a bit different for the follow-up survey. When the partners arrived to the banquet, they were asked again to take the survey and handed one if they agreed. They then handed them in to the center table once they were done. This gave initial readings for the attitudes on people with intellectual disabilities as well as conclusive readings to track changes. Participants were asked to put the last three digits of their university ID number so that their responses on the pre-survey could be matched with those on the post-survey.

Throughout the weeks, I was also able to observe some teams and individuals throughout the weeks. I wrote down their interactions with the athletes on their team and

compiled a timeline of their interactions to see if they improved. The target interactions were greetings, body language, and type of conversations.

### **Variables**

The independent variable in this study was the interactions and exposure to people with intellectual disabilities. Participants were able to make their own decisions on how much they wanted to interact with their teammates throughout the weeks of Unified.

The dependent variable was the attitudes towards people with intellectual disabilities. Their attitudes could have been positive or negative based on their relationship with teammates.

### **Experimental Design**

This study consisted of a pre-post survey as well as observations. The first survey was administered to determine the baseline attitudes towards people with intellectual disabilities. The second survey measured the final attitudes towards people with intellectual disabilities after participating in a whole season of Unified Sports. The observation portion was developed to track how the partners and athletes were developing socially, to see if the actions on and off the court were similar to the responses in the surveys.

## **Chapter 4**

### **Results**

#### **Summary**

In this study, the attitudes of college-aged students who were participating in a Unified Sports program towards individuals with intellectual disabilities were examined with 40 participants in an initial survey and 21 in a follow-up survey. The research questions to be answered were:

1. What pre-existing attitudes do college-aged students have towards individuals with intellectual disabilities?
2. Will Unified Sports change negative attitudes towards students with disabilities?

The partners were handed the survey, adapted from a study of measurement of attitudes toward disabled persons by Yuker, Block, and Youngg (1970). They took the survey a second time at the end of the Unified Sports season for a follow-up to see if there were any changes in attitudes.

#### **Group Results**

Table 1 shows the mean for each of the question from the first survey and the follow-up survey. In each survey, the participants were to write down, on a scale of 1-4, how much they agreed or disagreed to the statement. 1 stands for strongly agree, 2 is agree, 3 is disagree, and 4 is strongly disagree. The results for the first survey indicate that the respondents generally had a positive attitude toward people with disabilities. Statement 17 “Students with disabilities cannot have a normal social life” had the strongest disagreement with a mean of 3.83. Statement 14 “You should not expect too

much from a student with disabilities” and Statement 20 “Students with disabilities are often grouchy” were also in strong disagreement with means of 3.65 and 3.63. Statement 6 “There shouldn’t be special schools for students with disabilities” and Statement 19 “You have to be careful of what you say when you are with students with disabilities” yielded the most neutral responses with a mean of 2.55 each. The respondents agreed most with Statement 11 “ Students with disabilities are just as happy as typical students” with a mean of 1.23. Also with high agreement means were Statement 2 “Students with disabilities are just as intelligent as typical students” and Statement 5 “Students with disabilities are the same as anyone else” which produced means of 1.33 and 1.38.

The post-test results also yielded mostly positive attitudes towards students with disabilities. Again, most respondents disagreed to Statement 17 “Students with disabilities cannot have a normal social life” with a mean of 3.77. Statement 13 “It is almost impossible for students with disabilities to lead a normal life” and Statement 14 “You should not expect too much from a student with disabilities” both received a mean of 3.68. The statement that respondents agreed with the most was Statement 5 “ Students with disabilities are the same as anyone else” with a mean of 1.36.

Table 1

*First Survey and Follow-up Survey Results*

<b>Statement</b>	<b>First Survey</b>	<b>Follow-up Survey</b>
1. Parents of students with disabilities should be less strict than other parents.	3.18	3.14
2. Students with disabilities are just as intelligent as typical students.	1.33	1.5
3. Students with disabilities are usually easier to get along with than other people.	2.03	2.27
4. Most students with disabilities feel sorry for themselves.	3.55	3.55
5. Students with disabilities are the same as anyone else.	1.38	1.36
6. There shouldn't be special schools for students with disabilities.	2.55	2.59
7. It would be best for students with disabilities to live and work in special communities.	3.25	3.36
8. It is up to the government to take care of students with disabilities.	2.9	3.14
9. Most students with disabilities worry a great deal.	3.23	3.36
10. Students with disabilities should not be expected to meet the same standards as typical students.	2.85	2.73
11. Students with disabilities are just as happy as typical students.	1.23	1.64
12. Students with severe disabilities are no harder to get along with than students with minor disabilities.	1.75	1.86
13. It is almost impossible for students with disabilities to lead a normal life.	3.7	3.68
14. You should not expect too much from students with disabilities.	3.65	3.68
15. Students with disabilities tend to keep to themselves much of the time.	3.35	3.41
16. Students with disabilities are more easily upset than non-disabled people.	2.95	3.05
17. Students with disabilities cannot have a normal social life.	3.83	3.77
18. Students with disabilities feel that they are not as good as other people.	3.48	3.41
19. You have to be careful of what you say when you are with students with disabilities.	2.55	2.55
20. Students with disabilities are often grouchy.	3.63	3.55

To measure changes in responses, the mean from the second survey was subtracted from the first survey to find a difference. A positive difference indicates the responses of the first survey were more in agreement with the statement than the second survey. A negative difference indicates that the responses in the first survey disagreed more to the statement than the responses to that item in the second survey. The largest difference found was in Statement 11 “Students with disabilities are just as happy as other students“ with a -0.41 difference. The second highest difference is -0.24, which was for Statements 3 “Students with disabilities are usually easier to get along with than other

people“ and 8 “It is up to the government to take care of students with disabilities.“ In the first and second surveys, there were only two means that stayed the same throughout both surveys, for Statements 4 “Most students with disabilities feel sorry for themselves” and 19 “You have to be careful of what you say when you are with students with disabilities”. The average difference for the statements came out to be 0.10. The average increased on 10 statements and it decreased on 10 statements.

Figures 1 and 2 show male and female scores from the first and follow-up surveys. The biggest difference between the male and female means of the first survey was found in Statement 6 “There shouldn’t be special schools for students with disabilities“ which was a difference of 0.60. For the Follow-up survey, the highest difference between males and females was -0.80, which was for Statement 20 “Students with disabilities are often grouchy“.

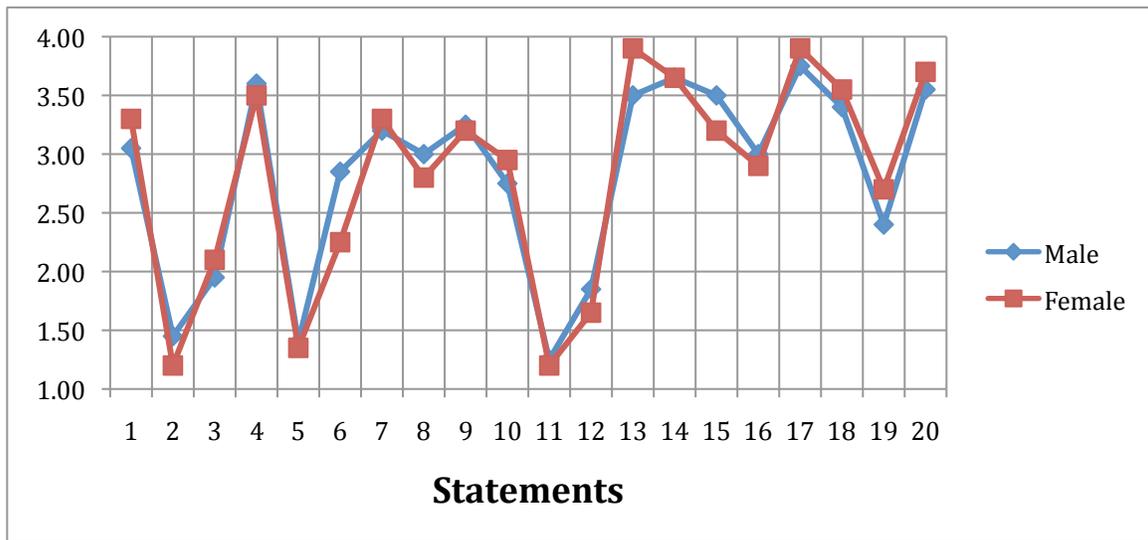


Figure 1. Male and Female First Survey

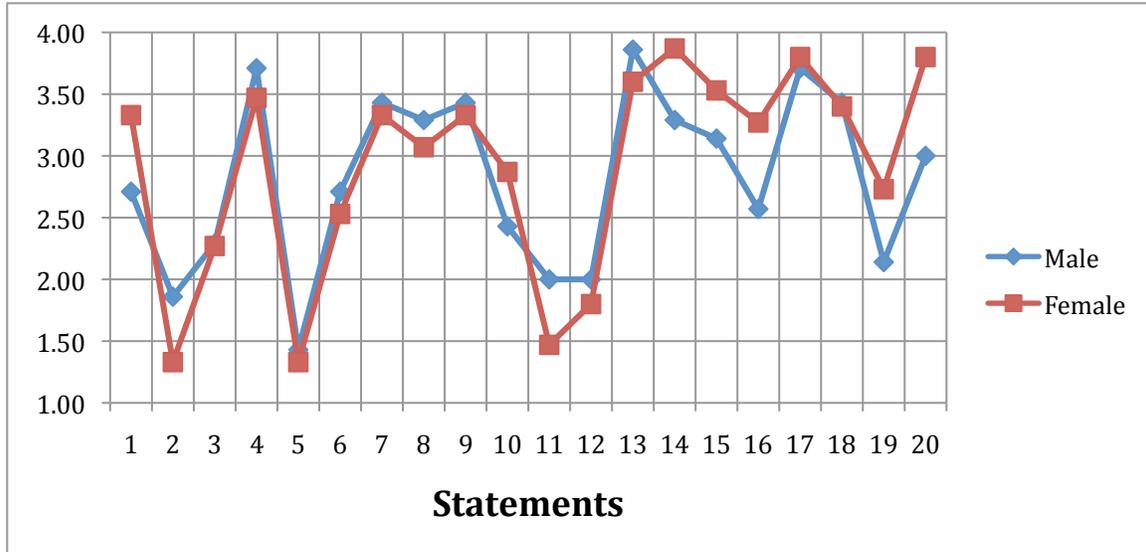


Figure 2. Male and Female Follow-up Survey

Figure 3 shows the comparison of female results for the first and follow-up surveys. Statement 16 “Students with disabilities are more easily upset than non-disabled people“ had the biggest difference in agreeability with a difference on  $-0.37$ . A majority of the responses remained consistent throughout each of the statements; with the average difference of responses being  $0.16$ . Figure 4 shows the comparison of male partners for the first and follow-up surveys. The biggest difference came in Statement 11 “Students with disabilities are just as happy as typical students“ which was the highest difference throughout males and females,  $-0.75$ . The males had significantly higher differences from the first survey to the follow-up survey than the women, with the average difference being  $0.28$ .

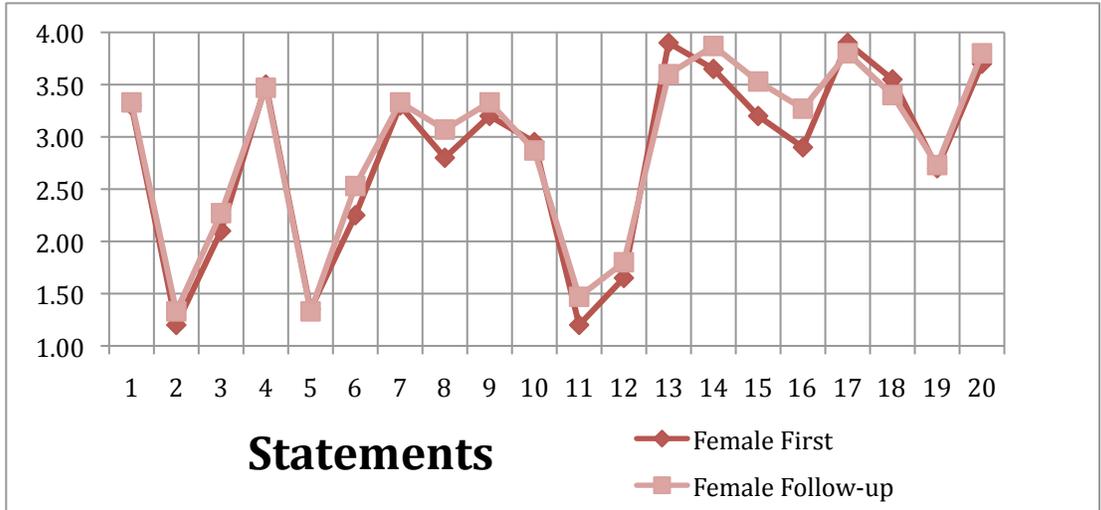


Figure 3. Female vs. Female First and Follow-up Surveys

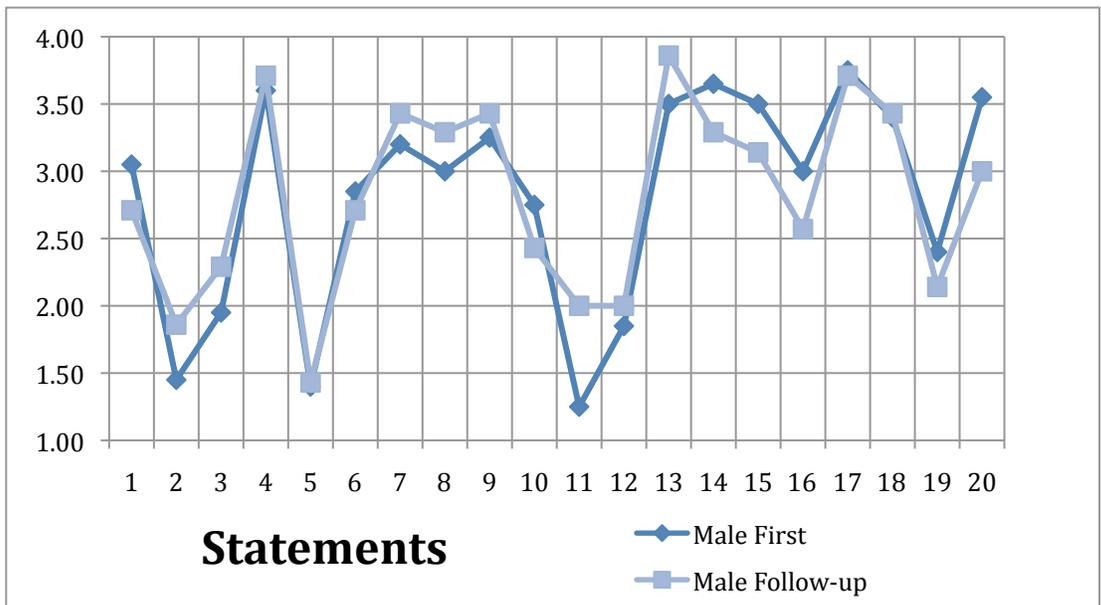


Figure 4. Male vs. Male First and Follow-up Surveys

**Individual Results**

Using the last question from the first survey and the follow-up survey, which asked for anonymous identifying information, 11 respondents were found to match. In

looking at their data individually, we can track their changes for responses to the statements. Different patterns emerged from the first survey to the second survey for each participant. The biggest changes were in Students 5, 8, and 11. Student 5 had a change from *agree* to *strongly disagree* for Statement 10 “Students with disabilities should not be expected to meet the same standards as typical students. Student 8 went from *disagree* to *strongly agree* for Statement 19 “It is up to the government to take care of students with disabilities”. Student 11 had the biggest change, going from *agree* to *strongly disagree* for Statement 11 “Students with disabilities are just as happy as typical students”. Student 6 had the least amount of changes to their responses. The only change they had been for Statement 7 “It would be best for students with disabilities to live and work in special communities” responding with *disagree* and changing to *strongly disagree*.

## **Chapter 5**

### **Discussion**

#### **Review**

This study focused on the effect of Unified Sports on attitudes of college-aged students at Rowan University, a state university located in southern New Jersey. The participants in the study were students enrolled at Rowan University that are a part of the Sport Club, Unified Sports. Any Rowan student who played for the club was eligible to take part of this study. In the beginning of the season, 40 participants filled out a survey that was adapted from a study by Yunker, Block, and Youngg (1970). The respondents then filled out the same survey at the end of the season for a follow-up and to compare responses to track any changes.

The data from the first survey revealed that the attitudes towards students with disabilities were already positive for most of the college-age subjects. For the statements that had a negative view of students with disabilities, the responses were closer toward disagree and strongly disagree. When the statements viewed students with disabilities positively, the responses were focused more towards agree and strongly agree.

Reviewing the comparison of mean responses to the first and follow-up surveys, it is found that there is not enough change to determine if the respondent's attitudes have changed. This made it difficult to draw any conclusion of the impact of Unified Sports on college-aged students towards students with disabilities.

#### **Limitations**

In reading the responses to the survey, 100% of the participants had previous experience in volunteering with Special Olympics. This was shown in the responses,

since there was little to no change in many of the responses. Student 11 only had one change in their response and they had only one year of experience with Special Olympics. This impacted the comparison of differences with the first survey and follow-up survey since they both were positive towards students with disabilities. Also, to be involved with the club, students needed to actively seek out the club and join. The respondents of the survey all wanted to be a part of the club, thus creating a positive environment when they were taking the survey.

Another limitation was the tool used to survey. Some statements on the survey could have been read in multiple ways. There were many questions while the respondents were taking the survey on what the statements meant, and it was left up to their interpretation. It is hard to tell how the respondents read each of the statements. Some wanted a section to explain why they were responding with certain answers.

The sample size was significantly less in the follow-up survey. There were 40 respondents for the first survey, yet only 22 for the follow-up. This could impact the comparison of the first and follow-up surveys. Since the sample size was smaller in the second, there could have been more positive or negative attitude changes that were missed as a result.

### **Practical Implications**

The participants in the survey all had positive attitudes towards students with disabilities to begin with and they all had experience with Special Olympics in working with students with disabilities. It could be said that Special Olympics does positively affect the attitudes towards students with disabilities. With the previous experiences of the participants and the positive environment the club creates, it is hard to see changes in

the responses of the first and follow-up survey. The environment that surrounds the club is one of inclusion and excitement. This atmosphere makes it difficult for the students to have a negative attitude while filling out the surveys in this atmosphere. Due to this pre-existing attitude, no other implications could be drawn from this study.

### **Future Studies**

For future studies, a different tool should be used to survey the partners. A section for comments should be available to the respondents so they can explain their responses for the statements. This comments section could also act as a testimonial for the club and the impact it has had on them, positive or negative. Also, multiple schools should be surveyed at the same time in a different setting. The Rowan Unified Sports Club already had a positive atmosphere to it, while other schools may be in the beginning stages of developing this atmosphere. Stockton College, Drew University, Montclair State University, and Rowan College of Gloucester County all have developing Unifies Sport Clubs at their institution and should be included in a future study.

### **Conclusion**

The study sought out answers to the questions: What pre-existing attitudes do college-aged students have towards individuals with intellectual disabilities? Will Unified Sports change negative attitudes towards students with disabilities? The data illustrated that the pre-existing attitude towards students with disabilities was positive. This could have been from their previous experience with Special Olympics or the positive atmosphere the Unified Sports Club creates at Rowan University. There are no conclusions that can be drawn for the second question, due to the answer of the first question. Throughout each of the responses, there were none that went from negative to

positive, or vice-versa. This could be tracked if the study is expanded throughout different institutions in New Jersey with students with no experience with Special Olympics. Overall, The Unified Sports program at Rowan University has created an atmosphere of positivity in inclusion and it does impact the students that participate in the club.

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